

Exploring Urban Change in South Asia

Eric Denis

Marie-Hélène Zérah *Editors*

Subaltern Urbanisation in India

An Introduction to the Dynamics of
Ordinary Towns



Springer

Exploring Urban Change in South Asia

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Editors

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Foreword

An Alternate Paradigm

The present volume edited by Eric Denis and Marie-Hélène Zérah attempts to rescue urban studies from the paradigm of metropolis-based urbanisation, a paradigm which envisions urban processes in the developing world, responding only passively to compulsions of global capital. This it does primarily by shifting the focus of analysis to small and medium towns. The authors in the volume must be complimented for highlighting the diverse scenarios of urbanisation in India and elaborating and addressing their problems through a select set of case studies. It is indeed true that a large part of contemporary urban growth occurs outside of the hegemonic power structure of globalisation, both politically and geographically. Therefore, instead of confining urban research to the global and national market, state level institutions, formal programmes, missions and legal systems, the volume attempts to build a “history of urbanisation from below” and explores the role of common people as actors and agencies in this process. *Subaltern urbanisation*, thus, is a conceptualisation of the initiatives and survival strategies adopted by the people living in smaller urban settlements and their development manifestations. It is an attempt to construct a new narrative through an analysis of situations and processes that are considered of marginal importance within the framework of metro-centric urbanisation.

The other important point that the volume makes, both explicitly and implicitly, is that simple, dualistic models postulating categories such as rural and urban, small and big cities, mainstream and subaltern urbanisation etc. are not appropriate to understand the dynamics of urban development in India. The spatial pattern of development is continuously blurring their distinctions and one must focus on the relationships emerging across both the hierarchical as well as non-hierarchical arrangement of the settlements.

Urban Dynamics of Small and Medium Towns

Small and medium towns play a critical role in the development of the regional economy in most developing countries. India is no exception. It is unfortunate that these towns have not received the attention they deserve in the context of India's economic development, particularly within the framework of globalisation. A limited number of studies were sponsored by the Indian Planning Commission in the 1950s to analyse their economic base and emerging physical structure. Subsequently, a section of geographers, regional planners, sociologists and economists have researched on the morphology of many such towns, focusing on their specialised economic activities, access to physical amenities, slum conditions etc. The studies were confined largely to physical and cultural contexts. Research was taken up to assess the impact of small town development programmes of the Government of India in the 1970s and 1980s, besides some sponsored by international organisations such as UNICEF, UNDP and UNESCO. These were, however, very localised and descriptive in their approach and rarely posed questions on the paradigm of development in the country.

Emergence of New Towns and In Situ Urbanisation

It is important to note that the number of towns (statutory and Census) has gone up by 2774 during the first decade of the twenty-first century, against 500 in the previous decade. The increase in the number of Census towns from 1352 to 3894 is unprecedented in the history of the Indian Census. It may be premature to conclude that the Census has gone overboard to identify these new urban settlements that are essentially rural in character, as towns. Chapter 2 of this volume suggests that almost all these settlements satisfy the three criteria of the Census and hence should legitimately get the urban status in 2011. Most of them, however, met these criteria even in 2001. It is, thus, evident that there has been a high growth in population and density in several large villages during the past two and even earlier decades, which can rarely be attributed to the developments in the global market. These have mostly gone unnoticed by urban researchers.

An analysis of the locational pattern of the new Census towns confirms that there is considerable randomness in their spatial distribution. There is no empirical evidence to suggest a strong process of sectoral diversification or growth of modern non-agricultural employment behind the emergence of these towns, as many of them are outside the hinterland of large urban centres. As a relatively small number of these towns fall within the metro region or around the industrial corridors, the hypothesis that these have emerged under the shadow of metropolitan cities can be dismissed. The statistical results presented in the volume reveal that the level of urbanisation of a district affects the emergence of these towns

negatively. This questions the trickle-down theory, or that the industrial base of these towns is linked to regional/national market.

A large section of the country's urban population, thus, lives in Census towns that are being governed by rural administrative set-up, as they have not been given the urban status by their respective state governments. These, therefore, have very different demographic and economic characteristics, particularly low levels of infrastructure and basic amenities. All these could adversely affect the future growth of these towns and the overall process of regional and urban development, unless major interventions are initiated at central and state level.

Combining the population and workforce data from the population Census with the GIS data from *Indiapolis*, the authors in the volume try to capture "urban growth" around agglomerations with 10,000 persons each, through identification of built-up areas around them. They put forward the proposition that the country is experiencing significant in-situ urbanisation which manifests in nonhierarchical linkages among smaller towns.

These towns, understandably, maintain strong rural characteristics and do not have even a modest level of infrastructure and basic services, which prompts the authors to describe them as manifestations of subaltern development. The Registrar General of India, when collecting slum statistics from these towns, as a supplementary work for 2001 Census, at the behest of the Ministry of Housing and Urban Poverty Alleviation, had held that in many cases the entire townships can be declared as slums. Their linkages with the neighbouring villages do not operate within the traditional framework as mostly they obtain their supply of food-grains, milk, vegetables etc., and raw materials from the national market rather than the hinterland. In this sense, they are not totally out of the global or national market system. In fact, the latter, to a limited extent, helps build trading and business relations within the region, facilitates ancillarisation and encourages commuting, thereby blurring the boundaries between rural and urban areas.

A New Economic Geography, or Rurbanisation

The present study underlines the need to build an alternate macro-economic framework for research on small and medium towns. The case studies of several small towns, included in the volume, tend to suggest that the inter-settlement linkages and socio-economic contexts, noted in and around the metro regions, are different from those existing away from the metropolises. This puts a question mark on the advocacy of a uniform system of governance as a solution to all urban problems. The study demonstrates that the growth of small and medium towns, in general, is not linked to the neighbouring metropolis and consequently does not reflect dependency relations, as discussed in the preceding section. Many of these towns, studied by the researchers contributing to the volume, exhibit fairly high economic growth in recent years, despite not being a part of the metropolitan hierarchy and receiving no major support from public agencies. Economic and

demographic growth here tends to be high because of strong local factors, delinked from the global or national economy. The case studies reveal that city-specific innovative arrangements, operationalised at a local level through social and financial institutions, impact investments in small-scale manufacturing and real estate development significantly. These make positive impacts on the nexus of exogenous and endogenous factors, evolving over time. The alignments in these arrangements often follow caste and community ties which get linked with social networks operating at larger territorial scale, complementing the local processes of economic growth.

Regrettably, national governments as well as development-cum-banking agencies at global level have paid scant attention to the cultural and institutional factors specific to these towns. The volume makes a strong case for studying these factors and their linked problems, and, more importantly, addressing them at micro level for promoting sustainable development. It argues that economic and demographic growth in these towns must be supported through specific interventions because, if left to market forces, it would take decades for their economic transformation and to get linked with the national market. There is an urgent need to make them “a part of India’s future urbanisation”.

Questioning the premise of new economic geography, several authors of the volume hold that the growth dynamics of small towns cannot be assessed without proper understanding of their cultural and economic history. For strengthening their infrastructural and institutional base and accelerating their economic and demographic growth, establishing linkages with an agglomeration or to highways passing through the locality could be useful. Haryana presents an interesting case as here a large number of new Census towns have emerged around large cities, constituting parts of existing built up agglomerations. Similarly, Kartarpur, located outside the metropolitan paradigm, exhibits phenomenal economic growth in the furniture industry because of the advantage of being strategically located on the Grand Trunk Road. In sharp contrast, many small towns, not having such locational advantages, have also successfully attracted economic activities, cashing on the middle class demand for housing and multifarious services including repair and maintenance, although these get their supply of basic materials from far away. A small town such as Abu Road has taken the dual advantage of the availability of non-timber forest products and proximity of a large factory to generate livelihoods successfully in non-peak seasons and slow down out-migration from the region.

The volume has, thus, done a great service to academia by identifying the diverse forces of urbanisation operating at ground level. These make urban processes extremely complex and they ought to be studied with empirical rigour. The volume also underlines the need to rescue urban studies from pure anthropological investigations. Even when analysing the specific situation in a hilly state, with high incidence of tribal population, a case is made to contextualise urban growth in terms of analytical categories that go beyond the traditional concepts, methods and frameworks. Several authors, thus, tend to suggest that although the economies of the small towns are currently localised, they can be linked to regional economy

through innovative interventions, implying that alternatives to the dominant development model do exist and need to be promoted in the developing world.

The proposition advanced by several international agencies that the success of globalisation and livelihood strategy in a less developed country depends on the speed with which modern production, trading and banking institutions in small towns can be linked with metro cities and global values injected into their business behaviour must, therefore, be taken with a lot of scepticism. Building metropolis centred institutional system with global technology and modern values, as attempted in some of the Latin American and East Asian countries for the success of capitalism can turn out to be not only expensive but also counterproductive. A number of micro level studies, including those in the volume, demonstrate that the socio-political environment created in several small and medium towns over a long period play an important role in attracting investments and skilled workers. These demonstrate that formal and informal institutions, along with their norms and practices, are extremely useful and supportive in the organisation of production, skill formation and industrial development, although the built-in power relations at local level could sometimes be detrimental to the sustainable urbanisation.

Where Do We Go from Here?

It is not difficult to accept the proposition that the process of urbanisation at the grassroots level, at lower level of the urban hierarchy, has gone unnoticed for decades primarily because of the mindset focused on metropolis-based urbanisation. This can be partly attributed to the system of data generation by the Census organisation and conservative discretionary judgement. This has resulted in systematic underreporting of the level of urbanisation. A proper identification, however, may not increase the growth rate in urban population (as both initial and terminal year figures would be increased). Also, there has been an increase in the number of workers having no fixed all time location and commuting on daily basis, which helps them find a survival strategy in off-peak seasons. This, too, has slowed down the pace of urbanisation. These processes are very different from those of the dominant paradigm of urbanisation. One can be persuaded to accept the stipulation that these are linked with the processes of subaltern development in the country.

The basic question asked in the volume is whether the growth of industry and emergence of “self-made engineers” in many of the small towns can be attributed to the local level institutions and the entrepreneurship of the people. One would also like to know, for example, how the artisans in Tiruchengode, specialising in repair of vehicles, get into manufacturing of vehicles and claim a big share in well digging activities, spread throughout the country, and manage to survive within the globally competitive system. Could the informal institutional arrangements and governance system supporting industrial growth in these towns be strengthened and the deficiencies corrected so as to provide a sustainable livelihood to the local population and the immigrants? Is it possible to scale up such success stories to national level?

Many of the chapters on the administrative status and governance system provide clues to answering the questions. The answer, indeed, is yes. The chapters here elaborate the large city bias in Indian planning, particularly in JNNURM, and make a case for greater assistance from the central government to small towns to address the deficiencies in their infrastructure and revenue generating capacity. Similarly, an analysis of the socio-cultural factors behind the selection of women representatives in the NCR region of Haryana reveals how the effective participation of women can be strengthened through implementation of decentralised governance. An in-depth probing of the social surface of the municipal councillors reveals that family, caste and professional network, as well as individual and family characteristics, affect decision making and manifest in power relations at local levels. The basic contention is that segregation of women in local politics results in their exclusion from all networks of decision making. An inclusive strategy of educational development can lead to creation of competent male and female councillors. These are a few of the recommendations emerging from the study. Rather than being exhaustive, these underline the need for building an understanding of the functioning of local level institutions for designing effective strategies for policy intervention.

The scholars, however, warn that the principle of inclusion and exclusion in the small towns are not always in compliance with the law of the land or ethical values. This was a worry to the makers of the Constitution such as Babasaheb Ambedkar. It is here that the state must step in to ensure that those who do not belong to any network and therefore are unlikely to get included in the traditional/informal institutional set up, are brought within the system. Public intervention could go a long way in promoting an inclusive system and strengthening sustainable urbanisation.

Subaltern urbanisation could be seen as a result of the limited possibility of metropolis-based urbanisation in India as also several countries in the developing world. Many of the African countries are experiencing a process of urban contraction in many of their metropolises which has led to premature deindustrialisation, a phenomenon empirically investigated by the Harvard economist Dani Rodrik and others. These countries are showing no increase in industrial output and are getting a stagnating workforce in manufacturing along with a low rate of urban growth. India, however, is projected to grow by 7–10 % per annum in real terms, led by the manufacturing and construction sectors. There are, however, disturbing trends leading to apprehensions that the predictions may not materialise. The shares of manufacturing sector both in terms of income and employment have not shown any significant increase in the last couple of decades, besides the fact that the rate of growth of urban population has slipped from 3.8 to 2.7 % over the past three decades. There are speculations that India, too, may fall into the trap of premature deindustrialisation.

An analysis of the consumption of household durables and construction material from the National Sample Survey data for the year 2011/2012 reveals that only 35 % are in the metropolitan cities. Understandably, a strategy of industrialisation centred on metropolitan demand is likely to face serious hurdles in India, as in many countries in the developing world. A window of opportunity, however, seems

to have opened up through the alternate pathways of urbanisation, as discussed in the volume. The strategy of industrialisation must focus on the remaining 65 % demand of manufactured products and consolidating them and generating employment for the growing labour force outside the metropolitan cities. This demand potential is manifest in growth of several small and medium towns and transformation of large villages into towns in recent years. The only way that the vision of 7–10 % growth of Indian economy, as projected by the Asian Development Bank, can be sustained in the coming two to three decades is by supporting the alternate modes of urbanisation. Policies and programmes to provide infrastructural support to this process would be an imperative for realisation of the vision.

The thesis of subaltern urbanisation rightly takes the position that the market-based urban system, dependent on a few metropolitan cities, need not be the only paradigm of development for India, and for that matter many other countries in the developing world. The ongoing process of urbanisation has created an extremely top-heavy urban structure in the country and several other Asian countries, leading to slowing down of the pace of urbanisation, as has been officially recognised in the UN system. This can, in turn, adversely impact on the development process. An alternate strategy for a more balanced urban economic development in the country can be built through an understanding of the development dynamics at local level and strengthening the growth potential of a large number of small and medium towns. To do that, it would be important to identify the geographical and socio-economic factors, including the cultural context, which characterise and determine their growth potential. It is only then that a strategy, utilising these potentials, can be designed. Addressing the constraints and strengthening appropriate institutions and practices at local level can promote sustainable urbanisation in the country. Focus on *subaltern urbanisation* would help make the bottom of the urban hierarchy visible and intelligible and bring into the mainstream problems of the vulnerable and marginalised.

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Contents

1	Introduction: Reclaiming Small Towns	1
	Marie-Hélène Zérah and Eric Denis	
Part I Placing Small Towns: Dynamics of Urbanisation and Systems of Cities		
2	Unacknowledged Urbanisation: The New Census Towns in India	39
	Kanhu Charan Pradhan	
3	The Substantial Share of Small Towns in India's System of Cities	67
	Elfie Swerts	
4	Income Ranking of Indian States and Their Pattern of Urbanisation	91
	Basudeb Chaudhuri, Boishampayan Chatterjee, Mainak Mazumdar and Safayet Karim	
5	Urbanisation in a Decade of Near Jobless Growth	119
	S. Chandrasekhar	
6	Comparison of Peripheral Metropolitanisation in Haryana and Rajasthan, India.	141
	Milap Punia, Rajnish Kumar, Laxman Singh and Sandeep Kaushik	
7	On Global and Multiple Linkages in the Making of an Ordinary Place: Parangipettai-Porto Novo	167
	Eric Denis and Zarin Ahmad	

Part II Land, Society, Belonging

- 8 Multilayered Urbanisation of the South Canara Territory. 199**
Solomon Benjamin
- 9 Practices of Territory in Small and Medium Cities
of South India 235**
Bhuvaneswari Raman
- 10 Territorial Legends: Politics of Indigeneity, Migration
and Urban Citizenship in Pasighat. 261**
Mythri Prasad-Aleyamma
- 11 Wealth, Mobility, Accretive Citizenship and Belonging:
Why Everyone Comes to Kullu and How they Remain 283**
Diya Mehra
- 12 Hindu Temples and Development of Localities
in Tamil Nadu (South India) 311**
Pierre-Yves Trouillet

Part III Small Towns Between Rural and Urban Administration: Public Policies, Governance and Urban Services

- 13 The Other Jawaharlal Nehru National Urban Renewal
Mission: What Does It Mean for Small Town India? 337**
Sama Khan
- 14 Shedding Light on Social and Economic Changes in Small
Towns Through the Prism of Local Governance: A Case
Study of Haryana 371**
Marie-Hélène Zérah
- 15 Purdah and Politics: Women's Participation
in Local Governance 397**
Aditi Surie and Marie-Hélène Zérah
- 16 New Urban Territories in West Bengal: Transition,
Transformation and Governance 421**
Gopa Samanta
- 17 Does Administrative Status Matter for Small Towns in India? 443**
Partha Mukhopadhyay

Part IV Producing and Innovating in Non-metropolitan Contexts

- 18 Development on the Urban Fringe: The Prosperity
of Kartarpur, a Small Town-Cluster in Punjab 473**
Rémi de Bercegol and Shankare Gowda

19	From Ox-Carts to Borewell Rigs: Maintenance, Manufacture and Innovation in Tiruchengode	497
	Yann Philippe Tastevin	
20	Globalisation, Productive Spaces and Small Town Transformation: The Case of Machlipatnam and Pedana in Coastal Andhra Pradesh.	527
	N. Sridharan	
21	Mapping Small Towns' Productive and Employment Configurations	553
	Elfie Swerts and Eric Denis	
22	Commuting Workers and the Integration of the Rural-Urban Economy	577
	Ajay Sharma	
23	Non-timber Forest Products and Small Town Economies	601
	Manoj Nadkarni	

Figures

Figure 2.1	a Rural and urban population growth 1961–2011. b Types of urban settlements 1981–2011.	40
Figure 2.2	a Characteristics of new CTs (village population threshold of 5000). b Characteristics of new CTs (village population threshold of 4000)	47
Figure 2.3	Contribution of new CTs to urban population growth (major states)	48
Figure 2.4	a Urbanisation and average number of new CTs per district (districts with at least one new CT). b Urbanisation and average number of new CTs per district (all districts)	53
Figure 2.5	District-wise distribution of new CTs in India	56
Figure 2.6	Percentage of new CTs to total large villages.	57
Figure 2.7	Expected new CTs in 2021 Census (major states)	63
Figure 3.1	Association of the population of towns and villages within the perimeter of polygons	70
Figure 3.2	a The 3141 “urban” IA of 10,000 inhabitants and above according to the Census criteria of 75 % of the male population engaged in non-agricultural activities in 2011	73
	b The 3966 “non-urban” IA of 10,000 inhabitants and above according to the Census criteria of 75 % of the male population engaged in non-agricultural activities in 2011	74
Figure 3.3	a The 5838 urban settlements (<i>class 1</i> IA specialised in secondary and tertiary activities, <i>class 2</i> diversified IA, with an overrepresentation of household industry and <i>class 3</i> diversified IA)	75
	b The 1269 nonurban settlements (large villages: <i>class 4</i> IA dominated by primary activities)	76

Figure 3.4	Rank size curve of Indian cities, 1961–2011	77
Figure 3.5	Evolution and convergence of the annual average rates of population change in Indian cities (total and per category of size, 1961–2011)	79
Figure 3.6	Trajectories of the 5730 Indian cities	81
Figure 3.7	a The 1995 small towns of class 1.	82
	b The 880 small towns of class 2.	83
	c The 2166 small towns of class 3.	84
	d The 151 small towns of class 4.	85
Figure 4.1	Log of NSDP and the urbanisation of the states.	99
Figure 6.1	Mismatch between CTs and SECC urban areas	148
Figure 6.2	a New urban settlements in Haryana reported in SECC (2011). b New CTs, 2011 around peripheries of class 1 towns	150
Figure 6.3	Growth around peripheries of class 1 towns. 1 Panipat. 2 Karnal. 3 Rohtak. 4 Ambala. 5 Yamunanagar	151
Figure 6.4	Gurgaon land use change 2008–2013.	154
Figure 6.5	New CTs in Rajasthan around peripheries of class 1 towns	158
Figure 6.6	New CTs in Jaipur Sub Urban	159
Figure 6.7	Jamwa Ramgarh: distribution of marginal workers, 2011.	161
Figure 6.8	Jamwa Ramgarh: age and gender specific commuting (in %).	162
Figure 6.9	CT criteria and Jamwa Ramgarh, 1961–2011.	162
Figure 7.1	Average demographic growth of Parangipettai and the 606 Indian localities having between 15,000 and 25,000 inhabitants in 1961.	171
Figure 7.2	Non-growing small towns in South India. Localities with between 10,000 and 50,000 inhabitants in 2011 and an annual growth between –1.3 and 1 % for the period 1961–2011 with their administrative status	172
Figure 8.1	Yermal overlapping territories	201
Figure 8.2	South Canara's transformation as an interface of physical geography and multi-logic urbanisation, a diagrammatic account that draws from several real sites in South Canara, and especially Yermal	213
Figure 8.3	A petition by the fishing federation to the District Commissioner and Head of Fisheries Department	214
Figure 8.4	South Canara as a transnational space	223
Figure 9.1	Land use changes in Tiruchengode town and surroundings between 1996 and 2009	241

Figure 10.1	Migration routes of Adis to Pasighat	266
Figure 11.1	Aerial view of Bhuntar.	286
Figure 11.2	Map of Kullu district, showing the metropolitan/study area from Kullu to Bajaura.	288
Figure 11.3	Kullu-Bhuntar Agglomeration.	293
Figure 11.4	TIN numbers issued by year.	298
Figure 11.5	A view from the <i>Gompa</i>	308
Figure 12.1	Locations of fieldworks in Tamil Nadu and their census population in 2011	313
Figure 12.2	The central location of the main temple of Tiruchengodu and its influence on the urban morphology.	320
Figure 13.1	Share of population and central share committed under JNNURM.	355
Figure 14.1	Location of the research sites	373
Figure 16.1	Barjora: location and connectivity	424
Figure 16.2	Economic landscape of the Barjora agglomeration	426
Figure 17.1	Indicators for towns in 2011. a In-house toilet. b Toilet with piped sewerage/septic tank. c Tap water. d In-house tap water	448
Figure 17.2	Density plots for various indicators in 2011 (CTs vis-à-vis statutory town)	451
Figure 17.3	Density plots for various indicators in 2011 (proximate vis-à-vis non-proximate CTs)	453
Figure 17.4	Change in Amenities 2001–2011 (CTs vis-à-vis statutory towns).	453
Figure 17.5	Difference measure <i>M</i> by population of urban area	461
Figure 17.6	Differences in urban and proximate rural area, by size of urban area	462
Figure 17.7	Differences in urban and proximate rural area, by status of urban area	463
Figure 18.1	Location of Kartarpur.	475
Figure 18.2	Spatial expansion of Kartarpur in 1989	479
Figure 18.3	Spatial expansion of Kartarpur in 2008	480
Figure 18.4	Detailed landuse map in 2012	481
Figure 18.5	The furniture industry in Kartarpur.	482
Figure 20.1	Coverage under IDSMT under various five-year plans.	531
Figure 20.2	Indicators and sub-indicators	535
Figure 20.3	Population of Machlipatnam and Pedana (1901–2011).	536
Figure 20.4	Population density in Machlipatnam and Pedana	537
Figure 20.5	Kalamkari production and supply chain	540
Figure 20.6	Marine products: supply chain	543
Figure 20.7	Imitation/artificial jewellery: production and supply chain	544

Figure 20.8	Impact of imitation jewellery and marine products on the Machlipatnam city parameters	545
Figure 20.9	Impact of the kalamkari industry on the city—a comparative picture	545
Figure 20.10	Unit level spatial transformation in three creative industries 2000–2014	547
Figure 20.11	Spatial expansion of Machlipatnam and Pedana	548
Figure 21.1	Distribution of small towns by socioeconomic profile in 2011 (<i>four classes</i>)	568
Figure 21.2	Share of male workers in Indian small towns in 2011	570
Figure 21.3	Proportion of male marginal workers in small towns	573
Figure 22.1	Intensity of rural-urban commuting at the regional level (quantile maps)	590
Figure 22.2	Intensity of urban-rural commuting at the regional level (quantile maps)	591
Figure 22.3	Intensity of rural workers with no fixed place of work at the regional level (quantile maps)	592
Figure 22.4	Intensity of urban workers with no fixed place of work at the regional level (quantile maps)	593
Figure 22.5	Distance from residence to workplace location (in kilometres)	594
Figure 22.6	Distribution of monthly cost of commuting (all modes of transport)	596

Tables

Table 1.1	Case studies from the SUBURBIN research project	11
Table 2.1	Dynamics of CTs between 2001 and 2011	45
Table 2.2	Share of new CTs to total urban population growth between 2001 and 2011	49
Table 2.3	Relationship between new CTs and district characteristics	54
Table 2.4	New CTs and proximity to large towns	58
Table 2.5	Proximity of new CTs by size class of towns	59
Table 2.6	New CTs by size of settlement agglomerations (SA)	61
Table 3.1	Male employment profiles in the classes of IA identified by the Hierarchical Ascending Classification (in percentage by sector).	72
Table 3.2	Urbanisation rates in India in 1961 and 2001 according to different definitions of cities and databases (in percentages).	76
Table 4.1	Percentage of urban population and number of towns in India	95
Table 4.2	Growth in urban population for states and towns between 1991, 2001 and 2011.	96
Table 4.3	Population growth in UAs between 1991 and 2001	102
Table 4.4	Growth in the number of large, medium and small towns across UAs between 1991 and 2001	105
Table 4.5	Share of urban and rural manufacturing firms across different states of India.	111
Table 4.6	Growth in rural-urban share of manufacturing firms and number of villages.	112
Table 4.7	Correlation between employment and number of towns	114
Table 4.8	Correlation between productivity and town class (2001). . . .	115
Table 4.9	Correlation between number of towns and agricultural employment	116

Table 5.1	Inter-censal change in main and marginal workers	123
Table 5.2	Main and marginal workers by occupation	124
Table 5.3	WPR for persons aged 15 years and above according to the usual status in 1999–2000, 2004–2005 and 2009–2010	124
Table 5.4	Distribution of employed (usual status) men aged 15 years and above by status in 1999–2000, 2004–2005 and 2009–2010.	126
Table 5.5	Distribution of person-days of males aged 15 years and above by broad current daily activity status in 2009–2010	127
Table 5.6	Unemployment rates (no. of persons/person-days in unemployment per 100 persons/person days in the labour force) for men aged 15 years and above according to usual status, current weekly status, current daily status in 1999–2000, 2004–2005 and 2009–2010.	130
Table 5.7	Distribution of usual status of male workers in the 15 years and above age group by the broad industry division in 1999–2000, 2004–2005 and 2009–2010	131
Table 5.8	Distribution of usual status male workers in the 15 years and above age group by the broad industry division in 2009–2010	132
Table 5.9	Ranking of regions based on concentration of section of industry	137
Table 6.1	Sample characteristics for micro study	145
Table 6.2	Level of urbanisation in India, Haryana and Rajasthan	146
Table 6.3	New towns in 2011 in Haryana as defined by the Census of India and the SECC survey	148
Table 6.4	Growth in population and built-up area of non-metro towns in Haryana	156
Table 6.5	Pattern of employment across the urban-rural continuum . . .	157
Table 6.6	Emergence of new towns in 2011 in Rajasthan	160
Table 6.7	Jamwa Ramgarh occupational characteristics, 2012 (in %)	161
Table 7.1	Parangipettai population distributed by religion from 1911 to 2011	175
Table 13.1	Funding pattern under JNNURM.	344
Table 13.2	Central share committed for some major states (INR in millions).	346
Table 13.3	Central share released for some major states (INR in millions).	349
Table 13.4	Class-wise distribution of towns and population	352

Table 13.5	Class-wise distribution of central share committed and released under the UIDSSMT and IHSDP (INR in millions).	353
Table 13.6	City-wise central share committed and released under the UIG and BSUP schemes (INR in millions)	361
Table 13.7	Class-wise distribution of towns and central share committed under the UIDSSMT (INR in millions).	363
Table 13.8	Class-wise distribution of towns and central releases under the UIDSSMT (INR in millions)	364
Table 13.9	Class-wise distribution of towns and central share committed under the IHSDP (INR in millions)	366
Table 13.10	Class-wise distribution of towns and central releases under the IHSDP (INR in millions)	367
Table 14.1	Presentation of the five small towns selected.	374
Table 14.2	Who can decide on provision of infrastructure as per the knowledge of councillors?	376
Table 14.3	Knowledge of councillors on stages of state interventions and decisions regarding land use (percentage and number of answers)	378
Table 14.4	How would you qualify the powers of the district commissioner?	380
Table 14.5	Response to the questions: are you involved in the decisions taken in the Nagar Panchayat/municipal councils regarding the awarding of contracts?	385
Table 14.6	Answers to the question: are there decisions you can take without the chairman's approval?	393
Table 14.7	Answers to the question: are there decisions you can take without the Executive Officer's approval?	394
Table 16.1	Population size, density of population and percentage of non-agricultural workforce in Barjora CT (<i>B. CT</i>) and Barjora agglomeration (<i>B. AG</i>), 1981–2001	426
Table 16.2	Sources of raw materials used in industries.	429
Table 16.3	Type of ownership and location of owners	430
Table 16.4	Types and sources of labour in the industries	431
Table 16.5	Levels of household assets, 2011 Census	435
Table 16.6	Condition of basic services as perceived by the households	436
Table 17.1	Summary statistics for towns in 2001 and 2011.	446
Table 17.2	Comparison of statutory towns and CTs.	450
Table 17.3	Comparison of proximate and non-proximate CTs	452
Table 17.4	Linear specification with population and proximity interaction	455
Table 17.5	Nonlinear specification with population and proximity interaction	456

Table 17.6	Share of proximate rural neighbourhood and town population by size class	457
Table 17.7	Access to services in CTs and statutory towns by size class	458
Table 17.8	Service in rural areas proximate to CTs and statutory towns by size class	459
Table 17.9	Share of villages which have better level of amenities than associated town	460
Table 17.10	Summary statistics of amenities in the rural neighbourhood of small towns	464
Table 17.11	Relationship of statutory status to access indicators	466
Table 19.1	Growth of lorry body building units in Salem district from 1982 to 1991	509
Table 19.2	Population size of Tiruchengode in Tamil Nadu in the district of Namakkal at the town and sub-district level	512
Table 20.1	Occupational structure of Machlipatnam and Pedana 2001 and 2011	539
Table 21.1	Correlation matrix of urban and rural population and sectorial GDP in 2000 and 2005	557
Table 21.2	Scaling laws for the distribution of cultivators and agricultural labourers, male workers engaged in household industries and male workers engaged in secondary and tertiary activities	564
Table 21.3	Proportion of cultivators and agricultural labourers, male workers engaged in household industries and male workers engaged in secondary and tertiary activities by city-size class in 2011	565
Table 21.4	Typology of the economic profile of Indian cities	567
Table 21.5	Proportion of marginal male workers according to city size for each sector of activity	572
Table 22.1	Estimated size of non-agricultural workforce by sector of residence and place of work: all India	582
Table 22.2	Distribution of non-agricultural workers based on industrial classification, residence and workplace location	583
Table 22.3	Distribution of non-agricultural workforce by gender and residence-workplace location	584
Table 22.4	Distribution of urban residents by economic activity, resident city size class and workplace location	585
Table 22.5	Distribution of rural and urban non-agricultural workforce in rural and urban areas	587
Table 22.6	Economic activities of the commuting workers	595
Table 23.1	Population of Abu Road block in the 2011 Census	605

Table 23.2	Production & Income of Tendu Leaves in Sirohi (Rajasthan)	607
Table 23.3	Monthly work cycles for men and women	611
Table 23.4	Income sources of an average family	612

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Acronyms and Guide to Numeral Conversion

1 lakh	100,000
1 crore	10 million
74th CAA	74th Constitutional Amendment Act
ACA	Additional Central Assistance
ADDA	Asansol Durgapur Development Authority
AMRUT	Atal Mission for Rejuvenation and Urban Transformation
ASI	Annual Survey of Industries
AUWSP	Accelerated Urban Water Supply Programme
BSUP	Basic Services to the Urban Poor
CAG	Comptroller and Auditor General
CCI	Cabinet Committee on Infrastructure
CSMC	Central Sanctioning and Monitoring Committee
CT	Census Towns
DIC	District Industrial Centre
EXIM policy	Export Import Policy
GoI	Government of India
IBEF	India Brand Equity Foundation
IDSMT	Integrated Development of Small and Medium Towns
IHSDP	Integrated Housing and Slum Development Program
IUDP	Integrated Urban Development Programme
JNNURM	Jawaharlal Nehru National Urban Renewal Mission
KIADB	Karnataka Industrial Area Development Authority
MLA	Member of Legislative Assembly
MoA	Memorandum of Agreement
MoHUPA	Ministry of Housing and Urban Poverty Alleviation
MOU	Memorandum of Understanding
MoUD	Ministry of Urban Development
MP	Member of Parliament
MSME	Micro, Small and Medium Enterprises department
NEG	New Economic Geography

NeGP	National e-Governance Plan
NRI	Non-Resident Indian
NSDP	National Slum Development Programme
OG	Outgrowth
PHED	Public Health Engineering Department
RGI	Registrar General of India
SA	Settlement Agglomeration
SEZ	Special Economic Zone
SPV	Special Purpose Vehicle
ST	Statutory Towns
UA	Urban Agglomeration
UIDSSMT	Urban Infrastructure Development Scheme for Small and Medium Towns
UIG	Urban Infrastructure and Governance
ULB	Urban Local Body
UNFPA	United Nations Population Fund
USD	United States Dollar
VAMBAY	Valmiki Ambedkar Awas Yojana
VAT	Value Added Tax

Chapter 1

Introduction: Reclaiming Small Towns

Marie-Hélène Zérah and Eric Denis

1.1 Introduction

Most books dealing with cities start with international statistics on urbanisation. These figures underline the shift towards an urban world. For instance, it is common to begin by stating, after the UN, that since 2014, 54 % of the world population lives in cities, and that the least urbanised continents, Africa and Asia, are also those experiencing the most rapid urbanisation.

We also open with this important fact, because it underlines the point of departure of this book and its content that interrogates anew the definition of the urban, the scope of the urban world and the urban transition process itself. It brings

We are grateful to all the researchers who were part of the SUBURBIN team. They embarked with us on a long collective journey that enabled us to write this introductory piece. We would also like to thank Loraine Kennedy and Barbara Harriss-White for their reading of an earlier draft of this introduction and the anonymous reviewer who provided some insightful comments on the overall manuscript. We are also grateful for the careful editing of the manuscript by Renuka George. Over the course of this project we organised a series of workshops, one of them jointly with the urban studies team at the Tata Institute of Social Sciences that contributed to opening up debates on this work. Finally, this research project received the unwavering support from the Centre for Social Sciences and Humanities (New Delhi) and the French Institute of Pondicherry where we were deputed during the course of this research.

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to the fore issues involved in defining the frontier of the urban and its political dimensions, and it demonstrates the important (and to some extent increasing) role small towns play in the urban transition process. This book is part of a growing body of work that reclaims the diversity of the urban phenomenon beyond the global metropolitan cities and highlights the range of national and regional trajectories. It questions the restricted representations, existing measures and the explanatory models of urban expansion. This is especially important because these engender a blinkered view of urban development, dominated by slogans for competitive cities and, more recently, for smart cities. Indeed, even though international urban statistics do not disaggregate the category of “secondary” cities, they underline the fact that half of the world’s urban population lives in settlements below 500,000 inhabitants.

Though the term “small towns” needs to be defined precisely, we cannot deny their importance as objects of study, both for empirical and theoretical reasons. We endorse the claim made by Bell and Jayne that “What is lost as a consequence of the bias towards large cities is a full picture of urban form and function: the urban world is not made up of a handful of global metropolises, but characterised by heterogeneity. Studying small cities enables us to see the full extent of this” (Bell and Jayne 2009: 683). However, small towns are not solely placed in contrast to big cities. On the contrary, small towns need to be studied for themselves, as sites of urbanity, economic activities and social transformations and for their place in urbanisation, rural-urban linkages and the global economy.

This is the purpose of this book which is itself located in a critical relation to a vision of global urbanisation reduced to metropolitanisation and competition between global cities. It aims to challenge the usual approach which sees the urban world only through the prism of very large cities. It acknowledges the various processes of demographic and economic agglomerations but contests the current dominant urban research which tends only to focus on megalopolises. This edited volume aims to offer additional perspectives on urban transition by focusing on small towns with populations below 100,000 people, approached from a multiplicity of academic disciplines, and linking macro and micro level analysis. In this, it constitutes a critical contribution to the current methods of conceptualising cities and urban planning. It also strives to contribute actively to the debates about the plurality of development models, to provide analytical tools for policy makers and to inform public policy debates on urban and regional planning.

Another of our goals is to contribute to the international dialogue on other contexts such as China and Asian and Latin American countries, where the process of in situ urbanisation and a renewed approach to urban-rural linkages is being discussed (Berdegúe et al. 2015; Berdegúe and Proctor 2014a, b; Christiaensen and Todo 2014; Zhu 2000, 2002).

This book focuses on India. The Indian case is an important one. Despite a low official urbanisation rate (31.1 % in 2011), 377 million Indians live in cities and this means that 1 out of 10 global urban citizens is Indian. Among them, around 150 million live in cities of less than 100,000 people and the share of these smaller settlements is increasing. These facts are often obscured by the very large and

conspicuous Indian cities, such as Delhi, Mumbai and Kolkata, which are among the 20 largest cities in the world. In other words, the process of urbanisation in India is oversimplified and this book seeks to contribute to unveiling its complex dynamics, in particular the widely unknown, badly documented and ignored expanding world of small towns and big villages.

To use the term coined by Gyan Prakash, there has been an “urban turn” (Prakash 2002) in the Indian literature. This large body of work has made important contributions to the understanding of the global South, post-colonial cities and, more importantly, urban theory (Roy 2009; Anjaria and McFarlane 2011; McFarlane et al. 2012; Benjamin 2008) but has remained focused on big cities. What we seek to do here is to initiate modestly a second urban turn by revisiting the realm of small towns which was an important topic of research before the early 1990s.

This book is not a collection of disparate contributions. It offers a mosaic of outlooks on small town dynamics that are the product of a common research framework and a 3-year research project. Our academic collective first met in the middle of 2009. We reached a shared conclusion that it was of great importance to reinstate small towns on the map of urban India. We agreed that we needed to straddle disciplinary boundaries and connect various scales of analysis using different data sources. The term “subaltern urbanisation” suited our idea of bringing the voices of smaller places and their inhabitants back into the limelight (Denis et al. 2012).

In Sect. 1.2 of this introduction we return to our argument on “subaltern urbanisation” and expound the theoretical underpinnings and the existing literature that shape our research. We then detail our methodology. The next four sections of the introduction present our research results based on the different chapters of the book, which is organised into four parts. Section 1.4 makes a case for a decentralised and non-hierarchical reading of the urbanisation process and its dynamics, relying mainly on the first part of the book. The next two sections largely draw lessons from the second and the fourth parts of the book. Section 1.5 demonstrates how the range of economic activities in small towns is historically embedded in social and political structures, as well as spatial relationships, shaped by culture and land tenure relations. Section 1.6 shows that small towns everywhere are sites of everyday economic activities that are reshaping urban-rural linkages and providing resources to help withstand underemployment, informality and poverty. The lens of governance in Sect. 1.7, based on Part III of the book, provides insights on the politics of urban classification and the outcomes in terms of infrastructure and public policies.

1.2 Why Study Small Towns?

1.2.1 A Theoretical and Empirical Necessity

The growing body of research on the “global South” has focussed essentially on large cities, be it the normative and prescriptive literature produced by international

organisations and think tanks, or the academic literature, including works produced in the areas of critical geography and urban studies. In the economic field, the New Economic Geography is influential, notably towards policy circles, as exemplified by the 2009 World Development Report titled *Reshaping Economic Geography*. It supported the revival of spatial policies favouring cities as engines of growth and special economic zones in order to create agglomeration economies, in the belief that there is a convergence and a universal process in the relationship between growth and urbanisation (World Bank 2009). Integration into the world economy is through large cities, which have developed innovation, talent and high levels of amenities (Glaeser 2010, 2011). The geography and urban studies literature does not adhere to this model and some of the criticisms are pertinent to the research agenda on small towns.

Among the many commentaries criticising the 2009 *World Development Report*, there is a consensus on the wrongly assumed connection between laissez-faire economics and pro-large cities policies of concentration and development (Bryceson et al. 2009) which are potentially dangerous in terms of creating regional inequalities and marginalising small towns (Rigg et al. 2009). They also reveal a lack of understanding of the variations in national policies towards development (Maranganti et al. 2009) and methodological issues regarding the measure of the urbanisation phenomena that obscure the role of small towns (Moriconi-Ebrard et al. 2010); this is partly because of the linear model commonly used to describe the rural to urban transition. The global economy, in contrast, is integrated via the multiple connections of varied types of settlements (Hart 2010).

A widely different set of criticisms, not directly addressed to the economic literature per se, is concerned with the constant reference to the cities of the “Global North” as the archetype to which all other cities are compared, and towards which they are expected to converge. In her landmark book, Robinson (2006) traces the history of this side-lining of cities of the South and calls for a shift away from the world city theory towards an understanding of the “world of cities”, which consists of ordinary cities. Roy and Ong (2011) take this forward by examining the practices followed by Asian urbanism in an attempt to build upon the theory from the South. The ability to recognise the many idioms of urbanism leads to a focus on diversity (Parnell and Oldfield 2014). However, this research on the urban global South remains located in large cities, paradoxically those that can compete with the iconic megalopolises of New York, London, Paris and Tokyo.

There is therefore a need to return to a more complete idea of the urban and this includes the study of the dynamics of small towns. As critics of the 2009 WDR pointed out, the restricted models, representations and existing measures of urbanisation lead to a distorted and simplified understanding of the world and national systems of cities and their evolution. In opposition to this dominant paradigm, and by no means ignoring the importance of agglomeration economies, we start from a more decentralised and less hierarchical world geography, of which small towns are an integral part. This implies looking at small towns beyond their demographic weight as sites of production and innovation.

To rethink urban theory seriously, it is necessary to move away from a “metrocentricity” bias (Bunnell and Maringanti 2010). We need to redraw the map, reinstating the small towns and big villages where an increasingly large number of people reside and build their livelihoods, slowly embracing the habits and lifestyles of urban consumption. Further, urban poverty is as high, if not higher, in small towns as in large cities, and we must pay attention to this, especially because it is, most often, slums located in large cities or on their peripheries which are commonly associated with urban deprivation. From a theoretical point of view, understanding the form and nature of “small town urbanism” is imperative to unpacking the role of small urban settlements as an interface functioning at different scales, without trapping them in a dominant and hierarchical view of the world, an abstract “planetary urbanisation” process (Brenner and Schmid 2011).

At the core of this agenda, one essential issue is to speak across these two sets of literature at different scales, from the urban system to the human settlement. In the 1970s and 1980s, “small towns” was a vibrant site of research concerned with a number of important themes. To start with, we should mention the question of urban concentration and its relationship with growth, the disposal of agricultural surpluses and industrialisation, which led to intense debates on the role of small towns (Mera 1973; Gilbert 1976, 1977; Richardson 1976). Second, the function of small urban centres in rural-urban linkages was studied at length, with some authors underlining their contribution to a balanced network of places (Rondinelli 1983; followed later by Tacoli 1998, 2006; Gaile 1992). Others saw small urban centres as “parasitic islands of privilege” and arenas of class formation and elite capture (Schatzberg 1979) which benefit from a policy bias (Lipton 1977) or, in a more nuanced way, gain from the surplus generated by the green revolution (Harriss and Harriss 1984). Third, the cultural and social specificities of small towns were also pointed out (Corwin 1977). The debates generated by this strand of research greatly declined from the 1990s onwards with the onslaught of globalisation and global cities studies, coinciding with structural adjustment policies and the pro-market reforms. That is not to say, however, that research on small towns totally disappeared, but it was less abundant and more descriptive, including in India (Sharma and Sandhu 2013; Sharma 1989, 2012; Mahadevia and Mukherjee 2003). However, some authors pursued a research tradition concerned with the complexity of the urban (Hilgers 2012; Tacoli 2006; Hinderink and Titus 2002), including in India (Basile 2013; Harriss-White 2015).

1.2.2 The Research Questions in This Book

India is an ideal site to shed light on the function of small towns because of its role in global urban transition. An extensive review of the literature by our collective identified research gaps around the main questions the project chose to address, and confirmed that the study of small towns is a blind spot in urban research, explaining the lack of evidence related to our own research hypothesis (Raman et al. 2015).

The review pointed to the elusive definition of small towns, because different authors use different population thresholds to define secondary towns, small towns and medium towns. Within the ongoing contemporary urban research that is not centred on the 10 large Indian cities, the focus is either on emerging topics such as environmental governance (Véron 2010) or questions of urban planning and governance in secondary cities with above 100,000 people (Kundu and Bhatia 2002; Coelho and Vijayabaskar 2014; Kamath and Deekshit 2014). The exception is Harriss-White's recent edited volume (2015) that focuses on an urban economy at the lowest end of the settlement distribution over a period of four decades.¹ In our work we recognise small towns as settlement agglomerations with a population between 10,000 and 100,000 people, regardless of their official classification.

Our definition of subaltern urbanisation focuses on cities as a network system. We argue that the notion of "subaltern urbanisation" enables us to make visible and intelligible the bottom of the urban hierarchy. This provocative term qualifies our aspiration to abide by a tradition that chooses to look at the agency of the subalterns with an attempt to apply it to invisible spaces. At the beginning of this research we put forward a definition based on the agency of small settlements (Denis et al. 2012). Placing settlements along two axes defined by spatial proximity and administrative recognition, we classified settlements into four categories—denied urbanisation, invisible urbanisation, contested urbanisation and recognised urbanisation—which underlined the blurred frontier of the urban. We also demarcated this notion from other terms such as suburbanisation and exclusionary urbanisation, and in particular from the innovative concept, coined by Roy (2011), of "subaltern urbanism" which focuses on political agency and small-scale entrepreneurialism but is located in large cities. Our classification served as a heuristic tool in the analysis of the diversity of urban settlements, including big villages that fall within the category of denied and invisible urbanisation and in our attempts to verify the research hypotheses we had formulated.

Our first research question interrogates the real extent of the urban: in other words, where do we draw the line between the rural and the urban, in terms of administrative status, functional characteristics and the experienced reality of residents? It leads to the discovery of the role small towns play in the debate as to whether the level of urbanisation is properly measured: is India under-urbanised? The definition of urbanisation in India is unique and not always well understood. There are two types of urban settlements: the statutory towns (STs), which are urban local bodies as per the state municipal acts and Census towns (CTs). From an administrative point of view, CTs are villages governed by a village committee, but they are considered urban by the Census of India because they fulfil the three criteria that define an urban settlement: a population of at least 5000 people, a density of at least 400 persons per square kilometre and a minimum of 75 % of male main workers employed in the non-farming sector. Consequently, the percentage of urban population includes both STs and CTs. This means that around

¹For more details, refer to the literature review in Raman et al. (2015).

15 % of the urban population (54 million people) lives in dense, in-between settlements (CTs), dominated by non-farm activities but which are administratively treated as rural. Conversely, Denis and Marius-Gnanou (2011) estimate that the level of urbanisation in 2001 was around 36 %, and therefore on a par with the Chinese rate of urbanisation, a finding shared by Uchida and Nelson (2010) based on another methodology. This suggested that a number of large villages could be considered urban, confirming the need for a more precise analysis of the extent of the urban system (Denis et al. 2012).

Our second research question asks, what are the relationships of small towns with larger cities? Because small towns represent a significant share of urban growth, what are their relationships with larger cities and does the standard hierarchical urban model² provide a relevant explanation of the situation of diffused growth? The development of a global web of connections, characteristic of our epoch, is not merely a hierarchical process mediated by proximity and distance as in a closed system. Multiple leapfroggings and external investments destabilise the existing national and subnational system of cities and, in fact, contradict the classical model engraved in the Central Place theory as first conceived by Christaller (1933). Finally, in 2015, the International Monetary Fund (Dabla-Norris et al. 2015) acknowledged the negative correlation between the urban concentration of wealth and economic growth, despite its own discourse in favour of deregulation and liberal policies. These policies were known to increase inequalities and social and spatial polarisation but, according to the IMF, they were supposed to be transitory and hence to lead to convergence. In this context, we examine how subaltern interconnections within the system of cities counter the *laissez-faire* approach that envisions large cities as the only motors of growth.

What is the relationship between the proliferation of small towns and economic processes? Are they just the recipients of diffusion processes and of the (re)location of low productivity activities, or wellsprings of growth linked to local capabilities articulated to larger networks? This is an important question, particularly as policy circles are influenced by large consultancy firms which equate growth with metropolitan cities. There are contradictory trends with regard to the role of agglomeration economies.³ On the one hand, Lall et al. (2010), following Chakravorty and Lall (2007), highlight the correlation between growth and connectivity to the international market, which is strengthened by port location. Spatial transformation is also a result of the productivity gains on the peripheries of large cities (Vishwanath et al. 2013). Investments and public policies have tended to support this vision with policies such as the Jawaharlal Nehru National Urban

²The canonical hierarchical urban model supposes a pyramidal distribution of power and competences mirroring the city-size distribution; it leaves limited capabilities and agency to small towns that are considered, rather, as dependent on the redistribution of banal activities from larger cities. Large cities concentrate the most innovative enterprises.

³For a detailed discussion, refer to the literature review of this project, pp. 29–34 in Raman et al. (2015).

Renewal Mission (JNNURM) that encourage public investment in large towns (Sivaramakrishnan 2011) and incentives for foreign direct investments, concentrated in coastal districts, particularly those that have large cities (Mukim and Nunnenkamp 2012). This could widen the rural-urban divide. However, another strand of research shows a dispersal of economic activities (Ghani et al. 2012) driven by the search for lower labour costs, less stringent environmental regulations and available land, and Himanshu et al. (2011) underline the role of small secondary centres in urban job creation. Further, actual mobility rates do not support the common belief that people are flooding to large cities (Kundu and Saraswati 2012). The 2001 Census data shows that only 21 % of natural population growth in cities is caused by rural urban migration, leading Mukhopadhyay to qualify the urban transition as a process of morphing places rather than moving people (Mukhopadhyay 2012), which is consistent with the low level of job creation in large cities. This lack of opportunities, except for highly qualified permanent jobs, led Kundu (Kundu 2011; Kundu and Saraswati 2012) to discuss “exclusionary urbanism”. In the same vein, Jedwab and Vollrath (2015) suggest that megacities in India, as in most developing countries, are blocked in a circular “Malthusian trap”.

Our next research question stems from the growth of small towns and the Indian employment story: how do small towns contribute to the growth of the Indian economy? There are concerns related to the quantity of jobs available, the nature and the location of these jobs and the ability to harness the window of opportunity generated by the demographic dividend with the ensuing arrival of cohorts of young workers on the labour market. Jobs in agriculture are declining rapidly but the salaried workforce remains limited, with a high persistence of jobs in the unorganised sector (Ghani et al. 2014). On the other hand, the highly touted growth sectors, such as IT, are not creating the large numbers of jobs required to absorb the existing and future workforce. Existing studies suggest that small towns play a role in rural job diversification with the rise of transport and construction activities (Denis et al. 2012). In other words, despite contradictory evidence regarding the economic and spatial dynamics at work in the last decade or two, there is sufficient evidence to argue that a significant share of the Indian economy and jobs is located outside large cities. A corollary question, therefore, relates to the governance of small towns, the levels of services and infrastructural support these small towns receive, because the literature clearly indicates a very low level of infrastructural services and of administrative capacity (Sharma 2012; De Bercegol 2016).⁴

Assuming that small towns are sites of economic activity and even innovation, a related question asks what kind of capital can actors mobilise and for which activities? What are the articulations between local economic practices and global flows of knowledge, capital and innovation (both organisational and industrial)? What economic activities characterise small towns, from the resilience of older industrial clusters and trade in agricultural products to new clusters of economic

⁴For a detailed discussion on this debate, refer to the literature review of this project, pp. 29–34, in Raman et al. (2015, pp. 85–89).

activities around real estate, or educational and health institutions, where land plays a central role as a source of capital? Are these settlements, sites of informal small-scale diverse activities, dependent on daily wages and casual work, also linked with mobility, seasonal migration and remittance flows? Studies looking at capital formation and its circulation in small towns have already demonstrated its embeddedness in complex social structures (Harriss-White 2015; Raman 2014, 2017)—see, for instance, the illuminating case of the Gounder caste in the textile cluster of Tirupur, as revealed by Chari (2004).

Our final question, following Massey (1991), contests the widespread idea that small towns are sites frozen in time or sites of backwardness associated with fixity and parochial societies. On the contrary, we assume that some of these settlements can be locations of economic innovation and social change, even though their development indicators remain weak. In other words, what kind of social change characterises small towns in terms of migration, social mobility, shifting power relationships or transformation of lifestyles and aspirations, among others? This stand defines understanding localities as “the intersection of social activities and social relations and, crucially, activities and relations which are necessarily, by definition, dynamic, changing” (Massey 1991: 275). Small towns are also sites of a form of rural or subaltern cosmopolitanism (Gidwani 2006) with economic and political entrepreneurs able to straddle the urban and the rural (Jeffery 1997). These actors have been neglected, as urban research has focused on large cities with their organised urban middle class (resident welfare associations, environmental associations...) that is perceived as new and socially dynamic. This creates a distorted view of social transformation and of the far more complex ongoing social churning. This book therefore aims to analyse social transformation from below by allowing inhabitants of small towns to speak out. Such a posture invites us to view small towns as “total” social facts (Mauss). For us, small towns are at least as complex as large cities.

1.3 Methodology: A Collective Research Project with a Multi-pronged Approach

Many of our hypotheses emanate from theoretical debates but they have also emerged from the results of a previous research project called e-Geopolis. This aimed to refine the United Nations’ efforts to build comparative data sets to measure urbanisation worldwide. In the e-Geopolis project a settlement agglomeration is considered a unit of contiguous built-up areas less than 200 m apart, as captured by satellite imagery. Further, building on a longitudinal series of Census counts for locality populations, the database aims to provide growth trends that qualify the urban settlement structure and its relationship with economic development (Moriconi-Ebrard et al. 2010). The UN provides almost no data below the 500,000 population threshold, whereas the geo-database we developed and used enables an

understanding of the lower urban settlement hierarchy. In the case of India, it clearly highlights the role of these settlement agglomerations, with a minimum population threshold above 10,000 people. These results were later confirmed by the rise of CTs in the 2011 Census (Denis and Marius-Gnanou 2011). The role of these lower settlements led to a series of discussions among a set of researchers from varied backgrounds interested in going beyond the study of large and global cities, or concerned with the broader transformation of the system of cities.

This convergence of questions and disciplines gave rise to the SUBURBIN project,⁵ which resulted in this book. The French National Agency for Research and several partner institutions in India financed it.⁶ The methodology of this project proposed a common set of research questions but chose a participatory and iterative research method at the crossroads of geography and economics to create a fruitful dialogue between the macro and micro perspectives of the project. Consequently, the methodology is totally constitutive of a research posture that aims at “shifting out of metro cities and towards small towns”.

This research also positions itself as a combination of both quantitative and qualitative analyses of the diversity of urbanisation trajectories in India. It is conceived as a multidisciplinary, back-and-forth theoretical dialogue, and an all-India level analysis, using large existing data sets, geo-spatialised economic data and field monographs located in both STs and CTs. The research thus rests on a dual approach: on one hand, economic and social indicators provided by large existing statistical databases have been used to develop a precise and comparative analysis of towns with less than 50,000 inhabitants; on the other hand, field monographs provide for a qualitative analysis of the observed dynamics. Our approach raises a set of empirical and theoretical questions.

One methodological question is the relevant scale of analysis. There are inherent limitations because most of the existing statistical data sets do not allow for an economic analysis at a scale smaller than the district (see Chandrasekhar 2017). Consequently, for economic trajectories, urban data aggregated for districts have remained our main units of analysis. In terms of qualitative fieldwork, the different chapters reveal the varied choices made by the authors; some of them focus on one specific settlement, others on a number of towns or a cluster of towns, but all of them extend their analysis to linkages with their surrounding settlements, whether rural or urban.

We also decided to keep the field research component open and exploratory, as well as susceptible to changes on the ground. The common practice was to see small towns not as isolated objects but as places set in multiscale flows, with their

⁵See the project website: www.suburbin.hypotheses.org.

⁶The project was coordinated by the French Institute of Pondicherry and the Centre for Social Sciences and Humanities in New Delhi and involved the following partners: The Centre for Policy Research (New Delhi); the Centre for the Study of Regional Development, Jawaharlal Nehru University (New Delhi); the School of Planning and Architecture (New Delhi); the Department of Geography of Burdwan University (West Bengal); the School of Social Sciences (Indian Institute of Technology of Madras); and the Indira Gandhi Institute of Development Research in Mumbai.

local specificity and agency. Importantly, small towns are not considered easier to decipher because they are “small” and we departed from a bounded vision of locality belonging to an old tradition of village anthropology. From our perspective, small towns are analysed as an open observatory of changes (economic, social and spatial) through a focus on urban practices on the ground.

The choice of sites was an important step in the project, as they were to reflect diverse demographic trajectories (growing or declining towns), economic activities (industrial, natural resource based, tourism...) and regional variations (from poor to rich states with varied institutions). Not all the case studies are presented in this volume but those that are not published here helped to reinforce the results (Table 1.1).

In addition, this research depicts complex realities and interdependencies and the chapters do not shy away from these difficulties. They show that multiple stories

Table 1.1 Case studies from the SUBURBIN research project

	Case studied (this volume)	In other publications of the project
Economic expansion, industrial location, mobility and job	Kartarpur (Punjab) Tiruchengode (Tamil Nadu) Parangipettai (Tamil Nadu) Malpe (Karnataka) Kullu (Himachal Pradesh) Abu Road (Rajasthan) Machlipatnam (Andhra Pradesh)	Ranipet (Tamil Nadu) CTs (Jharkhand, Bihar, Odisha, West Bengal)
Integration into the global economy, value chains and innovations	Tiruchengode (Tamil Nadu) Parangipettai (Tamil Nadu) Machlipatnam (Andhra Pradesh)	Kumily (Tourism, Kerala)
Governance and Urban classification	Barjora (West Bengal) Pasighat (Arunachal Pradesh) Five small towns (Haryana)	Singur (West Bengal) CTs (Eastern India, Bihar, Odisha, Jharkhand) Malegaon (Maharashtra)
Linkages with metropolitan areas	Malpe (Karnataka) Kartarpur (Punjab) Parangipettai (TN), Machlipatnam and Pedana (Andhra Pradesh)	Siliguri (integration into larger regional settlement)
Urban-rural relationships	Pasighat (Arunachal Pradesh) Abu Road (Rajasthan)	Bhopal (Madhya Pradesh) Malda (West Bengal) Gudur (Andhra Pradesh)

(continued)

Table 1.1 (continued)

	Case studied (this volume)	In other publications of the project
Linkages between capital, land and caste and social networks	Tiruchengode (Tamil Nadu) Pasighat (Arunachal Pradesh) Temple Towns (Tamil Nadu)	

Note The case studies conducted as part of this research project or by members of the research team are the following: (1) on Ranipet, family businesses and local economic development in small towns, Marius-Gnanou and Subramaniam (2014); (2) on CTs of Eastern India, Singur and Bhopal, see in references, respectively (Mukhopadhyay and Zérah 2015; Samanta 2014; Gupta 2013); (3) the other research was conducted by master's students from the School of Planning and Architecture, Delhi: A. Viswam on Kumily, O. Sengupta in Malegaon, A. Bannerjee in Siliguri, A. Roy in Malda and V. Vamsi Krishna in Gudur.

can be recounted (as revealed by the two chapters on the town of Tiruchengode written by Tastevin [2017], and Raman [2017]) and that inter-subjectivity matters in the encounter between researcher and inhabitants.

Finally, each field research and study of data analysis opens some doors although some potential avenues remain unexplored, but each chapter attempts to present a coherent narrative, either of the town studied or of the larger urban and economic dynamics analysed.

1.4 The Relevance of a Decentred and D-hierarchised Approach to the System of Cities

1.4.1 *Structurally Dispersed Demographic Growth Within the System of Cities*

“Small towns⁷ constitute 90 % of the total number of Indian cities and one-third of the urban population”, as highlighted by Swerts (2017). They were home to 134 million inhabitants in 2011, 10 % of the Indian population. Our results contradict the dominant vision of rapid metropolitanisation, where the demographic growth of small towns is driven by their proximity to, and incorporation in, extended metropolitan regions. Although this may be evident in some regions such as Haryana (Punia et al. 2017), this is not the case in all the states. Our research establishes that not all the relations within the system of cities can be explained solely based on notions of hierarchical relations, dependencies and the trickle down process. There are other mechanisms at work and individual trajectories of towns, embedded in their historical pathways, are essential elements of differentiation, whatever the location.

⁷Here, small towns are all agglomerations of between 10,000 and 100,000 inhabitants in 2011.

The study of the sudden emergence of numerous CTs in 2011, already discussed in previous publications (Denis and Marius-Gnanou 2011; Pradhan 2013, 2017, updated contribution), underlines that less than 40 % of them are close to large cities and that they account for one-third of the urban growth between 2001 and 2011. Another tier of urban growth is because of natural growth, and the third tier is the result of rural to urban migration and an extension of urban areas (outgrowth notably).⁸ However, as Pradhan (2017) shows reclassification of rural local units (villages) as urban local units (CTs) is, and will be, a major driver of urbanisation in India: an in situ urban transition, that is to say villages becoming towns, is at work. This process of urbanisation without residential migration is an essential motor of change which, in the case of India, is more influential than rural to urban migration (Chandrasekhar 2017; Sharma 2017).

As highlighted previously but revisited more precisely in Swerts (2017), there is an idea that, over the last 50 years, the growth rate and the size of the city are not correlated (Sharma 2003; Schaffar and Dimou 2012; Swerts and Pumain 2013). The larger cities are not growing significantly faster than the rest of the system of cities. The growth is distributed throughout the system, including over the smaller urban units. As in an arbitrary model, each urban locality has the same growth opportunities whatever its size. Nevertheless, besides the random aspect of the growth trends at the scale of the subcontinent, regional and subregional differentiation, associated with differentiated economic trajectories and the demographic transition are important, far more so than the location, evaluated in terms of accessibility or proximity to large cities (Chaudhuri et al. 2017; Pradhan 2017). Therefore, despite a slight population concentration in favour of the larger cities during the last century, the weight of small towns remains important, not to say constant (Swerts 2017). The canonical and supposedly universal process of urban convergence, based on the assumption that a proportion of small towns have to decline whereas the remainder must become medium to large urban units or merge into extended metropolitan areas, is not confirmed in the case of India. Pradhan and Swerts demonstrate that the burgeoning of small towns will also characterise the urbanisation to come, as it will be measured in the 2021 Census.

1.4.2 *Dynamics of Employment*

The temporality of the urbanisation in India today, during a phase of internationalisation and coalescence of the world's productive systems, along with the high global mobility of the value chain, driven by cost reductions, to some extent

⁸For instance, the area under the Bangalore Municipal Corporation almost doubled between 2001 and 2011.

explains the fact that small towns are not disappearing to the benefit of large metropolises. On the one hand, their industries are integrating into internationalised production systems. On the other hand, small towns constitute a large and fast growing market, as large numbers of people are not moving to large cities. Most of the small towns remain ordinary market towns which serve a subcontinent dominated by the weight of its rural population.

Several chapters converge to show how, in a context of structurally limited residential rural to urban migration (Sharma 2017) and very limited job creation in the formal sector (Chandrasekhar 2017), small towns constitute places of adjustment where people cope with regional conditions and opportunities, and with poverty and uncertainty, mobilising their kinship networks and family resources (Swerts and Denis 2017).

Research demonstrates the role of localised dynamics and regional clubs, looking at rich, poor and transitory Indian states (Swerts and Denis 2017). It confirms the importance of assembling local competences, skills and capital to enhance the dynamism of small towns or groups of towns (sub-networks), as illustrated in the textile (Sridharan 2017), furniture (de Bercegol and Gowda 2017) or truck assembly industries (Tastevin 2017), as well as the agro-industries. These macro and micro studies point to the importance of the meso level in understanding the Indian urban system of settlements. If state policies and economic histories matter in the differentiation of local trajectories (Chaudhuri et al. 2017), there seems to be another, intermediary scale which cuts across state boundaries and appears to be even more important. We observe that a specific district or group of districts share common trends vis-à-vis small towns (Swerts and Denis 2017). Localities can be even organised as networks, sharing industrial production and entrepreneurial values, embedded in the religious landscape and caste hierarchies (Raman 2017; Sridharan 2017). They are often privileged sites that attract investments in tourism (Mehra 2017), education (Raman 2017) and industries (Chaudhuri et al. 2017; Swerts and Denis 2017).

Whatever the diversity of trajectories, our results also highlight that a large majority of small towns remain strongly connected to their hinterland and dependent on the dynamism of the farming sector, as the analysis of the sectorial GDP per district, carried out by Swerts and Denis, reveals. In the first instance, they serve the rural population and they also constitute privileged places where people cope with job destruction in the farming sector (Chandrasekhar 2017) and agricultural underemployment, which leads people to engage in pluriactivities, inducing temporary or pendular work migrations between villages and nearby towns (Sharma 2017; Guérin et al. 2014). From this perspective, they can be conceived as buffer areas or transitional environments.

Indeed, large cities are linked with higher non-farming sector wealth creation at the district level, whatever the sector, ranging from industry to banking, via construction and services, either private or public. Nevertheless, because of the large diversity of regional contexts, combined with the extremely populous cohort of small towns, many small towns experience unique trajectories of growth or belong to specialised clusters (Swerts and Denis 2017).

Chaudhuri et al. (2017) demonstrate how small towns' demographic trajectories and economic profiles differ, depending on their regional location. Those located in the club of rich regions evolve differently, and their characteristics tend to converge with those of the larger cities rather than replicate the features of small towns located in transitory and poor states. Various chapters highlight the growing role of small and medium towns in India's economic growth, especially in the poor and transitory states. Chaudhuri et al.'s approach tends to demonstrate that, based on the observation of regional trends over a period of 20 years, "there is no inevitability about large agglomerations driving growth and inequality in a globalised and fast growing economy".

With wide regional contrasts, numerous small towns are characterised by an overconcentration of marginal workers, who find employment for less than 6 months a year. This is the situation in the Indo-Gangetic valley, notably in Bihar. In this region there is also a high concentration of small towns, which, for the most part, remain driven by farm employment (Swerts 2017). These regions contrast with more urbanised and rich states such as Tamil Nadu, which is characterised by a far higher concentration of permanent workers than the national average—this shows the importance of the resilience and adaptability of the industrial clusters in the development of south India (Raman 2017; Sridharan 2017; Swerts and Denis 2017; Tastevin 2017). It also confirms previous research findings that underlined the manner in which the mobilisation of agricultural surplus plays a structuring role in shaping the diffuse process of urbanisation characterising southern states such as Tamil Nadu (Rukmani 1994).

To sum up, both our quantitative and fieldwork-based results question the stylised figure of small towns in the canonical system of cities, where they are only considered to be transitional entities. The dominant paradigm presumes that the largest metropolitan areas gain increasing weight, whereas small towns decline. On the contrary, India appears to be in the process of combining a more de-concentrated, diffused and less hierarchical system of cities that associate rural and urban opportunities and innovative small-scale enterprises connected to labour-intensive workshops, comparable to the *Citta Diffusa*, observed notably in the Veneto region of Italy.

1.4.3 *Small Towns as Cities of Unbounded Flow*

The narrative of dependence of towns on large cities relates to the notion of economics of agglomeration but the quantitative and spatial analysis conducted within the program point to the limitation of this explanatory framework. A first set of results corroborates the complexity and diversity of forms of urbanisation in India, and therefore disputes the dominant reading of the process as merely and mechanically driven by the agglomeration logic. It leads to the use of an explanatory framework that constantly conflates urbanisation and metropolitanisation.

Different logics, including those of agglomeration, coexist and the levels of autonomy and dependence on the largest metropolitan regions can vary. They can also fluctuate between towns (Punia et al. 2017; Swerts and Denis 2017) and between the actors within cities; for certain actors, being incorporated within the metropolitan dynamic and planning system is positive, whereas for others, such as the carpenters of Kartarpur, it is detrimental (de Bercegol and Gowda 2017). In other words, the level of connectedness and dependence (physical, social and economic) on the large metropolitan cities is an insufficient determinant to explain the dynamics of small towns.

In an open world, with multiple layers and scales of circulation of persons, goods, capital, information, ideas and innovations, diverse spatial and network configurations, a variety of forms of association and collaborative chains of production can extend from the local level to worldwide networking. Tastevin's (2017) unveils how local truck assemblers located in a small town are expanding their market abroad and innovating in production and trading after feedback was provided by new clients. The literature on subaltern globalisation and minor transnationalism (Lionnet and Shih 2005) has already underlined the importance of such neglected networks, which are not dominated by large transnational firms and mainstream flows, emanating from larger metropolises. Nevertheless, localised dynamics often continue to be understood as scenes of resistance to the advance of global capital and places reluctant to change. Benjamin's (2017) abounds with solid arguments to ground a critical perspective on the resistance paradigm, seen from the Malpe district of coastal Karnataka. This region with its centuries-old connections to the Indian Ocean is an active participant in the current globalised economy.

In this district, the metropolitan perspective, with its special economic zone projects, highways and other redefinitions of land use leading to expropriation, possibly upsets an extremely resilient subaltern economy. Large investors and regional planners conceive this ordinary but complex economy as a folkloric background and an anecdotic reminiscence of the past, despite its capacity to reactivate its global linkages, based on local and ancient knowledge—the capacity for instance, to capture a dominant position in the world fish market when Chile's access to anchovies collapses. Disturbances driven by metropolitan planning and regional investment strategies often destabilise small town's economies. Two cases in this volume reinforce and complement the observation made for Malpe district: Kartarpur (de Bercegol and Gowda 2017), where a dynamic cluster of carpenters is jeopardised by the extension of the plan for the nearby Metropolitan Corporation and Parangipettai (Denis and Ahmad 2017), a coastal town of Tamil Nadu, which is on the brink of being totally redeveloped because of the implantation of a mega-power thermal plant on its doorstep.

The manner in which small towns are capable of capturing these emerging opportunities to become part of transnational economic networks, their capacity for resilience and renewal along with their local societies and economies reveal the emergence of a major trend, and another sign of far more complex interconnections than the canonical hierarchic model of cities predicts. The economies of small

towns do not always follow the rationale of pure economics and the maximisation principle leading to concentration. We argue that a multiplicity of connections, including social interactions based on solidarities, rivalries, coalitions and conflicts, are at work here. They contribute very actively to India's integration in the world economy. These connections, some old and some new, are hooked on to existing or emerging economic value chains that are not bounded by regional and national barriers. This allows the flow of goods and persons, as well as the circulation of ideas and socio-cultural values. In such a framework, the connections made by these localities (whatever their size and distance from the metropolis) and their entrepreneurs are not necessarily mediated by the larger cities. This is clearly visible in the quantitative work at the scale of the system of cities (see Swerts 2017; Swerts and Denis 2017) and in several case study-based contributions (Benjamin 2017; de Bercegol and Gowda 2017; Denis and Ahmad 2017; Sridharan 2017; Tastevin 2017).

Our qualitative work provides substantial elements to penetrate the ways in which the dynamics of small towns are embedded in multiple interactions, circulations and connections, which are of a social, historical and spatial nature. The famous notion of "space of flows" (Castells 1996), used mainly in the context of global cities, is not limited to them; we find flows of the type described by Batty and Cheshire (2011): "physical and visible but many relational, social, and often invisible" connecting a network of small towns. Today, these circulations occur at the local or meso level between land, agricultural surplus and capital, as we can see in Parangipettai, Tiruchengode or Kullu. They function at the larger regional scale through trade routes, including old ones, and fuel their local economies. The vestiges of old historical circulation are also a fundamental asset in frontier and port towns such as Pasighat or Parangipettai. These arguments, extracted from unique aspects of small towns, also remind others, and us, after Abu-Lughod (1991), that globalisation is not a new phenomenon. Over the centuries, ideas, capital, persons and goods have been exchanged and many small towns are nodes on these transnational circuits.

Because of these long distance economic ties, small towns or small cities can be understood as very cosmopolitan places. Several chapters in this volume highlight this cosmopolitanism which can be characterised by the different ways in which people coexist, their sense of belonging (territoriality) and affective ties, similar to the "rural cosmopolitanism" in Gidwani (2006). These results bring about a shift in our vision of cities, replacing the idea of networks of cities by the idea of cities as networks. In other words, cities are unbound, and the fecundity of local dynamics makes them "extraordinary cities" or, in other words, ordinary cities restored to their rightful complexity. In these small towns, people contribute to shaping an economy embedded in the mobilisation of the social, kinship and natural and human capital found in their hinterland, and anchored in the unbounded networks to which their residents and entrepreneurs belong.

1.5 Reclaiming the Notion of an Embedded Economy

We focus now on the nature of economic activities in small towns and the process of economic development through an analysis of the actors' practices in mobilising capital, resources, skills and knowledge. This section draws mainly from Parts II and IV of the book, the former focusing more on processes and the latter looking at specific economic sectors. However, we also refer to other chapters in the book.

1.5.1 *From Long-Standing to New and Emerging Activities: The Economic Diversity of Small Towns*

Our collective results highlight the resilience and the development of a diversity of activities in small towns, based on traditional activities, natural resource extraction, manufacturing or services (including trade). Some examples of this are the fisheries in Machlipatnam (Sridharan 2017), the packaging of *tendu* leaves and *bidi* production in Abu Road that started in the 1970s (Nadkarni 2017) and the production of Kalamkari textiles in Pedana (Sridharan 2017). Manufacturing activities include the furniture industry in Kartarpur and the trucking industry in Tiruchengode (Tastevin 2017) and we find mining and extraction of natural resources in Barjora (Samanta 2017). Our panorama did not study small agriculture-based towns such as *mandi* (market) towns or settlements with agro-processing economic activities,⁹ even though this category of small town remains dominant (see Swerts 2017).

This set of chapters corroborates the results of Ghani et al. (2012) concerning the factors behind the emergence or the resilience of this productive economy, but takes the analysis of the complexity of these economies further. Lower production costs are partly linked to the availability of a flexible and cheap labour force, in particular for low-skilled activities. The feminisation of labour drives down costs (in the fish industry in Machlipatnam, Kalamkari production in Pedana and *bidi* production in Abu Road) and there are examples of subcontracting, mainly to Dalits, in the Kartarpur furniture cluster. The maintenance of these forms of exploitation resonates with other research such as the work done by Harriss-White (2002, 2015) in the town of Arni (Tamil Nadu) and Kundu and Bhatia (2002) in Gobindgarh (Punjab).

Land is an important input into these economies, as highlighted by Raman in the case of Tiruchengode and Samanta in Barjora (Raman 2017; Samanta 2017,

⁹Mandi towns have played a historical role in the shaping of the system of cities (see Haynes 1999) and a large number of small towns can still be considered "mandi towns". This, for instance, is the case of Hodal, studied here but from a governance point of view. Krishnamurthy (2012) has recently studied the role of Haldia as a mandi town. The case of Gopalpur in West Bengal studied by Mukhopadhyay and Zérah (2015) is the story of a small Census town whose growth is linked to agro-processing activities.

respectively). These two cases point to the advantages, other than the cost factor, of locating manufacturing in rural areas. In Tiruchengode, the expansion of the truck industry takes place outside the municipal zone, in the surrounding villages. Barjora, a CT, is one example of the manner in which cumulative investments create centrality in a rural area. Further, this enables entrepreneurs to avoid more stringent environmental regulations and leads to air pollution (in Barjora) and water overdraft, both in Barjora and Tiruchengode. It underlines the flexibility in governance offered by rural areas which can trump the benefits of being incorporated into an urban local body¹⁰ (see Sect. 1.7).

Favourable labour and land conditions are not enough to explain the dynamics of small towns. The detailed case studies presented in this volume draw our attention to the roles that innovation and adaptability play, and to the vibrant entrepreneurship in these places. Tastevin's chapter (2017), based on an ethnography of the family of today's leading exporter of rig assembly to Africa, describes the manner in which artisans specialising in repairing vehicles gradually excelled at low cost reverse engineering, which led them to become manufacturers. Beyond technical skills, their ability to tap existing resources in the locality (human resources, connectivity etc.) and their keen comprehension of markets and networks supported their growth. As analysed by Sridharan (2017), this soft form of innovation, combined with external inputs, also fostered the Kalamkari industry in Pedana through the creation of new designs and the capacity to adapt to the demand in markets of larger towns. The endurance of the Kartarpur furniture industry is explained by an entrepreneurial ability to adapt to shifts in the labour market and the scarcity of locally produced raw materials by increased reliance on external resources and the demand for new designs from urban domestic and foreign markets. Thus, de Bercegol and Gowda (2017) estimate that, today, 10–15 % of the production is exported as compared to nil in the 1980s. These cases show diverse manners of reshaping the relationship to the national or international economy, and the influence of rising consumption patterns worldwide, which also have repercussions on aspirations in small towns, a topic needing further research.

This volume is also witness to the rapid emergence of new economic activities and their interlinked social and spatial changes. Tourism is reshaping the role of Kullu as an older hub on the way to Manali and the Barjora mining hub expands beyond the boundaries of the CT.

Two other important and emerging sectors are studied in this volume—the rise of private educational and health infrastructure and the real estate industry. In her work on Tiruchengode, Raman (2017) provides a subtle description of the manner in which land is mobilised and transformed to give rise to what can be called a “college industry” along the various corridors radiating out from Tiruchengode along the Attur-Rasimpode-Erode highway, or the Tiruchengode-Namakkaal-Trichy highway. The description of these educational institutions, interspersed with vacant land, is a

¹⁰See also Zerah (2013) on the entrepreneurialism in the villages of the NCR and the automobile corridor.

familiar sight for those travelling along highways in India, for example the Delhi-Meerut corridor in Uttar Pradesh, Chennai-Puducherry in the South, or those emerging in Haryana, alluded to by Punia and Zérah with the Palwal-Hodal corridor.¹¹ Thus, Raman's account is a first description of the manner in which rural lands are transformed outside metropolitan areas or regional capitals, and is completed by Trouillet (2017) who describes the creation of centrality around a triptych of temples, colleges and hospitals, led by strong real estate dynamics.

Indeed, most chapters mention the booming of real estate and the construction industry, which constitute a common feature of the transformation of economic, social and spatial dynamics in small towns. The process of land use change and real estate growth is a dominant feature of India's contemporary transformation and has been studied in metropolitan cities (Banerjee-Guha 2002) and their nearby suburbs (Gururani 2012), along highway corridors (Balakrishnan 2013) and in Special Economic Zones (Jenkins et al. 2014). The new regime of rising urban and rural land prices depicted by Chakravorty (2013) is visible in most of our case studies, and this edited volume adds to this body of work. It shows how transformation of land use is a locally produced process that occurs when wealthy families decide to sell their agricultural land to invest in real estate—in Parangipettai (Denis and Ahmad 2017) for example—or to set up businesses (Raman 2017; Tastevin 2017; Zérah 2013). It also transforms small towns spatially by extending them beyond their municipal boundaries, even in CTs (Samanta 2017), or horizontally and vertically in the larger Kullu municipality (Mehra 2017). This in turn leads to the emergence of new entrepreneurs such as the real estate agents in Haryana or Tiruchengode who often go on to become local political figures (Zérah 2017).

1.5.2 Understanding These Localised, Territorialised Economies: Economy, Land and Belonging

We now turn our attention to the manner in which these territorialised economies are shaped over time. This process takes place through a range of rationales or assemblages where land plays a central role. Despite their diversity, the various chapters, particularly those in Sects. II and IV, all discuss the complex and intricate array of dimensions that produce these economies, be they historical, territorial, social, cultural or symbolic.

We argue against a reading of land as it is usually presented in the mainstream literature, which understands land as a neutral entity. The relationship between land development and economic activity is not only a material one; it also has symbolic

¹¹McDuie Ra's work on Imphal (2016), a larger city, also highlights the role of secondary education and health institutions as drivers for growth.

and religious dimensions (Benjamin 2017; Trouillet 2017, respectively). In South Canara, on the one hand, large real estate developers use the purity of some sites to develop buildings in their vicinity, following practices that take the “sensitivity of territory” into account. On the other hand, the large expressways planned as part of the development of the entire western coast from Goa to Kerala, such as the Mangalore-Koondapur route, have to circumvent important local shrines to avoid disruption. In his study of temple trusts in Tamil Nadu, Trouillet shows how these trusts, which can own and buy assets, are important actors in the local economy through their different forms of patronage and control over space (through the location of retail shops and communities) and resources (through contracts). He also demonstrates how the symbolic and material dimensions are intricately woven together and are mingled with state regulations in the relationships between the creation of new temples and the capture of real estate value.

The notion of territory is neither merely functional (economic territory) nor solely political (control over resources), but is also social, cultural and religious. The accumulation of land, rapid turnover and land use changes, stimulated by external players, private investments and infrastructure developments, are motors of change. However, it is also around land that social status and a sense of belonging are structured. The neighbourhood you live in, the deities you worship, the temple you visit are a part of one’s notion of territory. For the residents of Kullu, this is linked to the *devtas* (gods) and the religious festivals that celebrate them. Raman (2017) uses the term “unified cultural and political-economic” region to describe the manner in which supra-local caste networks reshape the territory through circulation of land and money, the channelling of rural capital towards urban areas, and various modes of negotiation with the state (party politics, personnel and social networks, etc.). Land and financial capital are interrelated dimensions which Denis and Ahmad (2017) characterise as a subregional space of investment and social relations.

Benjamin’s work (2017) on South Canara is exemplary in the possibilities it offers for a reading of the different pathways and multi-layering of a socioeconomic development with its own agency and resources. First, it can be observed via the rapid social and economic changes that disrupt traditional power relationships, but did not escape totally the inherited sacredness of the land and the ritual associated with it. Second, we can see it through the prism of clear-sighted and public policies enforced by the state, to transform the regional economy. Third, the present transformations are embedded in a trajectory that should be understood by taking into account the region’s tradition of trade and economic openness dating back to the fourth century AD and exchanges with Africa, Egypt, South East Asia and China. It is revealed that any “external” development initiative is reworked by those local path dependencies still at work. He argues, and so do we, that these three narratives do not oppose each other but occur simultaneously, inducing an open-ended dynamic. They can be conflictual as well as woven together, and

combine to shape the emergence of small towns through non-commoditised practices and social formations that are historically constructed.

These simultaneous narratives are also visible in the skills and competences applied by the traders of Kullu and Kartarpur, through their long experience of straddling territories along the Indo-Tibetan trade route, the Lahore-Jalandhar artery on the one hand, and the Grand Trunk Road routes on the other. Prasad-Aleyamma (2017) argues that the story of Pasighat is co-instituted both by history and everyday practices. She also demonstrates how the contemporary economy cannot be understood without engaging with the specific historical governance structure of the tribal dominated state of Arunachal Pradesh which defined differentiated rights for the various social groups (for instance, land is alienable only to tribal groups, which shapes land markets in a particular way).

These different formulations, found in many chapters, attempt to describe how historical, cognitive, caste and social resources are mobilised and to identify the driving forces working towards creating a territorialised economy and a form of “small town urbanism”. We argue, further, that the focus on multiple logics and assemblages allows us to question the singular assumptions used to understand metro cities or agglomeration processes. Some of the forces that shape these larger cities, such as their rapid integration into wider market and public policies, also play a role in these small towns. Even these actors reject or neglect ordinary activities, which are not seen as modern. Consequently, they are reframed as environmental hazards, risks or illegal settlements.

1.6 The Ordinary Nature of Small Towns: Banal Economies, Urban-Rural Linkages and Access to Urban Resources

It has become a mantra to associate cities with engines of growth and the previous section highlighted the presence of productive economies in many small towns. However, this small town lens brings to light the number of very ordinary and banal exchanges and activities in urban localities. These activities are not always commoditised, nor do they generate a large surplus for accumulation. Small-scale household or informal activities are conspicuous by their presence in all the settlements studied, whether located in rich or poor states. Because of their all-pervasive nature, some of them, mainly trade, commerce, construction and transport, are only mentioned in passing in some chapters that focus on other dimensions, but they all refer to this scale of activity.

First, commerce and trade located in markets, for example the “bazaar”, remain a major occupation in small towns, continuing their traditional, historically constituted function as a site of provision for rural areas, as Mehra (2017) shows for Kullu or as traditional market towns such as Kartarpur (cereal) in Punjab, studied by de Bercegol and Gowda (2017), or Hodal in Haryana. However, the expansion and the

diversification of shops (groceries, chemists, construction materials and mobile phones) is taking place everywhere, from Barjora in West Bengal to Pasighat in Arunachal Pradesh or Parangipettai in Tamil Nadu. These markets provide small town citizens and neighbouring villages with access to new forms of consumerism, notably for women (Surie and Zerah 2017). They can also be understood as a site of local sociability and access to some form of public space. To some extent, some of these petty shops are just places where their owners can interact with friends outside the household sphere. They may also extend their commercial façade towards more informal activities, such as money lending.

Thus, these bazaars are a marker of a very banal transformation of the Indian urban landscape which is resilient, constant and likely to grow (Mukhopadhyay and Zerah 2015) and the expression “market as a mode of self-urbanisation” embodies a universal process of transformation in small towns (Mehra 2017).

Second, markets also contribute to shaping spatial transformation as well as to two other non-remarkable areas of activity—the construction and transport sectors. Quantitative data provided by Chandrasekhar (2017) and Sharma (2017) respectively, clearly point to these two sectors (as well as storage and hotels) as sources of employment, along with other non-tradable activities. Field studies mention para-transit vehicles that enhance connectivity between rural and urban settlements, as is also the case in the poorer states such as Bihar (Mukhopadhyay and Zerah 2015). Construction materials are found in all markets and feed into the expansion of built-up areas, not only through more visible real estate activities but also in the form of in situ urbanisation, whereby some categories of residents build their housing over time. This phenomenon explains the expansion not only of STs (such as Tiruchengode, Parangipettai, or in Haryana), but also of CTs (Samanta 2017). Finally, in many of the small towns we studied, the persistence of traditional caste-based activities, such as the collection of *tendu* leaves in Abu Road (Nadkarni 2017) or the fishermen in South Canara and Andhra Pradesh, shape a type of informal, household based economy.

Third, our results shed some light on the contemporary form of rural-urban linkages. On the one hand, the nature of transport connectivity has been transformed through large projects, such as highways or government programmes to build roads. Regional connectivity has increased in all the states and reduced the gap between small towns and their hinterlands.¹² The nature of commuting can no longer be characterised by a rural-urban movement (Chandrasekhar 2017; Sharma 2017, respectively) and it straddles the urban and the rural as we can see from the *tendu* leaves economy in Abu Road, or the migrant dormitories in Haryana. A renewed form of urban-rural linkages is also found in the education sector (Tiruchengode, Barjora and Hodal towns) which shows that movement between the rural and the urban is not linked solely to marketing and jobs but also to the shift towards small urban settlements in search of schools for children. For instance,

¹²For a detailed analysis of linkages between connectivity and regional integration, see the case of Bhopal (Gupta 2012).

people may keep their rural property but come and settle in towns such as Barjora (Samanta 2017), a process comparable to previous structural changes that took place in villages and small towns, such as the residential migration of dominant castes. This trend has to be related to the expanding casual job environment, where pluriactivity stimulates the advent of the rural-urban continuum (Punia et al. 2017).

Finally, small towns are sites of urban resources that include education, electricity (as a support for children's education and small household economies) and better overall facilities which explain why a number of inhabitants live in a small town but keep their property in the village (Samanta 2017). In our sample towns we observe different forms of social mobility involving enterprising individuals who use the opportunities of local governance to access the state and further their business interests. Some enter small-scale real estate businesses (Raman 2017; Trouillet 2017; Zérah 2017). Others open up shops with new types of products, as in the case of a young entrepreneur and MBA graduate in Kartarpur (de Bercegol and Gowda 2017). Tastevin's (2017) recounts the family history of the TVS export company that began with a blacksmith leaving his village to escape a crime. Through these examples, we discover a range of actors capable of harnessing opportunities through political channels or productive economies that do not often appear in recent work on large cities. This disrupts the manner in which small towns are sometimes described and understood as non-modern and sites of backwardness that cannot escape a mediocre future. This is not to deny the pervasiveness of caste hierarchy and patriarchy which many chapters highlight (see, for example, the ambivalence regarding women's labour in Sridharan [2017]) and the low level of urban services (Zérah 2017; Samanta 2017) that cripple these places, although we find the growth of small shops emerging as a substitute for other employment options. A specific study of the opportunities available to different social groups and their ability to cope with the tribulations of life in a small town would allow us to qualify these intermediary groups better. Although this is beyond the scope of this book, it still points towards the role of public policies, and therefore of governance, in providing better living conditions.

1.7 Multiple Readings of Governance in and of Small Towns

Uncovering of the nature of governance in invisible urban settlements is a central element of this research. India has a unique definition of the urban, which is both functional and administrative (Mukhopadhyay 2017). Small towns straddle this borderline: some of them are recognised STs and governed by an urban local body, whereas others are functionally urban but remain governed as large villages. Our research is the first to study both these types of settlements and to raise, at the outset, the question of the relevance and outcomes of this divide, as well as that of its significance in terms of public policy, in particular the question of district planning, in view of the blurring and dissolution of rural-urban borders.

1.7.1 Politics of the Rural-Urban Classification and Outcomes in Terms of Public Policy

There is a clear demarcating line between CTs and STs. The 73rd Constitutional Amendment on rural decentralisation governs the former, whereas the latter fall under the governance structure defined by the 74th Constitutional Amendment on urban decentralisation. This split has important governance outcomes in terms of flow of funds, types of public schemes and regulations, which also depend on the state level implementation of the amendments. Earlier, we argued that the politics of classification was an important area of research, and that to some extent CTs would have greater autonomy (Denis et al. 2012: 59) thanks to their rural status and lighter regulatory structure. For instance, owners can decide the use of their land without requesting permission, although this is not feasible once a settlement is declared urban, and stringent urban by-laws and rules regarding change of land use start to apply. Further, taxes are much lower in villages compared to urban local bodies, and rural schemes, such as the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS), the world largest programme of this nature, are a strong incentive for settlements to remain rural. Being urban is perceived as a means of accessing funding for networked urban services, such as water and sanitation even though Khan (2017) demonstrates that small towns have not benefitted greatly from the Jawaharlal Nehru National Urban Renewal Mission (JNNURM), the main aid programme for urban areas. These trade-offs clearly exist, they are debated locally in CTs and urban aspirations vary as they are shaped by state regulations that determine the rules for becoming urban (Samanta 2013) along with the social and local power structures (Mukhopadhyay and Zérah 2015).

This book questions the nature of governance and the importance of having an urban status, but it is in no way resolved. Samanta (2017), in her work on the Barjora CT, and in a previous work on Singur (2014), argues that rural status is one of the reasons behind a governance crisis, in particular in terms of the provision of urban services. She therefore explores governance options and considers that the best option for these settlements would be to become urban, or at least to break away from the division between urban and rural planning, and to look more holistically at development planning. In contrast, Mukhopadhyay (2017) provides a negative response to the question as to whether administrative status matters. Using Census data for 2001 and 2011, he compares STs with a population below 100,000 people, CTs in proximity to a large city and other CTs, based on the provision of a number of selected services (water, sanitation and banking). His results demonstrate that there is no significant difference in service provision, whether the settlement is urban or rural, perhaps with the exception of small towns located far away from large towns. He also further shows that small CTs might even be more urban than small STs in terms of their level of amenities. In other words, this close look at national level data suggests that other factors, apart from status, matter.

This has important implications in terms of policy issues. Regarding funding, in her chapter, Khan (2017) presents new and detailed evidence that the funds

allocated by the JNNURM favoured large towns, both in terms of their volume and proportion of population, as compared to the large population of small towns. She therefore argues that, considering the level of services in small towns, this funding instrument would have been more useful for the latter. The question of planning brings us to Samanta's discussion of various governance options. Beyond the sole question of services, the existing level of rural-urban connectedness and the spatial outgrowth for productive activities that expands outside demarcated boundaries (Sects. 1.5 and 1.6) create a need for a development planning carried out in larger spatial units that are more suitable than the village or the town. The sub-district could be one such unit, defined through district planning. This is an important debate because district planning committees exist and administrative and financial resources backed them. Finding solutions to ensure more efficient district planning, which is a concern, as Zérah (2017) shows for Haryana, could be a feasible and acceptable proposition in the existing institutional set-up, rather than seeking more radical solutions that call for abolishing the rural-urban distinction in the decentralisation laws. Thus, the debate among authors in this volume underlines the relevance of further research, but, most importantly, the urgency of discussions about policy options for small towns and large villages, including the type of financial interventions.

1.7.2 Multiple Readings of Local Governance

Considering local needs through regional planning is even more important in view of the weakness of local governance. De Bercegol shows that, in Kartarpur, there has been no computerisation since 1999 and no recruitment has been allowed. In Haryana, locally elected representatives can only hire sanitation workers on a contract basis. These local representatives are powerless before the district administration, and all the narratives in Zérah's chapter (2017) qualify the district commissioner as "the owner" of the town. Skills, knowledge of planning rules and procedures are partial and inadequate among councillors, and even more so among women councillors. Women are disempowered and turn into proxies for the males of their families, and are given even less responsibility than male councillors. Undoubtedly, the focus on Haryana, one of the most patriarchal states of India, might be the extreme negative end of the spectrum, but it underlines the disempowerment of local councillors. This disempowerment is not restricted to small towns, as literature on metropolitan governance has shown, but the lack of resources has aggravated it further.

In this book we argue that it is necessary to view local governance as an *in vivo* laboratory to understand the social transformations taking place in small towns. Surie and Zérah (2017) rely on the notion of multi-positionality developed by Boltanski, and the feminist literature on intersectionality, to show that the intersections of layers of gender, caste, language and social capital explain a complex process of elite capture on the one hand and violent struggles to destabilise

entrenched local power relationships on the other. Corrupt practices require influence and the ability to build coalitions, as we can see from Zérah's examples of the way in which contracts are awarded. This leads to social tensions that can vary from the pursuit of territorial and social control by traditional caste groups over the empowerment of lower castes in local politics, to the confrontation between old landed elites and organised migrants who unite to wield local power. In Pasighat, as demonstrated by Prasad-Aleyamma (2017), the conflict between the new elites and the Adi tribal group shapes the governance, and there is an attempt to undermine traditional tribal institutions and to create an urban local body that would reinforce the power of these new elites and of the regional state. In Kullu, Mehra (2017) reports on the seeming invisibility of caste-based discrimination in local politics. She points to the boundary line between the outsiders, the long-standing migrants and the natives, who are endowed with differentiated rights, resources and forms of citizenship, as is also the case in Pasighat. In other words, local political arenas are sites of battles over urban resources, but they are also there for social standing, the preservation of privileges and social status or for a legitimate status in the town. These struggles exist everywhere but need to be analysed locally, considering the depth of their specific social history. This would then contribute to understanding the rapid social changes that India faces, at the same time avoiding over-generalisation about mobility and the trajectories of social groups.

1.7.3 The Metropolitanisation Effect

A third important argument related to governance concerns the contradictory impacts of regional and state interventions and the strong, potentially detrimental effect of metropolitanisation. It is true that small towns are neglected, but they are also caught up in megaprojects, which require large tracts of land that lie in parts of towns and their surrounding areas. The influence of metropolitanisation is enacted in several ways: through master planning instruments that further alienate local bodies from decisions regarding land use as in towns such as Tiruchengode or Kartarpur or several others in Haryana; via large-scale infrastructure investments related to energy provision in Kullu (hydroelectricity), Pasighat (large dam) and Parangipettai (power plant) that result in social and spatial reconfigurations; and via spatial policies such as the special economic zones in South Canara district. We do not suggest that all these investments are misplaced and do not contribute to the dynamics of these small towns. A number of chapters in this edited volume point to the central role of the state in shaping small towns over time and, on occasion, in creating institutions to support productive activities. Nevertheless, we argue that these interventions reveal a thought process and a vision of the urban that is unable to grasp truly the reality of small towns.

First of all, large-scale investments not only produce new spatial configurations, especially in the hilly regions, but they also transform the social landscape with the arrival of new migrants, who also require and demand basic essential services from

the urban local bodies that are not equipped to cope with these rapid changes. Spatial transformation, such as ribbon, development would require much attention to district planning. Second, the master plan's instruments are imposed on small towns leading to "in situ" urbanisation. Sometimes state decisions generate inequalities, as the master plan can legalise some settlements whereas others are declared "illegal". Such occurrences intensify social conflicts and contribute to relegating local councillors to the role of mediators, or even brokers, who have to lobby for basic services. Instead of empowering the local governance institutions, they are redefined as a weak link in patronage networks. Finally, and perhaps more importantly, urban policy, as applied to small towns, seems only to consider these settlements in relation to the economies of large towns. They are seen either as an extension of a metropolitan city or as a flat and empty space. In South Canara (Benjamin 2017), spatial planning policies are superimposed on existing productive activities that are ignored when decisions to implement public actions are taken. In Kartarpur, de Bercegol and Gowda (2017) astutely show how the plan to integrate the town into the Jalandhar Master Plan reinforces the power of the regional government that sees Kartarpur as a location for an upper middle class suburb. As they say, it constitutes "an authoritarian urban project that reduces" Kartarpur to a commuter town and undermines the town's intrinsic value. The term "reduce" is aptly used to capture the vision of the urban that is currently the dominant viewpoint among decision makers at national and regional government levels, a vision that denies the reality of the dynamics of small towns.

1.8 Conclusion

Reinstating small towns on the map of social science enquiry is one of the objectives of this edited volume. The sole fact that such a large population lives and works in small towns vindicates our stand. However, beyond this somewhat moral argument, this book has larger ambitions in terms of reclaiming a different reading of the economy, where the role of large cities is not considered to be the only driver of growth, social change and innovation.

First, our studies, data analysis and fieldwork in different regions underline the diversity of the economies at work in these small towns and the importance of linkages, connections and circulations between people, ideas, assets and reciprocal relationships. In these localities, people find jobs and create activities that range from the very innovative to the most banal; these constitute different avenues of integration into the world economy. Small towns are places where people adjust to the non-farming transition of the economy. Therefore, small towns are essential and resilient locations today, but to some extent they also incarnate India's future. Tomorrow, we argue, small towns will have an important role to play in coping with the major challenge of providing jobs for the fast growing share of the population of working age. Our position is thus in contradistinction to the dominant new economic geography (NEG) theory, which only prioritises the unlimited

development of large urban and economic centres. The premises of the NEG argument are the benefits of economy of scale, attraction of talents and an innovative environment. Although these are certainly important for the creation of more wealth, they are not the only determinants of locational choices made by companies. Furthermore, accelerated economic growth based on concentration and redistribution is not a sufficient response to the challenge of expanding working opportunities and ensuring decent living conditions for everyone.

Second, this volume also emphasises the multiple readings of the “territorialised system” revealed through India’s small towns by underlining the resilience of a robust and diverse urban system of cities, which is partly rooted in a long history of urbanisation. This system, reshaped by local economies, social transformations and spatial restructuring, creates an urban environment where people live, a place of various forms of urbanity. This encompassing vision of “small town urbanism” blurs the dichotomy between rural and urban and we observe the importance of the sub-regional environment and a sense of belonging to a community that goes beyond the feeling of being part of the town. Caste and community kinship, among other relationships, are materialised in spatial practices and shape territories through appropriation, access and circulation of various assets.

Finally, by turning the spotlight on small towns and large villages, and by combining macro-data and fieldwork studies, we also hope to do two important things. The first is to provide and disseminate analytical tools that can be used by policy makers and inform public policy debates, especially as small towns have fallen off the public policy radar and their governance certainly requires greater attention. Some recent developments seem to be moving in this direction. The Indian central government’s recent announcement and creation of the Rurban Mission indicates a concern for these specific settlements and acknowledges the growing reality of a “hidden urbanisation”. This is the term used in a very recently released World Bank report entitled *Leveraging Urbanization in South Asia* (2015). However, though this report underlines the feeble attractiveness of large cities in India and perturbs the World Bank’s previous position on large cities, it falls short in its understanding of their dynamics. Thus, our second major intention is to conduct further research on these topics, in various disciplines as well as across disciplines.

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Part I
**Placing Small Towns: Dynamics of
Urbanisation and Systems of Cities**

Chapter 2

Unacknowledged Urbanisation: The New Census Towns in India

Kanhu Charan Pradhan

2.1 Introduction

The release of urbanisation figures from the 2011 Census has provoked several reactions. For the first time the absolute growth in urban population (91 million) is more than its rural counterpart (Fig. 2.1a) and slightly higher than expected (Kundu 2011; Bhagat 2011). The urban growth rate, which had fallen in the last two decades, also rose in this Census. However, the major surprise was the number of Census towns (CTs) which rose from 1362 to 3892, whereas the number of statutory towns (STs) increased marginally from 3799 to 4041 (Fig. 2.1b). Up to 2001 the focus on CTs was limited as their share in the total urban population was low (7.4 % in 2001) and their numbers were gradually increasing. However, the sudden increase in the number of CTs has highlighted the need to pay more attention to this class of settlement. This chapter presents the nature of these new CTs, their size and contribution to population, their location in relationship to existing urban centres and possible future trends in new CTs.

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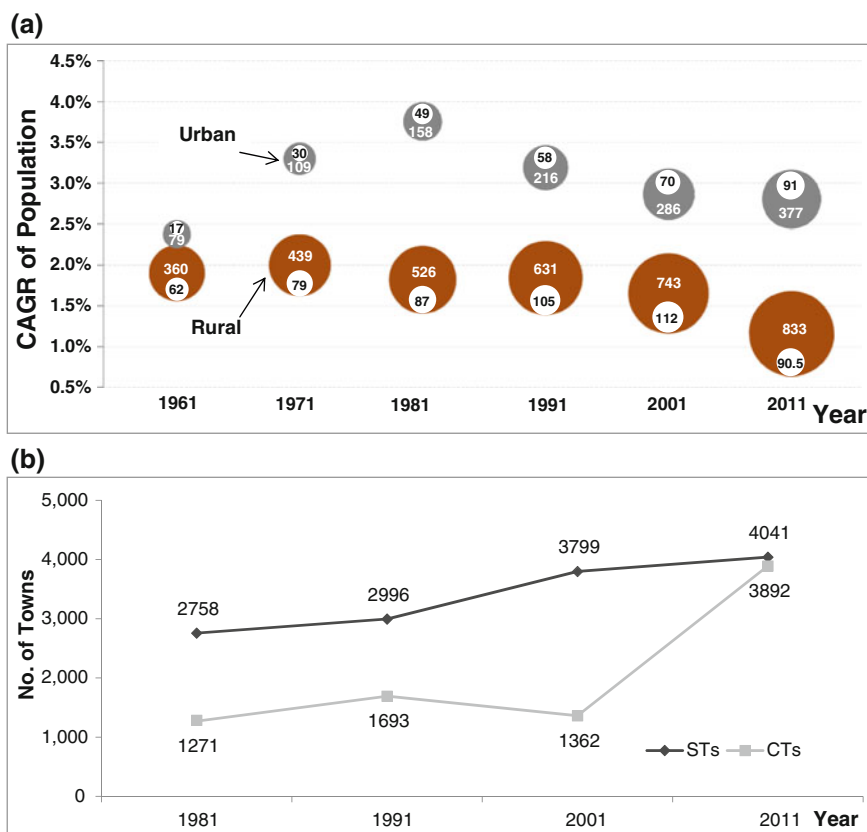


Fig. 2.1 **a** Rural and urban population growth 1961–2011. *Note* The outer bubble shows the total population (in million) and the inner bubble shows the increase of population (in million) with respect to the previous Census. CAGR is the compound annual growth rate. *Source* Census of India 2011. **b** Types of urban settlements 1981–2011. *Source* Sivaramakrishnan et al. (2005) and Census of India 2011

2.2 Types of Urban Areas in India

According to the Registrar General of India (RGI), there are two types of urban areas in India; namely STs and CTs. STs are administratively declared urban areas by a law which includes all manner of urban local bodies, such as municipalities, Town Panchayats, cantonment boards etc.¹ Because municipalities are defined by state law, under which they are governed, there is a large inter-state variation in

¹While cantonment boards fall under entry 3 of the Union List (Seventh Schedule) of the Indian Constitution and are notified under the Cantonments Act 2006, municipalities and industrial townships are notified by the respective state governments.

these definitions. There are 11 states in the country that do not have any clearly defined criteria for defining municipalities and these states include some of the most urbanised states such as Gujarat, Kerala and some of the biggest states such as Uttar Pradesh and Madhya Pradesh. It is the governor who, after consideration of various socio-economic indicators, notifies municipalities in these states. For the remaining states where the criteria are defined, the number of indicators included and their extent vary across states. For example, seven states have population as the only criterion for defining a municipality, whereas others consider multiple indicators (Karnataka has the maximum of four—population, density, non-agricultural employment and revenue). Similarly, the minimum population for defining transitional urban areas (i.e. Nagar Panchayat) can vary from 2000 in Himachal Pradesh to 30,000 in West Bengal.

CTs are classified as urban areas by the RGI as part of the Census operations if they cross the specified threshold with regard to three specific urban characteristics—size (population of at least 5000), density (at least 400 persons per square kilometre) and non-farm nature of the workforce (at least 75 % of the male main workforce in the non-farming sector). However, settlements declared as CTs continue to be administered as rural areas.

However, outgrowths (OGs) are another group of urban areas which always form part of an urban agglomeration (UA). They are defined as “a viable unit such as a village or a hamlet or an enumeration block made up of such village or hamlet and clearly identifiable in terms of its boundaries and location ... which have come up near a statutory town outside its statutory limits but within the revenue limits of a village or villages contiguous to the town ... [and] ... it possesses the urban features in terms of infrastructure and amenities such as pucca roads, electricity, taps, drainage system for disposal of waste water etc., educational institutions, post offices, medical facilities, banks etc. and physically contiguous with the core town of the UA.... Each such town together with its outgrowth(s) is treated as an integrated urban area and is designated as an ‘urban agglomeration’”.² Although OGs are considered urban areas, they are not counted as separate towns but only attached to another ST and this could be the reason why the OGs have the same town code as the main ST in the Census data.³ Similar to the CT, OGs are administered as rural areas.

²http://censusindia.gov.in/2011-prov-results/paper2/data_files/India2/1.%20Data%20Highlight.pdf. Accessed on 2 September 2014, p. 2.

³“Formation of Urban Agglomerations for the 2011 Census” Circular No 3, Census of India, 3 November 2008 (<http://www.censusindia.gov.in/2011-Circulars/Circulars/11-30-10-Circular-03.doc>).

2.3 Methodology of Defining Urban Areas in the Census

One of the major loopholes in the Census operation is that the classification of an area into rural or urban happens before the start of the Census operation. There are three steps involved in the whole identification process. First, all areas which are statutorily considered as urban areas (i.e. the STs) on a particular date, irrespective of their characteristics, are considered as STs. The Census 2011 used 31 December 2009 as the cutoff date and all areas defined as urban on that date under law were considered as STs. Second, the remaining areas (i.e. all rural areas or villages) are then considered for CT status using the information from the last Census (i.e. CTs in 2011 are based on 2001 Census data). All villages with a population greater than 4000 in the last Census are taken up for density and non-agricultural workforce consideration with the assumption that they reach the 5000 mark in 10 years. Although population projection is used to identify CTs (4000 instead of 5000), the actual density (at least 400 persons per square kilometre) and workforce (at least 75 % of male main workforce in the non-farming sector) is applied to the last Census data. Third, all remaining rural areas, after identifying CTs, are considered for OG status based on urban infrastructure and amenities as part of the identification of UA.

One of the consequences of this type of methodology is that some CTs do not satisfy the definition and others, which do satisfy these conditions, are not classified as urban. For example, there were 366 CTs in 2011 which had a population less than 5000 and another 286 CTs with a lower than 75 % non-farm male main workforce.

2.4 Data and Methodology

The Census provides a unique code for all settlements in India, with separate groups of code for the urban and rural sector, to facilitate comparison between Censuses. However, for some settlement units there is also a change in the sector between Census periods, that is some rural units become urban or vice versa. As these units move from one group to another, their Census code changes from one group to another. A common classification across Census periods for such units is needed to make them comparable across Census periods. Such a classification, known as “MDDS Location Code Directory”, is available from the RGI office, part of Government of India’s National e-Governance Plan (NeGP), and provides lists of all settlement units in 2011 and their correspondence with the 2001 Census. This

list has been prepared by the Census of India and provides state-wise lists of all settlement units for 2011, separately for rural and urban areas, with their corresponding 2001 Census code. This database could be considered a rich source for a comparative study between 2001 and 2011.⁴ The analysis covers all the states of India except Mizoram, which had no CT either in 2011 or 2001.

2.4.1 *Matching of Settlements*

The MDDS data set facilitates the matching of 2011 CTs with the corresponding 2001 settlement units. Of the 3892 CTs, 48 could not be matched; 44 of these are in Tamil Nadu.⁵ However, there are other units which are also important for this study. Some units which were classified as CTs in 2001 no longer existed in 2011 because they have either been denotified to villages, reclassified as STs or merged with other units. The first two types of issues (denotification to villages and reclassification into STs) can be addressed using the MDDS data set, but it does not help match the 2001 CTs that were merged into other units. For this, we use publicly available information. Even though the attempt was to use official sources such as ULB websites, city development plans, state government notifications and other official documents, there are 35 such CTs for which news articles and other sources from the internet were used, and these could not be independently verified.⁶

⁴There are some instances of wrong matching, for example, Barki Saraiya, a CT in 2011 in Giridih district of Jharkhand, has been matched with Sahibganj municipality of 2001. However the urban directory shows that Sahibganj was reclassified from municipality to Nagar Parishad and it is situated in a different district (Sahibganj district). Since there was only one settlement by the name of Barki Saraiya in the whole state and in one district in 2001 and in 2011 with a population of more than 15,000 population, it seems more appropriate to match Barki Saraiya CT from 2011 with Barki Saraiya village in 2001. This is only one of the possible types of error in the database presented here, but there are other issues such as missing codes, where personal judgments are needed.

⁵For 9 other CTs, when the 2001 settlement is divided into multiple CTs, the 2001 population is equally distributed among the new CTs. The data for Tamil Nadu, a state with a large number of new CTs is especially problematic. First, the 2001 code is missing for a large number of CTs. Second, there are instances where villages have been divided into multiple parts and a portion of them have been identified as urban and others as rural, making it difficult to allocate the 2001 population to rural and urban areas.

⁶The 35 CTs are distributed amongst the following states: Andhra Pradesh (3), Jammu and Kashmir (3), Gujarat (15), Haryana (2), NCT of Delhi (1), Maharashtra (1), Punjab (1), Rajasthan (1), Sikkim (1), Tamil Nadu (3), Uttar Pradesh (1) and West Bengal (3).

2.5 Origin of CTs

The change in the number of CTs between Census periods can occur in many ways, for example an increase because of a reclassification of villages and OGs, and, rarely, of STs into CTs,⁷ and a decrease caused by a denotification of existing CTs to villages, a reclassification or amalgamation of existing CTs into STs.

As can be seen from Table 2.1, although the absolute increase of CTs in the country between 2001 and 2011 is 2530, the number of settlements reclassified from village to CT (henceforth new CTs) is 2553 and an additional 141 settlements have been reclassified from OG or ST to CT. Because 48 CTs could not be matched between 2001 and 2011, the actual number might be slightly higher. Concomitantly, 55 CTs have been denotified to villages and 145 CTs have been recognised as STs or merged with other STs in this period. In terms of distribution of the new CTs across states, the state with the maximum number of new CTs is West Bengal (526) followed by Kerala (346), Tamil Nadu (227) and Uttar Pradesh (204). Along with Andhra Pradesh and Maharashtra, these six states have more than 60 % of the new CTs. Arunachal Pradesh and Chhattisgarh are the only states where the total number of CTs has decreased over this period. In Arunachal Pradesh all 17 CTs of 2001 were converted into notified towns in 2011 and 1 new CT was created in this period. In Chhattisgarh 13 out of 22 CTs in 2001 were merged into other STs even as 10 new CTs were added in this period. It appears from this analysis that most of the new CTs (over 90 %) were former villages and, further, very few of the CTs that existed in 2001 (about 15 %) were given statutory status, whether by recognition or merging. If this trend continues, a progressively smaller share of urban settlements can be governed as urban areas.

2.6 Characteristics of New CTs

As CTs are identified prior to the Census operation, information from the last Census is used to examine the process of identification. A priori, all the new CTs should be on the “threshold” of CT criteria, though such a “threshold” itself is somewhat subjective. Figure 2.2a, b shows the number of new CTs that satisfied the three criteria—population, density and male non-agricultural workforce in 2001. Figure 2.2a shows that 1793 settlements that have been declared new CTs fulfilled all the three conditions in 2001 and indeed were qualified to be CTs at that time

⁷Sadaura, in Yamunanagar district of Haryana, is one such example. It was a municipal committee (MC) in the 2001 Census with 2398 households. It was reportedly converted to a village panchayat in 2001 and back to an MC in 2006. In 2007, because of protests from residents, it was reverted back to a village panchayat. As it possesses all the urban characteristics, it was classified as CT in 2011, with 3075 households. See “Sadhaura to have panchayat, not MC: Poll Cancelled”, *The Tribune*, 28 February 2007 (accessed at <http://www.tribuneindia.com/2007/20070301/haryana.htm#9on> 25 July 2012).

Table 2.1 Dynamics of CTs between 2001 and 2011

Sl. no.	state	Total CT in 2001	Change in 2001 CT			New CT in 2011			Total CT in 2011
			Denotified to village	Upgraded/merged with ST	Not known	Other urban area to CT	From village to CT	Not known	
	All India	1362	55	145	12	141	2553	48	3892
1.	Andhra Pradesh	93	6	18		22	137		228
2.	Arunachal Pradesh	17		17			1		1
3.	Assam	45	2	3		6	80		126
4.	Bihar	5		1		4	52		60
5.	Chhattisgarh	22	2	13	3	0	10		14
6.	Goa	30				1	25		56
7.	Gujarat	74	1	24		21	83		153
8.	Haryana	22		4	2	8	49	1	74
9.	Himachal Pradesh	1		1			3		3
10.	Jammu and Kashmir	3				6	27		36
11.	Jharkhand	108	4	23			107		188
12.	Karnataka	44		11		13	81		127
13.	Kerala	99				16	346		461
14.	Madhya Pradesh	55	3	4		18	46		112
15.	Maharashtra	127	11	9			171		278
16.	Manipur	5					18		23
17.	Meghalaya	6					6		12
(continued)									

(continued)

Table 2.1 (continued)

Sl. no.	state	Total CT in 2001	Change in 2001 CT		New CT in 2011			Total CT in 2011
			Denotified to village	Upgraded/merged with ST	Not known	Other urban area to CT	From village to CT	
18.	Nagaland	1		1			6	7
19.	Odisha	31	1				86	116
20.	Punjab	18	3	1		5	55	74
21.	Rajasthan	38	3	2	1	4	76	112
22.	Sikkim	1		1			1	1
23.	Tamil Nadu	111	6				227	376
24.	Tripura	10	1	6			23	26
25.	Uttarakhand	12	1		1	2	29	41
26.	Uttar Pradesh	66	4		3	2	204	267
27.	West Bengal	252	4	4	1	11	526	780
28.	Andaman and Nicobar	2					2	4
29.	Chandigarh	0					5	5
30.	NCT of Delhi	59	3		1		55	110
31.	Dadra and Nagar Haveli	2		2			5	5
32.	Daman and Diu	0					6	6
33.	Lakshadweep	3					3	6
34.	Puducherry	0				2	2	4

Mizoram had no CT in either 2011 or 2001

Source Based on author's calculation

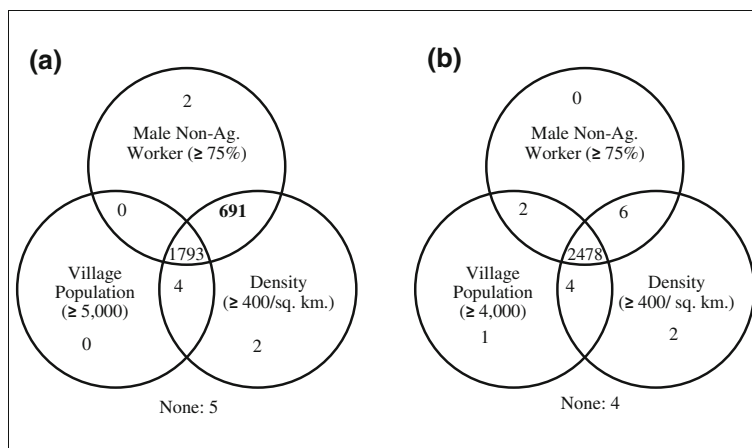


Fig. 2.2 **a** Characteristics of new CTs (village population threshold of 5000). **b** Characteristics of new CTs (village population threshold of 4000). *Note* The analysis is limited to 2497 new CTs and excludes 37 new CTs as information on their area of settlement was unavailable. Another 9 settlements that were classified as villages in 2001 became 19 CTs in 2011 by partition and all these 9 villages satisfied the three conditions in 2001. *Source* Based on Primary Census Abstract and Village Directory, Census of India 2001

itself. Similarly, another 691 new CTs fulfilled the density and workforce conditions. In addition to this, 9 locations that were classified as villages in 2001, which became 19 CTs in 2011, already fulfilled all three conditions. Figure 2.2b relaxes the population “threshold” to 4000, a figure used by the RGI on the presumption that such a settlement is expected to have a population of 5000 in 2011.⁸ Figure 2.2b shows that, with this modification, almost all the new CTs fulfilled all three conditions in 2001. If anything, the fact that 1812 of them already met the criterion in 2001 and were not recognised indicates that there may be more such settlements in 2011. The concerns over inflated urbanisation may therefore not be warranted. Indeed, it would appear that in both years the extent of urbanisation may in fact be underestimated; for example, if we were to include the population of the 1812 settlements that qualified for CT status in 2001, the urban population would have increased by 20.3 million people, raising the urbanisation rate to 29.8 %, an increase of 1.97 %. It is therefore conceivable that such an adjustment of the 2011 Census settlement-wise figures could increase the urbanisation rate even further.

⁸<http://censusindia.gov.in/2011-Circulars/Circulars/11-31-10-Circular-02.doc> (Accessed on 10 January 2013).

2.7 Contribution of New CTs to Urban Growth

So, if for the first time in its history India has added roughly twice the number of new CTs in the last decade, what is their contribution to the total urban growth in this period? Figure 2.3 shows that, at an all India level, 32.8 % of the urban growth (29.9 million people) between 2001 and 2011 is because of the reclassification of rural areas into CTs. This share of growth, attributable to reclassification, varies widely between states. Among the major states, the share is highest for Kerala (97 %) followed by West Bengal (70 %). Thus, almost the entire jump in the share of urban population in Kerala, from 26 to 48 %, and more than two-thirds of the increase in West Bengal, from 28 to 32 %, can be attributed to reclassification. It is lowest for Chhattisgarh (4 %) and Madhya Pradesh (10 %). Similarly, among the smaller states/UTs, it is 91 % for Daman and Diu, 90 % for Lakshadweep, 76 % for Goa and 62 % in Tripura, although Arunachal Pradesh (4 %) and Sikkim (6 %) have the lowest share of increase caused by reclassification (Table 2.2).

This implies a doubling in the share of CTs over one decade. Although the share of CTs with regard to the total urban population was 7.4 % in 2001, the share of CTs in 2011 represents 14.4 % of the urban population. This is a form of in situ urbanisation (Zhu 2002) that is occurring without substantial migration between settlements and, as such, is contrary to the usual perception of the process of urbanisation.

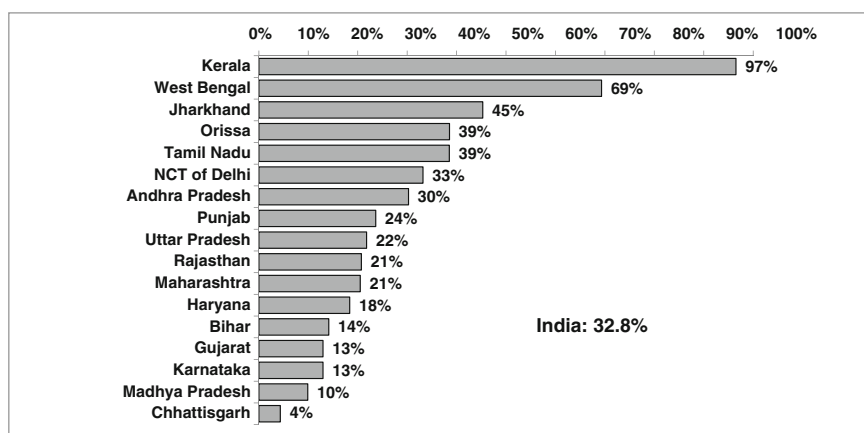


Fig. 2.3 Contribution of new CTs to urban population growth (major states). *Note* This is limited to states with a growth of at least one million in absolute urban population between 2001 and 2011. These 17 states together account for 94 % of the total urban growth. *Source* Based on author's calculation

Table 2.2 Share of new CTs to total urban population growth between 2001 and 2011

State	Total CTs 2011		New CTs		Urban pop. 2011	Urban gr. 2001–11	Share of CT to total urban pop 2011 (%)	Share of new CT to urban gr. 2001–2011 (%)
	Number	Pop (millions)	Number	Pop. (millions)				
All India	3892	54.3	2553	29.85	377.1	90.86	14.4	32.8
Kerala	461	10.30	346	7.40	15.93	7.67	64.6	96.5
Daman and Diu	6	0.11	6	0.11	0.18	0.13	62.7	91.3
Lakshadweep	6	0.05	3	0.02	0.05	0.02	100.0	89.9
Goa	56	0.47	25	0.18	0.91	0.24	52.3	75.8
West Bengal	780	7.94	526	4.65	29.09	6.67	27.3	69.7
Tripura	26	0.29	23	0.26	0.96	0.42	30.2	61.9
Assam	126	0.97	80	0.55	4.40	0.96	22.0	57.7
Manipur	23	0.18	18	0.15	0.83	0.26	22.0	57.2
Dadra and Nagar Haveli	5	0.06	5	0.06	0.16	0.11	38.8	56.6
Andaman and Nicobar	4	0.04	2	0.01	0.14	0.03	24.7	47.8
Jharkhand	188	2.58	107	0.88	7.93	1.94	32.5	45.2
Odisha	116	0.83	86	0.57	34.92	1.49	11.8	38.4
Uttarakhand	41	0.49	29	0.32	7.00	0.87	16.0	36.5
Tamil Nadu	376	5.00	227	2.49	3.05	7.43	14.3	33.4
NCT of Delhi	110	4.97	55	1.14	16.37	3.46	30.3	32.9
Andhra Pradesh	228	4.12	137	2.28	28.22	7.41	14.6	30.8
Meghalaya	12	0.22	6	0.04	0.60	0.14	36.9	30.7

(continued)

Table 2.2 (continued)

State	Total CTs 2011		New CTs		Urban pop. 2011	Urban gr. 2001–11	Share of CT to total urban pop 2011 (%)	Share of new CT to urban gr. 2001–2011 (%)
	Number	Pop (millions)	Number	Pop. (millions)				
Chandigarh	5	0.06	5	0.06	0.57	0.22	5.4	25.6
Punjab	74	0.69	55	0.50	1.03	2.14	6.6	23.5
Jammu and Kashmir	36	0.27	27	0.20	10.40	0.92	7.9	22.2
Nagaland	7	0.07	6	0.05	3.43	0.23	11.5	21.7
Rajasthan	112	1.24	76	0.80	44.50	3.83	7.3	20.9
Uttar Pradesh	267	3.56	204	2.06	17.05	9.96	8.0	20.6
Maharashtra	278	4.02	171	1.99	50.82	9.72	7.9	20.5
Himachal Pradesh	3	0.02	3	0.02	0.69	0.09	2.6	19.4
Haryana	74	0.91	49	0.50	8.84	2.73	10.3	18.2
Bihar	60	0.49	52	0.43	11.76	3.08	4.2	14.0
Puducherry	4	0.09	2	0.03	0.85	0.20	10.7	13.2
Gujarat	153	1.77	83	0.88	25.75	6.81	6.9	12.9
Karnataka	127	1.23	81	0.73	23.63	5.66	5.2	12.9
Madhya Pradesh	112	1.11	46	0.40	20.07	4.10	5.5	9.9
Sikkim	1	0.01	1	0.01	0.15	0.09	3.8	6.3
Chhattisgarh	14	0.14	10	0.08	5.94	1.75	2.3	4.3
Arunachal Pradesh	1	0.00	1	0.00	0.32	0.09	1.2	4.3

Source Based on author's calculation

2.8 Estimate of the Contribution of Migration

The estimation of the contribution of CTs to urban population growth helps in estimating the contribution of migration to this growth. This is estimated as a residual, after removing the estimated contribution of natural growth, net reclassification of rural settlements into CTs and STs and incorporation of rural settlements into existing STs by expansion of their boundaries. Bhagat (2011) estimates that 44 % of the urban growth between 2001 and 2011 is natural growth and the remaining 56 % is produced by net reclassification, expansion of boundaries and migration. As shown earlier, 32.8 % of the growth is because of the reclassification of rural settlements into CTs, implying that the remaining 23.2 % is attributable to net reclassification of rural settlements into STs, the incorporation of such settlements into existing STs by expansion of their boundaries and migration.⁹ The net change in STs occurs because of declassification of STs or merging of one or more STs into other STs (decrease) or reclassification of rural and other urban areas (CTs and OGs) into STs (increase). Although the merging of STs and the reclassification of other urban areas to STs has no impact on the total urban population, the declassification of STs and reclassification of rural areas into STs does affect the urban population.

Estimating the extent of urban growth produced by net change in STs is difficult till detailed information on their 2001 constituent units is released. A preliminary attempt to compare the 2011 STs with the 2001 STs suggests that 98.5 % of the STs in 2001 (3741 out of 3799) remained STs in 2011. The remaining STs in 2001 have either been denotified into rural areas or merged with other STs, with a major share of the population expected to be in the latter category because it is the smaller STs that are denotified. Of the 58 STs in 2001, which were no longer STs in 2011, the 35 STs that were merged with 8 large ULBs account for 93 % of the total population.¹⁰ This implies that conversion of urban area into rural area through denotification of STs would be minimal. Similarly, there are 55 CTs (identified in the 2001 Census), which became STs in 2011. Out of the 243 STs in 2011 which were rural areas in 2001, the 2001 population of 214 units, without accounting for other rural areas which could also have merged into these units, was 2.1 million or 2.3 % of the total urban growth in the last decade.¹¹ A figure of 2.3 % of urban growth through the reclassification of rural areas into STs would imply that the remaining 20.9 % of urban growth could be because of migration and the expansion of boundaries.

⁹Though 55 CTs in 2001 were denotified to villages, the relatively small size of these settlements would imply that its impact would be insignificant.

¹⁰Of the 35, 1 ST has been merged with Visakhapatnam, Junagarh and Jamnagar, 2 with Vasai-Virar, 4 with Dhanbad, 6 with Bengaluru, 9 with Hyderabad and 11 with Ahmedabad.

¹¹As the 2001 population for 29 STs could not be estimated, because the corresponding settlement in 2001 could not be identified, the actual figure in 2011 could be higher than this.

The expansion of boundaries, which is to a large extent limited to STs, is a process of urbanisation where smaller ULBs and villages are included within the city limits over time. When expansion includes existing urban areas, it does not change the aggregate urban population, but if the expansion also includes villages, a phenomenon which can be seen for a number of cities in the last decade (e.g. 111 in BBMP in 2007, 23 in Pune Municipal Corporation, 53 in Vasai-Virar Municipal Corporation etc.), it reclassifies such rural areas as urban areas.¹² The magnitude of expansion of boundaries in India varies over time. It was 11.9 % in 1971–1981, 2.1 % in 1981–1991 and 9.9 % in 1991–2001 (HPEC 2011). Even an assumption of 2 % of urban growth through the expansion of boundaries, which is the lowest in the last three decades, would imply that 18.9 % of urban growth in the last decade is because of migration as compared with 19.9, 22.6 and 21.1 % in 1971–1981, 1981–1991 and 1991–2001, respectively.¹³

A comparison of the extent of migration with the share of new CTs in urban growth suggests that the extent of the new CTs (32.8 % of urban growth) is larger than the extent of migration (18.9 % of the urban growth). So, it would be interesting to see whether this is the first time that the scale of urbanisation because of a change in classification (in situ urbanisation) is higher than the extent of urbanisation because of migration. Hence, this pattern hints at a shift in the pattern of urbanisation in India with an increasing share of rural-administered urban areas in India.

2.9 Location of New CTs

After the contribution of new CTs to urban growth and their inter-state variations, another important question concerns the location of these new CTs. This is examined in three ways. First, the number of new CTs in a district associated with its district characteristics? Second, what is the proportion of new CTs that are located around existing cities? Finally, are new CTs constituents of existing built-up agglomerations? For the last inquiry, a novel method of agglomerating built-up areas used by Denis and Marius-Gnanou (2011) is used.

¹²“Vasai-Virar civic body not a good idea, say villagers”, *The Indian Express*, 21 July 2009 (accessed at www.indianexpress.com/news/vasaivirar-civic-body-not-a-good-idea-say-villagers/491940/ on 25 July 2012); “Draft Development Plan For The Newly Merged 23 Villages”, Pune Municipal Corporation (accessed at www.punecorporation.org/pmcwebn/dp23vill.aspx on 25 July 2012); “BBMP jurisdiction is vast but resources are limited”, *The Hindu*, 17 March 2012 (accessed at www.hindu.com/2010/03/17/stories/2010031763290400.htm on 25 July 2012).

¹³Chandrasekhar (2011), on the basis of NSS data for 2009–2010, estimates that 8.05 million rural non-agricultural workers commute to urban areas for their work. This is 9.1 % of the total urban non-agricultural workforce. Though these people are an active part of the urban economy, the present system does not recognise them under urban areas.

2.9.1 New CTs and District Characteristics

It can be expected that the urbanisation of a district would have some positive bearing on the formation of new CTs. As a district becomes more urbanised, its employment pattern focuses more on non-farming sectors and if this share for a particular village crosses the specified limit, it would meet one of the conditions for becoming a CT.

Figure 2.4a, b shows the average number of new CTs per district when all 2001 districts are divided into quintiles based on the urbanisation rate for those districts with at least one new CT (Fig. 2.4a) and all 2001 districts (Fig. 2.4b). This appears to indicate that the average number of new CTs increases with a move to a higher quintile, indicating some association between new CTs and urbanisation.

In order to verify further the above relationship, a simple multivariate regression analysis was conducted with the following form:

$$\begin{aligned} &(\text{No. of New CTs in 2011})_{ij} \\ &= \text{Constant} + \alpha(\text{No. of Existing CTs in 2001})_{ij} \\ &+ \beta(\text{Other District Characteristics})_{ij} + \gamma(\text{state Dummy})_j + e_{ij} \end{aligned}$$

for district i in state j .

The inclusion of the number of existing CTs as a determinant of the number of new CTs is similar to the specification in Bhaumik et al. (2009) regarding the number of new firms in an area. It reflects the state's reluctance to recognise large villages with urban characteristics as statutory urban areas. In addition, the number of new CTs in a district is a function of other district characteristics such as its urbanisation rate, the number of large villages (having a population greater than 4000), the share of non-agricultural male workforce and whether or not the district

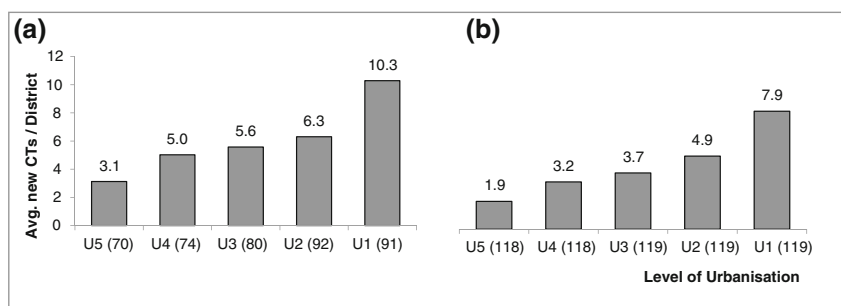


Fig. 2.4 **a** Urbanisation and average number of new CTs per district (districts with at least one new CT). **b** Urbanisation and average number of new CTs per district (all districts). *Note* The first quintile (U1) represents highest level of urbanisation and fifth quintile (U5) represents lowest level of urbanisation. U5 (<8.7 %), U4 (8.7–15.1 %), U3 (15.1–21.8 %), U2 (21.8–34.9 %). *Source* Based on author's calculation

Table 2.3 Relationship between new CTs and district characteristics

Independent variable	(I)	(II)	(III)
No. of existing CTs in 2001		0.890*** (0.21)	0.700*** (0.18)
Urbanisation rate in 2001	0.084** (0.03)	0.007 (0.02)	-0.109*** (0.03)
No. of large villages in 2001 (population > 4000)			0.055*** (0.02)
Share of non-agricultural male workforce in 2001			0.149*** (0.03)
Metropolitan district (Yes = 1)			4.299* (1.87)
Constant	-0.712 (1.40)	0.023 (0.81)	-9.448*** (2.02)
<i>N</i>	593	593	593
Adjusted <i>R</i> ²	0.39	0.57	0.66

The figures in parentheses represent the robust standard error. The metropolitan districts include 45 districts in 2001, 23 are in 7 metropolitan regions (Ahmedabad, Bangalore, Chennai, Hyderabad, Kolkata, Mumbai and Pune) and 22 in the National Capital Region. All models are controlled for state effects

Source Based on author's calculation

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

is part of a major metropolitan region.¹⁴ The state dummies control for other state-specific characteristics.

The results of OLS regression are reported in Table 2.3. The statistical significance of the district urbanisation rate in the first model does not survive after controlling for existing CTs (see model II). The number of existing CTs is statistically significant and positively associated with the number of new CTs in a district. The third model shows the continued statistical significance of the number of existing CTs, the number of large villages, the share of non-agricultural male workforce and the major metropolitan district dummy variable. The positive coefficient of the number of existing CTs implicitly reflects the nature of state policy and the reluctance of the state to declare them as STs. It is interesting that the urbanisation rate now has a negative and significant coefficient. This is consistent with a dual urbanisation process where the growth of CTs occurs both in the proximity of the major centres of urbanisation, as reflected in the major metropolitan district dummy variable, and in a more dispersed manner, as shown later in the discussion on the proximity of the new CTs to existing large towns (see also Denis et al. 2012).

¹⁴The metropolitan districts included 45 districts in 2001. Of these, 22 were in the National Capital Region in and around Delhi and 23 in 7 other major metropolitan regions, namely Ahmedabad, Bangalore, Chennai, Hyderabad, Kolkata, Mumbai and Pune.

2.9.2 *Location of New CTs in the Proximity of Large Towns*

Following on from the previous analysis of the determinants of new CTs, a number of questions arise with regard to their spatial distribution. Do rural areas close to an existing city transform faster in terms of criteria for becoming a CT? Are these new CTs spread more or less evenly across space or are they concentrated near particular areas? In this regard, it is important to note that if one village is important for its surrounding villages, for socio-economic reasons (marketing of products, education, health, banking etc.) it can become a CT over time with the growth of its surrounding areas, without proximity to a city (Rondinelli 1983; Gupta 2010).

Figure 2.5 shows the number of new CTs in each district. A visual inspection of the map confirms the impression created in the previous section that, although a large number of new CTs are concentrated around major metropolises, many of them are also geographically dispersed.¹⁵

However, the percentage of new CTs to total number of large villages (more than 4000 populations) provides a somewhat different spatial picture to that of the number of new CTs (Fig. 2.6). It shows a more limited effect of proximity to large cities, and the share is also high in some districts in North East states and Odisha. This is possibly because of variations in the size structure of settlements by districts, for example the higher number of large villages for districts with more than 10 new CTs (an average of 118) and the smaller number of large villages in districts with a ratio of new CTs to large villages greater than 50 % (an average of 10).

To address this phenomenon more precisely, the number of new CTs that fall within a certain radial distance (not road distance) of the larger cities is calculated. Some caveats are necessary. First, each city has a unique shape and a radius for one city may not be applicable to another city of the same size. Second, a single radius may not be appropriate even for the same class of cities, for example in a hilly state compared to a state in the plains. Resolving such issues requires detailed city-specific studies, which is beyond the scope of this chapter. However, to address these issues partially, buffers are differentiated by city size and a robustness check is carried out.

All towns with more than 1 lakh population, that is class 1 towns, in 2011 are grouped into four classes on the basis of population, namely 1–5 lakhs, 5–10 lakhs, 10–40 lakhs and more than 40 lakhs. A base radius of 10 km for 1–5-lakh towns, 15 km for 5–10-lakh towns, 20 km for 10–40-lakh towns and 25 km for more than 40-lakh towns was considered and then the number of new CTs under this area was estimated. If one CT comes under the radius of multiple cities, it is only counted

¹⁵A few examples of such districts where the number of new CTs is more than 10 are the North-West, South, South-West and Ghaziabad in the NCR; Hugli, Haora, Nadia, North 24 Parganas and South 24 Parganas in Kolkata Metropolitan Region; Mahbubnagar, Medak and Rangareddy in Hyderabad Metropolitan Region; Raigarh and Thane in Mumbai Metropolitan Region; Kancheepuram and Thiruvallur in Chennai Metropolitan Region; Coimbatore district, Nagpur district, Pune district etc.

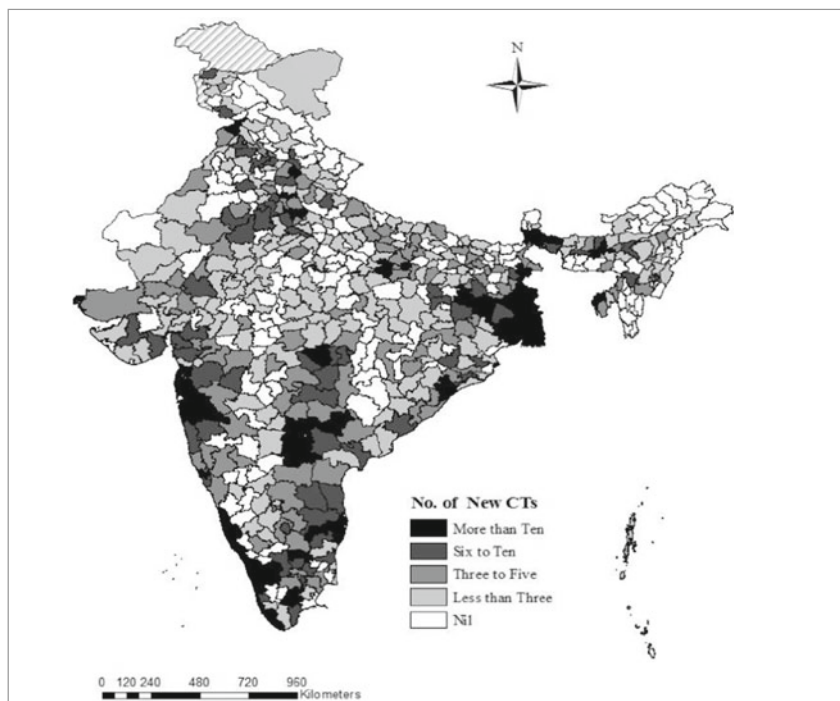


Fig. 2.5 District-wise distribution of new CTs in India. *Note* For the NCT of Delhi, the whole state is shown as one unit and the average number of new CTs per district is shown. *Source* Author, data from Census of India

once and attributed to the buffer of the city with largest population. For robustness, the above exercise was repeated by changing the radius of each class of cities by 25 % to see how the result changes with the change in the radius.¹⁶

The result is reported in Table 2.4. The last (sixth) column shows the total state-wise number of new CTs studied under this exercise and the corresponding 2011 population (figures in parenthesis) of these new CTs. The third to fifth columns show the proportion of new CTs around large towns based on three combinations of distances and the corresponding 2011 population. For all the states together, 37 % of the new CTs are within the buffer of large towns and they account for 39 % of the total population of new CTs. Thus, more than 60 % of the population of the new CTs is outside the buffer area of class 1 towns. If the radius is increased by 25 %, the numbers of CTs and population increase to 45 and 46 %, respectively.

¹⁶The radius combination which is 25 % more than the base radius is 12.5 km for 1–5-lakh towns, 18.75 km for 5–10-lakh towns, 25 km for 10–40-lakh towns and 31.25 km for more than 40-lakh towns. Similarly, the radius combination which is 25 % less than the base radius is 7.5 km for 1–5-lakh towns, 11.25 km for 5–10-lakh towns, 15 km for 10–40-lakh towns and 18.75 km for more than 40-lakh towns.

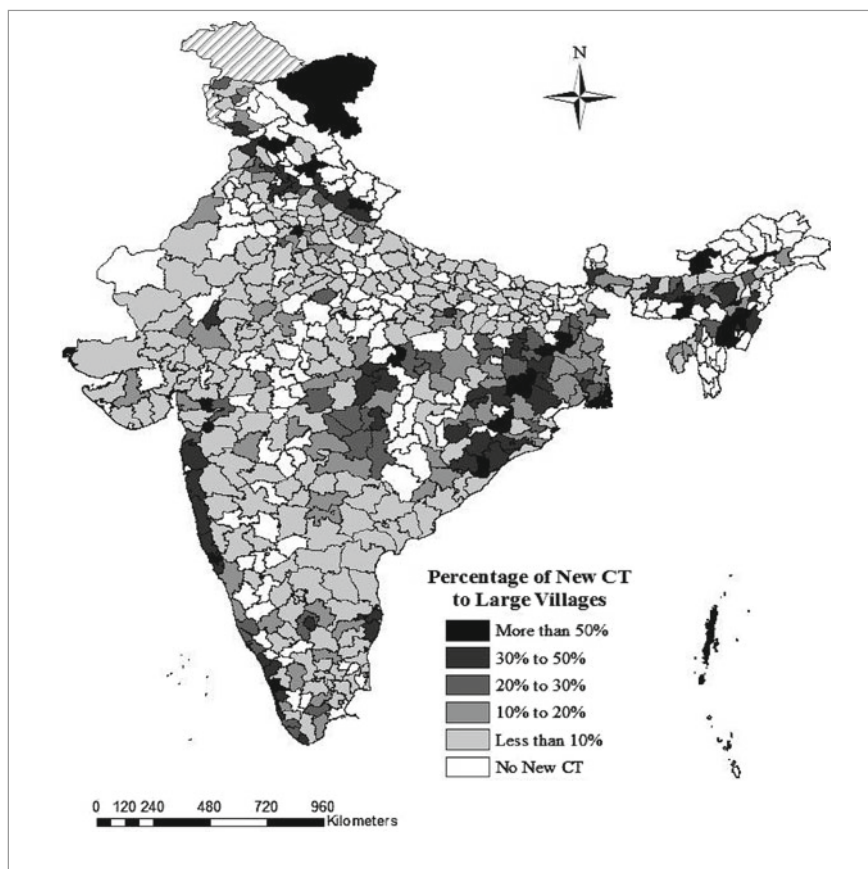


Fig. 2.6 Percentage of new CTs to total large villages. *Note* For the NCT of Delhi, the whole state is shown as one unit and the average of all districts is taken. Large villages are those with populations greater than 4000 in 2001. *Source* Author, Data from Census of India

respectively. Similarly, a 25 % reduction in distance would bring the percentages down to 30 and 32 %, respectively. However there is a wide inter-state variation in the share of new CTs located in the proximity of large towns. The share for Kerala, which has the second largest number of new CTs in India, is very low compared to the national average. Similarly, Assam, Odisha, Madhya Pradesh and Rajasthan are other states in which the share of new CTs in the proximity of large towns is very low. On the other hand, states with a large share of new CTs in the proximity of large towns are Delhi, Haryana, Uttarakhand and Uttar Pradesh.

Table 2.5 shows the distribution of new CTs in the proximity of large towns by the size-class of towns. It indicates that among the new CTs in the vicinity of class 1 towns, 45 % of the number of CTs and 40 % of the population are in the proximity of towns with a population of 1–5 lakhs. Similarly, another 15 % of the number of CTs and 17 % of population are in the proximity of towns with a population of

Table 2.4 New CTs and proximity to large towns

Sl. No.	State	Case-I (base) (% of total CTs in state)	Case-II (+25 %) (% of total CTs in state)	Case-III (-25 %) (% of total CTs in state)	CTs under analysis [No. (Pop. in millions)]
	All India	37.2 (38.9)	44.8 (45.8)	29.6 (32.3)	2489 (29.23)
1.	Andhra Pradesh	30.4 (32.8)	34.1 (34.2)	28.1 (29.9)	135 (2.25)
2.	Arunachal Pradesh	0 (0)	0 (0)	0 (0)	1 (0.00)
3.	Assam	18.8 (19.2)	23.2 (24.2)	14.5 (15.8)	69 (0.46)
4.	Bihar	36.5 (37.1)	42.3 (48.8)	32.7 (33)	52 (0.43)
5.	Chhattisgarh	30 (40.2)	30 (40.2)	20 (26.1)	10 (0.08)
6.	Goa	0 (0)	0 (0)	0 (0)	25 (0.18)
7.	Gujarat	37.3 (39.6)	44.6 (49)	34.9 (36.5)	83 (0.88)
8.	Haryana	67.3 (67.2)	69.4 (68.5)	57.1 (54.4)	49 (0.50)
9.	Himachal Pradesh	0 (0)	0 (0)	0 (0)	3 (0.02)
10.	Jammu and Kashmir	46.2 (42.9)	50 (47.2)	26.9 (25.5)	26 (0.20)
11.	Jharkhand	32.7 (32.3)	40.2 (37.4)	27.1 (28.4)	107 (0.88)
12.	Karnataka	37.5 (39.9)	47.5 (47.4)	21.3 (20)	80 (0.72)
13.	Kerala	14.1 (14.5)	22.4 (23.3)	7.9 (8.9)	340 (7.27)
14.	Madhya Pradesh	24.4 (29.3)	31.1 (36)	13.3 (20.8)	45 (0.40)
15.	Maharashtra	45.5 (52.7)	48.5 (55.3)	41.9 (48.6)	167 (1.97)
16.	Manipur	0 (0)	0 (0)	0 (0)	15 (0.13)
17.	Meghalaya	0 (0)	0 (0)	0 (0)	0 (0)
18.	Nagaland	50 (49.2)	50 (49.2)	50 (49.2)	6 (0.05)
19.	Odisha	8.2 (11)	12.9 (14.3)	4.7 (7)	85 (0.56)
20.	Punjab	43.6 (54.5)	56.4 (65.7)	36.4 (49.3)	55 (0.50)
21.	Rajasthan	18.4 (21.5)	21.1 (23.2)	14.5 (18.5)	76 (0.80)
22.	Sikkim	0 (0)	0 (0)	0 (0)	1 (0.01)
23.	Tamil Nadu	44.9 (53.6)	53.7 (62)	38 (46.7)	216 (2.40)
24.	Tripura	28.6 (35)	38.1 (48.1)	19 (23.7)	21 (0.24)
25.	Uttarakhand	63.7 (70.8)	69.1 (73.8)	54.4 (63)	29 (0.32)
26.	Uttar Pradesh	62.1 (64.9)	72.4 (75.3)	58.6 (62.5)	204 (2.06)
27.	West Bengal	43.1 (46.3)	55.8 (58)	29.9 (34.2)	511 (4.51)
28.	Andaman and Nicobar	50 (79)	50 (79)	50 (79)	2 (0.01)
29.	Chandigarh	100 (100)	100 (100)	100 (100)	5 (0.06)
30.	NCT of Delhi	89.1 (95.8)	96.4 (98.8)	80 (92.7)	55 (1.14)

(continued)

Table 2.4 (continued)

Sl. No.	State	Case-I (base) (% of total CTs in state)	Case-II (+25 %) (% of total CTs in state)	Case-III (-25 %) (% of total CTs in state)	CTs under analysis [No. (Pop. in millions)]
31.	Dadra and Nagar Haveli	0 (0)	0 (0)	0 (0)	5 (0.06)
32.	Daman and Diu	0 (0)	0 (0)	0 (0)	6 (0.11)
33.	Lakshadweep	0 (0)	0 (0)	0 (0)	3 (0.02)
34.	Puducherry	50 (58.2)	100 (100)	50 (58.2)	2 (0.03)

Note: The first number in a cell shows the total number (or share) of new CTs and the figures in the parentheses show the total (or share) 2011 population. This analysis is based on 2489 out of 2553 new CTs for which it was possible to find the georeference. The 64 new CTs, not included in the analysis, are distributed over the following states: 2 in Andhra Pradesh, 11 in Assam, 1 in Jammu and Kashmir, 1 in Karnataka, 6 in Kerala, 1 in Madhya Pradesh, 3 in Manipur, 6 in Meghalaya, 4 in Maharashtra, 1 in Odisha, 11 in Tamil Nadu, 2 in Tripura and 15 in West Bengal.

Case-I (Base): 1–5-lakh towns—10 km radius, 5–10-lakh towns—15 km radius, 10–40-lakh towns—20 km radius, >40-lakh towns—25 km radius; Case-II (25 % more): 1–5-lakh towns—12.5 km radius, 5–10-lakh towns—18.75 km radius, 10–40-lakh towns—25 km radius, >40-lakh towns—31.25 km radius; Case-III (25 % less): 1–5-lakh towns—7.5 km radius, 5–10-lakh towns—11.25 km radius, 10–40-lakh towns—15 km radius, >40-lakh towns—18.75 km radius

Source Based on author's calculation

Table 2.5 Proximity of new CTs by size class of towns

Size class of towns (2011)	Case-I (Base) Number (Popn.)	Case-II (+25 %) Number (Popn.)	Case-III (-25 %) Number (Popn.)
100,000–500,000	45.1 % (42.3 %)	41.9 % (41.1 %)	51.7 % (49.4 %)
500,000–1,000,000	14.8 % (18.6 %)	14.9 % (18.3 %)	14.7 % (17.5 %)
1,000,000–4,000,000	18.4 % (15.6 %)	17.1 % (14.3 %)	19.5 % (16.5 %)
More than 4,000,000	21.7 % (23.4 %)	26.1 % (26.3 %)	14.1 % (16.7 %)
Total in the proximity of large towns	926 (7.8 million)	1115 (9.5 million)	735 (6.2 million)
Not in the proximity of large towns	1563 (15.4 million)	1374 (13.7 million)	1754 (16.9 million)

Note If a CT comes under multiple classes of city proximity, then it is considered under the proximity of the larger city class

Source Based on author's calculation

5–10 lakhs. This means that even among the new CTs in the vicinity of class 1 towns, only 43 % of their population is in the vicinity of million plus cities, that is only 17 % of the population of the new CTs is in the vicinity of the million plus cities. This confirms the initial observation that, although there are a large number of CTs in close proximity to class 1 towns, many of them are not around the megacities

and there are many more that are widely spread across the countryside. This appears to indicate that there may be multiple urbanisation processes at work.¹⁷

2.9.3 New CTs and Built-up Agglomerations

Denis and Marius-Gnanou (2011) have constructed a new measure of agglomeration based on the proximity of a built-up area. According to their methodology, if the built-up area of one settlement, irrespective of the classification by the Census of India as rural or urban, is within 200 m of the built-up area of another settlement, both settlements are part of the same settlement agglomeration (SA). Using a threshold population of 10,000 for SAs, they have estimated that the share of people who live in such SAs in India was 37.5 % in 2001, vs the official urbanisation figure of 26.6 % for urban population in settlements above a population of 10,000. Using their database for SAs with a population of 5000 or more, Table 2.6 examines whether the new CTs form a part of such SAs. It shows that a large number of new CTs in 2011 (83 % of all CTs and 97 % of CTs with a population greater than 5000) were already part of an SA in 2001. Many of these CTs (884 or 42 %) are in SAs with a population of 50,000 and less, indicating that they are not located around large population centres. It also shows that many of these new CTs are not stand-alone settlements but part of a cluster of settlements, which are relatively proximate to each other, even if they are relatively distant from class 1 towns.

2.10 CT: A New Phenomenon of India's Future Urbanisation?

The large increase in the number of new CTs in the last decade was unprecedented. The question then arises as to whether this phenomenon is specific to a particular time period or whether it is going to be a part of India's future urbanisation process? Because the identification of CTs is based on the information from the last Census, the 2011 Census information was used to estimate the number of CTs that may come up between 2011 and 2021. However, there are two issues with such estimations as some of these possible upcoming CTs may become STs or merge with the existing STs before the 2021 Census urban frame is prepared. Out of the total of 1362 CTs in 2001, only 145 CTs were either converted into STs or merged with existing STs. Even though some states have some pre-defined criteria for creating a new ST, it is up to the state government to do so and the outcome would be difficult

¹⁷Denis et al. (2012) also seem to suggest that multiple urbanisation processes may be at work in India, such as metropolitan agglomeration and what they term subaltern urbanisation.

Table 2.6 New CTs by size of settlement agglomerations (SA)

Size of SA (2001)	Less than 10,000	10,000– 30,000	30,000– 50,000	50,000– 100,000	100,000– 200,000	200,000– 500,000	Greater than 500,000	Total in SA	Not in SA
Size of new CT (2001)									
Less than 5000	12	52	22	34	52	41	128	341	376
5,000–10,000	413	138	36	86	99	67	280	1119	35
10,000–20,000		158	23	30	23	28	189	451	11
20,000–50,000		19	11	8	3	6	162	209	4
More than 50,000				1		1	5	7	
Total	425 (20.0 %)	367 (17.3 %)	92 (4.3 %)	159 (7.5 %)	177 (8.3 %)	143 (6.7 %)	764 (36 %)	2127 (100 %)	426

Source Based on author's calculation

to predict beforehand. However, it would be useful to note that there were only 242 new STs added between 2001 and 2011 and not necessarily all of them were CTs before, as some villages were converted into STs. In order to assess the seriousness of the second issue, the share of the total upcoming CTs proximate to large towns is calculated.

As can be seen from Fig. 2.7, we can expect to see the addition of 2647 CTs in the next Census.¹⁸ The maximum number would be located in Kerala (407), followed by West Bengal (375), Tamil Nadu (309) and Uttar Pradesh (232). Although all sizes of STs can experience expansion of area, it is more prominent in larger STs. Out of the total upcoming CTs, around 30 % are in the proximity of class 1 towns, when proximity is defined in the same manner as in Table 2.4. If one assumes that the creation of new STs in this decade would be similar to the pattern visible over the last decade, this implies that a large number new CTs may emerge in the next Census. This suggests that the pattern of urbanisation through reclassification of rural areas is a new dimension of India's recent as well as future urbanisation process.

2.11 Implications for Governance

The CTs near and distant from metropolitan areas present distinct sets of challenges for urban governance. Though population growth within the administrative limits of large metropolitan cities in the last decade has shown a downwards trend, their peripheries have shown higher growth and some of this is because of the growth in CTs as well. The interaction between the core city and the peripheries is crucial for the growth and development of both types of entities. It is an open question as to whether the growth of such units took place because of the lack of land use planning and building restrictions; but it is difficult to dispute that these units are vital for the growth of the main cities and require proper governance arrangements. Expansion of the municipal boundary is one such process by which these units are included in the formal governance arrangement, although this process has not always been easy.¹⁹

¹⁸In the census, village level employment data are presented under four broad categories (cultivator, agricultural labourers, household industry workers and other workers). Non-farming employment is calculated here as the share of "household industry" workers and "other" workers in the total workers. As workers engaged in "plantation, livestock, forestry, fishing, hunting and allied activities" (in the paper counted as those engaged in non-farming employment) are to be excluded in CTs identification, 78 % non-farming employment cutoff is taken here instead of 75 % as the share of "plantation, livestock, forestry, fishing, hunting and allied activities" in total main male workforce was roughly 3 % in 2001.

¹⁹There have been instances where such settlements resisted efforts to merge them with the municipality. "Vasai-Virar civic body not a good idea, say villagers", The Indian Express, 21 July 2009 (accessed at www.indianexpress.com/news/vasai-virar-civic-body-not-a-good-idea-say-villagers/491940/ on 25 July 2012).

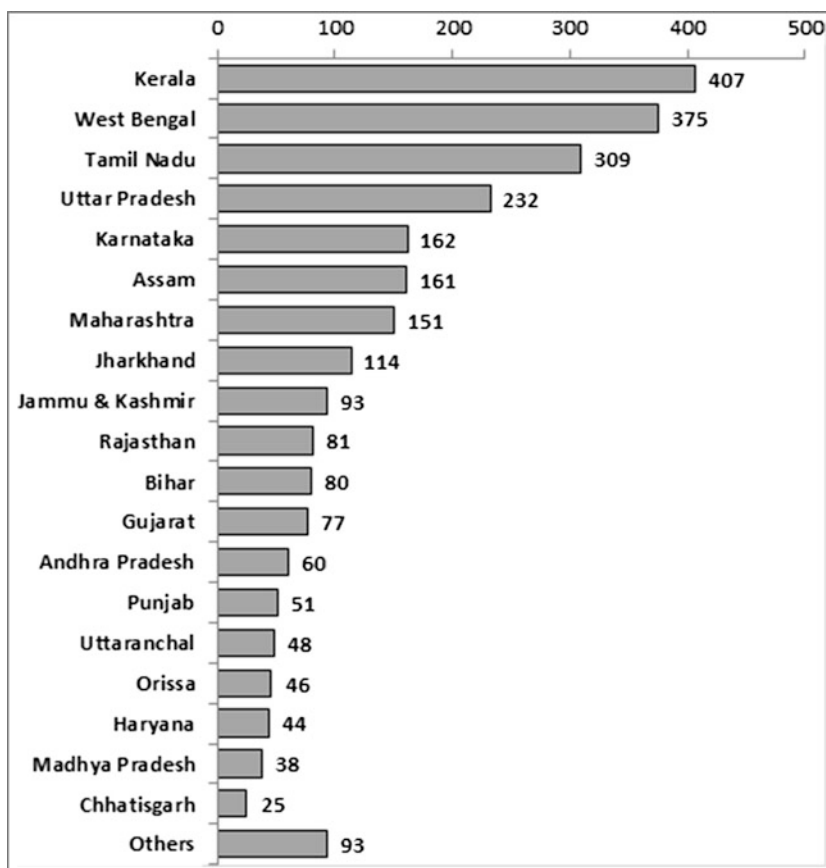


Fig. 2.7 Expected new CTs in 2021 Census (major states)

However, as seen above, not all CTs are near large towns. Depending upon the combinations of radii chosen, the number of new CTs in the proximity of large towns may vary, but it is clear from the above that a large share of the population of new CTs is not around large towns. These CTs could have different characteristics to the CTs located near large towns, and the nature of the interaction of these units with their surrounding areas (mainly villages) and within them, may be very different from the latter. However, ignoring them from a governance point of view, as is the case currently, is not a solution. Mr. Jairam Ramesh, the former Union minister for Rural Development, remarking on the growth of such CTs, said recently: “Our policies have been either for rural or urban areas. We lack an

approach to such *trishanku* (middle world) areas.”²⁰ In this context, the centrally sponsored scheme for Provision of Urban Amenities in Rural Areas (PURA) is being restructured and is eventually intended to cover non-municipal block headquarters and rural areas with potential growth centres as well as 3000 CTs.²¹ PURA, however, focuses only on certain services; it is also important to think about proper governance systems in these areas.²²

Given the current practice, where few CTs obtain statutory recognition, it is likely that their governance arrangements would continue to be rural for some time to come. Sometimes this is part of a deliberate state government strategy to access central government funds. On 11 June 2004 the Government of Tamil Nadu directed the “reclassification of 566 Town Panchayats as village panchayats”. The government determined that as “most of the Town Panchayats are financially weak, and *rural in character* ... Town Panchayats having a population of less than 30,000 may be reclassified as village panchayats *so as to enable them to receive more funds from the Government of India and state Government under various grants and assistance.*” (emphasis added).²³

2.12 Conclusion

The urban population growth of 91 million between 2001 and 2011 is for the first time higher than the absolute rural growth. This chapter finds that the 2553 new CTs, which were rural areas in 2001, accounted for 32.8 % of the urban growth in the last decade. From this it can be calculated that the extent of urban migration in the last decade is similar to the migration rate of the last three decades, that is 18.9 % despite the growth in the rural urban differential. Further, it shows that the extent of urbanisation through reclassification is higher than urbanisation through

²⁰“New scheme to uplift semi-urban settlements”, *The Hindustan Times*, 7 June 2012. Accessed at <http://www.hindustantimes.com/India-news/NewDelhi/New-scheme-to-uplift-semi-urban-settlements/Article1-867589.aspx> on 25 July 2012.

²¹Final Report of Working Group on “Scheme for Provision of Urban Amenities in Rural Areas (PURA)”, Ministry of Rural Development (accessed at http://planningcommission.nic.in/aboutus/committee/wrkgrp12/rd/wgrp_pura.pdf on 25 July 2012).

²²The Government of India has launched the Shyama Prasad Mukherji Rurban Mission (SPMRM) with the intention to build 300 cluster of smart villages through the provisioning of infrastructure facilities and creation of economic activities. Census towns along with block headquarter villages have given special emphasis under this scheme in cluster selection.

²³Government of Tamil Nadu, GO No. 270 dated 11 June 2004. Prior to this, “according to Sect. 3-B of the Tamil Nadu District Municipalities Act, 1920, any local area having a population of not less than 5000 and an annual income of not less than 1 lakh of rupees are constituted as a town panchayat.” Accessed at <http://www.tn.gov.in/gorders/maws/maws-e-270-2004.htm> on 25 July 2012. This was subsequently overturned by Government of Tamil Nadu, GO No. 55 dated 14 July 2006 (accessed at http://www.tn.gov.in/gorders/maws/maws_e_55_2006.htm on 25 July 2012).

migration, which is unusual. Further, it finds that only 37.2 % of these new CTs are in the proximity of class 1 towns. As more than 2000 new CTs are expected to emerge in the next Census, urbanisation through reclassification of rural areas is going to be part of India's future urbanisation process.

There is also large inter-state variation in these findings. West Bengal has the maximum number of new CTs, followed by Kerala, Tamil Nadu and Uttar Pradesh. Although 93 % of total urban growth in Kerala is because of new CTs, it is only 4 % for Chhattisgarh. Similarly, the proximity of new CTs to large towns is higher in Delhi, Haryana and Uttar Pradesh and lower in Assam, Odisha and Madhya Pradesh.

Because it is estimated that about one-third of the population in these new CTs are in the proximity of class 1 towns, it could be argued that they may come under the city jurisdiction through the process of future boundary expansion and would be governed by the formal urban system. However, a large number of the new CTs are away from major urban centres and are part of a smaller SA, which is governed under the rural administrative framework. Indeed, the empirical analysis seems to indicate that the reluctance of state policy to recognise new STs is partly responsible for the growth of new CTs. As these units are different from other rural areas by their economic characteristics and have the potential for future growth, proper governance arrangements would be crucial.

Contemporary urban studies in India make a great effort to understand migration and migrants on the one hand and larger urban areas on the other. However, the existence of a large number of rural settlements with urban characteristics is not seriously acknowledged and their economic importance is little understood. This chapter tries to provide a basic picture of the new CTs that emerged over the last decade but there are many unexplored areas and unanswered questions in the field which can hopefully be addressed by future academic debate and research.

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Chapter 3

The Substantial Share of Small Towns in India's System of Cities

Elfie Swerts

3.1 Introduction

There are many challenges to making sense of the transformations induced by India's urbanisation, whether in terms of economic growth, social development, governance or ecological sustainability. Within the context of global urbanisation studies, most of the analysis of urban changes in India has focused on megacities. Despite their importance, large metropolises contribute only partially to urban dynamics. Non-metro cities with fewer than one million inhabitants and small towns below 1 lakh (100,000 inhabitants) host an important part of the overall urban population and their share could grow. Their potentiality to accommodate future urbanisation is high. Nevertheless, the development of Indian small towns could either be linked to that of the megacities or predominantly driven by internal processes (Denis et al. 2012; Raman 2014).

In this wider context, the aim of this chapter is to make sense of the demographic contribution of small towns to the dynamics of the Indian city system since the beginning of the 1960s. It evaluates whether their trajectories differ from those of the larger cities and the extent of their dependence on them, taking into account the number of metro cities (about 40) and the bulk of medium size cities with between one million and 100,000 inhabitants. Small towns are defined here as localities accommodating between 10,000 and 100,000 inhabitants. In other contexts, in smaller countries with a less prolific system of cities, a locality of 100,000 inhabitants would appear to be a large city. We should also take into account the level of amenities available in such medium size places.

The first section discusses the ambiguities that arise when identifying small towns using the Census of India definition of urban localities. The second section goes on to discuss the methodology used to create a harmonised and diachronic data

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set of urban settlements. The third section describes the specificities of small towns' contributions to India's overall urbanisation process and the fourth section examines small towns' demographic trajectories.

3.2 Indian Small Towns: The Data in Question

The Indian Censuses, which have been carried out every 10 years since the beginning of the twentieth century, describe the population of each town of more than 5000 inhabitants. Despite their "exceptional quality and regularity" (Oliveau and Guilmoto 2005), some difficulties remain when it comes to studying the whole Indian system of cities. In particular, Censuses do not take into consideration all small towns and hence it is difficult to track and evaluate their demographic evolution. These problems can be partly solved by creating databases in which the definition of cities is as independent as possible from administrative criteria.

3.2.1 *Census Definition of Cities and Issues in Identifying Small Towns*

From 1881 to 1961, urban localities were defined as localities of at least 5000 inhabitants, showing urban characteristics, defined as houses juxtaposed or separated only by streets, even if these localities were not managed by a municipal government. Regardless of their size, urban localities could also be municipalities and cantonments (Bose 1964, 1970; Véron 1987; Bhagat 2002). Such a definition of an "urban locality" generates difficulties at various levels, in particular because it leaves too much latitude for interpretation to state Census superintendents regarding the designation of urban entities (Bhagat 2005). In 1961, the definition was standardised, and two different categories of towns were distinguished, one administrative, statutory towns (STs), and one based on demographic and economic criteria, Census towns (CTs) (Sivaramakrishnan et al. 2009).

STs are mainly municipal corporations (also called Nagar Nigam), which are cities with more than 1 million inhabitants, municipalities (Nagar Palika), with generally between 100,000 and one million inhabitants and Town Panchayat (Nagar Panchayat) (Census of India 2001) which include about 20,000–100,000 inhabitants. However, the required population thresholds for a town to be designated as a Statutory Town vary according to the Indian states (Palanithurai 2002; Shaw 2005; Denis et al. 2012) and in some states, such as West Bengal, the category of Town Panchayat does not exist (Samanta 2014b).

CTs are defined by a threshold population of 5000 inhabitants, a density higher than 400 inhabitants per square kilometre and a proportion of over 75 % of the male

workforce engaged in non-agricultural activities (Census of India, Administrative Division 2011).

However, despite standardisation, several problems remain:

1. The regional political and economic aims determining the urban classification may vary from state to state: state governments' decisions and local requests or opposition have a strong influence on the urban classification of a locality (Sivaramakrishnan et al. 2009; Ramachandran 2011; Denis et al. 2012; Pradhan 2012). This issue mainly concerns small towns as their capacity to fulfil the urban designation criteria is more doubtful than in the case of larger towns.
2. Many new small towns are not included in the census because the criteria designating CTs are based on data collected during the previous Census, which was held 10 years prior to their designation (Denis et al. 2012; Chandramouli 2013). In other words, in 2011, the workforce data of 2001 served to determine the list of CTs. Hence there is at least a 10-year delay in recognition.
3. From one Census to the next, a substantial number of small towns are downgraded to the rank of village, sometimes over a few decades (Denis et al. 2012).

3.2.2 *Construction of a Harmonised Database for an Analysis of the Evolution of Small Towns*

3.2.2.1 The Indiapolis Database: Cities as Morphological Agglomerations

A first database called Indiapolis¹ has been elaborated based on a definition of cities as morphological agglomerations with more than 10,000 inhabitants (Moriconi-Ebrard 1993; Denis and Marius-Gnanou 2011). The construction of Indiapolis is based on the following methodology (Fig. 3.1) (Swerts et al. 2014):

1. As a first step, the continuous urban built up area separated by less than 200 m is delineated using Google Earth images from the year 2000 with a resolution of 7000 ft (~2134 m). This perimeter is georeferenced and integrated into a Geographic Information System (GIS).
2. As a second step, the population data of towns and villages from the official Censuses of 1961, 1981, 1991, 2001 and 2011 are georeferenced and integrated into the same GIS, and associated with the perimeter of the continuous urban built up area.

In the Indiapolis database, the population figures have been retropolated back to 1961 (Denis and Marius-Gnanou 2011). However, one limitation of the Indiapolis

¹From the project e-Geopolis, coordinated by François Moriconi-Ebrard: <http://www.e-geopolis.eu/?lang=en>.

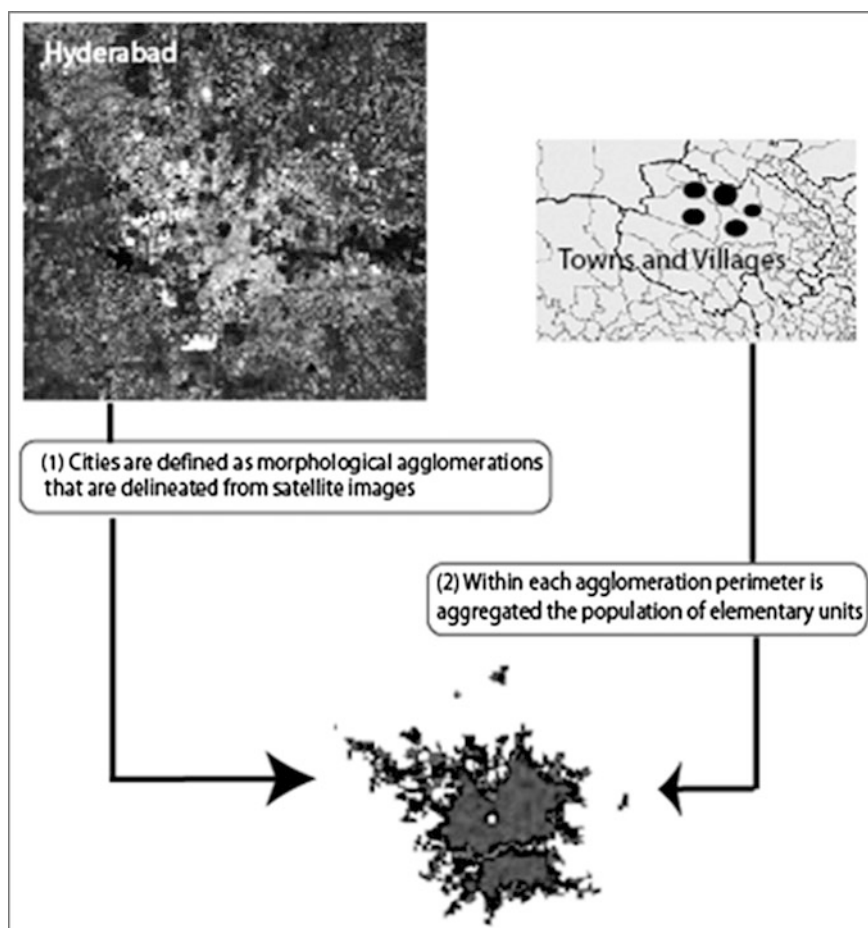


Fig. 3.1 Association of the population of towns and villages within the perimeter of polygons.
Source Swerts et al. (2014)

database is that the population of the morphological agglomerations from 1961 to 2011 is calculated according to the same delineation based on the morphological agglomeration observed from 2000 to 2005 (depending on satellite imagery availability). This methodology does not allow us to consider fully the temporal expansion of the agglomeration. Thus, to calculate the population data according to an evolutionary perimeter for the years 1961, 1981 and 1991, the towns and villages within the perimeter of the morphological agglomeration have been excluded if:

1. Their growth rate was lower than the regional average
2. They are located beyond a radius of 20 km from the centre of the agglomeration for the smaller towns (below 50,000 inhabitants), 40 km for towns with a

population of 50,000–500,000, 60 km for the towns with a population of 500,000–3 million and 100 km for the largest

The Indiapolis database identified 7107 morphological agglomerations with more than 10,000 inhabitants in 2011, in contrast to the 7935 cities and towns with more than 5000 inhabitants and 5141 with more than 10,000 inhabitants mentioned by the Indian Census. These differences are caused by the fact that several CTs can be aggregated to constitute a unique Indiapolis agglomeration.² On the other hand, the Indiapolis database does not take into account the official status of Indian localities (urban or rural) but their morphology, and thus includes towns which do not figure in the official Censuses, and conversely excludes few official cities with fewer than 10,000 inhabitants.

One limitation of the Indiapolis database is that the morphological criterion is not robust enough to define cities, particularly in Asia, where rural areas can be very dense, both in terms of population and urban construction. As a consequence, the number of small towns in the Indiapolis database could be overestimated: some “small morphological agglomerations” are actually only “large villages”, that is morphological agglomerations with a workforce overwhelmingly engaged in primary sector activities (agriculture, forestry, fishing etc.).

In this context, an economic criterion has been added to the morphological and population density criteria to refine the urban characterisation of the morphological settlements observed. This makes it possible to exclude all agricultural morphological agglomerations that occur in the database.

3.2.2.2 From Large Villages to “Forgotten” Small Towns

For each morphological agglomeration, statistics about the 2011 workforce have been added to details of the inhabitants. They provide the distribution of male and female employees in three sectors of activities: agricultural labourers and cultivators, household industry and a category “other”. This latter category includes secondary and tertiary activities.

Since 1981, the economic criterion used by the Census to define CTs is the male worker engaged in non-agricultural activities, one of the main reasons for this being that only men can be considered as economically active if a regular income and regular work is taken into account (Jose 1989). Similarly, only the male population has been considered in our analyses because of the significant undercounting of women and irregular counting in different places that occur in Indian economic statistics (Jose 1989; Mazumdar and Neetha 2011; Thomas 2012; Ghani et al. 2013), reinforcing the imbalances already observed between Indian states (Vaidyanathan 1986; Duvvury 1989; Bhagat 2002; Behera and Behera 2013).

²For example, the Indiapolis agglomeration of Mumbai is made up of Greater Mumbai, the towns of Thane, Navi, Mira-Bhayandar, Navi, Panvel, Talaja and Kalundre, and the villages of Kharghar, Owe, Vadghar, Vichumbe, Kolkhe, Karanjade and Kherane.

A highly controversial step is to determine a minimal threshold of men engaged in non-agricultural activities, which serves as a criterion to attribute an urban status to a morphological agglomeration of more than 10,000 inhabitants. The threshold of 75 % of male workers outside the primary sector used by the Indian Census was originally applied to the Indiapolis morphological agglomerations. According to this criterion, out of the 4711 and 6188 total Indiapolis Agglomerations (IA) in India in 1991 and 2001, respectively 2499 and 2864 IA with more than 10,000 inhabitants, remain “urban”. They represent respectively 53 and 46 % of the whole IA system. In 2011, 3141 IA out of 7107 identified in the IA database, remain “urban”, only 44 %. In other words, 3966 IA could be considered rural. Thus, 365 new IA (of more than 10,000 inhabitants) have emerged between 1991 and 2001, and 277 between 2001 and 2011. Following this trend, by 2021 India could have 3500 urban IA.

However, taking into account the irregular, short-term trends of agricultural activities and the large changes in the workforce proportions in small towns (Sidhwani 2014), determining a priori a threshold, based solely on agricultural workers, is debatable.

An alternative approach is to determine the urban characterisation of IA taking the entire male workforce distributed by sector into account, that is male workers whatever the sector of activity in which they are engaged, and applying a Hierarchical Ascendant Classification to highlight a typology of Indian IA according to their economic profile. Using this method, four classes of IA have been revealed according to the repartition of the male employees over the different sectors of activities: they could be classified either as significantly urban or as rural (Table 3.1; Figs. 3.2 and 3.3):

1. The first group is composed of 3128 IA specialised in secondary and tertiary activities
2. The second group is composed of 185 IA, for which profiles are diversified, with a significant overrepresentation of male workers engaged in secondary and tertiary activities and household industries

Table 3.1 Male employment profiles in the classes of IA identified by the Hierarchical Ascending Classification (in percentage by sector)

Classes of functional profile	Percentage of male employees engaged in		
	Other activities	Household industry	Agricultural activities
Class 1: specialised in secondary and tertiary activities	86	4	10
Class 2: diversified, household industry overrepresented	53	28	19
Class 3: diversified	50	4	46
Class 4: specialised in primary activities	18	2	80
All morphological agglomerations	69	4	27

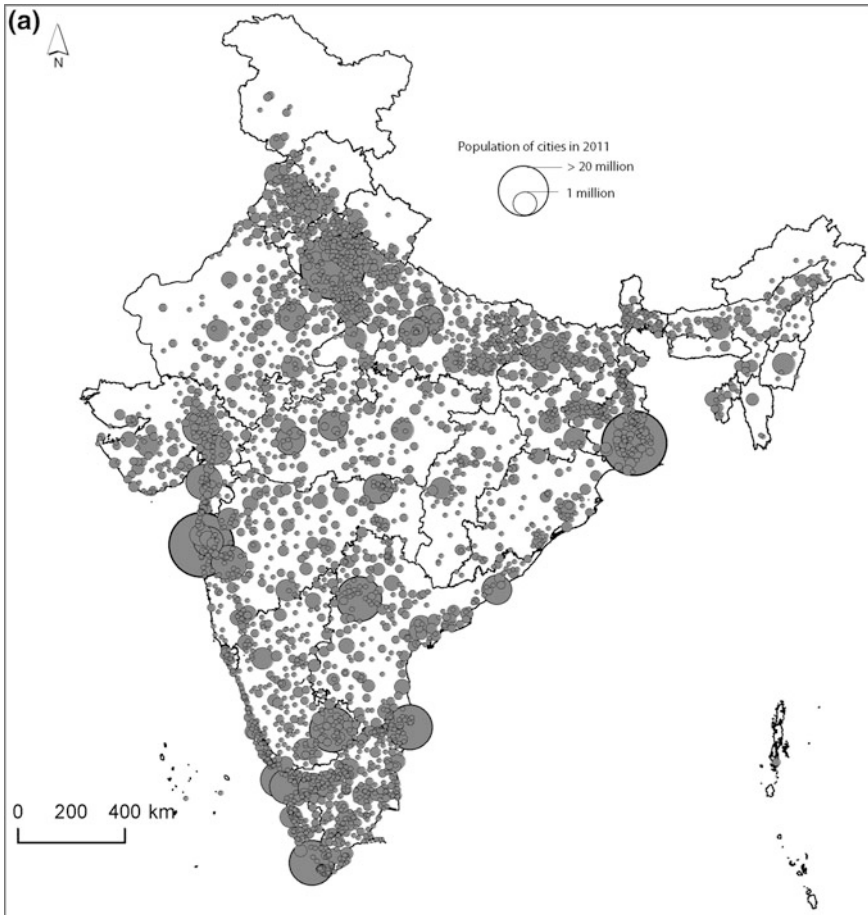


Fig. 3.2 a The 3141 “urban” IA of 10,000 inhabitants and above according to the Census criteria of 75 % of the male population engaged in non-agricultural activities in 2011

3. The third group is composed of 2525 IA with diverse functional profiles
4. The fourth group is composed of 1244 IA specialised in agricultural activities (80 % of male workers are engaged in agricultural activities)

The 1244 IA with an entirely agricultural economic profile (80 % of male workers engaged in agricultural activities) can be removed from the database describing Indian cities/agglomerations. They should be considered to be “large villages” rather than “small towns”. These large villages are mainly located in the dense region of Bihar which remains essentially rural, and along the Eastern and the Kerala coast, home to some dense and large fishing communities.

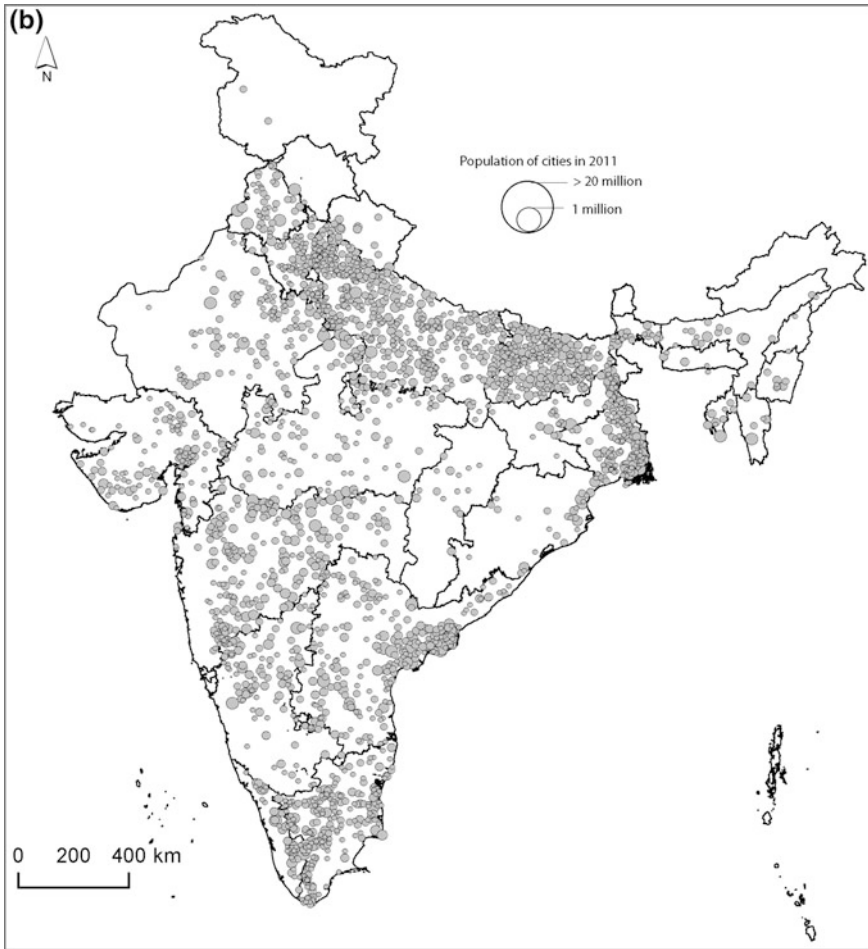


Fig. 3.2 b The 3966 “non-urban” IA of 10,000 inhabitants and above according to the Census criteria of 75 % of the male population engaged in non-agricultural activities in 2011

The urban characterisation of class 3 can be discussed, as 46 % of male workers are engaged in agricultural activities. In fact, they can be considered either as localities in transition between a rural and an urban environment, or as towns, which remain focused on agricultural activities as they are undergoing demographic and morphological expansion. We have chosen to include these cities in the Indian cities database, paying particular attention to the peculiarities/abnormalities they

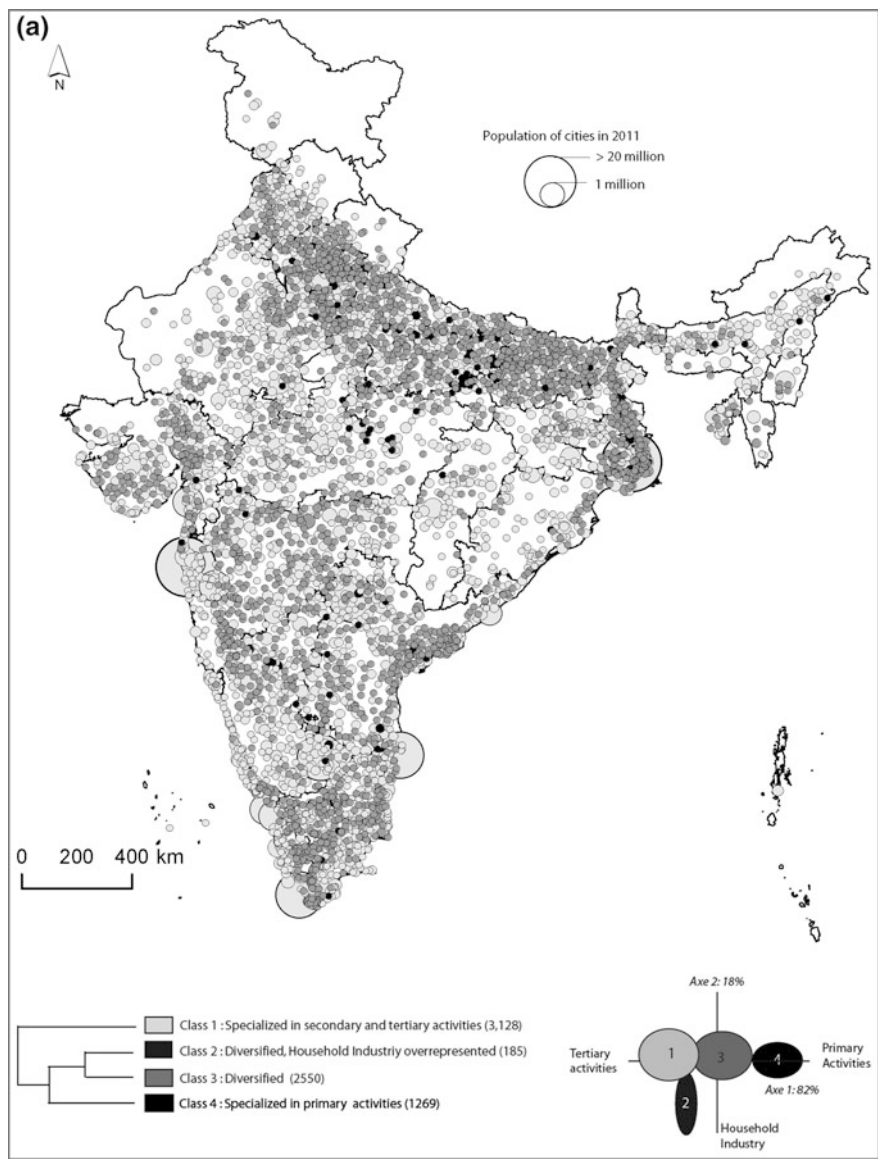


Fig. 3.3 a The 5838 urban settlements (*class 1* IA specialised in secondary and tertiary activities, *class 2* diversified IA, with an overrepresentation of household industry and *class 3* diversified IA)

could generate in the analysis. We call the database thus built IndiaCities, taking into account the workforce distribution to distinguish it from the original Indiapolis database, based only on the continuous morphological built-up area and population threshold (Table 3.2).

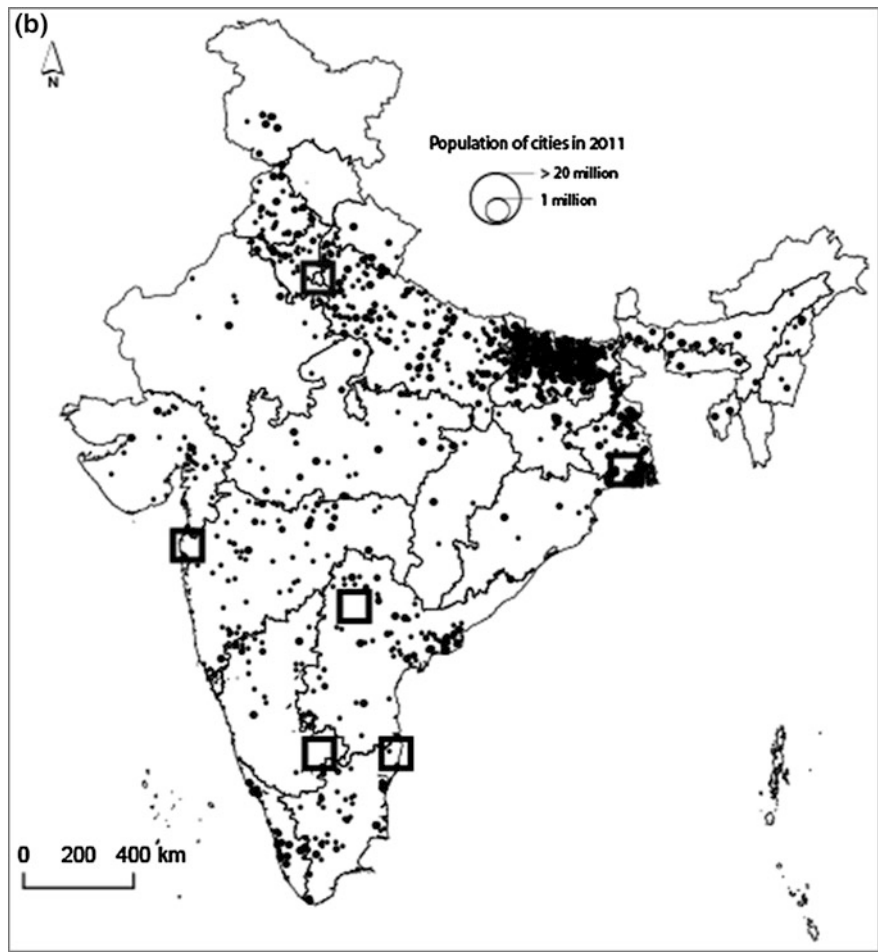


Fig. 3.3 b The 1269 nonurban settlements (large villages: *class 4* IA dominated by primary activities)

Table 3.2 Urbanisation rates in India in 1961 and 2001 according to different definitions of cities and databases (in percentages)

Database	1961	2011
Census	22	31
Indiapolis (IA)	32	39
IndiaCities	29	35
IA with more than 75 % of male workers engaged in non-agricultural activities	27	30
IndiaCities without the class 3 IA (class 3 = IA in transition from rural to urban)	27	31

3.3 Small Towns in the Indian Urbanisation Process

Based on the IndiaCities database, analyses of the place of small towns in the Indian urbanisation process have been conducted.

3.3.1 Small Towns: An Important Demographic Weight

According to the IndiaCities database as well as the Indian Census in 2011, small towns (between 10,000 and 100,000 inhabitants) constitute 90 % of Indian cities and one-third of the Indian urban population (134 million inhabitants).

The weight of small towns in the Indian system of cities and the evolution of their contribution over time partially explain the value of the slope of the rank-size curve (Fig. 3.4). It shows that the city number follows a geometric progression inversely proportionate to their size. It is described by the rank-size law or Zipf’s law (a form of Pareto distribution) whose equation is $\log P = K - q \log R$, where P represents the population of a city, R its rank in the urban hierarchy when cities are ranked in decreasing order of size and K is a constant. The coefficient q , which measures the slope of the curve, is an indicator of the unequal size of cities (Pumain 2012).

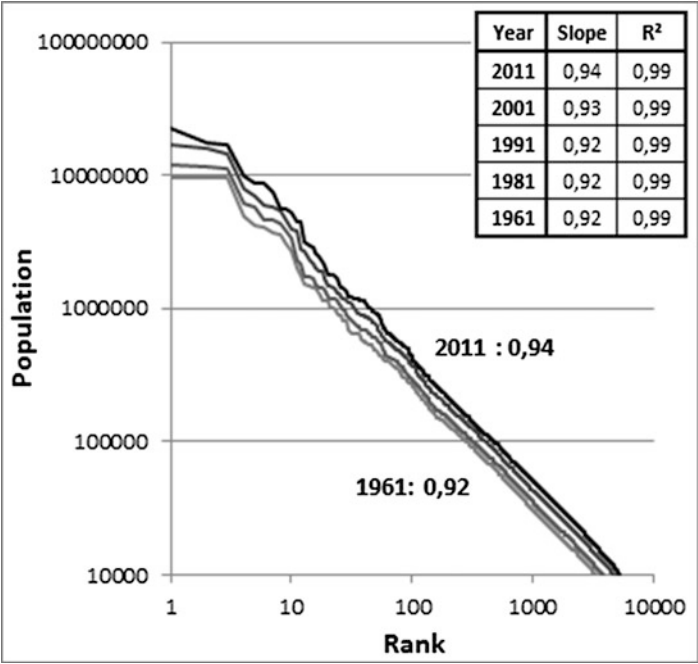


Fig. 3.4 Rank size curve of Indian cities, 1961–2011

It is generally estimated at between 0.7 and 1.3 according to the different countries worldwide (Moriconi-Ebrard 1993). The higher the coefficient, the more hierarchised the distribution, in terms of demographic size. Based on the IndiaCities data, the computed slope value for 2011 is 0.90, showing a slightly hierarchised distribution that is a characteristic of anciently urbanised countries or/and of regions where many small towns subsist (Bretagnolle et al. 2007) as in India (Denis and Marius-Gnanou 2011).³

As small towns have an important demographic weight in the hierarchical distribution of cities in India, an imprecise estimation of their numbers could generate serious variations in estimating the slope of the Indian rank-size curve. Thus in 2011, this slope would be 0.99 according to the official Censuses.

3.3.2 *A Slight Hierarchisation of the System*

The slope and the form of the rank-size curve remains somewhat constant from 1961 to 2011. This stability is explained by Gibrat's stochastic model of "distributed growth", according to which the growth rates of cities are random variables independent of the city size from one period to another (Pumain 1982; Ioannides and Overman 2003).

This is confirmed for India, where there is no statistical correlation between city growth rate and city size, both at the national as well as at the regional levels (Swerts and Pumain 2013), and regardless of the period. This observation confirms and completes the assessments made by Schaffar (2009) and Sharma (2003). The evolution of the slope rank-size curve from 1961 to 2011 indicates that the differentiation of city size tends to increase slightly over time, suggesting a minor trend of concentration of the urban population within the largest cities. Several Indian studies suggest that cities with more than one million inhabitants grew faster than the other cities, in particular between 1981 and 1991, and conversely that the growth of towns with less than 20,000 inhabitants was lower (Sivaramakrishnan et al. 2009; Kadi and Halingali 2010). Thus, even though the Gibrat model remains a good proxy to describe the urban growth process, a tendency towards metropolitanisation (Pumain and Moriconi-Ebrard 1997) could accompany the urbanisation process, following the theory of the hierarchical diffusion of innovations (Hägerstrand 1968) and the evolutionary theory of cities (Pumain and Moriconi-Ebrard 1997). Nevertheless, the weight of small towns in the overall Indian urban growth remains important as 28 % of the augmentation of the Indian urban population between 1961 and 2011 is caused by the increase in the number of small towns and their demographic growth.

³The degree of inequality of the size of the cities does not depend on the level of development of the country in which these cities are found, but on the historical and technological context prevailing at the time the system is established (Moriconi-Ebrard 1993; Bretagnolle et al. 2007).



Fig. 3.5 Evolution and convergence of the annual average rates of population change in Indian cities (total and per category of size, 1961–2011)

When cities are aggregated by size classes, the average growth rates for each class during the period 1961–2011 are not very different. Two types of segmentation have been tested: a geometric one based on the rank-size curve and a second one based on the classification used by the Indian Census. The first classification demonstrates that the cities having between 800,000 and three million inhabitants grow slightly more than the other size classes (0.5 point on average), whereas the second classification, does not exhibit significant differences. When time periods are distinguished (1961–1981, 1981–1991, 1991–2001 and 2001–2011), no clear trends appeared (Fig. 3.5; only the geometric segmentation is shown) because of the high variability of town growth over the time period. However, from 1981 to 2001 for the geometric classification and from 1991 to 2001 for the Census classification, and except for cities that consist of three to ten million inhabitants, the growth rate of cities of over 500,000 inhabitants is higher than the others. It is significant that the deviations between the growth rates of Indian cities according to their size classes tend to decrease sharply. Over time, they converge towards the same level, around 1.6 % per year.

Grouping the cities in size classes conceals the strong diversity of growth rates among small towns (Kundu 1983), ranging from –4 to 12.5 % per year from 1961 to 2011. Hence, to explore further the specificity of small towns' growth within the Indian system of cities, their individual demographic trajectories have been analysed and mapped.

The small towns with between 10,000 and 25,000 inhabitants in 1961 which grew beyond 1 lakh inhabitants in 2011 are extremely rare. Their growth has generally been regular and followed the general trend of urbanisation, rather than undergoing a radical boom. Only 0.7 % or eight cities saw a growth beyond 1 lakh of inhabitants: two in Rajasthan (Bhiwadi and Dhaulpur) and one each in West-Bengal (Jamuria), Haryana (Rewari), Punjab (Malerkotla), Maharashtra (Khairi), Gujarat (Deesa) and Madhya Pradesh (Dabra).

3.4 The Demographic Trajectories of Small Towns

First, we analyse the demographic trajectory of Indian cities, in other words the evolution of their populations over time, to determine whether, from 1961 to 2011, small towns' trajectories differ from those of other cities. Then, to identify whether the development of Indian small towns is linked to that of the megacities, we measure the influence of the Euclidian distance to the largest cities on the growth of small towns. We discuss the implication of demographic growth on the Census status attributed to small towns.

3.4.1 *Evolution of Small Towns in Relation to the Indian City System*

Despite the multiplicity of cities' trajectories, the main tendencies of the demographic evolution of Indian cities can be identified. An Ascending Hierarchical Classification using χ^2 distance brings together cities with a similar evolutionary profile regardless of their size. Using this method, four categories have been identified. They group and synthesise the distinct demographic trajectories of the 5730 Indian cities with over 10,000 inhabitants in 2011, between 1961 and 2011.

The typology of trajectories resulting from this classification is represented in Fig. 3.6. The graphic on the left represents the evolution curves for the mean population of each class of trajectories in absolute value. Because of the proportional distributed growth trend, all curves are ascending (Gibrat 1931). The graphic on the right shows the evolution curves for the mean population of each class of trajectories divided by the total population of the city system at each studied date, that is in relative value. As it is the mean weight of each city class that is taken into consideration in the urban system, the curves begin to diverge, allowing us to differentiate their evolutions and their positions within the urban hierarchy. The trajectories of small towns are represented in Fig. 3.7, each map corresponding to one class.

According to the curves describing the relative trajectories of the Indian cities and the shape of the classification tree, three types of trajectories can be distinguished: cities with increasing weight in the system (classes 2 and 4), cities with decreasing weight (class 1) and stable ones (class 3).

The weight in the city system of the 2181 class 1 cities (38 % of Indian cities, 11 % of the total urban population in 2011; represented in light grey in Figs. 3.6 and 3.7) is fairly stable but shows a slight decrease since 1981. These cities are mainly located in states such as Kerala, which have achieved their urban transition, as well in states that are already strongly urbanised such as Tamil Nadu or Goa, and along the coast. Most of the coastal cities, having known strong growth during the colonial period, later experienced a slight slowdown. The towns of Kartarpur (Punjab—25,662 inhabitants in 2011) and Parangipettai (Tamil Nadu—33,691 inhabitants),

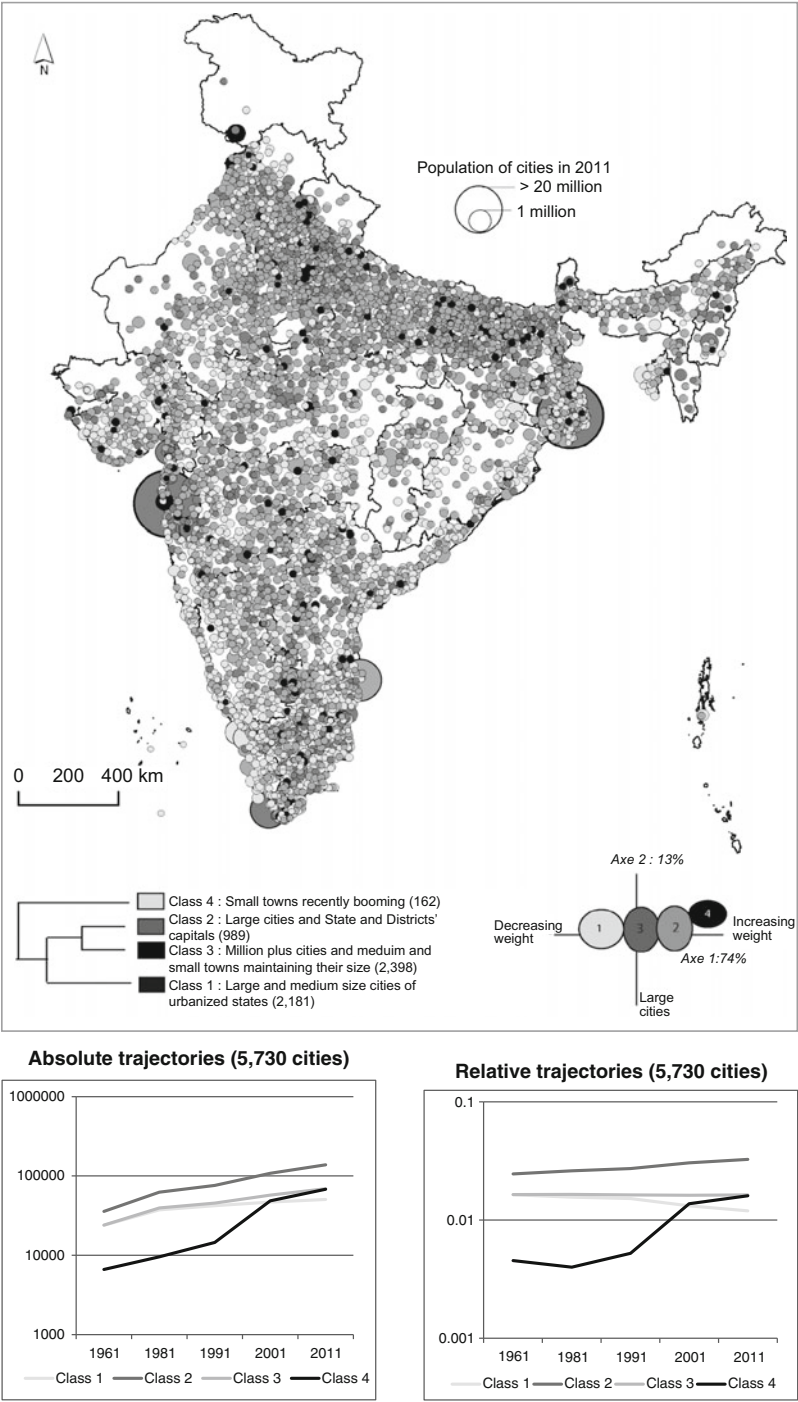


Fig. 3.6 Trajectories of the 5730 Indian cities

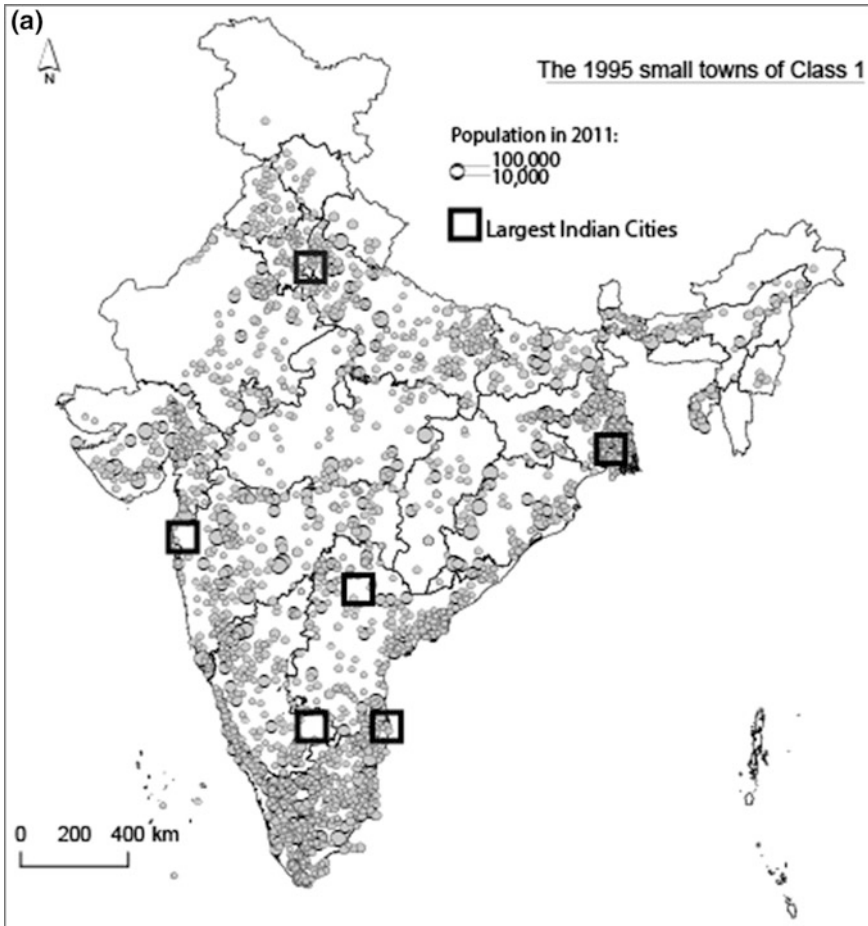


Fig. 3.7 a The 1995 small towns of class 1

two of the case studies discussed in this book, fall within this class. The weight of the 989 class 2 cities (17 % of Indian cities, 5 % of the total urban population in 2011, represented in dark grey) increases regularly and slightly faster than the average trend of the system of cities from 1961 to 2011. These cities are mostly located in North-West Tamil Nadu and around Delhi, as well as in the state of Bihar. The town of Pasighat (Arunachal Pradesh—24,656 inhabitants), another case study presented here, belongs to this class. The weight of the 2398 class 3 cities (42 % of the Indian cities, 13 % of the total urban population in 2011, represented in grey), mostly located in the very dense Indo-Gangetic region, is stable throughout the period 1961–2011. This class includes the towns of Barjora (West Bengal—14,012 inhabitants), Tiruchengode and Tharamangalam (Tamil Nadu—respectively 97,792 and 30,222 inhabitants), and these are another set of cases studies developed in this

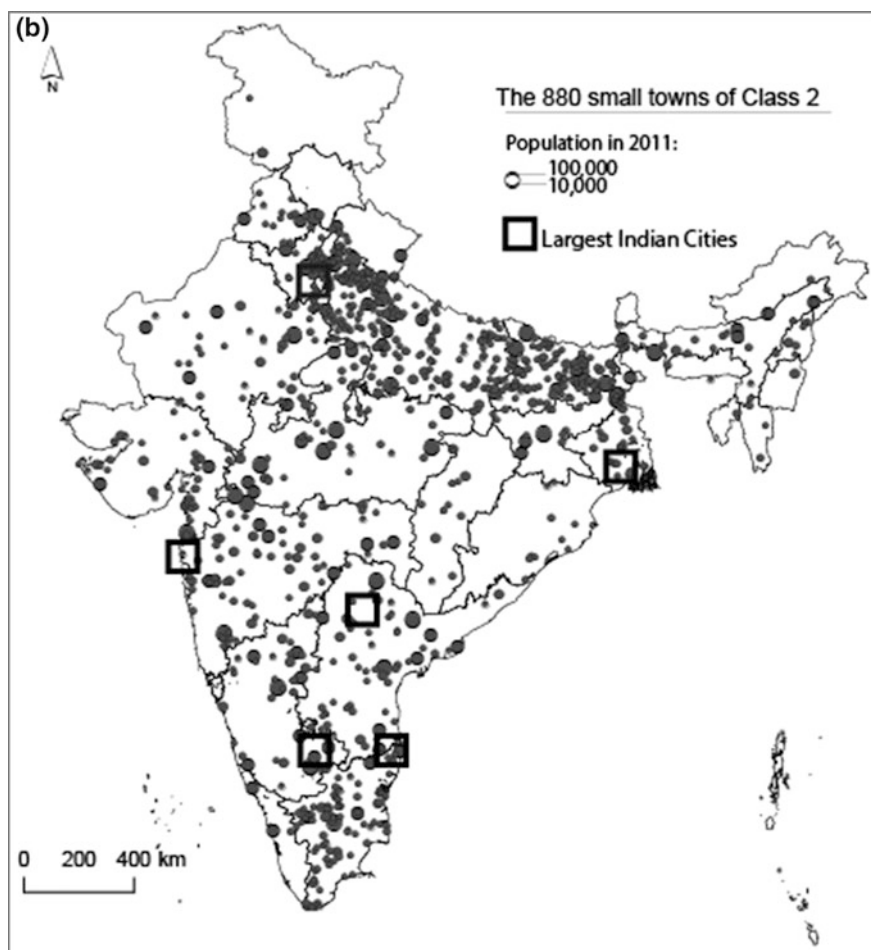


Fig. 3.7 b The 880 small towns of class 2

book. The weight of the 162 class 4 cities (3 % of Indian cities, 1 % of the total urban population in 2011, represented in black) have increased significantly faster than the other Indian cities since 1981.

Small towns are distributed over the four classes. They do not share any specific evolution within the Indian system of cities. However, these categories of towns are overrepresented in the most dynamic class (class 4), highlighting a group of cities distinguished by their rapidly growing weight in the system. By contrast, almost half of the cities with over one million inhabitants have a stable trajectory (class 3), and the mean size of cities having a slightly and regularly increasing weight (class 2) is larger than in the other classes—the proportion of small towns is significantly lower in this category 2.

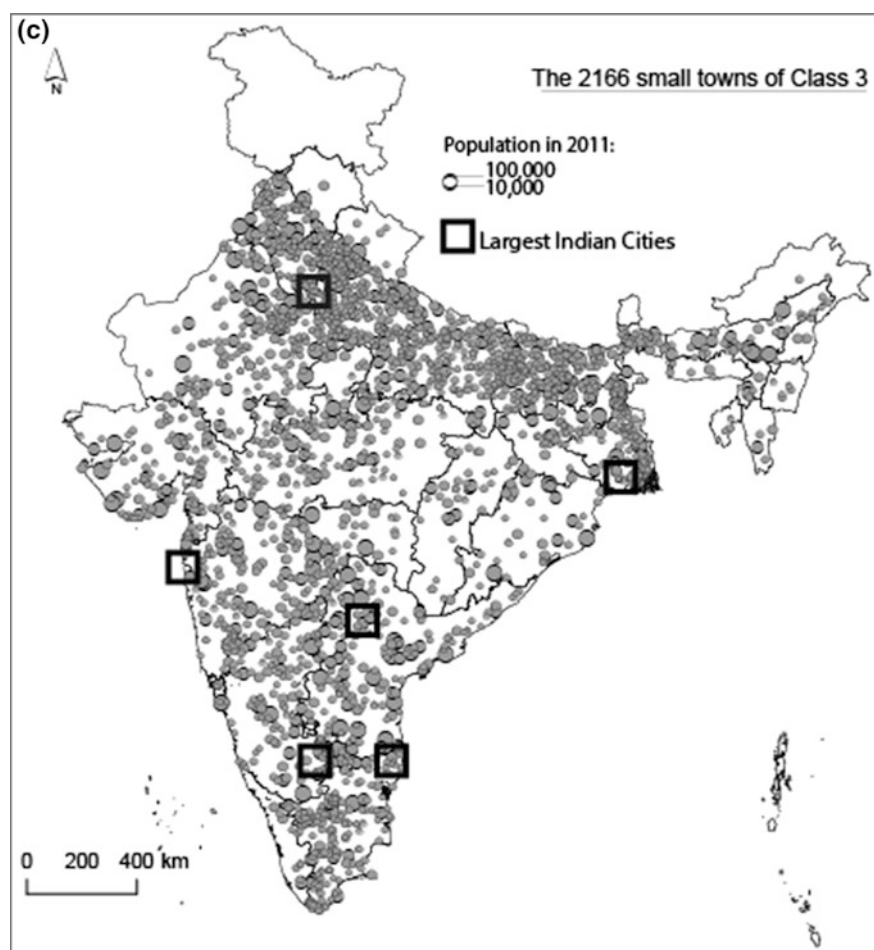


Fig. 3.7 c The 2166 small towns of class 3

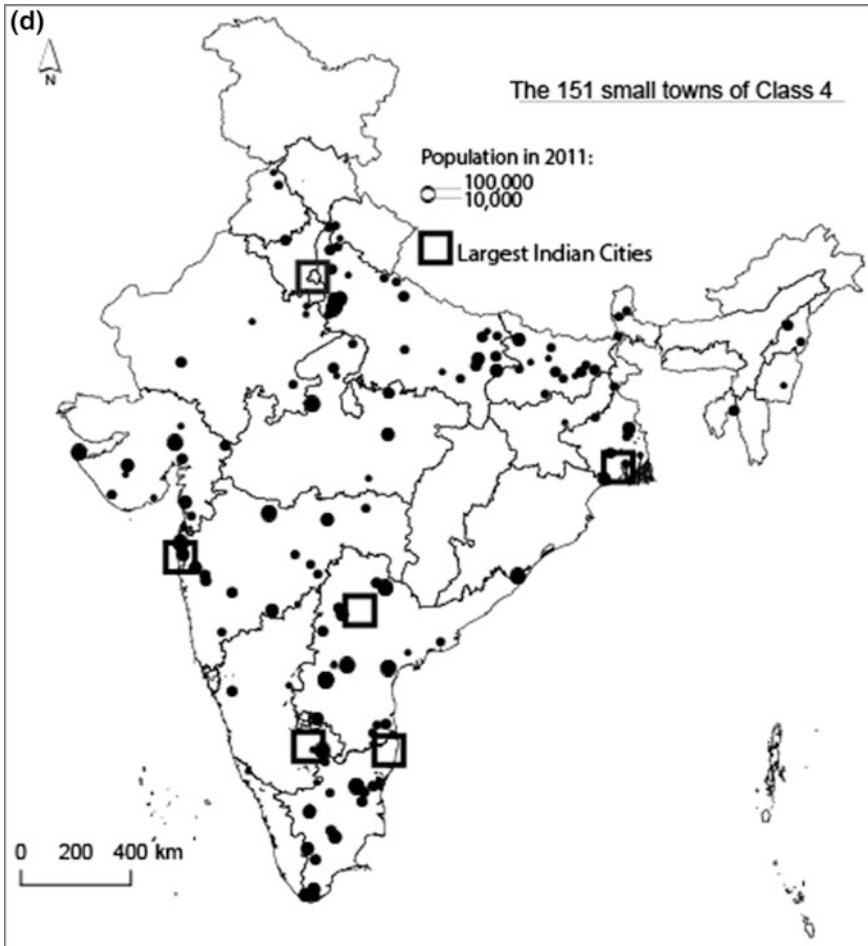


Fig. 3.7 d The 151 small towns of class 4

3.4.2 *The Demographic Evolution of Small Towns Is Independent of Their Distance from Major Economic Centres*

The growth of small towns is often interpreted as a possible spillover from larger, neighbouring urban centres. To analyse whether a correlation between the distance from the largest city and the growth of small towns had an influence between 1961 and 2011, a linear regression analysis of the city growth rates was performed.

For all cities with over one million inhabitants there is no correlation between growth and distance separating them from their surrounding cities, whatever the size, the radius and the time period considered. However, if we look at individual

cities with over one million inhabitants, in certain cases a positive correlation emerges: the growth of the surrounding cities appears proportional to the distance separating them from the metropolis under consideration. This is observed within a radius of up to 100 km.

Thus, for the two largest cities of Maharashtra, Mumbai and Pune, and Surat in Gujarat, a positive relation is observed between distance and growth rate within a 60-km radius, even if the correlation coefficient is low ($r^2 = 0.2$ for Mumbai and Pune and 0.12 for Surat). This means that the closer cities are to Mumbai, Pune and Surat, the higher their growth rate. The same tendency is observed for Agra (Uttar Pradesh) and Vijayawada (Andhra Pradesh). This result indicates that these major cities could have fostered the demographic growth of their surrounding towns and stimulated their economic development. Beyond the threshold of 60 km, distance no longer appears to have an impact.

The reverse trend, that is the greater the distance from a large city, the higher the growth rate in the surrounding cities, is observed up to a radius of 100 km⁴ for Bangalore, the capital of Karnataka state ($r^2 = 0.11$), Chennai, the capital of Tamil Nadu ($r^2 = 0.13$) and Meerut, and up to a radius of 60 km for Nashik (Maharashtra), Madurai (Tamil Nadu), Delhi and Bareilly (Uttar Pradesh). In this case, the proximity of a city with more than one million inhabitants could have inhibited the development of the surrounding towns by absorbing their local human resources.

For the entire period from 1961 to 2011, only 30 % of the 50 cities with more than one million inhabitants have an effect, either potentiating or inhibiting, on the growth of the surrounding cities, indicating that the effect of larger cities does not particularly impact the trajectories of smaller towns.

3.4.3 Administrative and Political Context of Small Towns' Demographic Development

As described in the first part of this chapter, Indian cities are defined in the Census as STs or as CTs. However, this status is not defined only for Census purposes; it also determines which authority governs each locality. Thus, STs have an urban status and are managed by a municipal government whereas CTs, “*urban*” by definition, but “*rural*” in governance’ (Census 2011) are administered and managed by rural governments, despite their “urban” economic and demographic characteristics (Census 2011). Furthermore, as Town Panchayats (STs), are considered a space of transition between rural and urban towns (Shaw 2005), they are not always managed by the same ministries as the Municipalities and Municipal Corporation, as is the case in Karnataka and Tamil Nadu.

⁴However, for Chennai, this tendency is visible only beyond a distance of 50 km.

Even if the trajectories of small towns are not related to their Census status, certain regularity can be however pointed out. Thus, the cities with a stable trajectory in the system are mostly STs. In contrast, half of the very dynamic small towns (class 4) are not considered urban by the Census, or are classified as CTs, that is they are not administered by urban governments. When cities are classified as STs, most of them (almost 80 %) have the status of Town Panchayat. All these results reveal the complexities in governance these fast growing towns face, and the challenges related to this issue, in particular in terms of sustainability of their growth. Some authors highlight the important consequences of this “denied urbanisation” (Samantha 2014b: 1) where there is a lack of infrastructure, basic services, and more generally of financial resources, calling for spatial planning and development management (Kuruvilla 2014; Samantha 2014b). Paradoxically, they are also localities which are attracting a great deal of industrial activity and which are hence growing faster.

3.5 Conclusion

The harmonised database of Indian cities allows us to compare the evolution of small towns and the other larger cities, whatever state they belong to, over the last 50 years. The analysis of this new set of data highlights the important weight of small towns in the Indian system of cities: they share almost 30 % of both Indian urban population and demographic growth, despite a slight trend of metropolitanisation. The growth rates of small towns are widely distributed, as are their demographic trajectories: their dynamics do not differ from those of larger cities.

A group of small towns is distinguished by their very dynamic demographic evolution. Contrary to a frequently suggested hypothesis, the location of the most rapidly growing small towns is generally independent of the distance from the nearest cities of over one million inhabitants. There are only a few cases where large cities seem to promote or, conversely, slow down the growth of the surrounding cities. This result could strengthen the theory of *in situ* urbanisation and non-hierarchical linkages associated with globalisation, but they must be completed by further studies on the economic complementarity of cities of over one million inhabitants and small towns, and the economic linkages between Indian cities. It also requires field expertise as developed throughout this book.

As field analysis on the CTs and Towns Panchayat in India (De Bercegol and Gowda 2013; Samanta 2014a; Kuruvilla 2014), the present macro-geographic analysis raises questions related to the governance of urban transformations and the demographic and economic development of small towns, including those with the most dynamic trajectories, which for the most part remain governed by the rural administration rules, provisions and schemes.

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Chapter 4

Income Ranking of Indian States and Their Pattern of Urbanisation

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4.1 Introduction

The vast body of economic literature on urbanisation and development, widely known as the New Economic Geography (NEG), underlines the importance of spatial agglomeration of population and economic activities and the development of megacities for the growth of a country. Empirical evidence, however, suggests a different pattern of urbanisation in India. It is surprising to note that for more than 20 years the demographic growth of the urban population has not been phenomenal and almost 70 % of the Indian population still reside in rural areas. Indeed, the demographic system of cities characterising India does not correspond mechanically with the country's economic growth story.

In India, the density of population is very high and growth is mainly driven by low cost rather than innovation. Therefore, the benefits that originate from greater agglomeration (such as increasing returns to scale, knowledge spill-overs, availability of large pools of labour with multiple skills, access to general infrastructure) dissolve

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easily because of the cost of congestion, rising land prices and labour costs in urban areas. Hence, there is an immense scope for small and medium towns with low costs of production and living to be an important hub for economic activity of the country. Consequently, small towns might turn out to be attractive locations for manufacturing activities following the cost reduction strategies of the various productive sectors. They might also play a crucial role in generating employment opportunities.

This chapter looks at the contribution of the growth of towns, particularly small and medium towns, towards the urbanisation process of India. However, instead of just looking at the broad Indian macro picture, we undertake a disaggregated analysis of urbanisation of the Indian states. Our analysis delivers a more accurate approach of the relation between the demographic change happening in small and medium towns and the economic growth at the scale of the Indian states. For the purpose of our analysis, we have considered the 15 largest states in India which represent around 90 % of India's population and we have further classified those states into rich, middle and poor groups or clubs of states, based on their per capita income level. This classification of the states into three groups has been achieved by using the non-parametric method of regression tree analysis.¹ After classifying the states into various groups, we have been able to characterise the urbanisation process of these Indian states in terms of population and employment growth and examine more precisely the role that the medium and small towns play in the process. We hypothesise that population and employment growth from manufacturing and related services, is substantially attributable to small and medium towns of Indian states.

As notified by the Planning Commission (2011) "the urbanisation in India has occurred more slowly than in other developing countries and the proportion of the population in urban areas is only 31 %". More recently, Nijman (2012) highlighted from the Census of 2011 that rural-urban migration has been particularly significant towards smaller cities, and it is driven by the poor performance of the agricultural sector in the surrounding countryside rather than by a pull from increased industrialisation in cities. In other words, in recent years there has been scope for the expansion and growth of small towns.

Urbanisation can have a significant impact on economic growth and the incidence of poverty in a country. The contribution of the growth of cities and urbanisation to the total gross state domestic product of India has been highlighted by Mitra and Mehta (2011). This study recognises that states with an elevated urban share of state domestic products have higher growth in per capita income and a lower incidence of poverty. Similar results have also been echoed in the study by Tripathi (2013) which

¹See Chaudhuri et al. (2012) Club Convergence Analysis: Unlike the Solow growth model which predicts that countries with low levels of income will grow faster than countries with higher income levels and will eventually catch up; the club convergence analysis claims that countries may converge in groups to different steady-state levels depending on the initial levels of income with which they start off. Thus the distribution of income of countries may be bimodal or multimodal instead of unimodal, each depicting a cluster of countries with different steady-state levels of income. In our study, we have used a non-parametric approach of GUIDE to classify the Indian states into various income clubs.

indicates that the larger share of GDP in India comes from urban India. The relationship of per capita income and the rural-urban divide across various states of India has been studied by Cali (2009). He indicates a clear nonlinear U-shaped relationship for most of the Indian states, with a contrast for the states of Jammu and Kashmir, Madhya Pradesh and Karnataka, which have an inverted U-shaped pattern, and for Orissa, Rajasthan and Tamil Nadu there is a linear relationship. The U-shaped relationship indicates that, with the rise in per capita income of the states, the rural-urban divide reduces to a threshold limit, beyond which it rises again.

The sources of agglomeration economies and the impact on the productivity of firms have been studied in some detail by Mitra (2011) and Lall et al. (2004). Mitra studied the significance of agglomeration economies for two Indian industries, electrical machinery and cotton textiles. The study indicates a positive association between technical efficiency and city size, although, after a certain threshold level, the city-size contributes more to diseconomies than economies of scale. Lall et al. (2004) have estimated the agglomeration economies for different industries of India. Their study underlines the fact that there is considerable variation in the sources and magnitudes of agglomeration economies between industrial sectors. In particular, the access to markets through improvements in inter-regional infrastructure is an important determinant of firm level productivity, whereas benefits of locating in dense urban areas do not appear to offset the associated costs. The study prescribed that one way for improving the efficiency in the industry location's decisions is to ameliorate the availability and quality of inter-regional transport infrastructure to link smaller urban areas with the main inter-cities' network. This would enhance market access for manufacturing plants and also provide opportunities for standardised manufacturing activities to move out of high cost large urban centres towards relatively lower cost secondary centres.

In our study we examine the disaggregated urbanisation process in India using the Indiapolis and Census databases. The Indiapolis data, as part of the global comparative e-Geopolis project, use a definition of urban unit harmonised worldwide. A unit called a settlement agglomeration (SA), which is distinct from the "urban agglomeration" (UA), a known concept of the Indian Census, is constructed on the basis of contiguous built-up areas (Swerts 2017). A cut-off level of 10,000 is specified for each SA. An SA may consist of multiple Census local units, whatever their status, either urban or rural, according to the Census of India. The Indiapolis data set, therefore, captures a more dispersed urbanisation process and can be insightful in understanding the dynamics of urbanisation in the different states of India.

Our analysis provides the following results after having described our classification of states and towns (Sect. 4.2). In (Sect. 4.3) we demonstrate that the extent (number) and the speed (growth) of urbanisation is higher in the richer states, which also have a higher per capita National State Domestic Product (NSDP) growth over the analysed period as compared to the states from the middle and poor groups. However, there is a fair amount of variation in the growth of towns across all categories of states. It is underlined in Sect. 4.4 using the UA data set. It enables a better understanding of the link between the larger agglomerations' dynamics and the growth of smaller towns. Then, in Sect. 4.5, a preliminary analysis of the

sectoral growth rates of income, employment and productivity by city-size classes and states, notably for the industrial sector, indicates that small and medium towns can play an important role in the growth of the manufacturing activities.

4.2 Classification of States, Towns and Description of Variables

We first cluster the states as rich, middle and poor using the regression tree approach. The figures in Table 4.1 indicate the states associated with each group. We also classify the towns as large, medium and small following the Census definition of classes of towns. They are based on population figures: cities with more than 100,000 inhabitants are classified as class 1, with 50,000–99,999 inhabitants as class 2, with 20,000–49,999 inhabitants as class 3, with 10,000–19,999 inhabitants as class 4, with 5000–9999 inhabitants as class 5 and with less than 5000 inhabitants as class 6. In our analysis, we have considered class 1 towns as large towns, classes 2 and 3 as medium towns and classes 4, 5 and 6 as small towns.

We then measure the urbanisation rate in terms of population and economic activity for each of the categories of states.² Thus the percentage changes in urban population, total number of towns and sectoral employment (primary, secondary and, tertiary) are measured for each group of states and form the basis of our analysis. In the following step we look at the distribution of small, medium and large towns in the states and their growth rate between 1991, 2001 and 2011. In other words, the growth of urban population, the total number of towns, the growth of small and medium towns and the sector-wise growth of employment give us the extent of the population and employment growth coming from the growth of small and medium towns. Next, we compute the correlation between the number of small, medium and large towns and employment in secondary and tertiary sectors for each state. A positive correlation between the number of small and medium towns and employment makes our hypothesis more likely in that the growth of small and medium towns is characterised by the growth of manufacturing and service related activities. Finally, we further compute the change in the number of villages between 1991 and 2001 to appreciate the rate at which villages are transforming into towns. In accordance with that, we also measure the change in the proportion of rural manufacturing firms to find out whether the presence of rural manufacturing firms is affecting the transformation of villages into towns. Observations from these computations may indicate whether the growth in manufacturing activities in rural areas

²Even though the Census of India and the Planning Commission carry out this exercise, we have done it for 15 major states with ‘unchanged frontiers’ after the break-up of some of them into smaller states to preserve the elements of comparability that we are interested in. All differences between Planning Commission and Census figures and ours are because of these boundary differences. We believe this exercise enables us to highlight long terms trends for the major states.

is one of the main drivers behind the transformation of rural areas into small and medium towns.

4.3 Extent and Pattern of Urbanisation Across Various States of India

The figures in Tables 4.1 and 4.2 explain the extent of urbanisation across the various groups of states. The figures in Table 4.1 indicate that, for all the states, the total number of towns and the proportions of urban population have increased over the years. The increase has been more important in the last decade, that is between 2001 and 2011, than between 1991 and 2001. At an aggregate level, we can see that the states in the rich club are relatively more urbanised followed by the states from the middle income group. This clearly indicates the strong positive association between urbanisation and the increase in per capita income.

Among the states from the middle income group, one can note that West Bengal had 567 more towns than Karnataka in 2011. Among the other factors, such as the

Table 4.1 Percentage of urban population and number of towns in India

Club	State name	No. of Towns			Total urban percentage		
		1991	2001	2011	1991	2001	2011
Rich	Gujarat	264	242	334	34.5	37.4	40.4
	Haryana	94	106	158	24.6	28.9	35.1
	Punjab	120	157	214	29.5	33.9	36.1
	Maharashtra	336	378	514	38.8	42.4	44.3
	Kerala	197	159	520	26.4	26.0	46.5
	Tamil Nadu	469	832	1109	34.2	44.0	49.1
	Total	1480	1874	2849	33.8	38.3	43.5
Middle	Andhra Pradesh	264	210	391	26.9	27.3	32.0
	Karnataka	306	270	343	30.9	34.0	37.7
	Rajasthan	222	222	295	22.9	23.4	24.7
	West Bengal	382	375	910	27.5	28.0	31.7
	Total	1174	1078	1939	27.1	28.0	31.4
Poor	Assam	93	125	222	11.1	12.9	14.1
	Bihar	271	282	423	13.1	13.3	18.6
	Orissa	124	138	214	13.4	15.0	15.7
	Madhya Pradesh	465	491	669	23.2	24.8	35.6
	Uttar Pradesh	753	790	1005	19.8	21.0	23.4
	Total	1706	1826	2533	17.7	18.8	22.9

Tables 4.1 and 4.2 are based on Census data. For the years 1991 and 2001, we use the Census Town directory and, for 2011, only the Census PCA data were available.

Table 4.2 Growth in urban population for states and towns between 1991, 2001 and 2011

state name	Town size	Urban population decadal growth		No. of urban towns decadal growth		Percentage changes in class-wise share of urban population to total population in that state		Percentage changes in class-wise share of number of town to total towns in that state	
		1991–2001	2001–2011	1991–2001	2001–2011	1991–2001	2001–2011	1991–2001	2001–2011
Andhra Pradesh	Total	16.08	30.53	–20.08	85.31				
Andhra Pradesh	Large	38.15	20.84	33.33	43.75	19.02	–7.43	66.82	–22.43
Andhra Pradesh	Medium	–13.33	42.95	–27.70	58.88	–25.34	9.51	–9.54	–14.26
Andhra Pradesh	Small	–33.70	143.84	–30.00	171.43	–42.88	86.80	–12.42	46.47
Assam	Total	38.24	27.66	34.41	77.60				
Assam	Large	55.68	–3.68	50.00	–16.67	12.61	–24.55	11.60	–53.08
Assam	Medium	29.84	29.95	34.78	19.35	–6.08	1.80	0.28	–32.80
Assam	Small	25.52	76.53	33.33	104.55	–9.21	38.29	–0.80	15.17
Bihar	Total	29.27	31.66	4.06	50.00				
Bihar	Large	60.95	47.76	62.50	34.62	24.51	12.23	56.16	–10.26
Bihar	Medium	13.58	6.02	9.30	8.51	–12.14	–19.48	5.04	–27.66
Bihar	Small	–12.19	61.74	–8.73	104.35	–32.07	22.85	–12.29	36.23
Gujarat	Total	32.88	29.03	–8.33	38.02				
Gujarat	Large	51.29	37.37	42.11	7.41	13.85	6.46	55.02	–22.18
Gujarat	Medium	24.83	–3.87	28.57	–2.56	–6.06	–25.50	40.26	–29.40
Gujarat	Small	–37.81	77.70	–36.36	94.90	–53.20	37.72	–30.58	41.21
Haryana	Total	56.78	45.35	17.78	49.06				
Haryana	Large	97.67	40.82	81.82	0.00	26.08	–3.12	54.37	–32.91
Haryana	Medium	3.54	73.45	26.92	72.73	–33.96	19.33	7.76	15.88
Haryana	Small	13.19	23.14	0.00	52.83	–27.80	–15.28	–15.09	2.53

(continued)

Table 4.2 (continued)

state name	Town size	Urban population decadal growth		No. of urban towns decadal growth		Percentage changes in class-wise share of urban population to total population in that state		Percentage changes in class-wise share of number of town to total towns in that state	
		1991–2001	2001–2011	1991–2001	2001–2011	1991–2001	2001–2011	1991–2001	2001–2011
Karnataka	Total	29.15	28.28	-11.76	27.04				
Karnataka	Large	55.41	33.00	66.67	-16.67	20.34	3.69	88.89	-34.40
Karnataka	Medium	8.65	12.30	7.20	6.72	-15.87	-12.46	21.49	-16.00
Karnataka	Small	-28.87	48.92	-34.97	65.09	-44.93	16.09	-26.30	29.96
Kerala	Total	7.64	87.91	-19.29	227.04				
Kerala	Large	51.91	-25.60	42.86	-20.00	41.13	-60.40	77.00	-75.54
Kerala	Medium	-9.56	156.34	-20.00	197.92	-15.98	36.42	-0.88	-8.91
Kerala	Small	-27.69	309.88	-24.29	326.42	-32.82	118.13	-6.19	30.38
Madhya Pradesh	Total	31.38	28.10	5.59	36.25				
Madhya Pradesh	Large	46.57	32.42	33.33	34.38	11.55	3.38	26.27	-1.38
Madhya Pradesh	Medium	37.46	16.69	40.57	22.15	4.63	-8.90	33.12	-10.35
Madhya Pradesh	Small	-4.97	33.41	-7.46	43.23	-27.67	4.15	-12.36	5.12
Maharashtra	Total	34.57	21.19	12.50	35.98				
Maharashtra	Large	39.24	20.84	21.21	10.00	3.47	-0.29	7.74	-19.11
Maharashtra	Medium	28.76	16.48	24.31	16.20	-4.32	-3.89	10.49	-14.54
Maharashtra	Small	-3.76	45.60	0.00	64.78	-28.49	20.14	-11.11	21.18
Orissa	Total	30.28	19.22	11.29	55.07				
Orissa	Large	41.95	15.37	12.50	0.00	8.96	-3.23	1.09	-35.51
Orissa	Medium	34.95	10.99	30.77	5.88	3.59	-6.91	17.50	-31.72
Orissa	Small	-0.41	48.93	1.30	93.59	-23.56	24.92	-8.98	24.84

(continued)

Table 4.2 (continued)

state name	Town size	Urban population decadal growth		No. of urban towns decadal growth		Percentage changes in class-wise share of urban population to total population in that state		Percentage changes in class-wise share of number of town to total towns in that state	
		1991–2001	2001–2011	1991–2001	2001–2011	1991–2001	2001–2011	1991–2001	2001–2011
Punjab	Total	37.86	21.86	30.83	36.31				
Punjab	Large	48.45	17.84	30.00	15.38	7.68	–3.30	–0.64	–15.35
Punjab	Medium	21.79	29.67	27.91	32.73	–11.66	6.40	–2.24	–2.63
Punjab	Small	34.35	22.53	32.84	41.57	–2.55	0.54	1.53	3.86
Rajasthan	Total	31.26	27.87	0.00	32.88				
Rajasthan	Large	49.22	38.57	35.71	57.89	13.68	8.37	35.71	18.82
Rajasthan	Medium	30.64	9.06	24.47	11.97	–0.47	–14.71	24.47	–15.74
Rajasthan	Small	–26.20	34.85	–24.56	55.81	–43.78	5.46	–24.56	17.26
Tamil Nadu	Total	44.06	28.92	77.40	33.29				
Tamil Nadu	Large	21.56	20.03	0.00	26.92	–15.62	–6.90	–43.63	–4.78
Tamil Nadu	Medium	41.63	41.70	53.21	39.75	–1.69	9.91	–13.64	4.84
Tamil Nadu	Small	123.86	26.71	97.56	30.86	55.39	–1.71	11.37	–1.82
Uttar Pradesh	Total	33.01	27.30	4.91	27.22				
Uttar Pradesh	Large	48.33	31.80	39.02	21.05	11.52	3.53	32.51	–4.84
Uttar Pradesh	Medium	30.17	19.79	36.46	21.76	–2.13	–5.90	30.07	–4.29
Uttar Pradesh	Small	–3.11	23.36	–9.42	31.00	–27.16	–3.10	–13.67	2.97
West Bengal	Total	19.88	29.33	–1.83	142.67				
West Bengal	Large	38.51	8.26	31.82	6.90	15.54	–16.29	34.28	–55.95
West Bengal	Medium	–15.21	30.80	–13.13	34.88	–29.28	1.14	–11.51	–44.42
West Bengal	Small	–10.08	193.23	–3.35	216.88	–24.99	126.73	–1.54	30.58

Table 4.2 is based on Census data. For the years 1991 and 2001, we use the Census Town directory and, for 2011, only the Census PCA data were available.

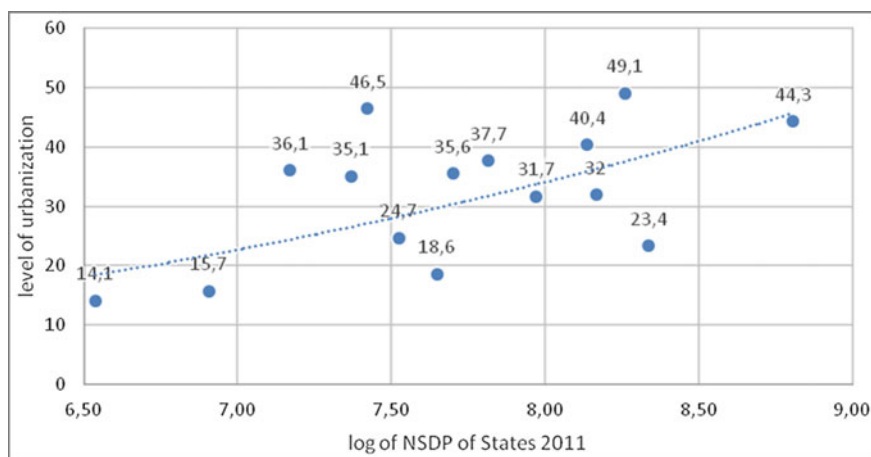


Fig. 4.1 Log of NSDP and the urbanisation of the states. *Source* Authors' own calculation

history of urbanisation and industrialisation, the sheer number of inhabitants, around 91 million compared to Karnataka which has only 60 million, might have led to the proliferation of towns in West Bengal. Moreover, this observation may indicate the prevalence of more small towns in this latter state. In fact, the number of small towns in West Bengal was 147 in 1991 and 231 in 2001. The same figures for Karnataka were only 97 and 106.³

Urbanisation, in terms of urban population and number of towns, is lowest for the states in the poor club. Only Madhya Pradesh has a comparable figure for the percentage of urban population and number of towns with respect to the states from the rich and middle income groups. Again, as with West Bengal, Uttar Pradesh has a relatively low percentage of urban population yet the total number of towns is fairly high, precisely because of the very high population of around 119.5 million in 2011.

Overall, the state level figures of total number of towns and urban population indicate that, with the increase in the per capita income of the states, the extent of urbanisation also increases. Figure 4.1, which plots the proportion of urban population against the log of NSDP of the states for the year 2011, also indicates that the urbanisation of the Indian state increases with the rise in the NSDP of the states.

We next consider a more disaggregated feature of the process of urbanisation in the Indian states by considering the growth rates of the small, medium and large towns and the proportion of population for each of these three categories of towns. Table 4.2 presents the growth rates of the total urban population and the total number of towns for states and towns classified as large, medium and small. It also

³Figures for the different categories of towns are not reported in this chapter.

shows the growth in the share of population in the large, medium and small towns against total population of the state.

The figures from Table 4.2 provide evidence of urbanisation in terms of population share and the growth of towns between 1991 and 2001 and between 2001 and 2011. However, between 1991 and 2001 there were wide variations in the growth of urbanisation, in the growth of the three categories of towns, and in the growth of the proportion of urban population across the different groups of states.

We can conclude from the figures that between 1991 and 2001 the weight of small and medium towns in the share of urban population declined for all the groups of states. In other words, during this decade the urbanisation in India has been mainly large city centric with a fall in the growth of the number of small towns. This indicates that there has been no transition of villages into small towns. The only exception is the state of Tamil Nadu where a massive growth in the number of small towns and also in the proportion of urban population residing in those towns has occurred.

Consider now the period of 2001–2011. Compared to the previous decade, the process of urbanisation is completely different. It becomes mainly driven by small and medium sized towns (see Pradhan 2017; Swerts 2017). It is interesting to note that the rate of overall urbanisation measured in terms of the growth of population residing in urban centres has actually reduced for all states in the rich club, even though the growth of towns is higher in the last Census decade. A fall in the growth of urban population and a corresponding rise of the total number of towns for the rest of the states is possible when two factors work at the same time: first, there is an increase in the number of small towns and a fall in the growth of large towns; second, the increase in the share of the urban population in small towns did not compensate for the fall in the urban population growth that would have been achieved with a continuous growth in large towns (at the 1991–2001 rate).

To understand the dynamics and nuances of the process, we examine a more disaggregated figure of urbanisation by considering the growth of all the categories of towns. The figures in Table 4.2 indicate that almost all the rich states have experienced a massive increase in the growth of small towns, the growth of which was either negative or insignificant during the previous decade.

On average, we find that, for the rich states, there has been a proliferation of small towns everywhere, and also of medium sized towns for a few states. Such proliferation might have happened because of the rising cost of living in large towns and congestion which might have outweighed the benefit that arises from agglomeration economics, leading to a shift in the urban activities towards small and medium sized towns. It is, at first, inherent in the transition of rural settlements towards non-agricultural jobs, which then become Census towns with above 75 % of the male workforce in the non-farming sector. The last decade represents a major threshold in that process (Pradhan 2017).

For the middle income group, the growth of urbanisation measured in terms of number of towns or of urban population has been significantly higher for West Bengal and Andhra Pradesh. What drives the urbanisation process for states from the middle income group? It is driven primarily by the growth of small towns and

its population. Lastly, the urbanisation trend for the poor states, measured in terms of the total number of towns, is significantly higher during the last inter-Census decade, but their population growth is lower. Once again, the urbanisation of the poor states appears primarily driven by the growth of the small towns.

Among all classes of states, the states from the poor club have experienced the maximum growth in the number of small towns and also in the population residing in those towns. As far as the increases in large and medium towns are concerned, all states from the poor clubs have either recorded a fall in growth rate or even negative growth rate of their large and medium sized towns. Thus Assam (−17 %) and Orissa (0 %) have recorded a negative to no growth in their number of large towns. For the rest of the states from the poor club, even though the growth of large towns is positive, the magnitude of growth is less compared to the previous decade. Madhya Pradesh is the only exception where the growth of large towns has remained more or less the same (32 % during the 2001 decade and 34 % during the following decade). The growth in the number of medium towns for all states in the poor clubs is much lower compared to the decade of 2001.

Overall, we can conclude that, for all the groups of states, there has been an important growth in the number of small towns and also in the proportion of population residing in those towns (Pradhan 2017; Swerts 2017). Thus the decade of 2001 and 2011 can be characterised as a period of dispersed urbanisation associated with the burgeoning of small and medium sized urban economic activities. We also notice that, for the states with a higher level of urbanisation, there is a fall in their growth rate for both their urban population and the number of towns. They reach a more mature stage in their urban transition, with a higher level of demographic transition which is not compensated by an increase of rural to urban residential migrations.

4.4 UA and Growth of Towns

Next we use the Geopolis-Indiapolis data set on UAs or morphological agglomerations characterised by a continuous build-up incorporating one or more Census local units. UAs may include villages, large, medium and small towns (see Swerts 2017 for a definition of the Geopolis database). We classify UAs as large, medium and small on the basis of their population level.⁴ The classification of towns and UAs implies that a medium UA does not contain a large town, and a small UA does not include large and/or medium towns. Observations from Table 4.3 and subsequently Table 4.4 help us to understand the population growth of UAs and towns in

⁴Large UA: 100,000 and above, medium UA: 20,000–100,000, small UA: 10,000–20,000.

Table 4.3 Population growth in UAs between 1991 and 2001

Club	State	Size class		Growth of UA population	Growth of number of UAs	Percentage changes in class-wise share of UA pop. to total UA pop. in that state	Percentage changes in class-wise share of number of UAs to total number of UAs in that state
Rich	Gujarat			1991–2001	1991–2001	1991–2001	1991–2001
		1	Large	100,000 and above	15.38	3.48	–10.46
		2	Medium	20,000–100,000	29.41	–9.02	0.43
		3	Small	10,000–20,000	31.11	–3.08	1.75
		State total		33.08	28.86		
	Haryana	1	Large	100,000 and above	55.56	16.37	3.07
		2	Medium	20,000–100,000	11.85	–27.93	–20.03
		3	Small	10,000–20,000	60.49	3.41	7.91
		Total		55.19	50.93		
	Punjab	1	Large	100,000 and above	16.67	11.42	–9.62
		2	Medium	20,000–100,000	33.33	–12.34	3.29
		3	Small	10,000–20,000	27.76	–16.64	–0.21
		Total		53.27	29.09		
	Maharashtra	1	Large	100,000 and above	38.32	2.18	–0.99
		2	Medium	20,000–100,000	34.40	–0.71	7.43
		3	Small	10,000–20,000	15.53	–14.65	–4.96
		Total		35.36	21.90		
	Kerala	1	Large	100,000 and above	10.17	–0.28	–7.76
		2	Medium	20,000–100,000	24.64	12.81	16.84
		3	Small	10,000–20,000	–11.67	–20.05	–13.08
		Total		10.49	8.41		

(continued)

Table 4.3 (continued)

Club	State	Size class		Growth of UA population	Growth of number of UAs	Percentage changes in class-wise share of UA pop. in that state	Percentage changes in class-wise share of number of UAs to total number of UAs in that state
				1991–2001	1991–2001	1991–2001	1991–2001
	Tamil Nadu		Large	29.26	31.03	3.40	1.61
		2	Medium	15.73	26.42	-7.42	-1.97
		3	Small	26.27	30.14	1.01	0.91
		Total		25.01	28.96		
Middle	Andhra Pradesh	1	Large	25.66	19.44	0.05	-5.21
		2	Medium	22.47	20.93	-2.49	-4.03
		3	Small	30.86	29.86	4.19	3.06
		Total		25.60	26.01		
	Karnataka	1	Large	28.22	19.05	0.63	1.32
		2	Medium	34.89	26.09	5.86	7.32
		3	Small	11.00	11.38	-12.89	-5.20
		Total		27.42	17.49		
	Rajasthan	1	Large	46.93	57.14	8.43	19.41
		2	Medium	18.73	17.82	-12.38	-10.47
		3	Small	41.05	40.52	4.09	6.77
		Total		35.50	31.60		
	West Bengal	1	Large	27.52	15.79	-1.35	-11.73
		2	Medium	32.18	27.71	2.27	-2.64
		3	Small	34.63	36.62	4.16	4.15
		Total		29.26	31.18		

(continued)

Table 4.3 (continued)

Club	State	Size class		Growth of UA population	Growth of number of UAs	Percentage changes in class-wise share of UA pop. to total UA pop. in that state	Percentage changes in class-wise share of number of UAs to total number of UAs in that state
Poor	Assam			1991–2001	1991–2001	1991–2001	1991–2001
		1	Large	100,000 and above	48.34	37.50	14.78
		2	Medium	20,000–100,000	20.21	20.83	–6.99
		3	Small	10,000–20,000	7.35	0.00	–16.94
		Total		29.24	11.82		
	Orissa	1	Large	100,000 and above	117.20	66.67	47.88
		2	Medium	20,000–100,000	15.75	12.00	–21.19
		3	Small	10,000–20,000	2.10	0.00	–30.48
		Total		46.87	9.43		
	Bihar	1	Large	100,000 and above	36.39	32.14	–6.64
		2	Medium	20,000–100,000	52.05	55.02	4.08
		3	Small	10,000–20,000	55.38	58.12	6.36
		Total		46.09	55.90		
	Madhya Pradesh	1	Large	100,000 and above	43.25	25.93	4.99
		2	Medium	20,000–100,000	34.68	36.63	–1.28
		3	Small	10,000–20,000	15.91	18.97	–15.05
		Total		36.44	25.50		
	Uttar Pradesh	1	Large	100,000 and above	42.50	36.96	2.68
		2	Medium	20,000–100,000	25.65	34.70	–9.47
		3	Small	10,000–20,000	49.23	53.74	7.52
		Total		38.79	45.85		

Data Source Geopolis

Note Data for three states—Bihar, Madhya Pradesh and Uttar Pradesh—are “undivided” in the sense of their original boundaries in order to maintain comparability

Table 4.4 Growth in the number of large, medium and small towns across UAs between 1991 and 2001

		Large UAs	Medium UAs	Small UAs
Gujarat	Large town ($\geq 100,000$)	33.33		
	Medium town ($\geq 20,000$ to $<100,000$)	82.35	20.83	
	Small town ($<20,000$)	-27.50	23.53	-34.04
	Village	1.25	24.66	38.46
	Total UAs	15.38	29.41	31.11
Haryana	Large town ($\geq 100,000$)	70.00		
	Medium town ($\geq 20,000$ to $<100,000$)	100.00	20.83	
	Small town ($<20,000$)	20.00	0.00	0.00
	Village	13.85	-9.09	86.21
	Total UAs	55.56	20.69	62.86
Punjab	Large town ($\geq 100,000$)	55.56		
	Medium town ($\geq 20,000$ to $<100,000$)	-33.33	37.14	
	Small town ($<20,000$)	16.67	-40.00	-21.88
	Village	14.81	-6.25	-17.39
	Total UAs	16.67	33.33	28.81
Maharashtra	Large town ($\geq 100,000$)	21.21		
	Medium town ($\geq 20,000$ to $<100,000$)	81.82	26.19	
	Small town ($<20,000$)	-12.50	-6.67	-27.47
	Village	10.26	22.36	24.17
	Total UAs	20.69	30.95	15.85
Kerala	Large town ($\geq 100,000$)	-28.57		
	Medium town ($\geq 20,000$ to $<100,000$)	15.66		
	Small town ($<20,000$)	-10.17	0.00	
	Village	0.00	12.75	-7.02
	Total UAs	0.00	26.67	-5.77
Tamil Nadu	Large town ($\geq 100,000$)	0.00		
	Medium town ($\geq 20,000$ to $<100,000$)	86.05	24.22	
	Small town ($<20,000$)	-17.36	5.88	12.22
	Village	18.00	-6.98	32.20
	Total UAs	31.03	26.42	30.14
Andhra Pradesh	Large town ($\geq 100,000$)	23.68		
	Medium town ($\geq 20,000$ to $<100,000$)	10.53	-4.40	
	Small town ($<20,000$)	15.38	10.00	0.00
	Village	8.15	15.86	26.92
	Total UAs	19.44	20.93	29.86

(continued)

Table 4.4 (continued)

		Large UAs	Medium UAs	Small UAs
Karnataka	Large town ($\geq 100,000$)	42.86		
	Medium town ($\geq 20,000$ to $<100,000$)	50.00	28.00	
	Small town ($<20,000$)	-35.29	7.69	-31.33
	Village	3.33	8.06	34.11
	Total UAs	19.05	26.09	11.38
Rajasthan	Large town ($\geq 100,000$)	35.71		
	Medium town ($\geq 20,000$ to $<100,000$)		21.28	
	Small town ($<20,000$)	50.00	-50.00	-18.67
	Village	13.33	-1.56	101.45
	Total UAs	57.14	17.82	40.52
West Bengal	Large town ($\geq 100,000$)	38.10		
	Medium town ($\geq 20,000$ to $<100,000$)	-2.56	6.82	
	Small town ($<20,000$)	-1.47	5.41	10.71
	Village	4.45	10.23	12.01
	Total UAs	15.79	27.71	36.62
Assam	Large town ($\geq 100,000$)	25.00		
	Medium town ($\geq 20,000$ to $<100,000$)	150.00	33.33	
	Small town ($<20,000$)	31.25	-9.09	-20.69
	Village	11.48	7.94	-16.08
	Total UAs	37.50	20.83	0.00
Orissa	Large town ($\geq 100,000$)	33.33		
	Medium town ($\geq 20,000$ to $<100,000$)	100.00	20.51	
	Small town ($<20,000$)	100.00	-17.65	-4.76
	Village	221.43	-23.68	-6.45
	Total UAs	66.67	12.00	0.00
Bihar + Jharkhand	Large town ($\geq 100,000$)	62.50		
	Medium town ($\geq 20,000$ to $<100,000$)	5.00	19.28	
	Small town ($<20,000$)	-11.11	-16.67	-27.91
	Village	10.49	32.30	33.09
	Total UAs	32.14	55.02	58.12
Madhya Pradesh + Chhattisgarh	Large town ($\geq 100,000$)	33.33		
	Medium town ($\geq 20,000$ to $<100,000$)	33.33	42.11	
	Small town ($<20,000$)	-18.52	8.33	7.83
	Village	6.85	2.13	82.76
	Total UAs	25.93	38.00	18.97

(continued)

Table 4.4 (continued)

		Large UAs	Medium UAs	Small UAs
Uttar Pradesh + Uttaranchal	Large town ($\geq 100,000$)	38.46		
	Medium town ($\geq 20,000$ to $<100,000$)	52.94	30.51	
	Small town ($<20,000$)	10.34	9.80	3.91
	Village	20.89	5.02	68.03
	Total UAs	36.96	34.70	53.74

Data Source Geopolis

relation to their size.⁵ In particular, we assess in more detail the link between the growth of small towns and the proximity of large UAs.

Table 4.3 (Geopolis table) summarises the population growth in large, medium and small UAs across the states in our sample during the decade 1991–2001. From Table 4.3 we can see that the growth of population in UAs is positive for almost all the states. A positive growth in population from small UAs implies that the growth is attributable to the inclusion of small town(s) and the village(s) within each UA. Small towns in small UAs are not incorporated with medium and large towns. However, growth in the population in medium UAs implies that the growth is attributable to both medium and small towns and the adjoining villages. Typically, there are strong linkages between the small and medium towns situated in the UAs. Similarly, the growth in the large UAs is attributable to large, medium and small towns and villages incorporated in the large UAs.

The figures in Table 4.3 indicate that all rich states registered a positive population growth in large, medium and small UAs. However, there is variation in the magnitude of growth. Thus, in Gujarat, for instance, the demographic growth of the large UAs is 38 %, for the medium UAs 21 % and for the small UAs 29 %. Nevertheless, in Gujarat, only large UAs registered a positive growth in their share of urban population by about 3.5 %. For small and medium UAs the share is decreasing. Gujarat has also recorded a negative growth of about –10 % in the number of large UAs. A negative percentage growth of the share of population out of the total urban population in small and medium UAs implies that, although the total population grew in these towns, large UAs grew relatively faster than small or

⁵Note on Tables 4.3 and 4.4 (see also note on the Geopolis database at the end of this chapter): We use Geopolis-Indiapolis data where we get population data for UAs for each state. We classify UAs as large, medium and small based upon the population number (similar to what we did in case of towns). Large UA: 100,000 and above, medium UA: 20,000–99,999, small UA: 10,000–19,999. In Table 4.2 we classified towns as large town: 100,000 and above, medium town: 20,000–99,999 and small town: less than 5000 to 19,999. The above data set has population figures for UAs. So we can classify UAs based on UA population data (large, medium and small). This data set also has population data on towns under each UA. Thus this data set enables us to identify towns under UAs along with the town's population and, based on our classification of towns, Table 4.4 can be created.

medium UAs. A fall in the growth of share in the number of large UAs with a corresponding rise in population also indicates that the existing large UAs are getting more concentrated in Gujarat through the agglomeration process. Similarly, a positive growth in the share of the number of small and medium UAs with a corresponding fall in the proportion of population for small and medium UAs implies that small and medium UAs are becoming more and more dispersed.

Consider now Punjab, Haryana and Maharashtra. All three states from the rich club have experienced a significant demographic growth in large UAs. If, however, we consider the percentage change in the urban population share for UAs, we notice that it is mainly driven by the large UAs and for small and medium UAs the change is negative.

Kerala is the only state in the rich club where the growth in the urban population is primarily driven by the medium UAs in an absolute and relative sense. The case of Tamil Nadu is also interesting. Although the Census data in Table 4.2 indicate that in Tamil Nadu the growth of small towns was phenomenal, the figures from Table 4.3 indicate that all three UAs have experienced a balanced growth.

All the states from the middle income group record a positive growth in the population and in the total number of UAs. Nevertheless, in a relative sense there is some heterogeneity in the growth of UAs. Finally, if we consider the poor states we find that in an absolute sense the proportion of population and the total number of UAs have increased at a significant rate. The growth in the population and number of UAs is also positive for all categories of UAs although the magnitudes differ across UAs.⁶

The purpose of Table 4.4 is to extend the observation from Table 4.3 to check whether or not the growth of large, small and medium towns, and also villages varies across different UAs. In other words, the question is whether there is a relation between the inclusion in large UA and growth of localities such as small towns and villages. This could be useful in order to appreciate the agglomeration effect vis-à-vis the dispersion dynamics.

Let us consider the states in the rich club. As an example, in Gujarat the growth of the small towns is negative in large UAs, indicating that, in large UAs, the small towns are gradually growing over the threshold of 20,000 or administratively incorporating in the larger ones and urbanisation is becoming increasingly large and medium city centric. Even small towns recorded a negative growth in small UAs (−34 %), indicating that the positive growth in UAs is mainly driven in Gujarat by the incorporation of the adjoining villages into the UAs. Only in medium UAs do

⁶All the comments here are subject to the caveat that there are some exceptions in each group of states. We use the Geopolis data to calculate the numbers. Geopolis provides population data for towns and villages under Urban Agglomeration across states. Using the population data, we classify Urban Agglomerations and towns into large, medium and small and then count the number of large, medium, small towns and villages across large, medium and small Urban Agglomerations. We use those counts to compute the growth between 1991 and 2001. This exercise would give us an idea of towns across categories and would give a sense on the speed of transition. Moreover, we wanted to see whether the growth of medium and small towns is dependent on whether such towns are situated in large, medium or small UAs.

we notice a growth in small towns (24 %). In Gujarat, the urbanisation is mainly large city centric and economic activities are becoming more and more agglomerate in metro cities. Similar commentaries can be written for the other states. All the growths in small, medium and large towns concentrated in large UAs are indicating a process of sprawl. A negative growth in small towns within large UAs implies that it is taken over by the growth of large and medium towns and urbanisation is becoming more and more concentrated. On the other hand, medium towns have recorded a positive growth in large and medium UAs.

If we summarise our finding from our analysis we can infer that for most of the states the magnitude of growth in medium towns has been the maximum for large UAs. In fact, the growth of medium towns has been more in large UAs, except for Punjab. The growth of small towns in large UAs is positive only for Punjab and Haryana. However, the magnitude is small as compared to the growth of large/medium towns. For states in the rich club, the growths of large UAs is associated with the growth of medium towns. At the same time, a negative growth rate of small towns implies that the rate of transition of small into medium towns in large UAs is quite high in rich states. For medium UAs, the growth of medium towns is higher. For a few states the growth of small towns is negative, which may again be indicative that the transition of small into medium towns is high. However, compared to the large UAs, the growth rate of medium towns in medium UAs is lower. In small UAs, the number of villages has grown although the growth of small towns is negative or zero for many states. This indicates that the transition of small towns into medium towns is greater than the transition of villages into small towns.⁷ This may also be reflected in the positive medium towns' growth in medium UAs. Overall, the growth of villages plays a significant role in small UAs.

Overall, for the rich states, the growth of the number of medium towns is highest for both large and medium UAs. Although the growth of large towns is also positive and of significant magnitude, the growth of small towns is relatively small and negative across UAs for many states.

For transitory states there are indications that the urbanisation process is slower than in the rich states. Growth of medium towns in large UAs is lower than in rich states whereas the growth of the number of large towns in large UAs is greater. Unlike rich states, the growth of small and medium towns is also happening beyond the large UAs. For instance, for West Bengal, medium and small UAs report positive growth rates in medium and small towns. Growth rates are also of comparable magnitudes for other states.

Among the poor states, the growth of medium towns is higher in large UAs, particularly for Assam, Orissa and UP. For Orissa, the growth in the number of

⁷Again, this has to be linked with the limited number of local units (villages) reclassified as towns (mainly as Census Towns) from Census to Census.

medium and small towns, and villages in large UAs is quite significant, whereas in medium and small UAs it is negative. This pattern may explain a rapid urbanisation marked by a high rate of transition of villages into small towns and of small towns into medium towns. For Assam too, the growth of small towns is positive in large UA, whereas it is negative in medium and small UAs. This is similar to the growth pattern observed in the rich states. For Bihar, MP and UP the growth of medium towns in medium UAs are of comparable magnitudes (in fact bigger in Bihar and Madhya Pradesh) with that of large UAs. For Bihar, the growth of small towns is negative across all UAs and the growth of medium towns is also not very high. This may indicate that the urbanisation process in Bihar may be large town centric.

4.5 Manufacturing Industry and Its Urban Share

Tables 4.5 and 4.6 show the urban share and the growth rates in the share of rural and urban manufacturing firms between 1998 and 2001. The growth of the number of villages between 1991 and 2001 for each state is added. The share of rural manufacturing firms (let's say " r ") is calculated as the total number of rural manufacturing firms divided by the total number of manufacturing firms. Hence, by construction, urban share is $1 - r$. We use the Annual Survey of Industries data to analyse the share and growth in manufacturing firms in urban and rural areas for each state.⁸ Altogether, states from the middle income group houses the maximum share of urban manufacturing firms out of the total number of urban manufacturing firms in India, followed by the poor and rich club. The aggregate share of the manufacturing firms for the rich and the middle income states have not varied much—constant at 60 % for the rich states and 65 % for the transitory states. However, for the poor states the share has increased from 57 to 61 %. Among the rich states the urban share of manufacturing firms is the highest in Punjab and least for Kerala and Tamil Nadu. In Kerala and Tamil Nadu, the rural share of manufacturing firms declined when their urban share went up between 1998 and 2001. During 1991 and 2001, both Kerala and Tamil Nadu reported an increase in their number of medium and small towns. Tamil Nadu in particular experienced 195 and 67 % increases in small and medium towns.⁹ Again, for both these states, there was a drop in the total number of villages between 1991 and 2001. These two observations may indicate that this increase in urban share of manufacturing firms may be partly attributable to the growth of small and medium towns.

However, the growth of urban manufacturing firms has been the highest for the poor club (5.54 %) followed by the rich club (2 %). The share of urban manufacturing for the transitory club has declined by about 1.64 %. For the other states

⁸Whether the firm is urban or rural is indicated in the ASI data.

⁹Eric Denis pointed out to us that this increase in the number of new towns can be very much a state-driven factor rather than an indicator of social or economic changes.

Table 4.5 Share of urban and rural manufacturing firms across different states of India

Club	State name	Urban manufacturing share				Growth rate of urban manufacturing firms share: 1998–2000	Growth rate of urban manufacturing firms share: 1998–2003
		1998–1999	2000–2001	2003–2004	Share in urban		
Rich	Gujarat	0.6439	0.6400	0.6210	–0.61	Share in urban	–3.56
	Haryana	0.7416	0.7405	0.7409	–0.14		–0.09
	Punjab	0.8074	0.7980	0.7736	–1.16		–4.19
	Maharashtra	0.6898	0.6699	0.6355	–2.89		–7.88
	Kerala	0.2713	0.3187	0.3573	17.50		31.71
	Tamil Nadu	0.4651	0.4937	0.4860	6.14		4.49
	Total	0.5845	0.6015	0.5960	2.90		1.96
Transitory	Andhra Pradesh	0.4836	0.4964	0.4602	2.64		–4.83
	Karnataka	0.7439	0.7532	0.7533	1.26		1.27
	Rajasthan	0.7597	0.7086	0.7251	–6.73		–4.56
	West Bengal	0.7897	0.7575	0.7573	–4.07		–4.09
	Total	0.6567	0.6588	0.6459	0.31		–1.64
	Assam	0.2685	0.2906	0.3522	8.23		31.15
	Bihar	0.5199	0.5740	0.5123	10.42		–1.46
Poor	Jharkhand	0.6337	0.6552	0.5284	3.40		–16.62
	Orissa	0.5479	0.5967	0.4849	8.92		–11.50
	Madhya Pradesh	0.7364	0.7710	0.7756	4.70		5.32
	Chhattisgarh	0.4792	0.4705	0.7115	–1.83		48.47
	Uttar Pradesh	0.6557	0.6613	0.7017	0.85		7.01
	Uttaranchal	0.3590	0.4205	0.3696	17.15		2.96
	Total	0.5788	0.5978	0.6109	3.29		5.54

Data Source Annual Survey of Industries

Table 4.6 Growth in rural-urban share of manufacturing firms and number of villages

Club	State name	Growth rate of share of manufacturing firms: 1998–2001		Percentage change in number of villages: 1991–2001		
		Share in rural	Share in urban	Total villages	Inhabited villages	Uninhabited villages
Rich	Gujarat	1.10	−0.61	0.16	0.21	−1.66
	Haryana	0.39	−0.14	−0.47	0.07	−16.59
	Punjab	4.87	−1.16	−0.95	−1.21	7.63
	Maharashtra	6.42	−2.89	1.59	1.69	0.11
	Kerala	−6.51	17.50	−1.45	−1.45	
	Tamil Nadu	−5.34	6.14	−2.76	−2.67	−4.28
	Total	−4.08	2.90	0.08	0.14	−1.20
Transitory	Andhra Pradesh	−2.47	2.64	0.44	0.10	6.79
	Karnataka	−3.65	1.26	0.73	1.53	−9.50
	Rajasthan	21.27	−6.73	3.88	4.92	−16.71
	West Bengal	15.30	−4.07	−0.26	0.09	−4.77
	Total	−0.60	0.31	1.29	1.81	−6.74
Poor	Assam	−3.02	8.23	2.82	1.78	31.27
	Bihar	−11.28	10.42	0.02	1.27	−8.25
	Orissa	−10.81	8.92	0.57	1.15	−6.10
	Madhya Pradesh	−13.12	4.70	−0.68	0.47	−18.19
	Uttar Pradesh	−1.62	0.85	0.26	0.80	−5.13
	Total	−4.52	3.29	0.24	0.95	−7.20

Source Authors' own calculations

in the rich club, the growth of rural manufacturing increased at the expense of the urban share. In fact the growth of small towns for both Gujarat and Haryana are relatively lower among the other states in rich club. This fits in well with the observed trend of a higher proportion of non-farm production being generated in the rural areas, especially in the better off states where this transition is taking place.

Among the transitory states, the rural share of manufacturing has increased in Rajasthan and West Bengal. Rajasthan also reports an increase in the number of villages and a fall in small towns. For West Bengal, small towns report the highest growth rate.

In the poor club, all states report a negative growth in their rural share of manufacturing. One can conjecture by adding up with the previous evidence that manufacturing activities of the states from the poor club is taking place in priority within medium and large towns.

Overall, all the states are showing negative growth rates in the rural manufacturing share and positive growth rates for the urban share. The rich and poor states show greater increase in urban manufacturing share. Growth of towns has been much greater, and for many states small and medium towns have grown substantially. This indicates that towns, particularly small and medium towns, can play an important role in the growth of manufacturing activity.

Table 4.7 presents the correlation between the number of towns in each category and the employment distribution for the states in each club.¹⁰ The correlation for each state is calculated using the district level data on the number of towns in each category and employment in that district. Thus a positive correlation indicates that a high employment level in a state is associated with the large number of small, medium or large towns in that given state. Analysis of the 1991 and 2001 correlation changes gives us an idea of whether the relationship of the growth of towns and the growth of manufacturing and service related activities becomes more or less strong.

The correlation between the number of towns in each category and the employment in that district of a state doesn't indicate that it is always the large towns where employment is accordingly distributed. The increase in employment is also associated with an increase in the number of medium and small towns. For states such as Assam, Maharashtra, Kerala, Tamil Nadu, Bihar, West Bengal and Uttar Pradesh, a strong positive correlation between the weight of employment and the number of medium and small towns is observed. It is interesting to note that for the states in the rich club, such as Tamil Nadu, Maharashtra, Punjab, Kerala and Haryana, the employment distribution is relatively more correlated with small and medium towns than with large towns. Only in Punjab and Maharashtra was the correlation between the large towns and the employment close to 41 % in 2001.

The overall observation from this table is that, by 2001, manufacturing and services-related employment may have grown beyond large towns. There, employment growth may have also resulted in the growth of small and medium towns. For most of the states, employment and the number of small and medium towns are positively correlated and relatively higher than with large towns. However, in states such as Karnataka, West Bengal, Bihar and Uttar Pradesh, the correlation between the employment distribution and large towns' number is as high as 90, 70, 67 and 59 %, respectively.

Table 4.8 shows the correlation between the productivity level and the town class-wise number of towns for each state. The correlation for each state is calculated using district level data on the number of towns in each category and the productivity in that district. The district level productivity is measured as the domestic product divided by the total employment in a district. A positive correlation for a state indicates that a higher number of small, medium or large towns is associated with a higher productivity level.

¹⁰Employment here includes all employment except agricultural laborers and household industry workers. This correlation uses Census data.

Table 4.7 Correlation between employment and number of towns

	State	Employment and large towns		Employment and medium towns		Employment and small towns	
		1991	2001	1991	2001	1991	2001
Rich	Gujarat	-0.2554	0.2391	0.4205*	0.6513*	0.4754*	0.4876*
	Haryana		0.2777	0.3309	0.3033	0.0188	0.0909
	Punjab	-0.1139	0.4125	-0.1862	0.1066	0.4453	0.6185*
	Maharashtra	0.2146	0.4016*	0.3509	0.4060*	0.4194*	0.6989*
	Kerala		-0.1644	0.1277	0.5758*	0.3082	0.2674
Transitory	Tamil Nadu	0.1214	0.1793	0.3216	0.7662*	0.1049	0.7803*
	Andhra Pradesh	0.6048*	0.4934*	0.4657*	0.1894	0.038	-0.3066
	Karnataka	-0.1423	0.9047*	0.7118*	-0.0058	0.6299*	0.4501*
	Rajasthan	0.0676	0.0873	0.5554*	0.3886*	0.5719*	0.2829
	West Bengal	0.5027*	0.6928*	0.2677	0.5321*	0.2153	0.5522*
Poor	Assam			0.1796	0.2608	-0.2804	0.7081*
	Bihar	0.4577	0.6651*	0.1027	0.8154*	-0.1654	0.7716*
	Orissa	0.6147	0.5570*	0.3252	0.3507	0.0765	0.5245*
	Madhya Pradesh	0.6254*	0.3699*	0.2252	0.3303*	0.1124	0.4892*
	Uttar Pradesh	0.1327	0.5879*	0.1626	0.3943*	0.2831*	0.514*

Data Source Census

*Correlation is significant at the 10 % level (two-tailed)

Table 4.8 Correlation between productivity and town class (2001)

Club	State	Productivity and large towns	Productivity and medium towns	Productivity and small towns	Productivity and all towns
		2001	2001	2001	2001
Rich	Gujarat				
	Haryana	0.4226*	-0.2123	0.5715*	0.6821*
	Punjab	0.1651	-0.0941	0.2161	0.1966
	Maharashtra	0.0603	0.4665*	0.8504*	0.0071
	Kerala	-0.1947	0.4236	-0.0341	0.2451
	Tamil Nadu	0.2484	0.4911*	0.4214*	0.2811
Transitory	Andhra Pradesh	0.2893	0.2000	-0.3399	-0.0711
	Karnataka	0.7993*	-0.1651	0.4196*	0.3639*
	Rajasthan	0.0847	0.0761	0.2629	0.266
	West Bengal	0.2348	0.5113*	0.6319*	0.3271
Poor	Assam		-0.1389	0.6414*	0.5126*
	Bihar	0.4815*	0.6921*	0.5249*	0.6823*
	Orissa	-0.021	0.2338	0.324	0.2129
	Madhya Pradesh	-0.0815	0.0059	0.0822	0.0761
	Uttar Pradesh	0.2612*	0.3135*	0.2668*	0.3965*

Data Source Town Data-Census

Note Productivity = Domestic Product/Employment

Gujarat data are missing so line is blank

*Correlation is significant at the 10 % level (two-tailed)

Looking at the correlation figures for the rich club, it may be observed that, except for Haryana, the correlation between the number of large towns and the productivity is weak in magnitude. In fact, for Maharashtra and Tamil Nadu, the correlation between medium and small towns with higher productivity is better than with the number of large towns. For Haryana, the number of small and large towns is significantly positively associated with productivity, whereas for the medium towns the value is negative. For Punjab, the magnitude of correlation is weak and is negative for medium towns.

Among the transitory states, West Bengal shows a similar pattern, as does Tamil Nadu. Small and medium towns are relatively more correlated with productivity than large towns. For Karnataka, it is large and small towns, and medium towns are negatively correlated. Andhra Pradesh and Rajasthan show a weak correlation between number of towns and productivity.

For the states in the poor club, Bihar and Uttar Pradesh show a significant positive correlation between the number of towns for all the categories and productivity. The correlation between the number of small, medium and large towns

Table 4.9 Correlation between number of towns and agricultural employment

Club	State	Cultivators + agricultural workers and large towns		Cultivators + agricultural workers and medium towns		Cultivators + agricultural workers and small towns	
		1991	2001	1991	2001	1991	2001
Rich	Gujarat	-0.2093	-0.2567	0.2581	0.1734	0.4714*	0.2653
	Haryana		-0.216	0.3321	0.3388	0.1591	-0.1312
	Punjab	-0.2423	-0.3719	0.2838	0.1755	0.32	-0.032
	Maharashtra	-0.2104	0.0525	0.2559	0.7491*	-0.0475	-0.1459
	Kerala		-0.1574	0.0351	-0.206	0.1012	-0.1665
Transitory	Tamil Nadu	-0.1741	0.0808	0.2351	0.197	0.0625	0.1172
	Andhra Pradesh	-0.3783	-0.0721	0.2071	0.3515	0.0241	0.0813
	Karnataka	0.1002	-0.4103	0.4773*	0.6778*	0.0673	0.0362
	Rajasthan	-0.1411	-0.13	0.4907*	0.4028*	0.5605*	0.4099*
	West Bengal	-0.3222	0.0327	0.2344	0.3043	0.1753	-0.0536
Poor	Assam			0.5941*	0.5232*	0.2451	0.1188
	Bihar	-0.0847	-0.2214	0.0088	0.0034	0.0052	-0.2111
	Orissa	-0.542	-0.0713	0.1364	0.7166*	0.2078	0.296
	Madhya Pradesh	0.5839*	0.045	0.0157	0.3303*	0.1419	0.4047*
	Uttar Pradesh	-0.1709	0.019	0.0646	0.111	0.2497*	0.2300*

Data Source Census

Correlation is significant at the 10 % level (two-tailed)

and productivity across the states is heterogeneous. However, it may be observed that small and medium towns, on average, show a greater correlation than large towns for many states. This observation is particularly evident for the states belonging to the rich club. For the transitory club, the correlation is of a comparable magnitude, except for Karnataka. The same is true for Bihar and Uttar Pradesh in the poor club. For the other states in the poor club, the correlation with large towns is negative, whereas for small and medium towns, although it is positive, the magnitude is weak.

Table 4.9 presents the correlation between the number of towns in each category and the agricultural employment for the states in each club. The correlation for each state is calculated using district level data on the number of towns in each category and the agricultural employment in that district. The correlation between the number of large towns and the number of agricultural workers for a state is generally weak for both years. Particularly for 2001, many of the states observe even a negative correlation, indicating that states with greater number of agricultural workers usually have fewer large towns.

However, the correlation between medium and small towns and agricultural workers is positive and strong for many states. This is particularly true for the transitory and poor states. The nature of urbanisation may be different for rich, transitory and poor states. The growth of medium and small towns in rich states may be more characterised by forward linkages with large towns whereas in transitory and poor states the growth is characterised by backward linkages. If the low-skilled manufacturing industrial sector is growing in medium and small towns in transitory and poor states, then that growth may be explained by its backward linkage with the agricultural sector. In that case, we may find a positive correlation between the number of agricultural workers and the number of small and medium towns.

4.6 Conclusion

The objective of this chapter has been relatively modest. We aimed to deliver a descriptive mapping of the evolution of large, medium and small towns in India's states (using Census and Geopolis definitions), their sectoral compositions and their place in the structural transformation of the Indian economy. This description is a necessary step to further research on the causes underlying the main trends outlined here. We show that the size dynamics in terms of population change of different types of towns, *and* the change in the overall number of towns in each category, both contribute to explaining the shifting dynamics of urbanisation, rural transformation and employment changes across the different classes of states, rich, middle and poor. The relative weight of different categories of towns varies across the states, and small and medium towns are playing a new role, as is rural non-farming activity and rural urban linkages.

We point out that India's historically leading states remain dynamic if one looks at the dynamics of large and medium towns in their growth, and at the relative shares of secondary and tertiary activities. However, the other major trend, which also coincides with the opening up of the Indian economy, is the increased role of small and medium towns in India's growth, especially in what we have called the poor and transitory states. All the descriptive statistics used here highlight this increased pace of small and medium towns, including the fact that they are themselves in transition. Over the last 10–20 years, India's experience point to the fact that there is no inevitability about large agglomerations driving growth and inequality in a globalised and fast growing economy. In large federal systems, small and medium towns, which are well positioned in a role of backward and forward linkages with agricultural (whose transition is a major driver) and larger agglomerations, respectively, can play a major role in development, which is in no way subaltern.

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Chapter 5

Urbanisation in a Decade of Near Jobless Growth

S. Chandrasekhar

5.1 Introduction

The issue of decent livelihoods has now come to the forefront of policy discussions. In 2008, productive employment was made a new target (1B) under the Millennium Development Goal 1.¹ Progress towards achieving this target has been tardy, with the consensus view being that there is a “large deficit in decent work”. The lack of productive and decent jobs is a pervasive problem across the developing world, including rural and urban India. It does not then come as a surprise that India’s Economic Survey 2012–2013 states that the “*central long-run question facing India is where will good jobs come from*” (Government of India 2013a). Led by the International Labour Office, the current thinking is that “full and productive employment and decent work” should be a central goal of the development agenda (International Labour Organization 2012).

In the Indian context, the first step towards answering the question would be to understand the trends and patterns in employment across the country’s states and union territories. Recent contributions have focussed on documenting the changes in the labour market in the post reform era beginning in the 1990s (Thomas 2012; Binswanger-Mkhize 2013; Mehrotra et al. 2014). Thomas (2012) arrives at three important findings of relevance to this chapter: the decline in manufacturing employment, the slowdown in employment in the services sector and the creation of new jobs in rural construction. In particular, given the official definition of urban areas, as the first two findings imply the lack of creation of non-agricultural jobs, this would contribute to a slower rate of urbanisation as per the official statistics.

¹Target 1B: Achieve full and productive employment and decent work for all, including women and young people.

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Although we have a fair understanding of developments at the national and state levels, because of data limitations very little is known about the processes at play and the consequent labour market outcomes across the size classes of villages and towns of India.

This chapter is structured as follows. In Sect. 5.2 we outline the stages in the rural non-farm (RNF) employment transition as this has implications for the rate of urbanisation and the changes in key workforce indicators at the national level in the inter-censal period 2001–2011. In Sect. 5.3 we provide estimates of a few key indicators of the labour market across the size class of cities. In Sect. 5.4 we provide estimates of location quotient, a measure that reflects the concentration of jobs across 21 broad sections of industry at the sub-national level. These estimates shed light on the pattern that has emerged following the churning of jobs in the primary, secondary and tertiary sectors. Section 5.5, concludes with a discussion on how such analysis needs to be undertaken for all size class of cities in India so that we have a better understanding of the role of specialisation, diversity and competition on employment generation and economic performance of regions.

5.2 Exiting from Agriculture

5.2.1 *Stages of the RNF Employment Transition*

There are three stages in the manner in which the nature of RNF activity changes over the course of a country's development (FAO 1998).² In the first stage, "RNF activity tends to be centred on the countryside itself, with little dependence on rural-urban links". In the second stage, there is a "greater weight of rural-urban links as the basis for RNF employment". In the third stage, what is evident is "a greater weight of urban-rural links manifested by the greater importance of more advanced forms of business linkages, such as subcontracting arrangements and labour commuting".

Although different districts of India are at various stages of this RNF transition, the extent to which they urbanised in the inter-censal period 2001–2011 and hence the strength of rural-urban linkages was constrained by the number of jobs created in the RNF sector, an issue we address in the next section. The stalling of the transition is well documented. In a recent article reviewing India's growth performance, Kotwal et al. (2011) point out that one distinct aspect of India's experience is the slow rate of decline in the share of workforce employed in agriculture. They argue that "An important component of growth—moving labor from low to high productivity activities—has been conspicuous by its absence in India. Also, as the labor to land ratio grows, it becomes much more difficult to increase agricultural wages and reduce poverty" (p. 1195). The stalling of the RNF employment

²<http://www.fao.org/docrep/w9500e/w9500e12.htm>.

transition has also led to an increase in worker mobility: both short-term migration and two-way rural urban commuting (Chandrasekhar and Sharma 2014; Sharma 2017).

5.2.2 *Is India an Outlier?*

As India's GDP increased from \$494 billion in 2001 to \$1.88 trillion in 2011, during this inter-censal period, as per data from the Census of India, the workforce participation rate (WPR) increased from 39.1 to 39.8 % and the number of workers increased by 79.5 million. Data from National Sample Survey Organisation (NSSO) surveys also paint a similar picture. The estimates, based on NSSO data, reveal that the size of the workforce increased from 399.5 million in 1999–2000 to 474.2 million in 2011–2012 (Mehrotra et al. 2014). The elasticity of employment to economic growth is larger in both Brazil (0.7) and South Africa (0.6) compared to India (0.1) (Arnal and Förster 2010). So, in this sense, India is an outlier.

Unlike other countries at similar levels of development, the transition of the workforce out of agriculture is incomplete not only because of very low employment elasticity of growth but also on account of a lack of a robust manufacturing sector. Disaggregation at the sectoral level reveals that the number of workers in manufacturing, non-manufacturing and services in the periods 1999–2000 and 2011–2012 increased by 17 million, 25 million and 38 million (Mehrotra et al. 2014). In its report, the Working Group on Employment, Planning and Policy for the Twelfth Five Year Plan examined the employment scenario that emerged in the period 2004–2005 to 2009–2010. Over the period 2004–2005 to 2009–2010, a total of 23.3 million and 4.02 million jobs were lost in agriculture and manufacturing, respectively. These losses were offset by a gain of 25.89 million jobs in non-manufacturing and 2.7 million jobs in services. Overall, only 1.74 million new jobs were created. For the period 2004–2005 to 2009–2010, the overall employment elasticity is estimated at 0.01 (Government of India 2011a). This is markedly lower than that of other countries. The standard explanation for these patterns runs along the following lines. In the context of rural India, increasing mechanisation could have contributed to a decline in labour demand. Further, in urban areas, there was an increase in capital intensity in the manufacturing sector (Mehrotra et al. 2014). Because India did not witness an expansion in employment in the non-farming sector, which is pre-supposed for urbanisation as per the official definition, it is not surprising that, with an urbanisation level of 31.16 % in 2011, India is the least urbanised country among the top 10 economies of the world.

5.2.3 *Reclassification of Villages as Census Towns (CTs)*

As is well known, the three criteria for determining whether an area is urban include the requirement that 75 % or more of the male workers need to be engaged in non-agricultural activities. However, the movement of workers from agriculture to non-farm has not been uni-directional with a large amount of variability. Sidhwani (2014) points out that “having a high proportion of the workforce engaged in non-farming activities today does not necessarily mean that it will be the case tomorrow” (p. 10). Although one does not have a ready explanation for this non-linearity, it is evident that this has implications for whether a geographical unit could be reclassified from rural to urban over the period 2001–2011. When a geographical unit is reclassified from rural to urban, it is called a Census town (CT). Pradhan (2013) has estimated that 30 % of the urban growth in the decade 2001–2011 was on account of new CTs. Based on a regression analysis, he finds that the number of new CTs in 2011 is explained by the “number of existing CTs, the number of large villages and the share of non-agricultural male workforce” (p. 48). Pradhan makes the following observation on whether rural areas closer to large urban areas are likely to transform at a faster rate into CTs. “... Although there are a large number of CTs in close proximity to class 1 towns, many of them are not around the megacities and there are many more that are widely spread across the countryside. This indicates that there may be multiple urbanisation processes at work” (p. 49).

5.2.4 *Inter-censal Changes in the Workforce*

As per the definition used by the Census of India, a worker is an individual “who has participated in any economically productive activity with or without compensation or profit” in the year preceding the enumeration. In the inter-censal period 2001–2011 the number of workers per 100 population (WPR) increased from 51.7 to 53.3 % in the case of men and declined fractionally from 25.6 to 25.5 % in the case of women. If the miniscule increase in WPR is a concern, what is worrying is also the decline in the proportion of main workers from 77.8 to 75.2 % and the corresponding increase in marginal workers from 22.2 to 24.8 % (Table 5.1). As per the official definition, a main worker is an individual who “worked” for 6 months or more during the reference year and a marginal worker is one who “worked” for less than 6 months. Among all marginal workers, 81.4 % worked for 3–6 months and 18.6 % worked for 0–3 months.

What these statistics indicate is a phenomenon of underemployment or voluntary unemployment in rural and urban India. The problem of underemployment is more acute for women than for men (Government of India 2011b: 90). The

Table 5.1 Inter-censal change in main and marginal workers

	Gender	2001	2011	Change
Main workers	Persons	77.8	75.2	-2.6
	Males	87.3	82.3	-5.0
	Females	57.3	59.6	2.3
Marginal workers	Persons	22.2	24.8	2.6
	Males	12.7	17.7	5.0
	Females	42.7	40.4	-2.3

Source Census of India (2013)

underemployment rate³ among men in rural and urban areas in 2009–2010 was 3 and 1 %, respectively, whereas for women it was 15 and 6 % in rural and urban areas, respectively. The apparent low rate of underemployment for men needs to be seen in conjunction with the male unemployment rate based on the current daily status.

5.2.5 *Inter-censal Changes in Occupation*

In 2011, the size of India's workforce stood at 481.7 million of which 118.7 million were cultivators, 144.3 million were agricultural labourers, 18.3 million were household industry workers and the remaining 200.4 million were other workers. Between 2001 and 2011 the proportion of workers in the agriculture sector declined by 3.6 points – 54.6 %. Kotwal et al. (2011) point out that what makes India's experience distinctive is that “the share of agriculture in employment has not come down rapidly.⁴ Unlike India, the absolute amount of labor in agriculture fell in all the developed countries at their comparable phases of development”.

Undoubtedly the miniscule reduction in proportion of workers engaged in agriculture contributed to the lower rate of urbanisation. However, what is of concern is the not so favorable transformation in occupation structure, in particular the increase in the proportion of agricultural labourers. The proportion of cultivators declined from 31.7 to 24.6 % over the period 2001–2011 and the proportion of agricultural labourers increased from 26.5 to 30 % (Table 5.2).

³As per the official definition, the underemployment rate is the “proportion of usually employed who were found to be not employed (i.e. reporting either unemployed or not in labour force) during the week preceding the date of survey”.

⁴Over the period 1983–1984 to 2004–2005, the share of agriculture in value added as a percentage of gross domestic product (GDP) decreased from 39 to 20 % in 2004–2005 while the share of agriculture in total employment declined from 68 to 58 %.

Table 5.2 Main and marginal workers by occupation

Category	2001	2011	Change
Cultivators	31.7	24.6	−7.1
Agricultural labourers	26.5	30.0	+3.5
Household industry workers	4.2	3.8	−0.4
Other workers	37.6	41.6	+4.0
Total	100	100	

Source Census of India (2013)

5.3 Labour Market Indicators by Size Class of Towns

We next turn to a discussion of trends and patterns in labour market indicators across the size classes of cities in the last decade. This information is available in the reports published by the NSSO, based on the employment and unemployment surveys it conducted. The size classes of cities are the following: class 1 cities (with population one million and above), class 2 towns (with population 50,000 to one million) and class 3 towns (with population less than 50,000). The indicators on work status are collected with three reference periods: usual status with a reference period of 1 year, current weekly status with a 1-week reference period and current daily status based on the daily activity pursued during each day of the week preceding the day of survey.

Over the period 1999–2000 and 2009–2010 there was no appreciable change in the WPR in any of the three size classes. The WPR is defined as the “number of persons or person-days employed per 100 persons or person-days”. In 2009–2010, the WPR among men in class 1 cities, class 2 towns and class 3 towns was 73.3, 73.6 and 75.5 %, respectively. In the case of women, the corresponding estimates are 16.7, 17.8 and 20.6 % (Table 5.3). In the discussion that follows, we focus only on the key statistics pertaining to men because it is their work patterns that are integral to the definition of what is urban.

Table 5.3 WPR for persons aged 15 years and above according to the usual status in 1999–2000, 2004–2005 and 2009–2010

	Male			Female		
	1999–2000	2004–2005	2009–2010	1999–2000	2004–2005	2009–2010
All class 1 cities	74.5	76.2	73.3	17.6	19.8	16.7
Size class 2 towns	74.6	75.6	73.6	17.9	21.8	17.8
Size class 3 towns	76.6	77.7	75.5	24.4	27.6	20.6
Urban India	75.2	76.3	74	19.7	22.7	18.3

Source Statement 3.2, Government of India (2013b)

Among men, based on the usual status, there are interesting patterns that emerge across size class of cities when one examines the nature of their work (Table 5.4). On the one hand, overall, in the period 1999–2000 to 2009–2010 we do not observe any discernible change in the distribution of the type of work (self-employed, regular wage/salaried, casual labour) that men are engaged in. However, if regular wage or salaried jobs are considered higher quality jobs, then the situation is better in the class 1 cities, as over 51 % of employed men report being regular wage earners or salaried. In contrast, in class 3 cities, less than 32 % of employed men report being regular wage earners or salaried.

The perspective changes when we examine the current daily activity status of men for the period 2009–2010 (Table 5.5). Note that the data in Table 5.4 is not comparable with estimates for 2009–2010 reported in Table 5.5 because in Table 5.4 we focus only on those employed, based on their usual status. In contrast, in Table 5.5 we focus on all men aged 15 years and above, and not only those who are employed. A comparison of the distribution of men by current daily status in each size class of city reveals that in class 3 towns, 15 % of the men are engaged as casual labour. In contrast, in class 1 cities, 37.5 % of men work as regular employees. There are no differences in the proportion of men out of the labour force in each class of city. Moving on to differences within India, we find that in Delhi, 32 % of men aged 15 years and above are self-employed, 38 % are regular employees, 1 % are engaged in casual labour, 2 % are unemployed and 27 % are not in the labour force. Differences across the other major states of India are reported in Table 5.5. Kerala also has the highest proportion of men (29.4 %) who are out of the labour force. This high statistic could also be because of higher school life expectancy in the state, as many men in the 15–24 age group are attending educational institutions, unlike Bihar where 28.4 % are not in the labour force nor are they studying. In Kerala, 17.8 % are casual labour and 8.5 % are unemployed.

There are differences across states depending on their levels of urbanisation. For example, in Bihar, 41.5 % of men aged 15 years and above are self-employed and in Maharashtra 41 % are self-employed.

Instead of looking at the ratio of the number of unemployed men to the total number of men aged 15 years and above, we can examine the unemployment rate using only those who are in the labour force as the denominator. We find that in 2009–2010, the male unemployment rate, as reflected by the current daily status in class 3 towns, is the higher at 5.9 % followed by class 2 towns (4.8 %) and class 1 cities (4.7 %) (Table 5.6).

Having discussed the WPR, the status in employment and the unemployment, we now focus on the industry of work (Table 5.7). Not surprisingly, we find that in class 3 towns 13.4 % of male workers are engaged in the primary sector. In contrast, in class 1 cities only 1.4 % of male workers are engaged in the primary sector. This difference is offset by the fact that, in class 1 cities 64 % of men are engaged in the tertiary sector in contrast to 53.6 % in class 3 towns. In all size classes we do not observe any significant change in the distribution of male workers across primary, secondary and tertiary sectors over the period 2004–2005 to 2009–2010.

Table 5.4 Distribution of employed (usual status) men aged 15 years and above by status in 1999–2000, 2004–2005 and 2009–2010

	1999–2000			2004–2005			2009–2010		
	Self employed	Regular wage/salaried	Casual labour	Self employed	Regular wage/salaried	Casual labour	Self employed	Regular wage/salaried	Casual labour
Class 1 cities	36.8	51	12.2	39.5	51.2	9.3	38.7	51.6	9.7
Class 2 towns	40.8	42.6	16.6	46	39	14.9	40.1	42.9	17
Class 3 towns	47.3	31.7	21	48.8	31.6	19.6	45	31	24
Urban India	41.5	41.8	16.6	44.9	40.7	14.4	41	42	17

Source Statement 3.3 Government of India (2013b)

Note Each row for each year adds up to 100

Table 5.5 Distribution of person-days of males aged 15 years and above by broad current daily activity status in 2009–2010

Working		Size class of town	Self employed	Regular employees	Casual labour	Total worker	Unemployed	Not in labour force	Total
Andhra Pradesh		1	21.5	41.7	6	69.1	4	26.9	100
		2	25.1	36.4	9.2	70.7	2.9	26.4	100
		3	30.8	24.1	18	72.8	4	23.1	100
		All	25.3	35.5	9.9	70.8	3.2	26	100
Bihar		1	34.3	20.5	2.2	57	9.4	33.7	100
		2	44.2	13	6.7	63.8	4.6	31.7	100
		3	44.5	11.8	19.4	75.7	2.3	22	100
		All	41.5	14.6	10.4	66.5	5	28.4	100
Chhattisgarh		1	0	0	0	0	0	0	0
		2	22.1	30.3	13.2	65.5	3.6	30.8	100
		3	31.8	24.3	16.1	72.2	3.2	24.6	100
		All	25.3	28.3	14.1	67.7	3.5	28.8	100
Gujarat		1	37.8	35.3	5.2	78.2	1.5	20.3	100
		2	32.5	28.1	13.4	74.1	2.7	23.3	100
		3	30.2	32.8	13.7	76.7	2.6	20.7	100
		All	34.6	32.5	9.5	76.6	2.1	21.3	100
Haryana		1	14.8	50.6	6.2	71.6	3.3	25	100
		2	27.4	41.4	8.8	77.6	2.4	20	100
		3	35.6	22.5	9.4	67.5	5.5	27	100
		All	26.5	39.6	8.4	74.5	3.2	22.4	100
Jharkhand		1	0	0	0	0	0	0	0
		2	27.1	27.1	14.6	68.8	5	26.1	100
		3	21.8	23.4	14.5	59.7	7.2	33.1	100
		All	25.6	26.1	14.5	66.3	5.6	28.1	100

(continued)

Table 5.5 (continued)

Working									
State	Size class of town	Self employed	Regular employees	Casual labour	Total worker	Unemployed	Not in labour force	Total	
Karnataka	1	30.5	35.7	7.4	73.5	3.4	23.1	100	
	2	27.1	29.1	13	69.2	3.2	27.6	100	
	3	33.6	23	20.5	77.1	3.5	19.4	100	
	All	29.5	29.4	13.2	72.2	3.3	24.5	100	
Kerala	1	0	0	0	0	0	0	0	
	2	24	21	17.6	62.5	8.5	29	100	
	3	22.8	20.6	18.1	61.5	8.5	30	100	
	All	23.5	20.8	17.8	62.1	8.5	29.4	100	
Madhya Pradesh	1	24.3	37.7	6.3	68.3	1	30.7	100	
	2	28.6	25.4	10.1	64.1	4.1	31.8	100	
	3	39.6	15.5	14.8	69.9	4.9	25.2	100	
	All	32	23.9	11.2	67	3.8	29.1	100	
Maharashtra	1	22.3	46.9	3.3	72.5	4	23.5	100	
	2	25.4	38.7	10.2	74.3	3.4	22.3	100	
	3	29.5	26.9	14.7	71.2	4	24.7	100	
	All	24.5	41	7.5	73	3.8	23.3	100	
Orissa	1	0	0	0	0	0	0	0	
	2	29.9	31.4	11.4	72.7	3.6	23.7	100	
	3	31.8	25.6	16.2	73.6	5.5	20.8	100	
	All	30.8	28.8	13.6	73.1	4.5	22.4	100	
Punjab	1	29.7	48.3	3	81	6.8	12.1	100	
	2	29.1	32.5	9.8	71.4	3.7	25	100	
	3	34.2	21.5	16.8	72.5	7	20.4	100	
	All	30.8	31.6	10.9	73.2	5.2	21.6	100	

(continued)

Table 5.5 (continued)

Working		Size class of town	Self employed	Regular employees	Casual labour	Total worker	Unemployed	Not in labour force	Total
Rajasthan		1	31.5	32.7	8.2	72.4	2.3	25.3	100
		2	31.5	28.9	8.7	69.1	2.9	28	100
		3	37	19.6	13	69.5	2.2	28.2	100
		All	33.1	26.8	9.9	69.8	2.6	27.6	100
Tamil Nadu		1	18.1	35.3	14.6	68	5.8	26.2	100
		2	24.5	36.4	12.3	73.2	4.1	22.7	100
		3	24.3	27.2	18.8	70.4	6.2	23.5	100
		All	23.4	31.9	15.7	71	5.4	23.6	100
Uttar Pradesh		1	31.8	23.5	11.3	66.6	3.3	30.1	100
		2	34.7	26.1	10.5	71.3	2.7	26.1	100
		3	45.1	14.6	13.3	73	4	23	100
		All	36.9	22.2	11.5	70.6	3.2	26.2	100
West Bengal		1	28.4	30.1	14.3	72.7	3.4	23.8	100
		2	33.7	30.1	8	71.8	5	23.1	100
		3	44.6	18.4	12.6	75.5	3.4	21.1	100
		All	34.5	28	10.2	72.7	4.4	22.9	100
All-India		1	28	37.5	6.2	71.7	3.5	24.8	100
		2	28.8	31.5	10.4	70.7	3.6	25.7	100
		3	33.5	23.2	15	71.7	4.5	23.8	100
		All	29.9	30.9	10.5	71.2	3.8	24.9	100

Source Table C3 Government of India (2013b)

Table 5.6 Unemployment rates (no. of persons/person-days in unemployment per 100 persons/person days in the labour force) for men aged 15 years and above according to usual status, current weekly status, current daily status in 1999–2000, 2004–2005 and 2009–2010

	1999–2000			2004–2005			2009–2010		
	Usual adjusted	Weekly	Current	Usual adjusted	Weekly	Current	Usual adjusted	Weekly	Current
Class 1 cities	4.7	5.4	6.5	3.4	4.7	6.1	3.4	4.0	4.7
Class 2 towns	4.6	5.7	7.2	3.7	5.1	7.5	2.5	3.3	4.8
Class 3 towns	4	5.6	8	4.1	5.9	8.7	2.6	3.5	5.9
Urban India	4.4	5.6	7.3	3.8	5.2	7.4	2.8	3.6	5.1

Source Statement 3.5 Government of India (2013b)

Table 5.7 Distribution of usual status of male workers in the 15 years and above age group by the broad industry division in 1999–2000, 2004–2005 and 2009–2010

	2004–2005			2009–2010		
	Primary	Secondary	Tertiary	Primary	Secondary	Tertiary
Class 1 cities	1.5	37.5	61	1.4	34.6	64
Class 2 towns	4.7	33.8	61.6	4.4	35.9	59.8
Class 3 towns	14.3	32.3	53.4	13.4	32.9	53.6
Urban India	6.1	34.4	59.4	6	34.6	59.3

Source Statement 3.6 Government of India (2013b)

Table 5.8 provides a more disaggregated picture. At the all-India level, nearly 93 % of male workers are engaged in manufacturing, construction, trade, hotel and restaurant, transport or other services. The share of male workers engaged in the manufacturing sector is highest in class 1 cities, followed by class 2 and class 3 towns. In contrast, the share of male workers engaged in construction is highest in class 3 towns followed by class 2 towns and class 1 cities. This table also provides limited insights into the potential employment dynamics in class 2 and class 3 towns. Hence, we next turn to a discussion of differences across the states of India. In Delhi, 29 % of male workers are engaged in manufacturing, 3.3 % in construction, 33 % in trade, hotel and restaurant, 10 % in transport and 25 % in other services.

Moving on to other states, in 2011, the states of Maharashtra, Uttar Pradesh and Tamil Nadu accounted for 13.5, 11.8 and 9.3 % of the country's urban population. What is striking is that in Tamil Nadu 10.2 % of urban male workers are engaged in agriculture. This is higher than in Maharashtra or Uttar Pradesh. In these three states it is the male worker in class 3 towns who is more likely to be engaged in agriculture. There is no significant difference in the proportion of urban males engaged in manufacturing in these three states. Among other states, it is only in Gujarat and Haryana that over 30 % of the male workers are engaged in manufacturing. In contrast, in Bihar, which is relatively less urbanised, 34.1 % of male workers are engaged in trade, hotel and restaurant services. Further, 12.7 % of the men are engaged in agriculture.

What can be augured for the rate of urbanisation in this decade from the lens of employment? Unless India manages to boost the share of manufacturing in the gross domestic product, not only the rate, but also the quality of urbanisation in this decade can be affected. The factors that have contributed to a decline in manufacturing employment⁵ since 2004–2005 include falling demand for manufacturing

⁵In a recent article, Rodrik (2015) has focused on the issue of premature deindustrialization. "What developing countries are experiencing today is appropriately called "premature deindustrialization," a term that seems to have been first used by Dasgupta and Singh (2006). In most of these countries, manufacturing began to shrink (or is on course for shrinking) at levels of income that are a fraction of those at which the advanced economies started to deindustrialize. These developing countries are turning into service economies without having gone through a proper experience of industrialization" (p. 3).

Table 5.8 Distribution of usual status male workers in the 15 years and above age group by the broad industry division in 2009-2010

State	Size class	Agriculture	Mining and quarrying	Manufacturing	Electricity and water	Construction	Hotel and restaurant trade	Transport	Other services
Andhra Pradesh	1	0.1	0	15.8	0.4	12.9	25.2	13.8	31.8
	2	4.4	0.8	21.3	0.8	13.2	23.2	12.6	23.7
	3	6.7	2.6	19.9	1.1	14.2	26.2	11.8	17.5
	All	3.8	0.9	19.9	0.8	13.3	24.1	12.7	24.5
Bihar	1	5.4	0	17	0	9.5	33.7	9.3	25
	2	8.9	0	12.9	0	9.1	32.9	14.2	21.9
	3	19.3	0	7.7	0	18.5	35.1	7.8	11.6
	All	12.7	0	11.6	0	13.3	34.1	10.2	18.1
Chhattisgarh	1	0	0	0	0	0	0	0	0
	2	1.2	6.3	26.5	1	11.5	23.9	6.2	23.5
	3	7.6	5	14	0	9.5	28.4	9.2	26.2
	All	3.4	5.9	22.2	0.6	10.8	25.5	7.3	24.4
Gujarat	1	1.1	0	34.1	0.3	6	29.7	10.1	18.7
	2	4.8	0.5	25	2.3	8.3	25.9	9.6	23.7
	3	10.9	0.5	27	0	9.6	21.9	12.1	18
	All	4.1	0.2	30.2	0.8	7.4	27.1	10.3	19.9
Haryana	1	1.2	0	44.8	0	12.1	13.8	9	19.1
	2	2.3	0	31	1.6	14.9	23.9	6.5	19.6
	3	13.1	0	18.1	0.7	11.2	31.7	8.6	16.6
	All	4	0	31.4	1.1	13.7	23.4	7.4	19
Jharkhand	1	0	0	0	0	0	0	0	0
	2	4.3	5.2	11.3	0.5	20.6	27.8	6.9	23.5
	3	4.8	10.6	4.5	3.1	14.4	24.5	17.9	20.1
	All	4.4	6.5	9.5	1.1	19	27	9.7	22.6

(continued)

Table 5.8 (continued)

State	Size class	Agriculture	Mining and quarrying	Manufacturing	Electricity and water	Construction	Hotel and restaurant trade	Transport	Other services
Karnataka	1	0	0	25.1	1.6	6.4	29.1	13.3	24.5
	2	7	0.5	17	0.3	18.6	23.4	13.4	19.9
	3	17.8	1.3	15.4	0.4	14.3	26.7	7.9	16.2
	All	7.9	0.6	18.7	0.7	14.3	25.7	12	20.2
Kerala	1	0	0	0	0	0	0	0	0
	2	11.7	0.8	14	0.4	17	23.4	12.2	20.5
	3	11.8	1.1	16.2	0.1	20.3	22.1	12.1	16.3
	All	11.7	0.9	14.8	0.3	18.2	22.9	12.1	18.9
Madhya Pradesh	1	1.6	0	22.5	1.2	11.2	23.3	11.7	28.6
	2	3.8	1.8	16.7	1.1	14.5	30.1	8.2	23.9
	3	17.5	2.2	10.3	0.5	15.4	31	7.7	15.6
	All	8.8	1.6	15.2	0.9	14.2	29.2	8.6	21.4
Maharashtra	1	0.9	0.4	25.4	0.5	7.3	22.3	13.1	30.2
	2	3.3	0.1	23.9	0.6	10.4	26.1	11	24.5
	3	15.4	0.7	15.6	3.4	11.5	23.6	10.9	18.7
	All	3.9	0.3	23.4	1	9.1	23.9	12	26.4
Orissa	1	0	0	0	0	0	0	0	0
	2	5.8	0.8	16.6	1.4	13.2	28.8	10.3	23.1
	3	9.9	3.3	17.2	1.5	13.3	26	10.4	18.5
	All	7.7	1.9	16.9	1.4	13.2	27.5	10.4	21
Punjab	1	1.5	0	39.9	0.2	5.5	32.8	5.2	14.8
	2	3.5	0.2	18.6	2.4	13.3	29.9	10.2	22
	3	13.1	0	15.5	0.7	21.5	28.3	5.6	15.4
	All	5.9	0.1	23.8	1.2	13.6	30.2	7.3	17.8

(continued)

Table 5.8 (continued)

State	Size class	Agriculture	Mining and quarrying	Manufacturing	Electricity and water	Construction	Hotel and restaurant trade	Transport	Other services
Rajasthan	1	0.3	0.5	20	0.2	10.5	32.8	12.6	23.2
	2	2.5	0.7	17.1	0.1	16.7	27.8	9.2	25.8
	3	5.2	1	12.9	0.1	21	32.2	7.2	20.4
	All	2.9	0.8	16.4	0.1	16.9	30	9.2	23.8
Tamil Nadu	1	3.4	0.7	20.4	0	6.2	27.5	13.1	28.8
	2	5.4	1.3	27.4	0.7	12.5	23.2	13.4	16.1
	3	16.2	0.5	22.5	0.4	13.6	21.1	11.5	14.2
	All	10.2	0.8	24	0.5	12.1	22.8	12.4	17.2
Uttar Pradesh	1	4.7	0.4	23.6	0.5	12.3	30.1	7.7	20.7
	2	4.3	0	25.8	0.5	11	27.3	7.2	24
	3	17.6	0.1	17	0.2	11.2	31.3	6.7	15.9
	All	8.4	0.2	22.6	0.4	11.4	29.2	7.2	20.7
West Bengal	1	0.3	0	27	0.1	5.3	34	10	23.3
	2	3.6	0.6	22.7	1.1	7.5	29.4	13.7	21.4
	3	6.7	1.9	26.9	0.5	10.6	29.5	9.1	14.8
	All	3.4	0.7	24.4	0.8	7.6	30.5	12.1	20.6
All-India	1	1.4	0.2	26.4	0.4	7.6	28	11	25
	2	4.4	0.8	21.6	0.9	12.6	26.2	10.7	22.9
	3	13.4	1.2	17.5	0.7	13.5	27	9.5	17.1
	All	6	0.7	21.8	0.7	11.4	26.9	10.5	21.9

Source Table C4 Government of India (2013b)

exports, rising import intensity of manufacturing output and rising wages. Mehrotra et al. (2014) argued that the last two factors raised the capital intensity. This increase in capital intensity only lowers the employment elasticity of growth. Since 1991, India's growth process has been led by the service sector. This phenomenon is likely to be the case in this decade too. However, there is "greater duality in services sector", "higher wage inequality" and "a high share of informality" (Ramaswamy and Agrawal 2012). Wages in the service sector range from high paying jobs in the information sector to low wage menial jobs. This scenario is not specific to India.⁶ Eventually, an increase in the level of urbanisation, without an improvement in livelihoods, only contributes to an urbanisation of poverty, a phenomenon where the head count ratio of poverty declines in rural and urban areas but the absolute number of poor increases in urban India.

5.4 Concentration of Jobs

The discussion based on Table 5.8 can be made more relevant by generating an appropriate indicator of concentration of jobs by broad industry divisions for rural India, cities with one million plus populations and other urban areas within each state. It is important to understand the phenomenon of job concentration from the viewpoint of the economic performance of regions and potential for future employment generation.⁷ One analysis in this regard is the World Bank (2013) report, which examined the issue of concentration of jobs across different city size classes. However, the analysis stops at the year 2005 and does not cover all sectors and regions of the economy. More recently, Chandrasekhar and Sharma (2014) undertook a similar exercise and constructed the location quotient at the sub-national level for India. They use the NSSO survey of employment and unemployment 2011–2012 to understand in which regions different kinds of economic activity are concentrated. They divide India into 73 regions: 22 rural state regions, 24 urban regions in a state and 27 cities with more than one million populations. The industry each individual works in can be grouped into 21 broad sections based on the NIC 2008. They calculate the Location Quotient to quantify

⁶"Underpinning some of these developments is the decline in medium-skilled routine jobs in recent years. This has occurred in parallel to rising demand for jobs at both the lower and upper ends of the skills ladder. As a result, relatively educated workers that used to undertake these medium-skilled jobs are now increasingly forced to compete for lower-skilled occupations. These occupational changes have shaped employment patterns and have also contributed to the widening of income inequality recorded over the past two decades" (International Labour Office 2015: 12).

⁷In their review article, Beaudry and Schiffauerova (2009) examine the viewpoint of three protagonists in the debate on factors conducive for employment generation: A. Marshall (who stressed the importance of specialisation or clustering), J. Jacobs (who stressed the importance of diversity and competition) and M. Porter (who believes that specialisation and clustering was important).

the extent of concentration of employment in any one sector of work across the 73 regions of India. Suppose X_{ns} denotes employment in region n ($n = 1, 2, \dots, N$) and section of industry s ($s = 1, 2, \dots, S$). Then the location quotient (LQ) is given by

$$LQ_{ns} = \left(\frac{X_{ns}}{\sum_1^S X_{ns}} / \frac{\sum_1^N X_{ns}}{\sum_1^S \sum_1^N X_{ns}} \right)$$

A region is said to have a concentration of workers in a particular industry if the LQ, which is the ratio of share of the region's employment in that industry to the share of the industry's employment in the nation's employment, takes a value greater than one. The value of the location quotient is driven by three factors: the initial distribution of employment over different sections of industry in the region, employment growth in a particular industry in a specific region and the overall distribution of employment across sections of industry at the aggregate level. Hence, the location quotient reflects the outcome following the churning of jobs across the industries.

Table 5.9 lists the top five regions based on a location quotient for each of the 19 sections of industry, these regions having the highest value of LQ for the particular section of industry. The rankings can be correlated with recent patterns evident in job creation and thereby provide explanations for the rankings. The first thing to note is that it is the rural areas that not surprisingly head the rankings in Sect. A (Agriculture, forestry and fishing) and Sect. B (Mining and quarrying). Indore appears in the ranking on account of activity in the mining and quarrying industries. The only other section where rural areas appear in the ranking is Sect. F (Construction). Nagpur appears in the rankings and we do not have an obvious explanation for this. The presence of Jammu and Kashmir can be easily explained. Jammu and Kashmir's 11th Five Year Plan (2007–2012) recognised that the construction sector would be the most important sector which would generate substantial additional employment. Given the absence of an industrial base and employment opportunities in other sectors, rural Jammu and Kashmir has the highest LQ in Sect. F.

An interesting fact that emerges from the table is the overwhelming presence of cities with one million plus populations in the rankings. Of particular interest is the preponderance of cities in Maharashtra in the rankings: Greater Mumbai, Kalyan-Dombivli, Nagpur, Nashik, Pune, Pimpri Chinchwad and Thane. These cities figure prominently as regions with a concentration of workers in one or more sections of industry. Across all the NIC sections, both Kalyan-Dombivli and Thane appear four times each in the rankings. Their presence in the ranking is consistent with the evidence of growth in suburban areas, a phenomenon documented by Chakravorty and Lall (2007). They documented three important patterns: the decline in the share of investments of individual metropolitan districts (i.e. cities that are districts) in the post reform period, that is since 1991, the decline in the share of urban districts (i.e. districts with at least 50 % urban population) in total

Table 5.9 Ranking of regions based on concentration of section of industry

Sector of industry	Ranking of regions by location quotient (top five)				
	1	2	3	4	5
AB	R Chattisgarh	Indore	R Maharashtra	R Gujarat	R Madhya Pradesh
C	Surat	Varanasi	Kanpur	Nashik	Agra
D	U Goa	Nagpur	U Rajasthan	U Chattisgarh	Jaipur
E	U Gujarat	Pimpri Chinchwad	Varanasi	U Goa	Delhi (R + U)
F	R Jammu and Kashmir	Nagpur	R Jharkhand	R Punjab	R Rajasthan
G	U Bihar	U Assam	Howrah	Lucknow	U Uttaranchal
H	Kalyan-Dombivli	Thane	U Andhra Pradesh	Hyderabad	Nagpur
I	U Goa	Bangalore	Meerut	Greater Mumbai	U Uttaranchal
J	Bangalore	Pune	Chennai	Faridabad	Delhi (R + U)
K	Nagpur	Pimpri Chinchwad	Kalyan-Dombivli	Greater Mumbai	Pune
L	Delhi (R + U)	Chennai	Pune	Delhi MC	Nagpur
M	Kalyan-Dombivli	Delhi MC	Bangalore	Pune	Howrah
N	Patna	Thane	Chennai	Bangalore	U Himachal Pradesh
O	U NE states	Patna	Hyderabad	Delhi (R + U)	U Jammu and Kashmir
P	Faridabad	Kalyan-Dombivli	U Jammu and Kashmir	U NE states	U Himachal Pradesh
Q	Agra	Faridabad	Lucknow	U Punjab	U Kerala
R	U Orissa	Ludhiana	Delhi MC	Greater Mumbai	U Assam
S	Meerut	Ludhiana	Lucknow	U Assam	Thane
T	Pimpri Chinchwad	Chennai	Greater Mumbai	Kolkata	Thane

Source Chandrasekhar and Sharma (2014)

Note Section A: Agriculture, forestry and fishing; Section B: Mining and quarrying; Section C: Manufacturing; Section D: Electricity, gas, steam and air conditioning supply; Section E: Water supply, sewerage, waste management and remediation activities; Section F: Construction; Section G: Wholesale and retail trade, repair of motor vehicles and motorcycles; Section H: Transportation and storage; Sect. 5.1: Accommodation and Food service activities; Section I: Information and communication; Section K: Financial and insurance activities; Section L: Real estate activities; Section M: Professional, scientific and technical activities; Section N: Administrative and support service activities; Section O: Public administration and defence; compulsory social security; Section P: Education; Section Q: Human health and social work activities; Section R: Arts, entertainment and recreation; Section S: Other service activities; Section T: Activities of households as employers; undifferentiated goods and services producing activities of households for own use Delhi (R + U) includes rural and urban areas except Delhi Municipal Corporation (Delhi MC)
R Rural; U Urban

investment and the increase in the share of suburban, non-metropolitan, and non-urban districts in investments.

The current employment pattern in Kalyan-Dombivli and Thane is without doubt driven by the fact that they are part of the Mumbai Metropolitan Region. Pune and Pimpri Chinchwad are adjoining cities, with Pune appearing twice in the ranking (Sects. J and M) and Pimpri Chinchwad appearing three times (Sects. E, K and T).

Turning to specific sectors, the cities with one million plus populations figure in the rankings in manufacturing (Sect. C) and financial and insurance activities (Sect. K). Only cities from Maharashtra figure in the top five ranks in Sect. K and this is not surprising. A limitation of this approach is that one cannot proffer similar explanations for the non-million urban areas of the states that appear in the rankings. Because data identifiers are unavailable in the unit level data released by the NSSO, we are unable to undertake the above analysis by size class of cities. However, our findings here need to be interpreted in conjunction with the pattern evident in Table 5.5.

5.5 Discussion

This chapter steers clear of the discussion that questions the official definition, in particular the employment criteria that serve to define an urban area. Given this definition, a slow rate of urbanisation was inevitable in an era of near jobless growth and stalled transition of workers from agriculture. The RNF employment transition that was expected did not materialise.

Over the period 1999–2000 to 2009–2010 we do not find any appreciable change in the WPR across size class of cities. In addition, we do not observe any discernible change in the distribution of type of work (self-employed, regular wage/salaried, casual labour) or in the distribution of male workers across primary, secondary and tertiary sectors. The share of male workers in the primary sector is highest in class 3 towns, whereas in class 1 cities the share of men engaged in the tertiary sector is the highest.

In the year 2009–2010, although class 2 and 3 towns accounted for 46.4 and 26.8 % of the population (age 15 and above), respectively and 46.1 and 27.3 % of the urban male workforce, we do not have a clear understanding of the employment dynamics because of the absence of rich data. The analysis based on the concentration of jobs could be interpreted as limited support for the conjecture that employment opportunities could continue to be centred on cities with one million plus populations. From a perspective of policy formulation, what emerges from the analysis is that initiatives aimed at the expansion of non-farm employment need to begin with an improved understanding of conduciveness of the urban employment pattern in the nearby areas. However, given the dispersed nature of CTs, an alternative view would be that small towns and villages, irrespective of whether they are in the vicinity of an urban agglomeration or not, could be engines of growth. In the absence of rich data, the conversation on where jobs can be created is

not necessarily going to be evidence-based. What we need is data that can help partially shed light on the role of localisation economies (arising from a geographical clustering of firms in the same industry), industrialisation economies (arising from an agglomeration of industries) and urbanisation economies (arising from an agglomeration of population and reduction in the cost of provision of basic services) in determining future growth trajectories.

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Chapter 6

Comparison of Peripheral Metropolitanisation in Haryana and Rajasthan, India

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6.1 Introduction

Over the past two decades, developing countries have urbanised rapidly. The number of people living in urban settlements has increased from about 1.5 billion in 1990 to 3.6 billion in 2011 (World Bank 2013). In India, the urban population has grown from 25.8 million in 1901 to 62.4 million in 1951 and to 377.1 million in 2011 (Census of India 2011). Although this growth is important in terms of absolute numbers, India's urban growth rate is not very high and some consider that the urbanisation process is not rapid enough despite continuous economic growth, especially since 1991, when new liberal policies based on foreign investments, free trade zones and special economic zones, to ensure integration in global value chains, were adopted.

Many authors, following the New Economic Geography paradigm, have argued that growth in India is often correlated to connectivity and proximity (location factor) and globalisation (understood as the economics of agglomeration) characterised by the expansion of existing city boundaries, in particular in the periphery of relatively large cities or along the urban corridors of non-metro cities (Vishwanath et al. 2013; World Bank 2009). Others, in contrast, argue that there is no absolute correlation between size and growth. What is obvious from the last Census is the role Census towns (CTs) have played in this growth. Their numbers have increased by 2532, an increase of 65 % since the last Census in 2001, and their population accounts for one-third of the urban growth. However, only 37 % of the new CTs are located within the buffer of large towns. The remaining new CTs are therefore located elsewhere (Pradhan 2013; Swerts 2017).

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Consequently, there are other multiple urbanisation processes, with their distinctive characteristics, at work beyond agglomeration and thus it is imperative to understand the location and emergence of these new CTs and, further, to understand their location in different states.

Second, one of the current trends of spatial urban growth in almost all Indian cities, particularly along the urban-rural fringe, occurs in an unplanned and uncontrolled manner, leading to change in the land use pattern along the highways and the loss of open green spaces and surface water bodies. Planned spatial expansion continues alongside this unplanned activity. Both planned and unplanned urban spread, often termed urban sprawl, have been measured using different methodologies (Sudhira et al. 2003; Cheng and Maser 2003; Rahman et al. 2011; Jiang et al. 2007; Punia and Singh 2012). Nevertheless, their common approach is to consider the behaviour of built-up areas and population density over the spatial and temporal changes taking place. The direct implication of such sprawl is change in the region's land use and land cover as it induces an increase in built-up, impervious surfaces and paved areas. The degree of urban sprawl is measured by quantifying the amount of the paved surface or the built-up area in a given region, obtained from the classification of remotely sensed data or other geospatial data sets at different dates.

Third, the pace of land consumed for urban purposes exceeds the rate of population growth. It raises concerns about the consumptive use of land. Seto et al. (2012) conceptualise a framework that explicitly links land changes to underlying urbanisation dynamics. Their paper does not precisely qualify the notion of urbanisation dynamics and focuses on explicating how urbanisation and land use change are two global processes that "although are tightly intertwined, the literature and analytical lenses to study them are largely developed separately" (Seto et al. 2012: 7687).

The manner in which these two processes intersect is important and can have different impacts. Thus, this chapter abides by this call for better linking for these two dimensions of land change and urbanisation. It relies on the study of urban transformation on the ground, with a focus on employment, and on the recourse to the discipline of remote sensing to extract built-up areas, used as a proxy for urban areas analysed in relation to the data from the Census of India and the recently published SECC data, which have never been used before. The focus is on the analysis of the location of the new CTs in 2011 in Haryana and Rajasthan, two states located in proximity to Delhi. The comparison of two states gives a strong indication on the evolving (or not) Indian urban structure and the potential differences across states. Further, it enables us to assess the relevance of the explanation for change provided by the NEG framework.

The chapter is organised into three main sections. After discussing the explanatory factors proposed by the New Economic Geography framework to explain population concentration, we look at the changes in Haryana (Sect. 6.2) and Rajasthan (Sect. 6.3). In each of these sections we conduct a macro analysis of the state urban system before looking at small micro studies to find how changes in employment structure shape the emergence of these towns.

6.2 CTs and New Economic Geography

This chapter starts with the common question raised by the research programme on small towns of which this chapter is one of the outcomes: Can the emergence of new CTs in 2011 be attributed to a spillover effect? It is related to the debate on the sources of growth. In other words, is the growth of small towns driven by endogenous or exogenous factors and, if both factors play a role, how do they combine? (Raman et al. 2015: 24) Inspired by a New Economic Geography framework, the World Bank Development Report on Reshaping Economic Geography, which draw examples and recommendations from and for India (World Bank 2009) suggests that connectivity, proximity and access to metropolitan cities are explanatory factors for the growth of small towns, which “are seen as recipients of trickle down effects or sites for the location of activities for which low cost and market expansion are important” (Raman et al. 2015: 20). In this assumption that small town dynamics are driven by the effects of metropolitan growth, there is little focus on the question of local innovation. Further, proximity is understood as dependence on the nearest cities, especially large cities, not considering the assumption that the tyranny of proximity may have declined (Pradhan 2013) or can even be detrimental to small town economies, as shown by De Bercegol in this volume. In the NEG approach, accessibility is a key central concept and increased connectivity allows firms located in large agglomerations to benefit from minimal or almost no transportation costs (see Fujita et al. 1999; Krugman 1991; Baldwin 2001). Settlements are then transformed through the push provided by connectivity incentives, driven by public interventions, land regulation, industrial investments, real estate and construction activities.

In the case of India, as mentioned earlier, the focus on expansion around large metropolitan cities has underlined the role of connectivity and proximity to large cities (Vishwanath et al. 2013; World Bank 2009; Lall and Chakravorty 2005) and has also indicated how land regulation and land markets act as a constraint to faster economic growth (Chakravorty 2013). However, CTs are also one of the sites where this increased concentration of population occurs and, as Pradhan shows, around 7.8 million people living in the new CTs are in proximity to a large town, although twice this number (15.4 million) do not live in proximity to large towns. Bhagat (2011) estimates that 44 % of the urban growth between 2001 and 2011 is natural growth, and the remaining 56 % results from net reclassification, expansion of boundaries and migration. Consequently, the study of the location of these new CTs at the state or regional level is a pertinent tool to attempt to test the new economic geography framework and to understand the changing urban structure. Indeed, according to the Census definition, apart from a population and a density criteria (more than 5000 people and density above 400 persons per square metre), 75 % of the male population needs to be engaged in non-farm employment for a locality to be declared a CT. Consequently, CTs would be sites of new activities. In

this context, this study attempts to do two important things: on the one hand, locate CTs and study land use change in the two selected states and, on the other, conduct a micro study in order to discover the existing employment dynamics.

6.3 Research Methodology

We have devised a multi-approach methodology based on the use of different tools and sets of data. First of all, remote sensing provides spatially consistent image information and is an important instrument for providing information on urban land use land cover characteristics and their changes over time at various spatial and temporal scales (Herold et al. 2003; Weng 2012). Urban land use and land cover changes are linked to socio-economic activities (Lambin et al. 2003; Avelar et al. 2009). Therefore, it is essential to combine remote sensing-derived parameters with socio-economic parameters to analyse the spatial-temporal changes of urban growth. Consequently, we used remote sensing data sets to investigate the spatial and temporal dynamics of urban growth at the regional scale for the state of Haryana. This specific analysis is not carried out in the case of Rajasthan because, of the 29 class 1 towns, 3 have a population of one million plus and the remainder do not reflect major changes in their peripheries in terms of new CTs, which was our interest in the case of Haryana. We have relied on remote sensing imagery for 2005 and 2011. Besides, to capture decadal urban population growth, we used the Census of India Primary Census Abstract data from 1961 to 2011. First, we used the decision tree approach (Punia et al. 2011) using AWiFS data sets for 2005 at the state level and the supervised classification method used for 2011 for Landsat TM data sets for non-metro class 1 cities of Haryana to produce land use maps. Next, we combined the land use and land cover maps of 2005 and 2011 to analyse the urban growth beyond city boundaries and to establish whether there is any relationship between land use change and location of new CTs. Finally, we compared land cover changes in terms of built-up areas and urban population growth.

Second, to map and locate urban growth, we used two sets of data. The first, as mentioned above, is the Census of 2011 which provides the numbers of CTs and enables a comparison between 2001 and 2011. The second is the Socio-Economic Caste Census conducted for the very first time at the household level by the Census of India (SECC 2011) along with the national Census. According to the types of settlement, urban or rural, a different questionnaire was administered. In the rural questionnaire a larger set of questions dealt with agricultural activities and land-holdings and in the urban questionnaire there was a stronger focus on non-farming activities. As our empirical results clearly show, there is a mismatch between the SECC and the Census data which needs to be explained at the outset. The SECC did administer the urban questionnaire in some areas still classified as rural as per the Census and vice versa, leading, as we demonstrate later, to another layer of differences in defining what is urban. This is a very important point because the rise of CTs has already been seen as a measure of increased urbanisation but, as per our

Table 6.1 Sample characteristics for micro study

City	Haryana			Rajasthan
	Gurgaon			Jaipur
Locality	Gurgaon Ward No. 34 (urban)	GarhiHarsaru Town (fringe)	Dhankot (rural)	Jamwaramgarh (CT)
Households	600 (56.92 % of total HH)	624 (40.54 % of HH)	229 (24.7 % of HH)	202 (16 % of HH)
Sample population	826	2477	499	1114

Source SECC (2011), Primary Survey of Jamwaramgarh, 2012

Note For Haryana we selected municipal corporation ward number 34 in the central part of Gurgaon city, the town of GarhiHarsaru on the north western fringe and the village of Dhankot around 5 km to the north of Gurgaon. In Rajasthan, JamwaRamgarh is one of the new CTs of Jaipur district. It is about 25 km to the north east of Jaipur city on state Highway-55 connection to Aandhi village. It is also a sub district (tehsil) headquarter consisting of 43 panchayats

knowledge, no research has begun so far to explore the SECC data sets. Indeed, this data set had only recently been released and was only available for the state of Haryana, which explains some differences in our analysis between Haryana and Rajasthan.

Third, as the emergence of CTs is linked to a rise in non-farm employment, we attempted to look, at the micro level, at the distribution of activities in two areas, Gurgaon and its surroundings in Haryana and Jamwaramgarh (CT) next to Jaipur. Despite these locations being either large cities (such as Gurgaon) or close to large cities, we made the hypothesis that they would still be an entry point to understand some of the rural-urban continuum characteristics. In the case of Haryana, we rely on the socio economic caste Census data (SECC 2011) whereas in Rajasthan we rely on primary data collected in 2012 (see Table 6.1).

6.4 Urbanisation Trends in Haryana and Rajasthan

The level of urbanisation in India was just 11 % in the year 1901 and had risen to 31.2 % by the 2011 Census. It was 25.7 % in 1991 when the country's economy opened up towards globalisation after the new economic reforms. Although they have witnessed different paces of urbanisation, Haryana and Rajasthan are two states in which some districts come under the National Capital Region. The state of Haryana has experienced a high rate of urbanisation owing to migration and rural push factors whereas the same does not appear to be true in the case of Rajasthan. In 2001 about 29 % of Haryana's population was urban, and this figure had increased to about 35 % in 2011 (Census of India 2011). During the period from 1991 to 2001 the decennial urban growth rate was about 51 % but it fell to 44 % between 2001 and 2011. In the last decade the main difference between both these states has been that in Haryana, 67.3 % of new CTs are located in proximity to a large town

whereas this percentage is only 18.6 % in Rajasthan. This apparent contrast needs to be further clarified empirically as well as from a more theoretical perspective to reveal the diverse dynamics at work.

Haryana has some very urbanised districts but during the decade from 2001 to 2011 the increase in urban population across the districts of the state shows different trends. Faridabad and Gurgaon, both located in the south of Delhi, have about 80 and 69 % of urban population respectively. Faridabad is the only one million plus city of the state (1.4 million population) followed by Gurgaon with 0.8 million people; the latter registered the highest percentage of increase in urban population (182 %) between 2001 and 2011. Gurgaon is the most thriving location south of Delhi and the starting point of the automobile corridor that also includes the district of Rewari, which grew at a rate of 70 % in the last decade. Other urbanised districts are Panchkula (55 %), Panipat (46 %), Ambala (44 %) and Rohtak (42 %). In the whole of Haryana, there were 20 class 1 cities (above 100,000 people) with Rohtak, Hissar and Panipat having a population ranging from 290,000 to 370,000 people.

Interestingly, Rajasthan was more urbanised than the national average and Haryana till the 1951 Census. However it did not grow as fast as Haryana, which benefitted from its proximity to Delhi and the development of industrial corridors. As a result, in 1981 the state level of urbanisation went down to the national average and was the same as that of the neighbouring state of Haryana. As per the 2011 Census, around one-quarter of the state's population lives in its urban areas. In fact, during last 30 years the urbanisation level of Rajasthan has only increased by 3.85 % (Table 6.2). Rajasthan reported 29 class 1 cities in the year 2011 and the state has seen over 10 class 1 towns emerge over the last 10 years. Jaipur is the largest city and the state capital with three million people. Jodhpur and Kota also became one million plus cities during this period. Kota emerged as the most urbanised district of the state, with more than 60 % of its population living in urban areas, thanks to its role as an educational hub. Jaipur district has a level of urbanisation higher than 50 %. Ajmer, Jodhpur and Bikaner are other districts where more than one-third of the population is urbanised.

Table 6.2 Level of urbanisation in India, Haryana and Rajasthan

Percent of urban population to total population	1901	1951	1981	1991	2001	2011	Decennial urban growth rate 1991–2001	Decennial urban growth rate 2001–2011
India	11.0	17.6	23.7	25.7	27.8	31.2	32.6	31.8
Haryana	12.42	17.07	21.88	24.63	28.92	34.79	50.8	44.3
Rajasthan	15.06	18.50	21.05	22.9	23.39	24.89	31.3	29.3

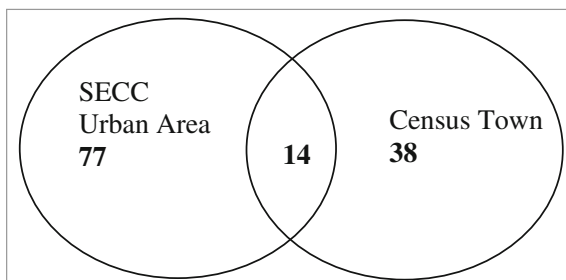
Source Census of India, various issues

Regarding the emergent urbanisation around CTs, the release of urbanisation figures from the 2011 Census has provoked several reactions. It has been noted that for the first time the absolute growth in urban population (91 million) is more than its rural counterpart (90.5 million) and there is a rise in the urban growth rate after two decades of decline. However, the major surprise was the number of CTs that increased from 1362 to 3894, fuelling the discussion on denied or subaltern forms of urbanisation. In terms of their regional distribution, some densely populated states such as West Bengal and Kerala saw the emergence of 525 and 362 new CTs, respectively, between 2001 and 2011, and this has led to a specific focus on these two states. However, the number of CTs also increased in Haryana and in Rajasthan. The increase was significant in Haryana where there were 22 CTs in 2001 and 74 in 2011. In Rajasthan as well, the Census declared 74 new CTs, taking the total to 112 CTs in 2011. By looking at these two states we are attempting to expand our knowledge of regional patterns of emergence of CTs.

6.4.1 Location and Emergence of CTs in Haryana

The analysis of where CTs are located in Haryana opens up an interesting puzzle as to the definition of urbanisation. On the one hand, the Census declared an additional 52 CTs, which are represented in Fig. 6.2b. On the other hand, the SECC, conducted along with the Census, administered its urban questionnaire in 91 new urban settlements that emerged between 2001 and 2011. According to the SECC, in most cases the villages at the periphery of towns have been converted into or reclassified as towns. There is therefore a mismatch between the urban as understood by the Census and the urban as understood by the SECC data and this would require further investigation.¹ For instance, as can be seen in Table 6.3, whereas the Census of India (2011) officially reported only 52 new CTs for the whole of Haryana, in the sole district of Yamunanagar the SECC counted 38 settlements as urban, with only one of them appearing as such on both surveys. In contrast, in the Sonapat district, for instance, three CTs (Fazalpur, Bayanpur and BadhMalak) were administered the rural questionnaire by the SECC and the three CTs around the periphery of Dharuhera on NH-8 and three CTs (Badshapur, Bhondsi and GarhiHarsaru) around Gurgaon continued to be treated as rural by the SECC (see Table 6.3) (Fig. 6.1).

¹At this stage it is too early to state the reasons why the SECC administered the urban questionnaire in areas declared as rural by the Census of India and vice versa for some urban areas (e.g. the Census 2011 declared Garhi Harsaru a CT, whereas the rural questionnaire was administered here). An interesting hypothesis which would need to be probed further is that the gap between the Census and the SECC classification might reflect the existing dynamics between 2001 and 2011 and that the settlements seen as urban by the SECC are to be declared CTs in the next Census in 2021. However, this could be because of the multiplicity of institutions involved in the survey, especially state governments who rolled out the urban questionnaire taking aspects of local governance into consideration.

Fig. 6.1 Mismatch between CTs and SECC urban areas**Table 6.3** New towns in 2011 in Haryana as defined by the Census of India and the SECC survey

S. no	Name of new towns	No. of new towns	Periphery of class 1 city
1	Boh*, Dhulkot , Jandli*, Kalarheri , Khojkipur , KhudaKhurd , Machhonda , Naggal , Nanhera*, Rampur , Rattangarh , Salarheri , Sonda , Tundla*	14	Ambala
#	KakkarMajra, Majra, Boh, Tundla, Jandli, Kanwla, Saha, Barara	8	
2	Gangwa*, SatrodKhas*, SatrodKhurd*, SatrodKalan*	4	Hisar
#	Mayyer	1	
3	Baldhi, BudhaKhera, Daha, Depot, Jhanjhari, Kailash, KambohPura, Karnal (Rural), Makrampur, Mangalpur, Nissing, Phusgarh, Saidpura, Uchana, ZarifaWiran	15	Karnal
4	Hassanpur	1	Palwal
#	Baghola, Palwal Rural	2	
5	Azizullapur, Kachrauli*, UgraKheri*, Nizampur, PanipatTaraf Afghan, Bachhra, Sarai Pilghan, Sikanderpur*, SimlaMolana, Sondhapur, etc.	11	Panipat
#	Kabri, Sec 11 and 12, UgraKheri, KheriNangal	4	
6	Bohar, GarhiBohar, Jalalpur, Kanheli, KheriSadh, Sunari Kalan*, SunariKhurd	7	Rohtak
7	HMT Pinjore*	1	Panchkula
#	ChandiMandir, BirGhaghar, Ramgarh	3	

(continued)

Table 6.3 (continued)

S. no	Name of new towns	No. of new towns	Periphery of class 1 city
8	Aurangabad, BadhiMajra*, BhagwanGarh, Bhatauli, BhutMajra, Buria, BuriaJagir, BuriaSarkar, Chaneti, Darwa, Daulatpur, Gadhauli, GarhiBanjaran, GarhiGujran, Gobindpur, Ishopur, Jampur, Jarauda, Jorian, Juarin, Kami Majra, KheriRangran, Mukaribpur, Manakpur, Khera, Mandebbar, Mandebari, Madhubala, Mumidi, Nabh, Pansara, Patasgarh, Raipur, Ratauli, Shadipur, Tejekpur, Tejli, Tellipura, Udhamgarh	38	Yamunanagar
9 #	Bhakali, Aakera, GhatalMahaniawas, Maheshari, Rampura, Manethi	6	Rewari
10 #	Ismailabad	1	Kurukshetra
11 #	Bhuran	1	Jind
12 #	Badshahpur, Bhondsi, GarhiHarsaru	3	Gurgaon
13 #	Fazalpur, Bayanpur, BadhMalak	3	Sonipat
14 #	Faizabad	1	Jhajjar
15 #	Salamba, Pingwan, Nagina, Khori Kalan	4	Mewat
16 #	Piala	1	Faridabad
Total	CTs as Census of India (2011)	52	Haryana
	Urban areas as SECC (2011)	91	

Source Provisional SECC (2011) and Census of India (2011)

Note

1. Settlements classified as urban both by the Census and the SECC survey are marked with *
2. Settlements classified as CTs but not classified as urban by the SECC are marked with #
3. Settlements classified as urban by the SECC but not by the Census of India are indicated in bold

This emergence of small urban centres as per the SECC survey is represented in Fig. 6.2a. Further, we have attempted to analyse the spatial distribution of new CTs in Haryana along with the spread of the built-up area across city boundaries and in the surrounding hinterland, using the Geographic Information System environment. To corroborate this, data from the National Remote Sensing Center (NRSC 2012) initiative on land use and land cover change was analysed using AWiFS data of 56 m spatial resolution, showing that the built-up area proxy for settlements in Haryana increased by 1.25 lakh hectares (1500 km²) between 2004–2005 and 2011–2012. In other words, there is a significant transformation of land for urban uses in non-metros and along their rural fringes. This huge spatial expansion in built-up areas signified a loss of fertile agricultural land and an increase in urban activity. What drives this rapid increase of urban activity could be connectivity and the proximity to a major metropolitan region, the location of new enterprises or real estate and construction activities, in peripheries where the land rents in larger cities are high.

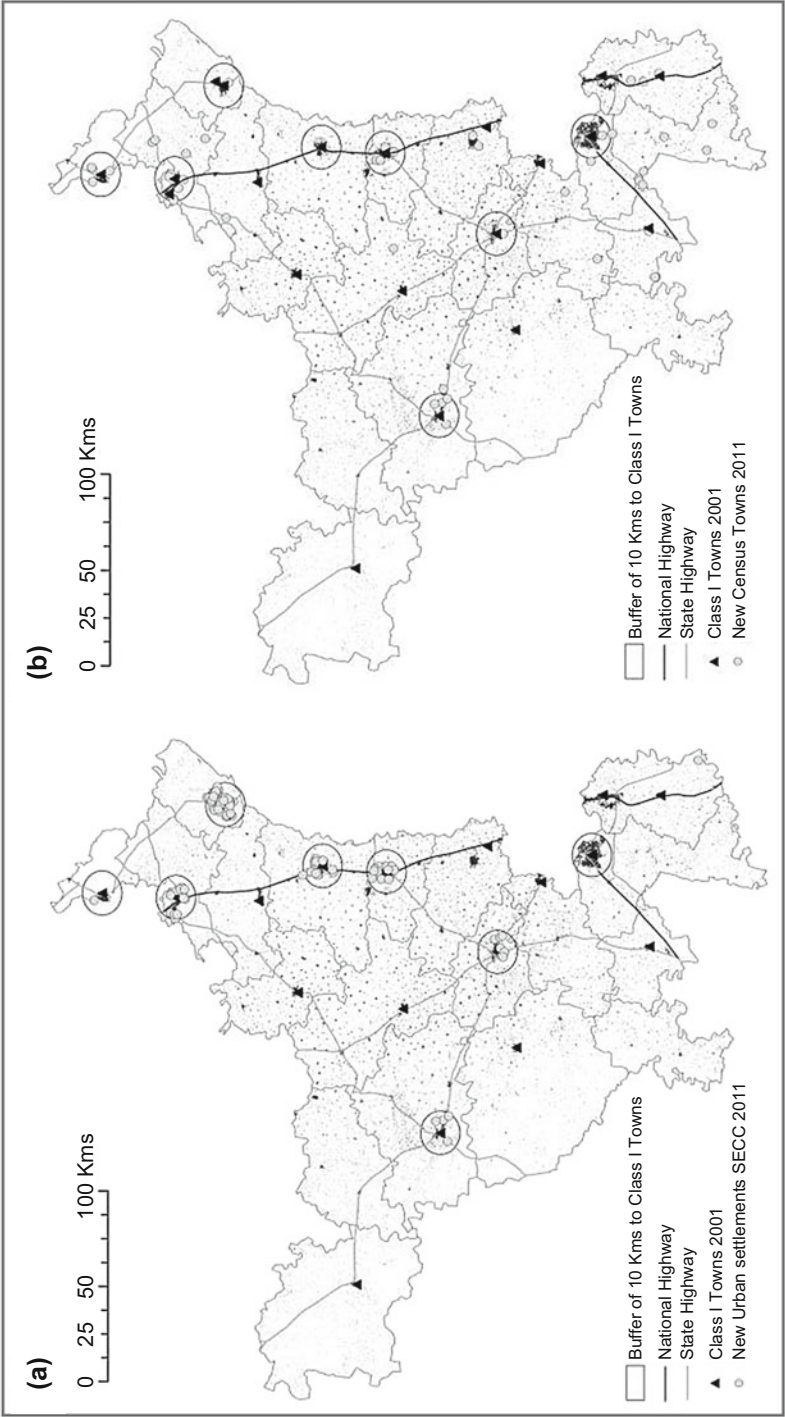


Fig. 6.2 a New urban settlements in Haryana reported in SECC (2011). b New CTs, 2011 around peripheries of class 1 towns

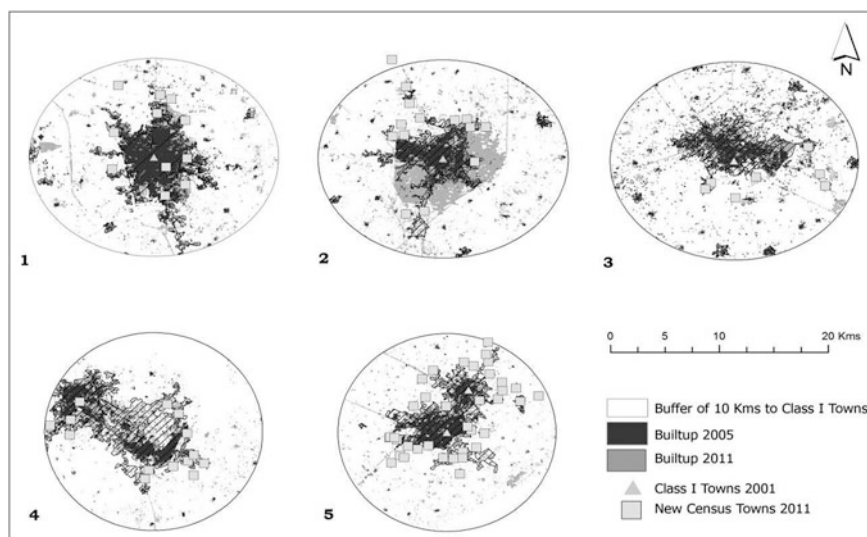


Fig. 6.3 Growth around peripheries of class 1 towns. 1 Panipat. 2 Karnal. 3 Rohtak. 4 Ambala. 5 Yamunanagar

6.4.2 Existing Dynamics in Haryana

Although this is not the main focus of this chapter, we can begin to provide some explanatory factors for the rapid changes occurring in Haryana. This highlights the diversity at work but reveals a common process of concentration (see Fig. 6.3).

The twin cities Yumananagar–Jagadhri form an important industrial town with metal, utensil and timber-based industries. The city produces sugar machinery, paper machinery and highly efficient equipment for petrochemical plants, which are shipped to various refineries across the country. One of India's largest railway carriage and wagon repair workshops is also located here. In addition, Reliance Industries has installed a thermal power plant in the town. Indeed, 38 new settlements (SECC + Census; see Table 6.3), the highest figure for Haryana, are reported from the Yumananagar–Jagadhri peripheral region. This includes Mandebal, Bhutmajra, Jampur, Aurangabad and Ishopur in the south, Bhatauli and Daulatpur in the west, Manakpur and Mukaribpura in the north and Chaneti, GarhiBanjaran, Bhagwanpur, PadhiMajra, Buria, Buria Sarkar, BuriaJangir, Mumidi and GarhiGurjan in the east. The major investment areas are located in the north. Some of the companies that have invested in Manakpur are Haryana State Industrial & Infrastructure Development Corporation Ltd, Vardhman Strips Private Limited, Kirtiman Cements and Packaging Industries Limited, Prakash Alloy, VAGS Industries and numerous small-scale enterprises involved in the timber business. There is also an industrial cluster in Manakpur with firms such as Pragati High Tech, Vijayvallbh Alloys, D.S Metal, Indo International, Shree Balaji Aluminum,

Raj Narain Enterprise, Atul Metals, D.S Metals, GVR International, Subha Metal Industrial, Oberoi Metals and Adishwar Metal Alloys. In the east, investment includes a thermal power plant in PadhiMajra and an educational and institutional area in Buria. The reclassification of Manakpur, Mukarabpur and Chaneti villages into CTs is embedded in the firms that moved into these rural locations in the peripheries. These industries and many others are adding to local economic activity and all this is transforming rural areas into new CTs.

In Karnal, major land transformation is driven by the private real estate sector as we can see from the projects involving Ansal and Sushant city in Kambohpora, which are developing institutional, educational and commercial activity around the city. The area has also seen important industrial development and, apart from cold stores and rice shellers, there are manufacturing plants for agricultural implements, shoe-making, chemicals, welding, electric rods, saw mills, cardboard industries, electric motors and rice husking. A number of national institutions are located in the area including The National Dairy Research Institute, The Regional Wheat Research Centre, The Indian Agriculture Research Institute, The Regional Centre of Indira Gandhi National Open University and Haryana Agriculture University, The Central Soil Salinity Research Institute and The Sugarcane Breeding Regional Research Centre. For all these reasons, the town is growing steadily, both in terms of population and size. New CTs such as Baldi, BudhaKhera, Jhanjhari, Makrampur, Uchana and Zarifawiran are located to the north of Karnal along the highway. Here the major investment is in real estate with developments such as the Alpha International housing project in Baldi, the new institutional area near the airport in Buddha Khera and educational, commercial and entertainment facilities in Jhanjhari. Similarly, some of the new CTs have more or less become part of Karnal city peripheral areas: Daha and Kambohpora in the south, Mangalpur, Phoosgarh and Nissing in the east and Saidpur behind the railway station in the west.

Panipat is famous for handloom products, carpets and blankets. There are also several heavy industries of national importance located in this town: the Indian Oil Corporation Limited refinery, one of Haryana Power Generation Corporation Limited's power plants, a urea manufacturing facility belonging to National Fertilizers Limited and a sugar mill and distillery set up by Panipat Co-operative Sugar Mills. Ten new CTs were reported in Panipat's peripheral region. The possible drivers of change north of the city along the national highway are real estate builders (Ansal Sushant city, Parsvnath Paliwal city), demand from agro processing industries such as rice and wheat flourmills and government cooperatives for housing projects [Haryana Urban Development Authority (HUDA)]. The new towns that have emerged in the north are Azizulpur, Kachrauli, Bachhra Sari, SimlaMolana and Nizampur. Similarly, Panipat city is sprawling southwards to include Sarai Pilghan again along the NH-1, westwards towards Milk Ngrakheri on the Sonali road, and towards Sikanderpur and Sondhapur and eastwards to include PanipatTaraf Afghan's HUDA industrial area. Interestingly, three villages—Mullana, Shimla and Nizampur—boycotted the 2013 municipal elections and demanded their exclusion from the ambit of Panipat Municipal Corporation, preferring to retain their status as panchayats. This choice underlined that, beyond the

process of urbanisation, there are struggles over the status of settlements as the classification necessarily involves a cost-benefit trade off. Some settlements prefer not to be statutory towns in order to avoid urban taxation (Bhagat 2011) or more stringent urban regulations (Denis et al. 2012).

Finally, the results of growth statistics for five centres of these class 1 towns, including the three described above in detail, reveal that the rate of land development has outstripped the rate of population growth for all these cities. From 2005 to 2011, Karnal registered the highest increase in population (16.9 %) with an annual growth rate of 2.6 %, and the land developed increased by 173.4 % with an annual growth rate of 18.25 %, which was much higher than the rate of population growth. Yamunanagar has witnessed the highest increase of built-up area and its growth rate is 22.15 % per year (refer Table 6.4). This implies that the land is being used for urbanisation at a much faster rate, which further indicates that the per capita consumption of land has increased very rapidly over the last 6 years.²

This entire phenomenon represents the shifting of real estate towards the non-million plus cities, with a development of the manufacturing and service sectors as well as increased infrastructure such as roads. This expansion, which is accompanied by a series of negative outcomes, such as the loss of fertile land, as mentioned above, has also provided some urban amenities and linkages to the surrounding rural areas and this probably explains their transition into CTs.

The above hypothesis is further reinforced by the rural transformation in the periphery of these cities. Rural areas or villages close to existing class 1 city transform faster in terms of criteria for becoming a CT. All the new CTs in Haryana, without any exception, are concentrated within a 10 km radius of class 1 towns, this emphasises the feedback mechanism of surrounding villages for socio-economic reasons (for marketing their products, education, health, banking, etc.).

6.4.3 *Employment and Census Towns*

As one of the main criteria for the definition of CTs concerns the level of male non-farm employment, we discuss below the patterns of occupation in three areas. One location is municipal ward No. 34 of Gurgaon, the second, is GarhiHarsaru a small town in the north of Gurgaon, and the third, a neighbouring village, Dhankot,

²The per capita land consumption refers to the utilisation of all lands for development initiatives such as commercial, industrial, educational, recreational and residential establishments per person.

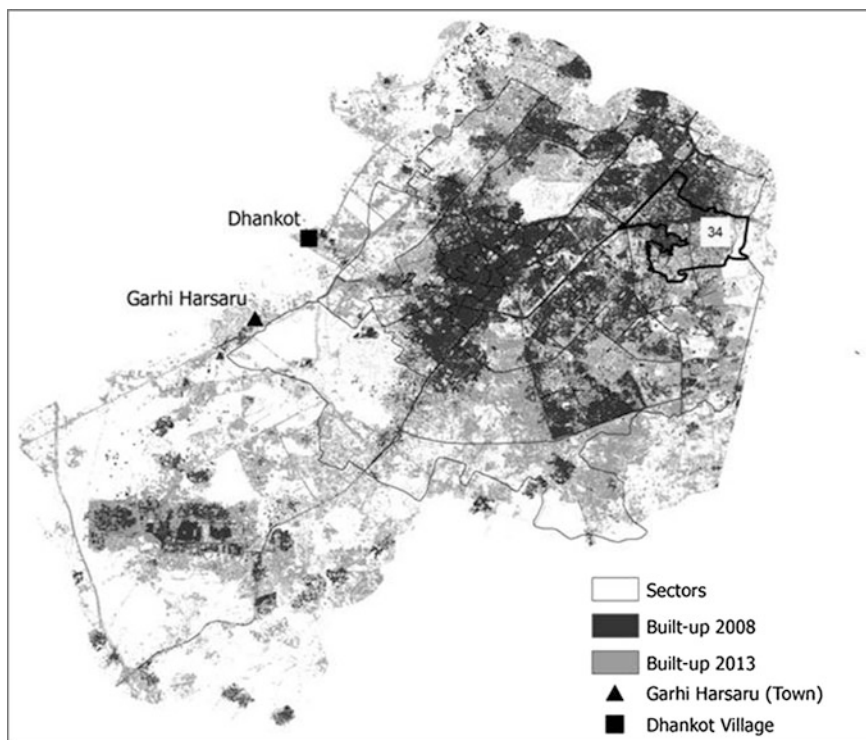


Fig. 6.4 Gurgaon land use change 2008–2013

about 8 km from Gurgaon. As seen in Fig. 6.4, these three settlements are located close to each other in an area undergoing rapid transformation in terms of increased built-up area and change of land use. Even though, Gurgaon cannot be considered to be a small town, we make the assumption that an analysis of the social and economic dynamics would enable us to understand better the rural urban continuum. We use the socio economic caste Census (SECC) data of 2011 (see Fig. 6.4), which provides detailed family and occupational details for each member of a household. We have aggregated the data to create a household and an individual level. Data on housing clearly indicates that households in the inner part of Gurgaon have better facilities with a larger number of households having four and five rooms as compared to GarhiHarsaru and Dhankot. A similar observation can be made with regard to the data on equipment: the proportion of households having refrigeration appliances is 88.3 (Gurgaon), 38.2 (GarhiHasaru) and 56.6 % (Dhankot) across the urban-rural continuum (Fig. 6.4).

In terms of education, the percentage of illiterate people is very high in the village of Dhankot (33 %) as compared to GarhiHarsaru and Gurgaon, but this difference is much less striking when we look at the university graduation level.

This might have various implications with regard to employment.³ For instance, in the village of Dhankot, the percentage of dependents and people working as labourers is higher than in GarhiHasaru and Gurgaon although it has more people who are still engaged in farming. The number of people engaged in a regular salaried job in the private sector is marginal in Dhankot and highest in Gurgaon, which is coherent with the tertiary activities that dominate the city of Gurgaon (Table 6.5). In contrast, what is remarkable is the proximity of GarhiHasaru to Gurgaon, indicating that this small town is most probably on the verge of being engulfed by the Gurgaon economy. GarhiHasaru is very similar to Gurgaon in terms of salaried employees but has a larger percentage of students and private enterprises, which can indicate that it is cheaper to reside and to start small businesses in GarhiHasaru than in Gurgaon.

The data for Haryana presented above essentially reveals that the definition of urban in the state lacks clarity, growth here is largely driven by vast industrial, institutional and real estate investment as well as improved connectivity and infrastructure and all the CTs that emerged during the last Census were located in close proximity to class 1 towns.

6.5 Urbanisation Trends in Rajasthan

We turn our attention now to the neighbouring state of Rajasthan. As mentioned earlier, 74 new CTs were identified in the 2011 Census. The number of CTs rose from 38 in 2001 to 112 in 2011.

6.5.1 *Location of New CTs*

As was the case in Haryana, we are interested in understanding the location pattern of these towns and verifying whether they are uniformly represented across space or whether there is a phenomenon of metropolitanisation of second tier cities. We raise this question because, during the decade 2001–2011, at least 10 towns (Sujargarh, Bhiwadi, Dhaulpur, Hindaun, Gangapur City, Nagaur, Bundi, Banswara, Chittaurgarh and Baran) passed the 100,000 population mark, adding to the 19 CTs identified in 2001. Of these, Bhiwadi (220 %) and Baran (50 %) registered the highest population growth between 2001 and 2011.

When we look carefully at the emergence of these CTs, we notice that they are unevenly located in terms of their proximity to class 1 towns. The majority of these class 1 towns, namely Bikaner, Churu, Hanumangarh, Jhunjhunu, SawaiMadhopur,

³As the rate of women workforce participation is very low across all age groups and all settlements, we do not expand on it.

Table 6.4 Growth in population and built-up area of non-metro towns in Haryana

City	Population in 000			Rate of growth (AEGR)	Built-up (km ²)		Absolute increase	Rate of growth (CAGR)	Increase in population (%) (2005–2011)	Increase in built-up area (%) (2005–2011)
	2001	2005	2011		2005	2011				
Yamunanagar	291.0	310.2	341.5	1.60	11.68	38.8	27.12	22.15	10.1	232.2
Panipat	268.9	278.7	294.2	0.90	47.32	52.07	4.75	1.61	5.5	10.0
Karnal	221.2	245.5	287.0	2.60	26.98	73.77	46.79	18.25	16.9	173.4
Ambala	245.8	266.4	300.5	2.01	34.75	46.53	11.78	4.99	12.8	33.9
Rohtak	294.6	323.8	373.1	2.36	35.45	60.62	25.17	9.35	15.2	71.0

Source Census 2001 and 2011 and built-up area from AWiFS of 2005 and Landsat TM of 2011

Table 6.5 Pattern of employment across the urban-rural continuum

Employment	Garhi Harsaru	Dhankot	Gurgaon	Total	Garhi Harsaru	Dhankot	Gurgaon	Total
Business	0	0	5	5	0.0	0.0	0.6	0.2
Dependent	95	134	66	295	5.2	27.6	8.1	9.5
Driver	11	3	5	19	0.6	0.6	0.6	0.6
Farmer	42	16	13	71	2.3	3.3	1.6	2.3
Home-based	526	131	228	885	29.0	27.0	27.9	28.4
Labour	211	75	71	357	11.6	15.5	8.7	11.4
Mechanic	2	10	0	12	0.1	2.1	0.0	0.4
Others	2	0	1	3	0.1	0.0	0.1	0.1
Pension/remittance	45	8	22	75	2.5	1.6	2.7	2.4
Professional	6	0	1	7	0.3	0.0	0.1	0.2
Regular salaried government	39	7	17	63	2.1	1.4	2.1	2.0
Regular salaried private	195	19	91	305	10.7	3.9	11.1	9.8
Self-enterprise	64	10	1	75	3.5	2.1	0.1	2.4
Student	576	72	285	933	31.8	14.8	34.8	29.9
Transport	0	0	12	12	0.0	0.0	1.5	0.4
Total	1814	485	818	3117	100.0	100.0	100.0	100.0

Source SECC (2011)

Sikar, Pali, Beavar, Kishangarh, Tonk and Bhilwara, have not seen the emergence of CTs in their suburban localities (within a radius of 10 km), although three CTs have emerged within a periphery of 10 km around Udaipur city and Alwar (Table 6.4). Jaipur and Jhunjhunu have reported two CTs within a periphery of 10–20 km. Kota, Bhilwara and Ganganagar reported one town each. As we know, physical factors play a significant role in the growth of settlements and the two states of Haryana and Rajasthan vary in terms of agro-climatic factors. Hence the lower density of population and Rajasthan's arid and semi-arid climate became determinants when looking into the growth of CTs beyond the periphery of 10 km (Table 6.6).

6.5.2 Rural-Urban Interactions: A Case Study of Jamwa Ramgarh

Jaipur is Rajasthan's metropolitan capital city with a population of over 30 lakh. Figure 6.6 gives an idea of the emergence of CTs between 2001 and 2011 around the 10 and 20 km buffer zones. At least eight new CTs have emerged around Jaipur since 1991. Two new CTs, namely Kanota and Bagrana, emerged in the last decade, whereas only one settlement within the periphery of 10 km i.e. Akedadoongar, acquired the status of CT during this period.

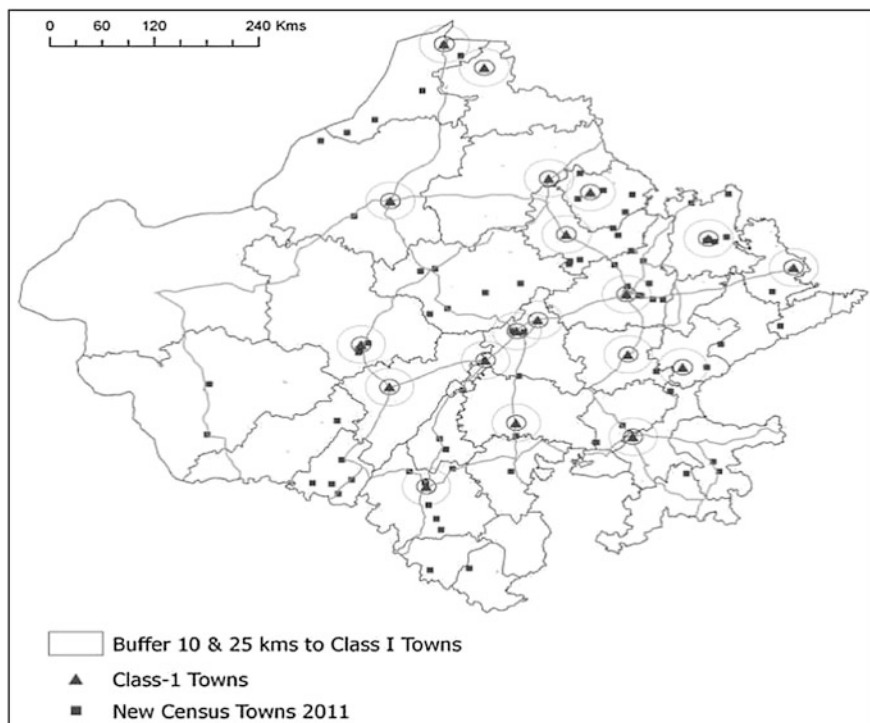


Fig. 6.5 New CTs in Rajasthan around peripheries of class 1 towns

However, we decided to study Jamwa Ramagarh, a settlement beyond the 20 km buffer zone, because of its location in proximity to the boundary of the Jaipur Development Authority and to the state highway. As in the case of Haryana, we focus mainly on the changing employment structure to investigate the reality (or not) of a polarisation process. Jamwa Ramagarh was predominantly a tribal village, but caste composition has become more heterogeneous with migration from surrounding villages.

Jamwa Ramagarh became a CT in 2011 with a decadal growth rate of 15.4 %; the village has witnessed an absolute growth of 1000 people and now accommodates around 1300 households. In 1961 the village had a density of just 100 people per square kilometre, a population of around 4000 with about 38 % of male workers employed in non-farming sector jobs. By the year 1971 the village had registered a significant population growth of about 1500 persons, and crossed the benchmark of a population of 5000, one of the criteria for becoming a CT. However, the percentage of non-farm male workers had barely changed. From 1971 to 1981, the percentage of non-farm male workers increased to 51 % and then to 68 % by the year 1991. In the 2001 Census, with 73.4 % male workers engaged in non-farm

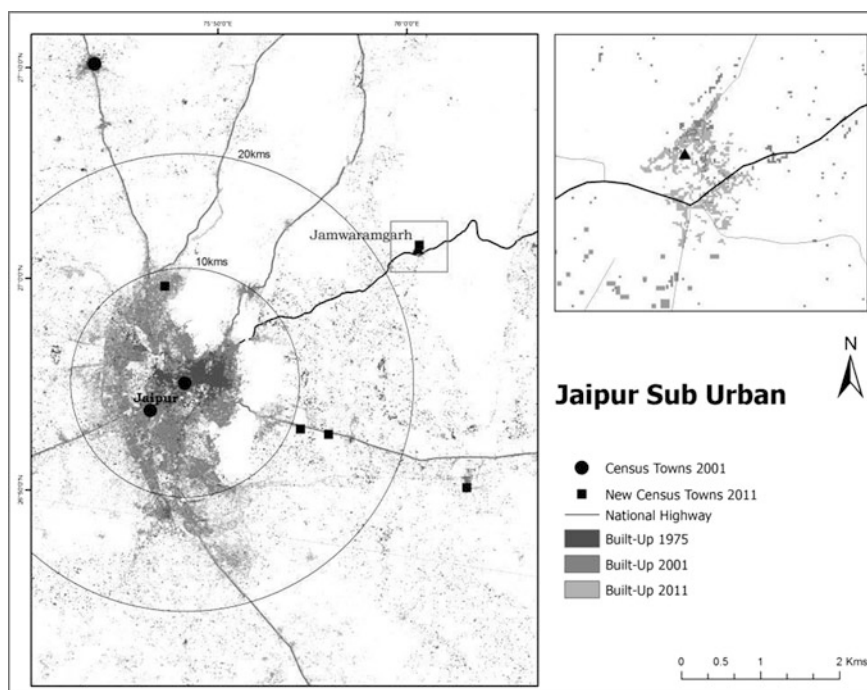


Fig. 6.6 New CTs in Jaipur Sub Urban

employment, it did not fulfil the criterion to become a CT. This transition occurred in 2011 with over 86.38 % male workers employed in the non-farming sector.

In what concerns the employment transition effects on this pattern, we rely on Census data that provide information regarding the total number of workers (main and marginal workers). The shift in the occupation distribution of workers into four categories that occurred between 2001–2011 shows that non-farming sector employment had increased rapidly (above 80 % for male workers as compared to 62 % in 2001) with a significant increase in the numbers employed in the household manufacturing sector (from 2.8 to 9.4 %) and a sharp decline in the number of people employed as agricultural labourers. Further, the proportion of women as main cultivators is higher than for males and agriculture does not seem to provide work for long periods of time. Less than 1 % of main workers were reported as agricultural labourers. With regard to the marginal agricultural labourer category, it showed an engagement of 8 %, with a significant gender bias towards male workers. Availability of work among the marginal workers had been further clubbed into two groups on the basis of duration of work. Around three-quarters of marginal workers declared themselves employed for 3–6 months during the enumeration year. In the case of male marginal workers, this figure rises to 86 %. Around one-third of female marginal workers were declared as employed for up to 3 months in the marginal worker category (Fig. 6.7).

Table 6.6 Emergence of new towns in 2011 in Rajasthan

S. no	Name of new towns		No. of new towns	Periphery of class 1 city
	Within 10 km	10–20 km		
1	Diwakari, Desoola, Bhoogar	Ramagarh	4	Alwar
2	Akedodoongar	Bagrana, Kanota	3	Jaipur
3	Badlya, BorajKazipura		2	Ajmer
4		Talera	1	Kota
5	Bargaon, BedlaKhurd, Bedla		3	Udaipur
6	Nandri, KuriBhagtasani	Sangariya	3	Jodhpur
7		Nooran, Islampur	2	Jhunjhenu
8		Hameergarh	1	Bhilwara
9		8 LLG (Lalgarh)	1	Ganganagar

Source Census 2011

Note In the case of Rajasthan, SECC was not available in the public domain for validation

To understand these dynamics better, a survey was conducted in December 2012 as part of a village study. A total number of 202 households were selected on the basis of a house listing that included the entire village, describing the individual traits of over 1200 persons.

The workforce participation rate (WPR) for all age groups was found to be 30 %. When it is further segregated into different social groups, the scheduled tribes (STs) reported the highest level of participation (36.3 %) followed by others (34.9 %). Scheduled castes (SCs) and other backward castes (OBCs) registered a low WPR of 28.7 and 28.8 %, respectively. What we also see from the survey is that the WPR is as high as 46 % for the 15–59 age group or the working age group. Age and gender clearly have an impact on the WPR. Females have a much lower WPR than males. Similarly, young people in the 15–29 age group have a much lower WPR than the adult population.

When we asked the respondent households to describe their main source of livelihood, about 21 % declared casual labour as their main source of income. SC households reported the maximum proportional share as casual labour in the non-farming sector. The highest number of casual labourers comes from the ST and OBC categories (18 % of the total households). General and SC emerged as the front runners in terms of government sector employment with more than 20 % of households engaged in this activity.

Although our study confirmed the Census data provided above, what it also highlighted was that only 8 % of workers declared themselves as cultivators,

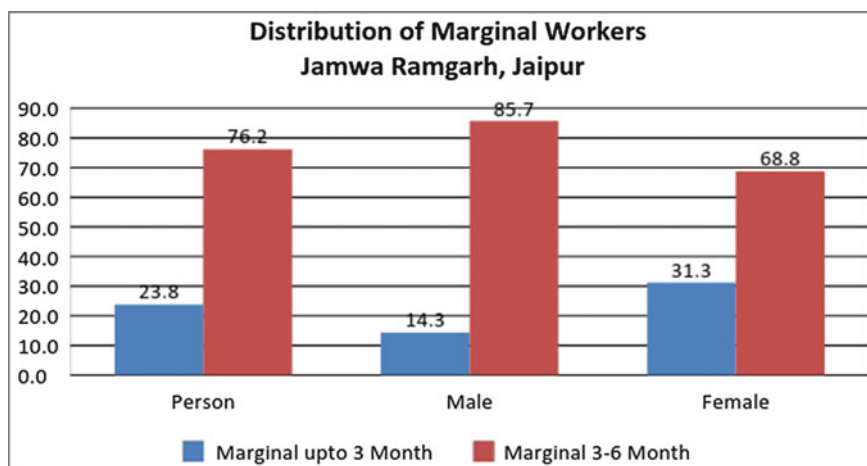


Fig. 6.7 Jamwa Ramgarh: distribution of marginal workers, 2011

Table 6.7 Jamwa Ramgarh occupational characteristics, 2012 (in %)

Occupation	ST	SC	OBC	Gen	Total
Cultivators	6.9	4.1	16.2	3.3	7.7
Agricultural labour	10.3	4.1	9.1	0.0	5.4
Casual labour	17.2	30.6	19.2	3.3	21.1
Private job	17.2	12.9	11.1	24.6	14.9
Government job	6.9	16.3	7.1	36.1	16.4
Own account worker	41.4	32.0	37.4	32.8	34.5
Total	100	100	100	100	100

Source Primary Survey, 2012

whereas 5.4 % said they were agricultural labourers. Interestingly, in comparison to other social groups, OBC workers declared a high proportion (18 %) of cultivators. Non-farming sectors employment was categorised as casual labour, salaried employment and own account workers. The occupation distribution of workers into four categories as per the Census classification, indicates a steep increase in the occupation category “others” from 59 % in 2001 to 70.7 % in 2011. “Others”, which excludes cultivators, agriculture labour and household manufacturing, provided employment to over 70 % of workers in the CT as per the Census 2011 data. A further analysis of the “others” in the marginal categories indicates an increase in casual workers, which is corroborated by the primary survey, in which one-fifth of all workers declared themselves as casual labourers. In terms of private jobs, all the social groups claimed to be involved to some extent, but in general we see the advantages of caste in this area. Around one-third of workers were found to be

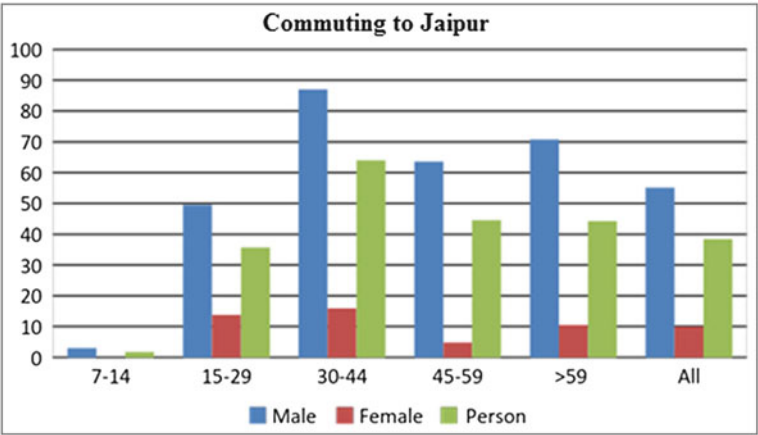


Fig. 6.8 Jamwa Ramgarh: age and gender specific commuting (in %)

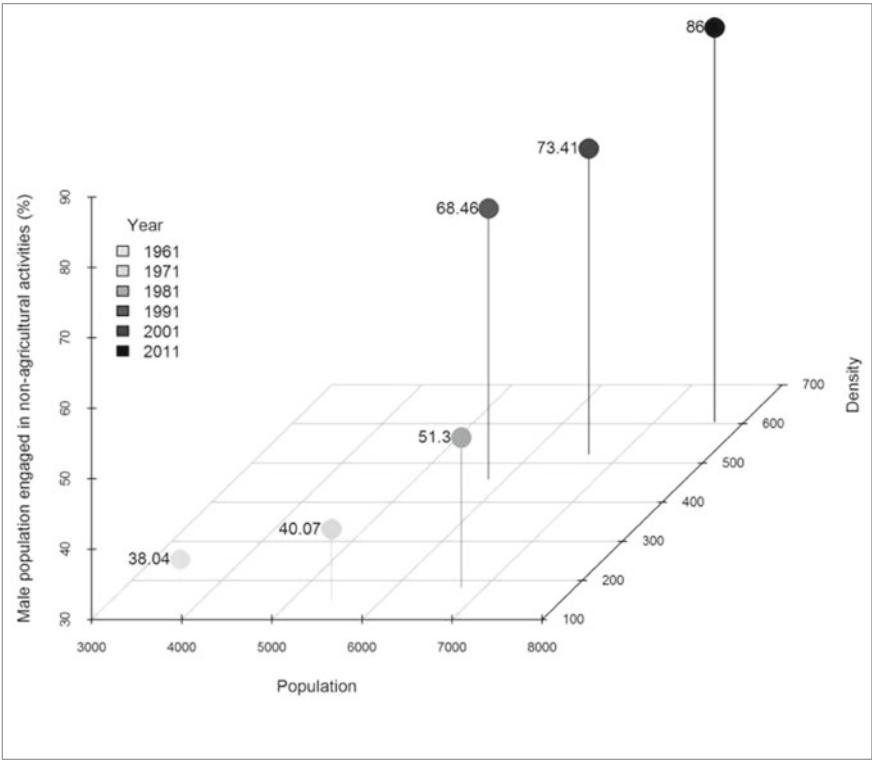


Fig. 6.9 CT criteria and Jamwa Ramgarh, 1961–2011

engaged as self-enterprise workers. In this self-employment sector a high proportion were STs (41 %) and SCs were the lowest (32 %) (Table 6.7).

What is of interest to us is Jamwaramgarh's relationship with Jaipur, especially as a good road network allows mobility. Private and public buses play an important role in connecting Jamwaramgarh town to Jaipur, and the heart of the city is a 35–45 min bus journey away. Around one-quarter of our sample population reported that they commute to the city of Jaipur. More than half the commuters travel on a daily basis for regular jobs, casual employment or small businesses. Around one-quarter of the commuters reported that they visit the city on a bi-weekly or weekly basis for the purpose of household purchases, including farm inputs. The fieldwork revealed the relationship between education and commuting (Fig. 6.8). It is clear from the above that individuals involved in secondary and middle level education prefer commuting to the city for better school education. There was not much difference among primary students or the illiterate section of the population. It seems that in terms of literacy, education enables the individual to commute to the city and provides job opportunities in the city. Other categories seem to commute for construction and transport purposes.

A good communication network allows town dwellers to commute to large cities, whereas badly connected subaltern towns limit their inhabitants to their rural surroundings. As a result, land prices in well connected towns are constantly rising.

6.6 Conclusion

The emergence of new urban settlements in Haryana (new CTs and urban settlements according to the SECC 2011) is located around second tier cities thanks to better connectivity, clustering of enterprises and a strong inclusion within the larger economy of the National Capital Region. New towns around Ambala, Yamunanagar and Panipat are constituents of existing built-up agglomerations as is evident from the spread of contiguous built-up areas extracted from multi temporal remote sensing images. The rapid rise in the number of new CTs reveals an important pattern of spatial transformation in Haryana. As it is estimated that the majority of new urban settlements, including CTs, are in the proximity of class 1 towns, it could be argued that many of them may come under the city jurisdiction, especially those that are constituents of existing built-up agglomerations, through the process of future boundary expansion and would be governed by the formal urban system. However, there are also instances of new CTs, such as Shimla Mullana and Nizampur, demanding to remain under rural administration. This ambivalence suggests that whether these settlements acquire an urban status or not, Haryana should witness major urban sprawl in the coming years and see a shift in employment patterns (as seen by our micro study). Consequently, a certain number of policies must be put in place to implement effective urban planning, infrastructure generation and the provision of services. The scale of planning needs to encompass both rural and urban localities, as argued in another chapter on Haryana

in this volume by Zérah (2017). In contrast, and even though our analysis of the situation in Rajasthan is less detailed, in this state the emergence of new towns is not necessarily related to their proximity to one million plus or class 1 towns. In fact, only Bhiwadi and Baran class 1 towns have registered a high urban population growth and in the majority of towns with a population above 100,000 there are no emerging CTs in close proximity, with the exception of Udaipur and Alwar. Nevertheless, the study of the relationship between Jamwa Ramgarh and Jaipur does show strong rural-urban linkages, but they seem to be different to those analysed in Haryana.

This precise exploration of the location of CTs in two states has a dual effect. It is a continuation of Pradhan's work on understanding the location of CTs, and it corroborates his assumption of diverse processes at work, as we can see in Haryana and Rajasthan. A note of caution is required, however, and we must mention that this chapter aims to open up our understanding of how urban transformation is taking place but we remain acutely aware that more ethnographic fieldwork, a task this book takes up, would be required to refine this analysis. Jamwa Ramgarh, which also obtained CT status in the Census, is located just over 25 km away from Jaipur. However, the population growth rate of the subaltern settlements was not very high; the impact of globalisation can be observed, especially in terms of significant commuting to Jaipur and increased non-farming male employment (Fig. 6.9).

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Chapter 7

On Global and Multiple Linkages in the Making of an Ordinary Place: Parangipettai-Porto Novo

Eric Denis and Zarin Ahmad

What the map cuts up, the story cuts across.

Michel de Certeau, *The Practice of Everyday Life*, p. 129
(1988)

7.1 Introduction

This chapter is about a locality recognised as a town long before the pre-colonial period—a historical sea-gate on the Coromandel Coast, known as Parangipettai today, but also as Porto Novo and Mohammed or Mahmud Bandar. With 25,000 inhabitants in 2011, it had remained a non-growth locality for half a century, a place that had fallen off the map of Indian liberal development. Nevertheless, behind a landscape of decay and ruin, dotted with 200 Sufi tombs, emerges a lively network of circulation with a rich diaspora connected to an expanding Muslim community, which represents 43 % of Parangipettai's population. This small town has complex ramifications of transnational trade, subaltern cosmopolitanism and intensive job circulation in South-East Asia and the Gulf monarchies, which fuel flows and accumulations of wealth. An unbound town appears, with linkages throughout the Indian Ocean.

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Parangipettai is a relevant case for this collective research on subaltern urbanisation in that it focuses on small towns in India and their contribution to urbanisation and economic growth processes and their role in social development. It questions the dominant “metrocentricity” narratives (Bunnell and Maringanti 2010) and the prevalent conception of development as necessarily driven by urban concentration and the redistribution of wealth. The metropolitanisation paradigm remains confined to the dependency theory, the subsidiary functionality concept or the ever-fashionable centre and periphery model. These canonical models provide partial and often inaccurate responses to the puzzle of India’s urban and economic trend, which has in fact been characterised by low migration towards the larger cities for over three decades. An extremely low rate of formal and skilled job creation regardless of the GDP growth rate completes the socioeconomic background of the urbanisation (Chandrasekhar 2017). Beside the globally connected network of million-plus cities, we see the consolidation of an ordinary system of settlements. Small towns are burgeoning without the metrocentric dependence and they do not always show a clear linkage with a mega-urban region (Pradhan 2017; Swerts 2017).

This research frame supports the study of diverse types of localities. They already provide a consistent regional diversity and nourish a wide spectrum of questions: we have towns in most of the major states as well as in frontier and poor states. We also researched places in extended metropolitan contexts or in industrial clusters. We explored tourist-induced urban development, agro-towns, trade-induced local growth, temple towns, frontier towns, college and plot-based local capital formation, or the spread of reverse-engineering and low-tech embedded innovation. Urban governments administer some of the places studied. Others remain only village administration headquarters. Most of these towns shared a high postcolonial demographic growth rate, a rapid physical sprawl beyond their administrative boundaries, and are associated with building renewal and densification. What about stagnant small towns?

In this chapter we focus precisely on one such case: a historical city that has apparently fallen out of India’s twenty-first century growth story. It accumulates many attributes of an apparent remote locality. Situated on the coast and the estuary of the Vellar River, 50 km south of Pondicherry (800,000 inhabitants), after Cuddalore (200,000) and a major Special Economic Zone, Parangipettai seems to be a sleepy small town. Even the number of inhabitants decreased from 23,500 to 20,900 between 1991 and 2001.

The chapter opens with a discussion about the small town, understood as a transitional or dependent feature in the canonical hierarchical system of city literature. In this perspective, towns and cities are conceived within a hierarchical statistical series as places that should evolve, expand or disappear. The notion of a “city life cycle” (Norton 1979) or an “urbanisation cycle” with a bottom-up urbanisation process followed by suburbanisation, disurbanisation and then reurbanisation (Klaassen et al. 1981) still exists as a shared vision. It encapsulates anthropomorphic and evolutionary perspectives about life and death, natural selection or birth and decline. Other pro-developmental conceptions, for instance,

see the city as a blueprint of a unique economic transition from commercial town to post-industrial metropolis, passing through preindustrial and industrial city stages (Sjoberg 1960). They are also often conceived as transitional places between tradition and modernity.

Urbanisation is indeed a process of population concentration and it is difficult to view it as a complex and complete dynamic system, without envisaging that each object, a town or a city, has to grow individually. In conformity with the Gibrat law (Gibrat 1931) related to “the proportional effect”, the trend would be to move towards urban concentration associated with aleatory fluctuations, with the biggest cities growing perceptibly faster and larger. Nevertheless, the unpredictability condition recognises that local destinies exist. They are marked by original trajectories and encounters which are not captured by the median trend. Localities can diverge from the trend. For instance, their local population dynamic could remain very stable. Commonly, these localities are understood as stagnant or attached to the limited agricultural dynamic of the hinterland they serve. Another reality emerges if we consider the city as a network of integrated inflows, connections and relationships (Batty 2013) deployed at multiples scales.

We argue here that small towns are not only the premise of future large cities, nor are they mechanically dependent on larger cities or remain engulfed in their immediate environment. They can evolve within a much larger web of exchanges and therefore their local materiality or immediate appearance does not encapsulate the intensity and scale of the flows they structure and capture. The retroaction of this open condition implies that local social networks are structured in interrelation with the global webs to which they belong.

Second, small towns cannot be seen only as market towns serving their rural hinterland, as Hinderink and Titus (2002) reduced them to. They cannot be simplified to non-innovative places controlled by local leaders and, hence, blocked within traditional social relations that inhibit the agency of individuals.

The “evolutionary cities theory” (Pumain and Moriconi-Ebrard 1997) stipulates that cities are never isolated. They co-develop or live in an interconnected manner through multiple networks articulated at different scales. Cities or towns, whatever their size, are webs of connectivity between people, activities, ideas and places. They are not places bounded by an intangible community control, hermetic to social changes and impermeable to individualisation.

Consequently, our demonstration unbinds Parangipettai. How does this locality appear today through narratives of its actual transnational ramifications and the active “traces” (Lepetit 1994) of networks that were mobilised in its glorious past?

The conceptual problem underlined here is related to the difficulty in conceiving that a town’s relationship to other places is not necessarily linked (only) to the nearest locality. It is not automatically subjected to a hierarchical system associated with dependency, as the canonical central place or the centre-periphery models imply. In our contemporary interconnected world, the stronghold of the tyranny of distance decreases every day, whatever the size of the localities. As we show, for many families, Parangipettai is closer to Singapore (2900 km away, with five million inhabitants) than Chennai (200 km away, with eight million inhabitants). It

shows that small towns are not only dependent localities. They could very well constitute a nodal reference in interlinked network economies organised around/by/for cities.

Third, the case of Parangipettai demonstrates that local arrangements matter and they can be untied from global connections and the diaspora. A socio-institutional setting channels and actualises the historical decline into a non-growth strategy through political and land control. Collective intentions and internal disagreements deployed by the Muslim community's leaders with the resident's consent are supported and reproduced in the inherited land configurations (*wakf* properties in particular) and through strategic alliances, which makes it possible to freeze investments from outsiders and to channel community and diaspora investment. Here, remoteness acts as a spatial advantage that opens up multiple opportunities to local residents (Ardener 1987).

This section also deals with what Henderson and Wang (2007) call the "ability of cities to limit migration" or Kundu (2009) describes as "exclusionary urbanism". It shows how local politics and social relations generate demographic stagnation, and is an indirect product of conflicts and domination. It invites us to question the social divisions and inequality that the exclusionary model reveals, showing that this socio-political logic is not limited to large cities.

Fourth, despite the absence of demographic growth, Parangipettai is not the sleepy, stagnant and remote town that it appears to be. Furthermore, it is certainly no longer a place apart. The regional growth coalition vision and the investment map of coastal Tamil Nadu have captured it. Its specific local-regional-global subaltern setting is currently destabilised and firmly reframed by the implantation nearby of a power generation mega-plant associated with a new seaport dedicated to coal import from Indonesia.

7.2 Parangipettai Within the Distribution of India's Small Towns

Parangipettai is demographically a non-growth locality. Today, it has only 37 % more inhabitants than a century ago (Annex 1), whereas India's overall population has multiplied almost fourfold (400 %) over the same period. Between 1961 and 2011 (Fig. 7.1) it grew at only 0.6 % per year, whereas India's urban population—in the sense of inhabitants within urban agglomerations having more than 10,000 inhabitants—increased by an average of 2.4 % (2 % annually for the whole of India).

This town belongs to a group of 249 localities with populations ranging from 10,000 to 50,000 in 2011, which have been stagnating since 1961, with a growth rate of between zero and 1 % per year. This set is composed of 40 % of old statutory towns (STs) and 15 % of Census towns (CTs) (only nine are new CTs declared in 2011). The other half is constituted of villages. Most of these STs are

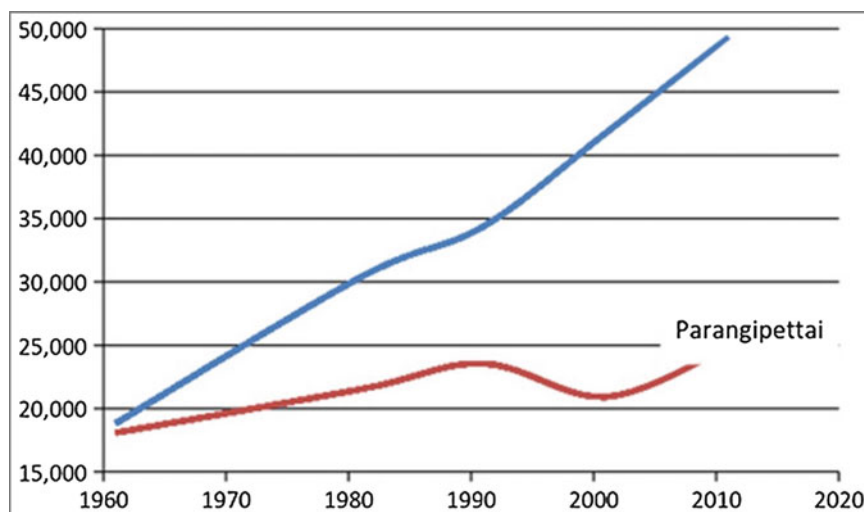


Fig. 7.1 Average demographic growth of Parangipettai and the 606 Indian localities having between 15,000 and 25,000 inhabitants in 1961. *Sources* Census of India

old towns recognised as such long before India's independence. Parangipettai is an ST, which conforms to the current definition of a town with 80 % of its male workforce employed outside of agriculture and fishing in 2011.

The spatial distribution of these places is highly informative (Fig. 7.2), in particular for Tamil Nadu where we find historical sub-regional clusters of stagnant towns. Beside the old coastal small towns, there is also a group of localities in Thanjavur district and another along the former Kongunadu area, between Coimbatore and Salem. The stagnation of the latter small towns is related to the decline of traditional proto-industrial and artisanal activities such as weaving, metal, bronze and copper workshops in many parts of the Cauvery river delta, and the consequent adaptation of the area. Other parts of the state are booming, for example places such as Tirupur with its knitwear industry, strongly integrated into global chains.

The distribution of stagnant small towns in Tamil Nadu contrasts sharply with the adjacent state of Kerala, where only the upland villages of the Western Ghats are dormant. As was the case in coastal Andhra Pradesh, these villages had already seen extensive growth by 1961 but have not expanded since then.

A wide range of local and regional causes could explain the stagnation of these localities. From the dominant/mainstream urban study perspective, they can be seen as disappearing places or as victims of the concentration processes and pull factors of large cities. The acceleration of transportation supported this process, as it left an increasing number of smaller settlements by the wayside (tunnel effect). This group also includes vanishing small towns—those that were killed by their specialisation, which rendered them inept in adapting to change. It could also include simple *mandi* or market towns located in districts where agriculture has not benefited from

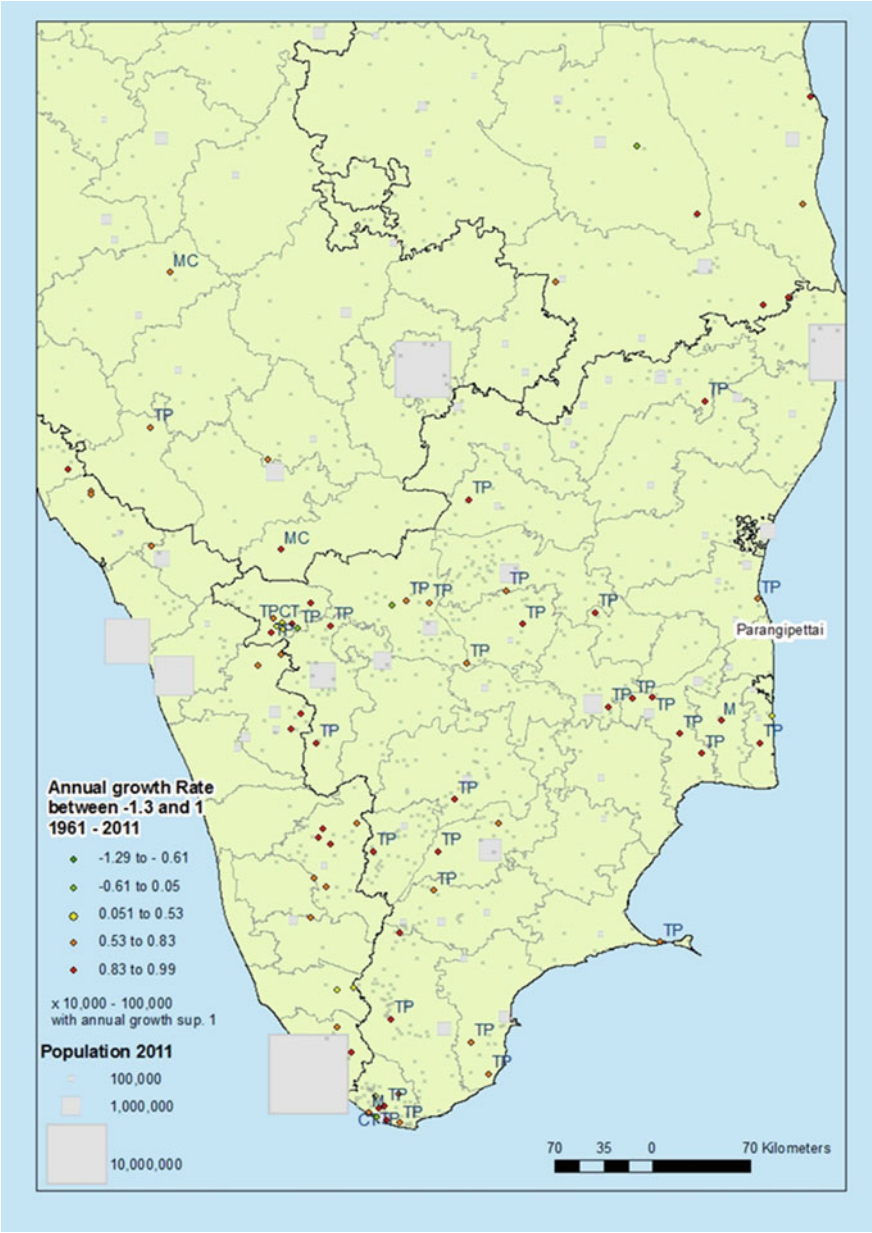


Fig. 7.2 Non-growing small towns in South India. Localities with between 10,000 and 50,000 inhabitants in 2011 and an annual growth between -1.3 and 1% for the period 1961–2011 with their administrative status: TP for Town Panchayat, MC for Metropolitan Corporation, M for Metropolitan, CT for Census Town, and villages are indicated by a dot without a letter. *Sources* Census of India. Design: E. Denis

the green revolution and local craft industries declined through lack of any company investments.

All of these belong to a tiny group of small towns as compared to the 6650 towns with less than 50,000 inhabitants that had a growth rate of above 1 % a year (50 % of them above 2 %). They constitute a minuscule halo of exceptions trapped at the crossroads of adverse local transformations and the negative influence of external factors.

Nevertheless, population size is not the only criterion to consider and appreciate the prominence of a locality—importance is itself polysemous. The second factor in urban theory that determines the preponderance of a place, besides its rank in the hierarchy revealed by its demographic size, is related to its location. It refers to the spacing between cities. Here again, Parangipettai appears as a marginal place, isolated on a poor strip of salty and barren land, off the coastal highway. Neoclassical economic geography and its new avatar, New Economic Geography, would both consider a town such as Parangipettai vis à vis the hinterland it serves and its relations with the closest cities and, here again, from this perspective it would be seen as a marginal place. Further, the sub-district it belongs to is also poor.

We need to turn these well-entrenched meta-narratives around and look at them differently in order to work out the “real” and unbounded position Parangipettai occupies as well as its links within the Indian system of cities and the Indian Ocean flows. All these remain invisible if we limit our analysis to mainstream urban theory and the principle of hierarchy and location.

7.3 Parangipettai: A Global Town

To see Parangipettai differently we have to emancipate it from the demographic facts that classify it as a stagnant town. We also need to avoid the romantic perspective associated with the urban landscape of ruin and decay, of old Sufi tombs, which compel one to see the town merely as the remnant traces of a once glorious past.

During our initial visits to Parangipettai, the absolute disjunction between the acute demographic stagnation and the evident urbanity of the place took us by surprise. A few thousand inhabitants occupy a very clear grid with large main streets and a rare urban character.

The absence of any industrial activity—even a small workshop—makes it difficult to grasp the economics of the place. The surrounding areas under cultivation do not seem very profitable either as salinisation compromises the yield of the paddy fields. After a boom in the 1990s, the shrimp’s farms are collapsing. Fishing is the only obvious productive industry still clearly present, but it does not involve large trawler boats.

Amidst this story of seeming stagnation, there are signs of prosperity. There is a lot of construction activity—expensive villas and plush mansions are appearing in

clean and quiet streets. There are signs of money flow, capital formation and financial services. There are ATMs and two banks—Indian Overseas Bank and the State Bank. There is an active market place; restaurants, two grocery marts, a bakery and a bicycle shop complete the landscape of a high standard of living within a small town, even for the rich state of Tamil Nadu. Parangipettai combines the high level of amenities of an ancient urban locality and a place linked to India's post-1990 rapid economic growth.

7.3.1 *Sea Gate on the Indian Ocean, Historical Flows*

This historical town is administratively named Parangipettai but is still popularly known as “Porto Novo” and its inhabitants as Novians. *Parangi* refers to the Europeans (efrangi/farang in Persian) and *pettah* or *pettai* means locality-place or market in Tamil. Porto Novo was the name given to the place after the Portuguese negotiated their settlement here in 1643, with the Tanjore king, before the place was contested by the British (Subrahmanyam 1989). During the Nayak period it had been called Muthukrishnapuri (King Senji gave it to his warrior Muthukrishna Nayak). At the time, it was already a major centre for shipping cotton and pepper. The Periya Kovil (Big Temple), dedicated to lord Shiva, is mentioned in sacred Shivaite texts and the locality was known as Thiruvaramanmiyam (*Thiru* meaning sacred in Tamil—the equivalent of Sri in Hindi and Sanskrit).

It was also known as Mohammed Bandar or Mahmud Bandar after the Mughal venture into the South when the kingdom of Mysore ruled the region. In 1674, Mahmud Khan, the Governor of Chenji (Cenji/Senji/Gingee) suggested to the President of Fort Saint George that factories and a fort be built in Porto Novo—though steps to this effect were taken much later.

It is also in this place that, in 1781, the British conquerors defeated Hydar Ali and his son. A plate in a public park commemorates the event.

India's first modern iron manufacturing industry was started here, before shifting to West Bengal where it expanded largely to increase production and to serve the construction of the Indian railway grid. The India Iron Co., whose charter dates back to 1854, set up its first workshop in Parangipettai, where it soon began production of several alloy steels. Porto Novo became a major maritime gateway of the East India Company on the Coromandel Coast, when Cuddalore was privileged over Madras for reasons of insecurity. Construction of the Buckingham canal was started near Cuddalore to connect it to the other section of the canal linked to Chennai but the work was stopped after the railway was built. Water still flows in what is left of the canal near Parangipettai.

This place has other historical associations as well, mainly with the Mughal conquest of the Deccan region and the arrival of Sufi saints in the area. They constitute two distinct entry points but they are also historically linked. Parangipettai is a small town interspersed with numerous mosques and dargahs. There is a local saying that if you stumble when walking, it is likely to be over a

mazar or a mausoleum and not an ordinary stone. There are 13 mosques where congregational prayers are performed 5 times a day. Parangipettai encapsulates a Sufi tradition materialising in its historical dargahs and pilgrimages. There are an estimated 200–360 dargahs and 9 historical mosques in this small town.

Oral histories and popular lore indicate that one of Prophet Muhammad's companions, Sahabi Mohammad Hukkasha/Ukkasa, came to Mahmud Bandar and settled here. For this reason, the Ukkasa dargah or Sufi shrine in contemporary Parangipettai is extremely popular and draws large numbers of devotees, particularly from the neighbouring areas in Tamil Nadu as well as from all over the world. According to documented sources (Government Gazette of 1901), the trustee of the Killur Nabi or Khizir Nabi mosque, Cadip Sadakathullah, paid tax from 1090 onwards to Mecca. Scholars indicate that the neighbourhoods surrounding the Khillur Nabi mosque are possibly the first Muslim settlements in the area, which gradually moved towards the Vellar estuary. According to local residents, the architecture of the Vathiapalli mosque also indicates that it is one of the oldest mosques in Parangipettai.

The local "identity" can be perceived through the multiplicity of names attributed to the town. Over the centuries it attracted the attention of the larger world, which gave it a long, complex, multiple and disputed history. In 1953, the place became a major Hindu pilgrimage site after the great ageless Himalayan yogi, Guru Mahavatar Babaji, revealed to some of his disciples that he was born in 203 AD in a place today named Parangipettai. A shrine was built for the guru and an annual festival held in his honour attracts droves of Hindu devotees. Rajanikanth, a contemporary Tamil film superstar, is one of his most fervent disciples. Once a year, a ritual called the "Universal prayer day for Thalaivar Rajanikanth" dedicated to the film star takes place at the guru's shrine.

Temples and mosques provide clear landmarks and organise public spaces and centralities. "Fifty-fifty" is what the outsider is always told: "half Muslim, half Hindu", with much solidarity" and an insistent affirmation of "no difference".

In the available enumerations, until the 1930s, there were clearly far more Hindus than Muslims in the town. Even so, the Muslim population grew much faster after 1920. Between 1931 and 2011 the Hindu population has grown at less than 0.5 % per year whereas the Muslim population has grown at the rate of 1.25 % a year. Today, the numbers are, more or less, equal, or at least both communities evaluate their demographic weight as such (Table 7.1).

Table 7.1 Parangipettai population distributed by religion from 1911 to 2011

	Hindu	Muslim	Christian
1911	11,988	3757	59
1921	9407	3457	76
1931	9692	4024	46
2011	14,392	10,905	119

Sources Censuses, between 1931 and 2011, religion has never been provided by locality

Local informants and landscape traces indicate that, at least since independence, Hindus have lost ground within the locality, especially the dominant landowning castes such as the Chettiars and the Pillais. Many families left Parangipettai with the decline of agricultural revenues and several temple-trusts have been abandoned. Even more recently, the government took part of the temple-trust land assets located along the Vellar River for post-tsunami rehabilitation. Wealthy families have shifted their residence, notably to Chidambaram, after having transferred their cultivable land capital into real estate and businesses.

The fishermen, mainly from the Meenavar community, constitute an important part of the population and their sea activity is the most developed. Fishing is the major sector of employment and an essential source of local revenue after remittances from abroad. Agriculture, leasing of land and crop revenue come third. Two hundred mechanised boats operate daily, with three to five persons on board. However, large-scale fishing has been decreasing over the years because of environmental factors. The quantity of fish in the estuary has fallen in the last decade and prawns have been almost totally depleted. According to Mr Yunoos, the President of the Town Panchayat (who was exporting prawns two decades ago), “there were hardly any prawns left in the estuary—so how to do business”? Prawn farming has not been successful either. Mathi or mackerel fish is the main money earner; nevertheless, it does not have a local market. The local population does not appreciate mackerel, but it is considered a delicacy in the neighbouring state, Kerala. Few big fish merchants from Parangipettai and Kerala supply fish, mainly to the Thiruvananthapuram fish market. Interestingly, local fishermen often use the word “export” to describe the fact that the day’s catch is transported to Kerala. Some people are involved in minor fishing, which is self-sustaining at the household level. Fishermen’s spouses travel to the town of Chidambaram (15 km) daily to sell the fish or trade it at the weekly market of Parangipettai.

7.3.2 Multi-layered Node in a Network: Trading, Diaspora and Remittances

Under the radar, dilapidated, Parangipettai is also a pirate town. During the Raj, and even after independence, it was well known for its smuggling activity until economic liberalisation, when the tax reduction on imports diminished the interest in contraband goods.

Mercantile trade with the Arab countries predates the birth of Islam, and it continued with the advent and emergence of the new religion. Arab Muslim settlers on the Coromandel Coast often married native women. Their descendants continued the seafaring tradition as navigators, shipowners and overseas merchant princes. The Muslim mercantile community gradually gained influence in the courts of the local rulers where they served as mariners, administrators and “guardians” of the Indian Ocean sea coast until about the fifteenth century. They also established a

network of overseas depots and branches in Ceylon, Malacca and other parts of Southeast Asia such as Penang, Java and Sumatra. This mercantile population increased through conversions and the influence of the Sufi missionaries (Raja Muhamad 2004: 2). Pearl hunting also flourished in the south of the Coromandel Coast under the control of Muslim traders, invigorating long distance trade. Parangipettai's importance as a major trading town continued through the medieval period. Traders and navigators, particularly the Maraikayar Muslims,¹ were involved in long-distance trade between Malaysia, Burma and other countries in the Indian Ocean and the Gulf Kingdoms. Textile production was also a major local activity and Parangipettai's reputed port was used to ship textiles to Eastern Asia.

Historians indicate that the encounter of the Maraikayar Muslim traders with the Portuguese was a strained one—they faced covert and overt forms of persecution, which adversely affected their control over the sea (Raja Muhamad 2004). In the early part of the nineteenth century there were Muslim shipowners all along the Coromandel Coast, in Nagapattinam, Porto Novo, Kilakarai, Mandapam, Kayalpattinam and Kulasekarapattinam. However, according to colonial records, this number had dwindled by the latter part of the eighteenth century (Seshan 2012). British colonial rule restricted the Indian fleet's access to the sea and shipowners and sailors were condemned to work on British ships in East Asia, perish or be considered pirates. This was the beginning of piracy in the Indian Ocean and certainly the time when local smuggling began—a time when local seamen were perceived as outlaws in their own ports. Until the end of the 1990s, Parangipettai was well known for its contraband black market. Several people described the highly creative ruses employed to bring in imported products, notably cigarettes, diamonds and gold. During that period—the postcolonial raj era—the town's marginal location and sleepy, decaying reputation made it a haven for a flourishing covert business linking the local families around the Indian Ocean and engendering new individual and family fortunes.

When the Marakaiyars lost the opportunity to carry out maritime activities along the Coromandel Coast, many settled in the interior parts of Ceylon and other Southeast Asian countries and South India as workers, traders and plantation labourers. Some took up agriculture and fishing as well. For others, however, their association with the sea and the sea route continued in different ways. Some became seafarers and workers on ships and others travelled as labourers and petty traders to various parts of Southeast Asia. The Coromandel Muslim communities mingled with the local populations and also, to a large extent, took their Islamic culture and traditions with them. This historical encounter of Islam, mercantile trade and local customs is reflected in the culture of the South Indian and Sri Lankan Muslims.

Colonial rule saw an increase in migration to East Asia (Amrith 2013). Several old families of Parangipettai still preserve memories and souvenirs (pictures,

¹The Maraikayar Muslims probably got their name from marakallam, which means a boat (mara is sometime linked also with the Maure).

tickets, letters, personal memoirs and account books) of their family's migration to Singapore or Java, embarking on British steamers often from Porto Novo itself.

Because of this, there is a considerable diaspora in South Asia, in particular in present-day Malaysia, Singapore and Siam (Thailand) (Amrith 2009). Besides the large majority of petty migrants who embarked as coolies and remained modest residents abroad, some more wealthy families have been very successful. For instance, Kalima² & Co. was started in 1949 by Hameed Ghouse Maricar backed by traditional weaving workshops in the Cuddalore-Chidambaram region. Historically, before their migration to South Asia, the family was also involved in the early iron industry. Kalima & Co. continues today as a leader in South Asia in the trade of lungis or sarongs with Madras designs. The family managed to expand vastly their import-export business, transporting Batik textiles from Indonesia and other textiles from Nepal, and later entering the embroidery trade. The group has its own brand sold in many emporiums in South Asia and the Middle East and its own emporiums in Singapore and Jakarta. Their catalogue includes all kinds of Islamic apparel (abayas, hijabs, scarves etc.). They diversified into shops and businesses in Pondicherry, Cuddalore, Chidambaram and Karaikal. Another wealthy family, Indomal, owns a chain of gold shops in the region as well as businesses abroad, and the Abdul Jaleel family became one of the major contractors in Singapore.

7.3.3 Against the First Geographic Law: Distant Links Matter More

The first law of geography, the motto of the discipline, stipulates "Everything is related to everything else, but near things are more related than distant things". Tobler (1970) formalised this as a physical metaphoric perspective of the law of gravity, which has been taken seriously by spatial econometrics. Nevertheless, in the context of a locality such as Parangipettai, it appears that distant relations are certainly far more important than the modest exchanges with a supposed hinterland (tehsil or district) or even with the nearest metropolis, Chennai. The gravity principle did not bound the extended relationship system of the place. On the contrary, it is associated with a huge network routed through transnational relations made up of trading and religious connections, alliances, the circulation of family assets and remittance flows. The long-distance circulations are far more important than the relations with the closest places. The port location certainly supports such dynamics of global connectivity, but this phenomenon occurs inland too, as shown in this volume by Tastevin's chapter on Tiruchengode.

Following the economic liberalisation of the 1990s, these linkages with the diaspora have been intensified and renewed. With the decrease in import taxes, new

²Kalima stands for Khadar Ali Maraikayar, family ancestor.

opportunities for international trade emerged, such as the export of sea products and shrimps, notably for the Asian markets, Japan and China.

Young and creative investors are able to capitalise on their multiple family anchorages around the Indian Ocean. They benefit from local knowledge in terms of trading relations, financing and customs negotiations. They manage to make money and to circulate goods, investing abroad and in India, following multiple opportunities. One can buy raw cashew nuts in Tanzania, process them in Kollam (Kerala) and then re-export them in association with a family member established in Singapore. The same entrepreneur, a few months later, bought iron scrap when an abandoned spinning factory near Bhavani was dismantled, to deliver it to a specialised company in Chennai. Some of the benefits are fixed in high-value plots bought near Parangipettai, knowing that the Coastal National Highway, NH45A, is in the process of being extended to a dual carriageway.

From the 1970s onwards, connections also developed with job agencies in the Gulf countries, which provided the desperately needed workforce to build and run the industrial and urban infrastructures built with the huge petrol revenues. Some left as simple construction workers or trading employees, others became port captains as did the present president of the United Jamaat. Today, many families have links in both regions—South Asia and the Gulf monarchies. It also appears that, continuing the Maraikayar seafaring tradition, many families have a parent, a son or a relative in the merchant marine, working for shipping companies in South Asia or Mumbai. Some of the younger generation continue to enter marine engineering colleges but the older generation considers the youth to be less interested in moving abroad or joining the marine industry, as more opportunities are currently available to them in India.

The systematic inventory of houses in a main street in the centre of Parangipettai gives a sense of the local migration and the diaspora (see Annex 2). It shows that at least one-third of the house-owners in this street live abroad. A number of houses are not occupied, indicating that the proportion may well be higher over time. These families accumulated considerable capital which was invested in real estate. Several families possess more than one house in the same street. Many houses belong to families established mainly in Singapore, but also in Malaysia, Abu Dhabi, Oman and Dubai.

Social media also gives us a sense of the tremendous presence of Parangipettai natives abroad. We find plenty of Parangipettai local migrants associations, based in different cities and countries around the Indian Ocean, real estate companies advertising for NRIs wanting to invest in India and recruitment agencies offering jobs in Gulf Countries or travel agencies.

In many discussions we had locally, people stated that the Parangipettai population is much higher than the Census figure. Considering that the expatriates and migrant workers still belong to the local community, some consider that the population is at least double the figure mentioned in the Census, which would make it about 50,000 people in reality. The locality is seen to have a mirror population abroad, with most of the households having relatives somewhere around the Indian Ocean. Parangipettai is known for its important share of non-resident Indian bank

accounts and its highly developed financial services. In terms of financial affairs, the town is much larger than the capital generated by the local population.

This diaspora is influential in the local economy. First, remittances constitute essential revenues for many families. Then the constant flow of investments into the family house, construction, maintenance and redesign stimulates the local economy and provides jobs. The diaspora's consumption during holidays and religious festivals contributes to maintaining a much higher standard of services and shops than the local residents could sustain.

Several owners of small shops explained that, in addition to the construction of a new house and their children's marriages, they invest part of their savings from their long periods of migration working in the Gulf in a modest stall. They sell pre-paid phone cards, tea and a few kitchen items. This investment is not made with a view to develop a business but to meet with friends and be out of the house. The business does not really bring in any money, apart from when one occasionally becomes a moneylender, and the stalls serve essentially as meeting places.

Other small and tiny old stalls in the market streets are also associated with the diaspora and migrant workers. This is notably the case of the sweet shops producing the traditional halva. At least two of them claim to export regularly to Dubai and Singapore, one even to New York.

7.3.4 Locality, Region and Place as a Core Investment Space

The term "ullûr" recurs in all our discussions about alliance, marriage and investments. "Ullûr" refers to "ullé" which means inside and "ûr" for village or locality (town/hometown). When the term Ullûr is used in conversation by a Parangipettai citizen, it is not only to designate Parangipettai itself: the speaker, in fact, has in mind a much wider space. He refers to a coastal territory invested socially and economically, primarily by the Muslim community. This interconnected network of localities extends from Pondicherry to Nagapattinam and includes Cuddalore, Lalpet, Karaikal and Nagore, three other coastal towns with an important Tamil Muslim population.

Apart from matrimonial linkages, these towns form a highly prioritised area for investments in real estate, both residential and commercial. It includes restaurants as well as shops for grocery, jewellery and gold (moneylenders) and construction materials. This territory clearly bears the geographical imprint of an ethnic business model, connecting the local and the global through a diaspora disseminated around the Indian Ocean. This is the place where remittances flow and are invested, fixed mainly in land assets and plots. It is remarkable that there is no business investment in the heart of the town of Parangipettai. In many interviews the town is described as a place to live quietly, not a place to yield profit from capital. This, to some

extent, explains why the place appears so dormant and sometime almost on the brink of collapse.

In all our interviews and observations of circulations and investments, Chennai appears much apart from and completely outside the *ullûr*. Families linked with South Asia or the Middle East cite the capital of Tamil Nadu mainly for its airport. It is also on the map of local traders and middlemen involved in the import-export business through Chennai port and customs services, or of car owners working in the formal or informal taxi business, with a large share of their activity also focusing on the airport.

This socioeconomic configuration, with the town, the *ullûr* and the Indian Ocean, structured to sustain a micro-society centred on kinship and community interests, is reflected in the political scene and the conduct of local affairs.

7.4 Parangipettai Local Inhabitants' Affairs Embedded in Property History and Diaspora Visions

7.4.1 Land Control and Social Segregation

The Town Panchayat was officially constituted as per the Director of the Town Panchayat regulations, drawn up in Chennai in 1953. The revenue villages of Agaram and Parangipettai town were combined to form Parangipettai Town Panchayat. However, Parangipettai was already recognised as a town in many anterior official records, even before British colonial rule, and governed as such.

Land generally belongs either to the state and the localities (state domain and commons) or is privately owned. Parangipettai has a third relevant category, *wakf* land, which is associated with mosques and Sufi tombs. These are lands given to God that are assembled under a trust which sustains a religious charity and finances religious festivals and the maintenance of the edifice.

As mentioned earlier, Parangipettai has a long tradition of patronising Sufi saints. These *dargahs* also own a huge amount of land registered by the *wakf* board, mostly under the control of individual trustees. These lands were granted to the saints and thereafter have been under the trusteeship of a *mutawalli* (trustee or caretaker). The *mutawalli* can be hereditary or, more rarely, nominated by the *wakf* committee in Chennai. The role of the *mutawalli* is similar to that of the *mahant* in Hindu temples, with one major difference—unlike a *mahant*, a *mutawalli* is not part of the clergy. The local *Jamaat*, in this case the United *Jamaat*, plays a central role in the management of *wakf* properties.

The town morphology, its centre and old extensions, is structured by the *wakf* property distribution, or God properties. They constitute a large proportion of the central plots. This large bulk of land that exists outside the purview of the market constitutes the key to the socio-spatial arrangements and determines the orientation of the town's built up developments. The United *Jamaat* and the trustees

(mutawallis) have the legal competence to control these lands. However, these properties cannot be sold or transferred; wakf land is technically and legally non-transferable. This means they control the right to settle within the core of the town. The main morphology of the town is based on blocks separated by a street. The general aspect is a grid plan. Each block has an open core composed of barren lands where one or more dargahs and, often, they incorporate a pond. The houses stretch along the streets. These wakf trusts are still dominated by brown fields which surround their religious edifices. These inherited structures, largely maintained without further occupation, explain why the grid has not been complicated. There is no housing in the core of the plots that requires access. Only the subdivision of the houses after inheritance is transforming the aspect of streets, but the centre of the blocks are still very rarely invested.

Nevertheless, houses and slum-dwellings are built on wakf lands. As the land is non-transferable, the house occupants do not possess it although they pay a nominal amount as rent to the wakf trustee. The renter may, in some cases, get a power of attorney but the land remains wakf property. A clearance, lengthy paperwork and political lobbying with the wakf board in Chennai are needed to change the status of these lands. The trustees, advised by the elders and members of the Jamaat, prefer not to take the issue beyond Parangipettai. Hence, these lands, as most wakf lands, are lucrative but in limbo. The tenants are satisfied with the status quo as long as they can live there at nominal rents. The wakf trustees also prefer not to upset the situation and maintain the limited authority that they are able to exercise. They require the agreement of the Jamaat and/or the trustees for any transaction and these bodies levy a tax on the transaction. This is the case for the major slum areas, all located on wakf lands, but also the ordinary condition of many middle-class and wealthy families. Many families have settled on the land belonging to the family trust they inherited and this prevents the extended family from selling the property. The installation is carefully filtered along the lines of faith and family belonging.

Five such unrecognised slums exist, where no fewer than 500 households live in precarious conditions. Delhi (Dilli) Shah Shrine land is the largest with 158 families, all but 1 of whom are Muslim. Access to water is a major issue as well as problems such as water logging and the absence of concrete streets or any kind of sanitation system or latrine. Nearly all the residents settled there after concluding a written agreement with the mutawalli in charge. Because of the land status and hence the absence of pattas or property deeds, those households are not entitled to funds from any schemes for the urban poor in Tamil Nadu. In particular, they could not access the Rajiv Gandhi Rehabilitation package, which was widely available after the tsunami, or other housing rehabilitation schemes supported by the Tamil Nadu Slum Clearance Board (TNSCB). They were not entitled to any post-tsunami house renovation. They could only get a meagre sum from the Jamaat charity and a few NGOs were authorised to intervene with limited impact.

In 2012, Parangipettai benefited from the *Urban Infrastructure Development Scheme for Small and Medium Towns* funds to improve its water supply, but this did not include improvement for any of those slums. The 2011 Census enumerated 1692 households living in a slum environment—this represents 7392 persons or

29 % of Parangipettai inhabitants (a figure much higher than the urban Tamil Nadu average established at 6 %), but only 511 of the total 7392 belong to Scheduled Castes, indicating the important share of poor Muslims. In contrast to the non-slum Muslim population, very few of these households are linked to the Indian Ocean circulation and have migrant workers in their families. They are essentially trapped in the local environment and do not receive any remittances. For the most part, they are employed as casual workers: domestic helps, housekeepers, watchmen, cooks, drivers or coolies on construction sites, and are dependent on a daily wage.

Despite several legal attempts to obtain pattas, the residents could not succeed in changing their status and they continue to pay a monthly rent (30–60 INR per month) to their mutawalli, who then hands a fee to the Jamaat. They also pay the roof tax to the Town Panchayat (60 INR per year). All the collective actions such as petitions and individual court cases to obtain a patta have failed. Nevertheless, there is no fear of eviction and, as elsewhere on wakf properties, the system allows for a certain fluidity in house transactions.

At the beginning of the 1990s, a resurvey carried out by the district Survey Department made it possible to detach the plots in the town centre, along the main streets, from the different dargah trusts they belonged to, and then subdivide them further. Adverse possession was recognised and registered individually as the occupants had sometimes been living in these places for two or more generations and they can present multiples proofs of residence—electricity bills, roof tax receipts etc. The land has been recognised as private property associated with the house on it. Nevertheless, this did not lead to further property transactions and a community diversification in the centre. On the contrary, in Chettiyar street where many gold shops and moneylenders were located (two remain), many properties have been purchased by Muslim families. The decline in agricultural revenue in this coastal district and the increased salinisation are largely responsible for the departure of the families associated directly or indirectly with farm activities.

This inherited and specific property structure largely restricts the demographic growth potential. Newcomers/outsideers cannot easily find a place to settle within the town, even in slum areas. There is a sort of socio-communal filtration setup which also affects peripheral land belonging in many cases to mutawallis and registered as wakf. Nevertheless, access to land is easier outside the town centre, as trustees prefer to rent out their property at a low price rather than find it squatted. A lot of negotiation occurs based on location, proximity to the centre of Parangipettai and regarding who can rent out their properties and to whom. Newcomers also have to compete with a booming market for housing plots on private land, which essentially serves to fix assets for speculation rather than for immediate residential use. This type of property is much more expensive as it is offered with full property rights, patta or registered documents.

A historical political change took place after the 26th December 2004 tsunami. The United Islamic Jamaat's quick and efficient response to the catastrophe that killed over 130 persons locally set a national example of an effective response to a disaster by a local organisation. That day there were four weddings planned in the town. The Jamaat leader, Mohammad Yunoos, mobilised the hosts and guests to

offer the food prepared for the wedding feast and to help people in the nearby affected areas. The local people responded to his call and, along with his volunteers, he was the first to arrive with help and provisions for the affected coastal areas of Parangipettai. The district administration from Cuddalore followed just a few hours later. This earned Yunoos the respect of the fishing community and the district collector. Later the Jamaat and the administration worked together for post-tsunami relief and rehabilitation. All this paved the way for Yunoos' political career. He won the overwhelming support of the fishing community in the local elections and consequently became the first Muslim President of the Panchayat. Yunoos' former experience as a prawn exporter in the 1990s is a bonus when it comes to forging good relations with the fishing community.

Earlier, between 1996 and 2006, Selvi Ramajayam was the Panchayat President. Later, in 2011, she became Minister for Social Welfare with the AIADMK regional government for just a few months. She is currently an MP and has partnership investments in several local businesses, notably in a concrete batching plant, a unique recent productive investment, and real estate. In this regard, she is at the forefront of demands for the economic and social development of the locality and for its opening to outside investment.

When he was elected Panchayat President, Yunoos resigned from his position at the head of the United Jamaat. He won the municipality for a second time as an independent candidate in October 2006. He was elected again during the 2012 local election when he stood as a DMK candidate—the party that headed the Tamil Nadu Regional Government until 2011.

This political dynamic should not be interpreted further as a full alignment of the local interests along the lines of the United Jamaat views. There are gaps and disagreements between the conduct of municipal and Muslim community affairs. Within the community, there is conflict around the conduct of the United Jamaat's charity work, diverging views and principles clearly opposing prominent local personalities and there is disagreement with the followers of the Tawheed al-Islam regarding the orientation of religious affairs.

7.4.2 The Involvement of the Diaspora in Local Affairs

Parangipettai has a small but influential core of wealthy elite citizens, most of whom prospered through transnational trade, and a multi-generational association with South Asian countries. Although they own vast properties, some inherited and some bought, some people have also managed to secure important positions as mutawallis of mosques and shrines. This has given them certain control over the local space. A sort of unequal stability or spatial segregation prevails, dominated at the centre by the wealthiest merchant families. This core settlement's wealth has been renewed and reinforced by remittances from the South East Asia diaspora and more recently by the expatriate workers in the Gulf petroleum monarchies and sometime by entrepreneurs and doctors established in countries as far away as

Australia and the United States. Pious donations, *zakat*,³ given to the Jamaat and religious and education foundations, support the diversification of the local landscape in terms of education and social works.

The NRI families, particularly those who have Singaporean or Malaysian nationality, have a conservative conception of the locality; they claim that it should be maintained as an exclusively residential town. They do not see it as a place for investments and development projects but rather the place where their roots lie, where they want to find peace and return to their traditions. For this reason, they are highly involved in charity, education and religious affairs and, of course, they play an important role in the local marriage arrangements and family alliances. The diaspora is well represented in the United Jamaat initiatives and is solicited to support their actions, notably during Ramadan, Eid and the major Sufi festivals, during which they often visit their hometowns.

For instance, one Indonesia-based businessman has managed, with the consent of the United Jamaat and the wakf authority (non-objection certificate), to invest in a multi-floor religious complex to replace one of the major historical mosques, Gummath Palli, built in the fifteenth century. It has been entirely demolished, without any notice, and supplanted by a massive building integrating a marriage hall, a madrasa and a mosque.

The United Jamaat supervises the support that the Kalima trust provides for a matriculation school with separate sections for boys and girls and the United Welfare Association from Chennai, working with trustees from Parangipettai, which has established a residential institution, Niswan Madrasa. This institution allows girls, who either are orphans or come from low-income Muslim families, to study for 2 years to be able to teach the Quran in qutabs or koranic schools.

The modernisation and commoditisation of religious affairs are accelerated by the involvement of the wealthiest members of the disseminated Parangipettai diaspora.

A more secular force such as the Muna Australian Institution, founded in 2003 by Dr Rahman, who made his fortune in medicine abroad, runs a matriculation higher secondary school. A teachers training institute was added in 2006, with a capacity of 50 students, and since 2010 a college of education trains about 100 students. The trust has hostels and transport facilities. Muhammad Yunus is the vice-chairman of this trust. Again, there are local disagreements about the way the students should be taught and a plurality of visions competes through educational initiatives.

This landscape would not be complete without considering a famous reformist landmark set up in 1921, the Seva Mandir School. It still runs as a residential primary and secondary school for girls, with about 500 pupils and a Teacher

³In our interview with the Jamaat members and residents, the *zakat* (2 % of revenues in principle) is often designated as an essential means of leveraging action along with the land revenues on wakf. It provides the capacity to conduct charity and educational initiatives, but we do not have any figures to evaluate those financial dimensions. We should take into consideration the fact that migrants in the Gulf are, for the most part, not earning much.

Training Institute. Located on the edge of Agaram Colony, a Hindu settlement, the private trust is still imbued with a Gandhian spirit, brought by Anne-Marie Petersen, a Danish woman, well known for her devotion to girl's education and Indian nationalism. It materialises and actualises an unexpected product of the colonial encounter.

The renowned Annamalai Centre of Advanced Study in Marine Biology, a postgraduate and research facility established in 1957, is also a fundamental feature of Parangipettai. Supported by the central University Grant Commission, it is part of a national network of coastal and environmental information systems and, in 2010, it was elevated to the rank of faculty by the Annamalai University to which it belongs. Since 2012, its director has taken a strong stand in favour of the mega power plant project and against all the legal actions challenging its environmental approval. At the same time, the marine centre received funding from the IL&FS (Infrastructure Leasing and Financial Services Limited) for the restoration of the nearby mangrove. It certainly constitutes one of the most powerful local agents working for a complete integration of Parangipettai within the coastal industrial development map of Tamil Nadu.

7.5 The Encounter of Parangipettai with the Coastal Mega Project Development Agenda

In regional and national investment, growth and development circles, a locality such as Parangipettai and its surrounding villages are designated as empty and dormant areas. This represents an opportunity that can be appropriated to implement a much needed growth instrument for South India and the subcontinent at large; in this case, the motor is a 3600 MW thermal power plant. In Tamil Nadu alone, the capacity to generate electricity is far lower than the fast-growing demand. Long power cuts affect industrial development and productivity. Tamil Nadu Electricity Board has commissioned about 40,000 MW of coal-fired electricity plants in just three coastal districts—Thoothukudi (16,460 MW), Nagapattinam (14,701 MW) and Cuddalore (10,140 MW). The Coromandel Coast from North Chennai to Tuticorin is turning into an energy hub with associated industrial estates and coal terminals—no less than 30 coal-based thermal projects have been announced along the Coromandel coastal strip (Babu 2011).

In 2010, IL&FS finalised the assembly of the 480 hectares of land necessary to implement its coal-based thermal power project. IL&FS, a pioneer in Public-Private Partnerships in infrastructure development, could then start the construction work. The plots were acquired through direct private negotiations with landowners. For some public domain areas trapped in between, which represented about 50 hectares, No objection certificates and compensation agreements with the three revenue villages' presidents were negotiated and approved by the district collector. In the same way, many of the recent private and PPP projects in Tamil Nadu did not rely

on the 1894 Land Acquisition Act to acquire the necessary land. In these cases, the companies acted in their own names and negotiated directly with the villages. Nevertheless, some well-informed local intermediaries or brokers sub-assembled plots to sell them to the company, earning a considerable margin. In the process, the price of land increased sharply, inducing severe inequalities between the first sales which were concluded without the owners knowing of the existence of the mega project and the last plots acquired. The price at the beginning was about 400,000 INR per acre,⁴ but the owners of the last plots to be acquired negotiated amounts up to 14 million INR (140 lakhs) and an average of 3 million INR (30 lakhs) for 5 acres. In a final deadlock over the acquisition of the last 5 acres, negotiations were blocked by a demand for 12.5 million INR for them (1.25 crores). Before the arrival of the power plant project, the average land value was around 50,000 INR per acre. In the same block/tehsil, the *State Industries Promotion Corporation of Tamilnadu* (SIPCOT), a parastatal agency, acquired land for phase III of its industrial estate, at an average price of 1.4 million INR (14 lakhs) per acre. These inequalities motivated the first sellers to take the matter to court; the outcome is still pending.

In 2012, despite all the delays, mainly because of a stay order after the first environmental clearance was annulled by the National Green Tribunal, phase I of the project (1200 MW) was still planned to be commissioned in December 2014. The project includes a dedicated port with an enabling infrastructure to import 15–25 million tons of coal per annum; it is also to be equipped with an attached desalinisation plant. Most of the coal is to be sourced from Indonesia, where the company acquired a coalfield. Alternatively, the proximity of the Neyveli coalfield (40 km) and the already existing and recently renovated railway line could offer an alternative, particularly if the construction of the port is delayed (the coal terminal at Karaikal constitutes another potential substitute). The project has faced a series of delays and accidents, including a second stay order pronounced by the National Green Tribunal at the end of 2014, for defaulting on the social impact assessments. The case was then presented before the Supreme Court who pronounced a judgment in favour of the company in February 2015. After all this, the first phase of the project should be connected to the grid by the end of 2015. The delays and negotiations increased the final cost estimate for phase I by 30 %, taking it to 9808 crores INR or 1.5 billion USD.

The power generated is to be sold under both a long-term Power Purchase Agreement with the Tamil Nadu Generation And Distribution Corporation Ltd and directly to clients located in the Cuddalore Industrial park run by SIPCOT. One of the future clients is likely to be the nearby giant textile, dyeing and printing processing park based on the “ocean-based treatment concept”. This project, in which IL&FS is a partner, has also faced a series of setbacks because of villagers’ opposition and legal claims for better compensation after 1000 hectares of land was

⁴1 acre = 0.405 hectare or 4046.8 m².

already acquired, as well as fishermen questioning the pollution risks. All these local demands are supported by regional and local NGOs.

The *Rapid Cumulative Environmental Impact Assessment Report* (21/06/2012) commissioned by the National Green Tribunal for the power plant concluded that this investment would be positive in terms of jobs and social and physical infrastructure. It asserts that, especially after the industries committed to implementing Corporate Social Responsibility programmes, “the infusion of investment into the area by various projects is expected to provide additional jobs and opportunities for the local populace and is likely to enhance the infrastructure, social and economic fabric of the area. Also, the committed CSR programs by various industries, with special focus on the vulnerable sections including women, fishermen, etc., the infusion of funds is likely to bring about major economic changes in the area”. IL&FS has started to support local skill development and vocational training programmes. It funded a complete training centre for the textile industry.

Located at less than 3 km from the centre of Parangipettai, the plant has radically changed the landscape. The area it occupies is larger than the town itself and, in its immediate surroundings, many housing facilities for the construction workers and permanent staff and real estate projects have popped up.

Since mid-2014, the lighthouse is no longer the highest landmark in the skyline of Parangipettai. It has been replaced by the boiler chimney, which is visible from any of the main streets of the town. The main street, which is also one of the major market places of Parangipettai, has been reclassified as a National Highway to serve the expected traffic boom towards the coastal area and the port. Because of coastal regulations, it was not possible to open a new road outside the town. Many shops and stalls have been realigned backwards and their facades destroyed by diggers in the process of enlarging this street. Heavy truck traffic through the centre has meanwhile increased enormously, provoking a very dusty environment.

As well as the rapid transformation of the landscape, social and economic changes are clearly taking place. On Sundays construction workers visit the town in groups. One can often see a crowd of Chinese foremen and engineers in the market streets. Workers come into towns to have lunch in the few small hotels and at the stalls serving meals, dosa, biryani and parotta. They drink tea and use the Western Union booths to send money to their families. They buy soap, beedies and other tobacco products, but interaction remains extremely limited. The workers live completely apart in camps. Sometimes a van comes to a restaurant to order a load of lunchboxes for workers on the construction site. Only a few engineers and technicians share rented houses in towns. Some fishermen have managed to rent out their tsunami houses to subcontractor labourers. Very few Parangipettai natives are employed in the power plant construction work. Only a few individuals from here and the surrounding villages obtain jobs as watchmen. The prospect for long-term contract employment in the power plant is also very limited.

Very little investment has been made by local entrepreneurs to respond to potential demands emanating from the giant building sites and induced developments. Only the taxi business clearly seems to be flourishing. The local concrete maker, who opened his factory specifically for this project in 2012, managed to become a supplier for the power plant construction site. However, he is very much an exception with good political connections. Two young local entrepreneurs also invested 800,000 INR (80 lakhs) in a water bottling plant in 2013, but they face huge price competition from local non-certified bottling brands and, by the summer of 2014, they had not managed to obtain a serious market with the power plant construction site.

The limited local entrepreneurship noted earlier partially explains the absence of a positive effect in term of induced activity development. On the other hand, the power plant construction site's management is not specifically attempting to avoid the local entrepreneurs. The company is seeking immediate subcontractors and service providers through tenders open to the whole of Tamil Nadu. Certainly, the fact that IL&FS delegates the construction work to a Chinese consortium, SEPCO Electric Power Construction and Shandong Tiejun Power Electric Corporation, has not helped to link the local workforce and entrepreneurs. They recruit their employees through a distant third party based in Pondicherry which functions on a roll jobs basis, subcontractors who have their own maestri system, or through the intermediaries who recruit labourers in the poorest states of India.

Although the power plant mega project has not encouraged much change in terms of employment, it has greatly stimulated land transactions and real estate ventures. So far, some local investors have tried to capture the potential of housing workers and technicians in town. A few buildings have been erected containing about 15 single rooms, also called "studio-apartments", distributed over 2 or 3 floors with external stairs and corridors to serve them. More are planned or in construction on the outskirts, towards the power plant. These buildings also target students at the marine biology centre and their professors. Whatever the real demand may be after the power plant opens, in terms of flats or plots for housing, the price of land has already rocketed to incredible levels. Plots are a privileged investment for NRIs and the richest local families. The soil is considered an excellent way to fix savings and protect them from inflation. In a context of expected major economic transformations, accelerated and higher returns on investment can also be expected. The power plant is one of these opportunities and the extension of the NH45A to a dual carriageway is another. On the NH, negotiations for an acre of presently only cultivable land started at 26 million INR (2.6 crores) in 2015! Everywhere along the entry roads, plots surrounded by fences and advertising are burgeoning. New residential communities are promoted with fancy names. Most plots are sold rapidly and could then change hands several times as their price increases, but they are very rarely actually becoming residential areas and house construction is not really materialising. In town too, with more

opportunities to rent flats and houses, the price of land has increased steeply, almost 10 times in 5 years: from 100–350 to 1000–1500 INR per cent.⁵

The land and real estate boom has a very positive effect on the Town Panchayat revenue. The panchayat receives half of the 8 % stamp duty collected on each land transaction. The new houses increase the panchayat income, which in 2010, stood at 16 million INR (1.6 crore) with expenses representing an outflow of 21 million INR (2.1 crores). The funds devolved by the state through the district administration make up the difference. The recent investment supported by the rise in income was spent on street lighting and, previously, a new bus stand.

Up to now, the opportunity the power plant represents has been dominated locally by a speculative approach, controlled by people trying to capitalise on land and who already have capital to invest. It does not create leverage for social transformation. It did not induce a local dynamic of redistribution through new opportunities and employment. The external change impelled by the power generation mega project seems unable to transform the very stable, unequal and polarised social setting which is still largely dependent on the wealthy extended family's capacity to perpetuate the accumulation of capital through their Indian Ocean connections and on the network of expatriate workers and NRIs.

From another perspective, the potential salinisation that the power plant creates, the need to install desalinisation equipment and all the other potential pollutants likely to result from the power project, together with the giant dying project, raise legitimate questions among fishermen about the future of their activity. This anxiety reinforces the fishermen's alliance with the Muslim elites who are trying to defend the stability and peace of the local environment.

7.6 Conclusion: Trajectory of a Global Town

We have shown that, behind the appearance of decay and stagnation of a marginal coastal town, a lively and globally connected local society is tremendously active. Parangipettai's configuration challenges many accepted, common and rarely contested perspectives on the small town paradigm.

It is not an isolated town, nor a simple mandi town serving its immediate rural hinterland, even though it has an important weekly fresh local vegetable and fruit market. Neither its present dynamics nor its historical path is dependent on the nearest metropolitan region, Chennai. Parangipettai seems to be decaying but, at the same time, a large proportion of the families associated with the town belong to global networks and are involved in circulations all around the Indian Ocean, from South Asia to the Arabian Peninsula. One could say that a mirror population lives

⁵1 cent = 40.5 m².

and works abroad or at sea, as sailors or captains. What seems to be demographic stagnation is, in fact, a dynamic flow of expatriate workers, remittances and import-export of goods. Direct incorporation in long-distance circulation should not be seen as an exclusive attribute of large cities. Parangipettai clearly belongs to a network society open to the world. The diaspora in return appears to be extremely involved in the conduct of local affairs, notably through their investments, charity commitments and marital alliances.

Complexity is considered an attribute of large cities, and from the diversity and intricacy associated with complexity emerge the capabilities to adapt to crises and to reinvent the urban milieu. In contrast, the small town is seen as an insubstantial environment, too small and with a specialised and dependent centre highly sensitive to external negative events. The major crisis of the tsunami in fact revealed that, as any networked and complex society, Parangipettai has been extremely resilient and capable of mobilising and redistributing multiple resources locally as well as on a global scale without waiting for the welfare authorities and NGOs to intervene.

It is important to remember the remoteness of the place, with all the associated implications. It allows local actors who possess the capital and connections to embark on businesses. It plays a role in the social control that contributes to maintaining the slum dwellers in a situation of great dependency, confined on specific land configurations (*wakf* properties). This remoteness also contributes to the feeble local redistribution of wealth.

From a methodological perspective, our attention to openness and connectedness may be somewhat biased by our approach, interests and entry into the locality. Multiple narratives coexist and sometimes compete and contradict each other. This is clearly the case with the setting up of the mega power plant.

Indian Ocean connections have been of great importance for over two centuries. Hence, the hierarchical model usually associated with the spatial and size distribution of cities does not apply here. Parangipettai is not a place of redistribution of banal activities, dependent on a chain of larger cities. Nevertheless, the business-friendly developmentalist perspective can be seen in the implementation of a mega power plant that serves distant industrial needs and supports the large cities' access to continuous electricity distribution. The superimposition of the regional vision in favour of industrial and mega urban development over this local space, with its own and independent dynamic, can compromise the residential centrality it has for its Indian Ocean diaspora. This project is likely to have negative impacts; notably, it can create water and air pollution which can also destabilise the local fishing economy.

A highly connected and urban society is currently facing a sort of impediment to progress as it has been trapped in the net of the coastal investment plan which is imposed here, in Parangipettai and in the name of mega project, a gigantic but also outdated coal-based power plant – a technology conceived at the end of the nineteenth century.

Annexes

Annex 1

Parangipettai population 1813–2011	
1813	9147 inhabitants
1866	7499
1871	7182
1881	7823
1891	14,061
1901	13,712
1911	15,804
1921	12,940
1931	13,762
1941	14,175
1951	15,084
1961	18,079
1981	21,523
1991	23,550
2001	20,912
2011	25,541

Sources Gazetteers 1813–1881 and census of India 1881–2011

Annex 2

List of houses in a street of Parangipettai centre (January 2013).

1. Rented house that costs 6000 INR/month. The owner lives abroad in a *Gulf country*.
2. The owner does not live here. Three shops and a tea stall are accommodated in the house. Same tenant for the four boutiques (2000 INR/month rent for each shop).
3. An old family house in decay, inhabited by the owner, two children and their families.
4. The owner lives in *Singapore*. He did not let out his house. He just comes once a year for a vacation. The market price of his house is around 60 lakhs.
5. A rich family's house occupied partly by the watchman and his family. The owners have a number of businesses established in *Singapore* where they are settled. They do not return often.
6. The house is rented to a doctor for 3000 INR/month.

7. The family owner, absent, has some businesses in *Malaysia*. They rent their Parangipettai property to an optical shop and it is subdivided into four flats.
8. This is an old house not well maintained. The owner rented it out to a relative a long time ago.
9. The owner is absent and comes only for few months each year. He has businesses in *Oman*, *Dubai* and India. He invests in real estate and plots along the Pondicherry to Karaikal strip that passes Parangipettai.
10. The owner lives in *Singapore*. He rents his house to his stepmother.
11. S., the owner, renovated the house in which he lives. The market price of this house is estimated at 8 million INR (80 lakhs).
12. S.—a totally rebuilt house.
13. The owner lives in this house with his family, wife and four sons.
14. The owner lives in *Singapore*. The house is not rented. He visits only every 3 years.
15. Belongs to K., a major business family. The house is empty. No one uses it.
16. Occupied by one member of the K. family, a major business family. He runs a shop in Karaikal after his father died during the tsunami.
17. Occupied by its owner.
18. The house is closed. The owner is a citizen of *Singapore*. He has a business there. He is well settled. He owns many flats and hotels. He returns once year to India.
19. The owner lives in *Singapore*. The house is not for rent.
20. The owner rented it to relatives.
21. Belongs to K., a major business family. They rent it out for 3500 INR/month.
22. Belongs to K., a major business family. One family member lives in it.
23. Belongs to K., a major business family. One family member lives in it.
24. Belongs to K., a major business family. One family member lives in it.
25. The owner works in *Abu Dhabi*. He comes twice a year.
26. The house is rented out to a doctor working at the Annamalai Centre of Advanced Study in Marine Biology.
27. House inhabited by its owner.
28. Owned by a trader who has gold and grocery shops in Chidambaram and Parangipettai. He owns four houses.
29. A K. major business family house occupied by one family member.
30. A K. major business family house, rented.
31. The owner lives in *Dubai*. He comes to Parangipettai once a year.
32. Empty house.
33. Occupied by the owner.
34. The owner lives in *Dubai*. Not for rent. He uses it when he comes back.
35. House rented out.
36. A house rented out. The owner runs a business in *Singapore*.
37. A family house. They own a shop in Chidambaram but live here with the extended family.
38. Empty house.
39. Empty house. The owner family lives abroad in *South Asia*.

40. The owner is settled in *Singapore* (second generation abroad). She does not return but she keeps the house empty.
41. Inhabited by its owner who has a shop in Parangipettai.
42. Empty house that is used only for 1 month per year when the owner who lives in *Dubai* comes to Parangipettai for his summer's holidays and some years also for the main Muslim festival.
43. Inhabited by its owner.
44. Occupied house.
45. The owner lives in *Singapore*. He does not return often. The house is kept empty.
46. House occupied by the owner and his son's family.
47. A major K. business family house that is rented out.
48. Major K. business family house, occupied by one family member.
49. Occupied house.
50. Major K. business family house that is rented out.
51. Occupied by its owner.
52. Occupied by its owner.
53. The owner is in the army: occupied.
54. S.N. family house, rented out.
55. S.N. family house occupied by the family.
56. S.N. family house, rented out.
57. S.M. family house occupied by the owners (only Hindu-owned house in the street).
58. S.M. family house, rented out.
59. House occupied by the owner's family.
60. House rented out—same family as 59.

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Part II
Land, Society, Belonging

Chapter 8

Multilayered Urbanisation of the South Canara Territory

Solomon Benjamin

8.1 Introduction: Settings of Multiple Logics

One sunny afternoon in February 2011 I sat in a palatial “guthu mane” (a traditional Bunt manor house) in South Canara’s Yermal town, located between the cities of Mangalore and Udupi. With me were two Bunt “Chieftains”, Raja, the owner of the house, descended from a long lineage of Jain Bunts, and the late Harish Hegde, my friend and fellow colleague at the architecture school of Manipal University.¹ We were in the mansion’s main public space, a cloistered verandah used as a private space, a durbar. This overlooked what is now an enclosed parking lot. Until about half a century ago this would have been an open ground, occupied by the chieftain’s militia with the captains in the immediate vicinity and the soldiers camped a bit further away. At that time, the guthu-mane stood near a major backwater that meandered into the Arabian Sea. This was my third meeting with Raja and what struck me this time were two massive Chinese vases that flanked our heavily carved rosewood sofas. Raja explained that his guthu mane was also the site of a small inland port from where, about a century ago, ships carried on long distance trade with Africa and China. This natural harbour was strategically located in a bend of the backwater, where pressures from tides from the seaward side “balance” the river flow pressures, allowing for easy inland navigation. Being inland protected the fleet from harsh weather and pirates, and it was watched over by his militia. Harish explained that, till as recently as the 1940s, this backwater haven was maintained by monthly dredging, which allowed an intense river traffic of forest products extracted

¹The Bunts, including some Jains, comprise the Hedge or the Chieftain land owning group, supported by other middle level castes who used to form their militia.

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from the western Ghats. Raja quickly added that this inland port, the source of his own inheritance, reinforced his wealth and status.

An aerial view of Yermal reveals another significant bend to the west, along the sea, a curve in the massive and otherwise straight, eight-lane coastal highway that links Mangalore to Kundapura. This diversion, they explained, was inevitable because of the power of a particularly strong bhoota—a forest deity.

Over the last 10 years this whole locality has been radically transformed by a large coal-based thermal power station, and the nearby SEZ, dedicated to the Suzlon company's wind turbine plant. Later, just before dusk, Raja took Harish Hegde and myself on a walk to show us the oily water in his well, contaminated by the thermal power plant whose exhaust towers loomed on the horizon. During our walk we also came across a pump house which powered a "high pressure" seawater pipeline that snaked through Raja's territory on its way to the thermal power station. The expressway too had cut across Raja's inherited territory, an expanse that included a large tract of fertile paddy fields. We returned to the Durbar hall skirting a cluster of pipal trees under which stood a group of stones that I had learned to recognise as Naga stones, marking a "*Nagabanas*" or a sacred territory. About 100 m away lay a group of smaller buildings now owned by former "tenants". This transformation occurred in the mid-1980s following the anti-tenant legislation. This was one of the many important factors that deprived Raja of his former power, land ownership and wealth. My first meeting with Raja had given me a closer glimpse of how power in the region was being reshaped, as he had just sold the shop we had visited to the incoming Marwari Jains, who during the past decade had taken over many commercial centres of towns in South Canara (Fig. 8.1).

The introduction to this chapter presents some of the core arguments that serve to understand and trace the multiple rationales that have participated in South Canara's urban transformation. Although these include the singularist logic of modern global capital entering metro cities to shape further more "interior regions" such as South Canara, there are also other rationales at work in the region. The choice of South Canara for this study was motivated by its being a site with both historical and contemporary transnational trading practices, dating back to the fourth century AD. Today, its transnational linkages exist via its fishing industry which connects it to South Korea and Japan, the manufacturing and sale of fishing nets to Latin America, and the export of cashew nuts and related equipment to the Gulf, Malaysia and China.

In addition to its sea network, South Canara has a significant land transport history. The Konkan Railways created the country's first rapid railway corridor in the region, linking it to Bombay in the late 1980s. Well before this, in the early 1940s–1950s, India's first night bus service was established between Mangalore and Bombay by the Canara Public Company (CPC) and this was followed by the first overnight bus route to Bangalore in the 1960s. Finally, both transportation and a long-standing trading history that flourished in the 1950s, led to the development of what would go on to become an important banking system at the national level.



Fig. 8.1 Yermal overlapping territories. The Guthu Mane, earlier encampment ground for the chieftains' militia fronting the backwater port (now silted to grow paddy), Naga Sta-ana, ex-tenant houses; more recent interventions: High Pressure Sea Water cooling pipeline for the Thermal Power Project, and the Mangalore-Kundapur Expressway–Panvel Highway

Reading and Arguments

This chapter makes three interrelated arguments based on the case of coastal Karnataka's South Canara²:

- First, it is possible to think about the emerging and remnant urban as constituted via multiple logics that are socially and institutionally embedded in complex configurations and relational spaces.
- Second, although these logics are driven by a variety of factors relating to history, economy, geography and cultural meanings, land, both as a site and as a realm, embodies these forces and they become factors that play a central role in shaping logics of urbanism.
- Third, in what can be described as “autonomous relationalism”, some of these logics can be relatively autonomous and even at times competing, whereas others are built on relationships to metro centres. These logics have dialectical aspects. Conceptually this calls for moving beyond the “local-global binary”, and focusing, as Massey (1994, 2005), on “extroverted places” constituted, as Hart (2006) emphasises, “relationally” via connections across space and time.

Conventionally, the process of urbanisation observed in South Canara would be perceived as the linear progression of modernity as a larger and external force, supported by global capital which would swallow up the region's small trade economy and determine the course of the local society and built form. Within this framework, the South Canara territory is understood as being dependent on its connection to the metro-logics associated with Bangalore and Bombay, where “settlement patterns” have to be discerned in a hierarchical structure in relation to other “closer” towns but also larger urban centres such as Mangalore (632,000 inhabitants in 2011).

Such a “singularist” reading would be supported by several other inter-related and self-reinforcing dogmas:

- (a) South Canara's “culture” is treated as a vestige of an earlier feudal history to discount any substantive role in more “contemporary” processes of territoriality.
- (b) The flattening of practices by a range of social groups and their networks (especially those constructed as being “marginal”).
- (c) Land is seen as a passive setting, devoid of the capacity to bring alive any form of historical intervention. Earlier occupancy histories are viewed as a relic that would dissolve with modernity, unleashed by capital, where territory

²Coastal Karnataka is composed of several districts: Kodagu, Dakshina Canara, Uttara Canara. The Bunt community consists of groups with family names such as Hegde and Shetty, which are part of a larger community of other non-Brahmin groups such as the Mogaveeras (fishing community), Billavas (toddy tappers and archer militia) and Poojari (priests). The other local ethnic groups include other Madhava and Brahmins, the Konkani Catholics, and the Goud Saraswat Brahmins, who speak Konkona and are distinct from the Catholic speaking Konkans. The Goud Saraswat Brahmins or GSB moved south from Goa, encouraged to leave by the Portuguese.

is remapped as articulated investment opportunities set within an axis of rapid global connections.

Furthermore, these readings can create blind spots, because when events or aspects that constitute such complexity are “discovered”, they are perceived as minor or reminiscent of the past, within a hierarchical framework that easily slips into a linear sequence, contained by ideas and ideals of modernity. Local politics, then, is narrowly relegated to the framework of “resistance” that can, in perverse ways, emphasise the need for “expert” rule to interpret and guide events, which further makes uniform other ways of thinking and practices.

All this highlights the scope of the SUBURBIN project, not just as a survey of small towns in India but as a substantive conceptual agenda for exploring multiple epistemologies. As a critique, this requires us not just to consider its assumptions within the New Economic Geography (NEG) framework but rather to look beyond in an effort to “contemporise history”. Supported by future work, this shift may also reveal valuable lessons for the way we think about large cities, enhancing its impact in academic and policy terms.

If we want to consider the varied territorial practices of urbanism in small towns and large villages more seriously than the economist perspective allows, we have to locate them in their particular histories and diverse epistemologies (Visvanathan 2013; Miller and Chapin 2008). Thus, as revealed by a rich scholarship and emphasised by Polanyi (1944), economy is deeply embedded in society. Conversely, this economic framework also forms our main critique of the NEG which is not only de-historicised but also, in many ways, reflects an approach that produces an analysis oblivious to material constructs shaped by complex institutional and cultural spaces. Reading South Canara as a site of practices, we can view mega projects as one of the many epistemological realms located in institutional procedures and policy frames that lead to singular, rather than plural, tenure categories; yet, in the same breath, other categories include small manufacturing and trading firms established in various settlement configurations, shaped by their lobbying local as well as higher level administrative spaces, using their social and political connections. A third set of epistemological realms locate land permeated by sacred beliefs. This diversity suggests that we should view space not as something homogenous, but we need instead to maintain the unboundedness of conceptual categories to reflect various realms of politics that constitute the urban.

Methodically, this calls for a “grounded theory” and a multi-site approach (Lund 2014; Heath and Cowley 2004; Charmaz 2006; Marcus 1995), but also thinking about how to frame an understanding of territorial logics. Accompanying Harish Hegde on his numerous site visits to value property was an opportunity to witness first-hand how economic value was implicated in varied family claims (including conflicts) and complex boundary claims, and to discover various forms of protective deities—especially the Naga stana (snake goddess)—that marked boundaries. We often discussed the formative aspects of South Canara’s urban transformation. As a chieftain, a certified land valuer and having a grandfather who started one of the three main bus companies, Hegde adopted a grounded view over several

sessions. The basis of his approach was an understanding of territory, which located land and property in beliefs and practices of sacredness, forms of inheritance that were also impacted in complex ways by legislation. This formed a backdrop then to view other aspects of urbanisation: the unique geography of South Canara, a narrow strip located between the Western Ghats to the East and the sea, with trading possibilities to the West—discussions about transport, connections and how these came about via the three main bus companies. Finally Hedge provided the opportunity to take a closer look at the economy by introducing me to a range of contacts within the Malpe region fishing community. Posing the question in the sequence mentioned above seems to me a meaningful way to explain the main part of this chapter, and a way to emphasise the centrality of land as a site and realm of practices that shape consciousness. The next section is structured as three subsections that discuss these intersecting logics³:

- (a) The first section, “Sacred Moorings” looks at sacredness as part of a long genealogy of territory that shapes contemporary forms of politics. “Aliya-santana”, a form of “matrilineal” anthropological structure regulating land and property circulation, has a major influence on territorial reshaping. This understanding of land and property both forms and influences other logics of transport and trade-based economies.
- (b) The second theme of inquiry, transport and connectivity shows how a deeply embedded history dating back to the 1930s and set within a particular geography of land and backwaters, along with the networking of ethnic groups and clans, shape the evolution of a significant bus system for both passengers and goods. Such a perspective moves beyond the assumption that sees the organisation of a logistics system as only driven by and focusing on metro centrality and growth centres. Furthermore, these social and political capacities create new geographies of economies.
- (c) Finally, the embeddedness of the economy is highlighted by an illustration of the fishing economy of Malpe near Udupi. With its linkages to a hinterland that covers an area of about 30 km², this economy encompasses transnational and complex local, social and regional political linkages. As is the case with transport, there have been interventions to upgrade the port facilities built around the appropriated bureaucratic space that was politicised to shape interventions beyond the logic of positivist policy. Yet this expansion of the fishing economy includes the use of infrastructures such as the New Mangalore Port Trust and also the Mangalore-Kundapura expressway that find prominence in “modernist” logics.

The concluding part of our chapter returns to the theoretical frame with pointers to how future research may be framed.

³Because of the limitations of space, this chapter does not discuss a fourth logic—the SEZs and megaprojects—as those frames remain the dominant focus of research as discussed in the conclusion to this chapter.

8.2 Setting and Theoretical Critique: Three Spaces of South Canara's Multilayered Territory

8.2.1 Sacred Moorings

Land and its embedded belief systems fundamentally shape political and social space and its related economic forms (Abramson and Theodossopoulos 2000). My initial research agenda aimed to explore tenancy forms in South Canara. I set out with a broad hypothesis that, in small towns, they would be far more varied than in the metro city context, where the master planning process tends to homogenise claims. Meetings with document writers, field visits and discussions with Harish Hegde and later more detailed sessions with Manohar Shetty, one of South Canara's largest land developers, revealed a fundamental issue: that of ideas about and beliefs in sacredness. As evident from the details provided below, ideas of sacredness and property remain deeply intertwined with practices of justice.

The “*Aliya-santana*” form of inheritance, practiced by non-Brahmins in the region, passes landed property to the maternal nephew instead of one's own progeny and is seen to be critical in maintaining the parcels intact and avoiding “fragmentation”. As a long-standing social practice, this was recognised as law by the British Indian court system as far back as 1843. The first guide to this practice took the form of an English translation of the accepted law, published in 1864 by the German Press Mission in Mangalore.⁴

Bhootas, or local deities, occupy a fundamental position in the relationship to land, its ownership, usage and value. The role they play is reflected in both functional and symbolic acts and spaces, for example the control of larger land parcels which include the chieftains' and tenants' houses, and also various types of cultivated, sacred groves and sites and forest land. Carrin (2008: 183–186) notes that “*Bhutas symbolise the political boundaries of a territory, ...bhutas serve to express, at the same time, metaphors of autochthony and land, and metaphors of foreigners and migrations.*” These beliefs underpin complex tenure forms including the short- and long-term leasing systems (chalageni and mulageni), management of various kinds of temple and other grant lands, common lands and numerous forest based tenures.⁵

⁴“*Aliya-santana*” is practiced within non-Brahmin communities. Ancestral lineage is traced through female lineage but, as in the Dravidian *bali*, when a woman marries she moves to her husband's household, giving her “hold over” landed property to her maternal uncle or sister's son. If her husband dies, after the 13th day following the death the woman (and her son/daughter) returns to her own house and takes charge of the property which meanwhile was maintained by her brother. In this system the niece (and the nephew via the “holding” form) have an important role in the continuation of the property. The continuation of property claims is enshrined in the Bhoota that represents the “title”. See: Hegde B (2012) “Aliyasantana”—Where the accent is on women, <http://www.deccanherald.com/content/257244/aliyasantana-accent-women.html> and Hebbar (2005) The Bunts of Tulu Nadu <http://www.boloji.com/index.cfm?md=Content&sd=Articles&ArticleID=838>.

⁵Of these, the most interesting and controversial have been the mulageni and chalageni tenancies, the former being recognized by the Karnataka State Legislature as the Karnataka Mulageni Athava

Territories are highly contextually marked, often invisibly, by forms of sacredness built around complex meanings of “*sta-ana*” connected with various forest deities (Baindur 2014). Spirits include the dual gendered, they cut across religious and caste divides, and one of the most important and powerful of them is the dual gendered *Panjurli* whose commentary advises on territorial conflicts.⁶ Other bhoota cross religious boundaries as seen in the Bobbaya that is both Hindu and Muslim (Carrin 2009). The “naga” or the cobra snake goddess constitutes more visible markers which serve as a protective force emanating from these deities and forest spirits. These are set up as a cluster of stones in the “naga-mandala”. The idea of the *sta-ana* is materialised in the annual bhoota kola, which takes place within a clearly structured rectilinear organisation, but expands within a larger temple area and includes specific physical positions for various non-Brahmin caste groups.⁷

Bhoota, is a “title” conferring ownership of a “*sta-ana*”. In Bunt houses it is common to find a room dedicated to the *bhoota*. Idols of the spirit deity are placed in this room and worshipped by the family and idols are also placed in the families temple grounds that function as an operational space for the bhoota kola. The *bhoota sta-ana* is located outside the house, in the adjacent fields. The positioning of sacred spaces governs the usage of various types of land. The “*guthu mane*” remains connected to these via complex tenancy arrangements, which support the chieftain’s social position and political power (in real and symbolic terms) via the payment of a certain amount of paddy from the annual production; this is also reinforced during the annual bhoota kola ritual as discussed below.

Harish Hegde organised my visits to a bhoota kola in his own village of Hiredeka just beyond Udupi, to explain how, as a chieftain, he has to mediate in complex territorial and other conflicts. Detailed research (Carrin 2008, 2009) also emphasises the dual political and social functions of this space. Bhoota kolas are flexible and operate as a dialectic structure, allowing the kola to address a range of contemporary conflicts. There are two aspects to the annual bhoota Kola, one involves the person representing the Bhoota going into a trance and taking on the identity of the Bhoota; hence, any advice or answers provided in this state are considered the sacred word of the Bhoota. The other is the administrative aspect of

(Footnote 5 continued)

Volamulageni Genidararige Malikathvavannu Pradana Maduva Vidheyaka in 2011. The study of tenure forms is still pertinent, but as this chapter emphasizes, other logics emerge in sharper relief.

⁶See Carrin and Tambs-Lyche (2003) and Carrin (2008, 2009) for a detailed account of the types of spirits and also “new mediums” to reflect more contemporary situations. Carrin (2008: 183–186) notes that: “... *The story of Bobbarya, the sailor bhuta, helps to understand how north and south, forest and coast area, autochthons and foreigners are integrated in an ideal order defined by the figures of the bhutas. ... Bobbarya is known as the god of the sea and worshipped mostly by the members of the fishermen communities (Karve and Mogaveera). He is the soul of a young man born of a Muslim father and a Jain mother...he exemplifies all the oppositions we find in Tulunadu today: Muslims as well as Hindus attend his kola...*”.

⁷If a lower caste group at the Kola, such as the *Billaawa* (armed bowmen/toddy tappers) chose to “step out” of their particular location, the entire possession ritual comes to a grinding halt—as the change of position calls into question the legitimacy and power of the chieftain who funds the event.

the forum where a range of issues are discussed by the whole village. These forums function in addition to, rather than as a replacement of, the court or administrative system. At some kolas a well-known drama such as *Koti' Channaye* is performed late into the night and often well into the early hours of the morning. An entrepreneur, Prabhakar Nayak, pointed out that the “question and answer session” that is part of these performances does not follow any prescribed agenda: any member of the audience can raise an issue for public resolution. The long oral narratives (or *paad-danaas*—songs sung in the kola performances) provide an open-ended space to highlight the issue that has been tabled for discussion before the possessed spirit. This flexibility, along with a seemingly rigid structuring of “who stands where” is an example of “incompleteness” which allows the Kola to address a range of contemporary issues (Carrin 2008, 2009). Such social relationships support an economic setting that interconnects various types and geographies of land.

The above discussion presents a critique of the “western and globalised” notions of property (Verdery and Humphrey 2004) and forms the core of the Carrin and Tambs-Lyche (2003) nuanced understanding of the bhoota kola as a political and social space to establish a conceptual realm. We can make several remarks about the role of the Kola:

- (a) The first is that the *kola* functions as a fluid space of power relationships between various caste groups and these are mediated in complex and unpredictable ways rather than being hierarchically fixed
- (b) Second, it reveals the close connection between the ritual space and a variety of types of land, which in turn underpins economic transformations
- (c) The kola ceremony not only continues to be held but attracts an ever increasing audience and has a real role to play as a forum for mediation and justice on contemporary issues
- (d) “Sacredness” here remains both intensely autochthonous and an open political space (Carrin and Tambs-Lyche 2003: 35, 36)

Such a perspective of territory resonates with another set of significant works located in small towns in Eastern China, where “modernist” infrastructure interfaces with territorial logics shaped by sacredness (Dean and Lamarre 2003).

I discovered the dialectical importance of sacredness and territory one February afternoon in 2011 when Hegde and I were sitting in Raja’s mansion. Our discussions focused on an archival letter written by Raja’s grandfather to the British Colonial Administrator in Mangalore. This yellowing paper, traced with blue writing, reminded the administrator of the chieftain’s control over the family’s temple land territory which was reinforced, at least annually, by the kola and extensive public, or rather political, support. As Hegde was translating the letter, we were interrupted by a group of people who had brought a petition. Raja went to meet them and, on his return, mentioned how they were his ex-tenants, now landowners after the tenancy act. They had come to request his financial and

ceremonial support in the upcoming *Bhoota Kola*.⁸ He complained that these days, with the loss of his family's earlier agricultural incomes to this very same group, it seemed highly unfair to expect him to fund the event. Harish Hegde countered that the *kola*, however, still maintained their honour, ending a conversation that is a pointer to the complex changes that South Canara is witnessing.

Disturbance as legislative upheavals and from territories possessed

Sathyada mann undu,/ sathyada daiva yaan,/ ee raajyodu sathya athaavande/mithya kodi yetthere budaye" (This land is truth, I am the truth and I will never allow falsehood or lies to come up in this landTrust me, I will create the situation to trust, I will consider children of ten parents as one, feed you like a mother by my invisible breast milk, guide you as an uncle, protect you on my lap. I will be the invisible fence for the entire village and protect you all like a beautiful garden) - Bhoota Verdict. <http://yadavbanger.wix.com/billawar#!bhootaradhane/cclj>

In a series of interviews with Manohar Shetty, a Bunt and one of the biggest land developers in South Canara, he repeatedly returned to his conception of South Canara as possessed by various governing spirits. This has deeply affected his own real estate practices which consist mainly of building high-class apartment complexes for upper to middle income groups. Such beliefs in "sacred territory" apply across religions, and even Catholics and Muslims returning from abroad have their extended families visit him to ensure that the required cleansing ritual has been carried out. Any buildable land has to be carefully checked, cleansed and delineated as buildable or unbuildable.⁹ Shetty explained in detail how the entire territory of South Canara, possessed by spirits and protected by nagas, was "disturbed" and he narrated the mythological genealogy of South Canara. The territory was formed when the god Parashurama threw a *Kuudali* (axe) into the Arabian sea. The parting of the sea disturbed the nagas, leading them to complain, and in compensation they

⁸Carrin (2008: 181) makes an important point illustrating her argument about South Canara's "autochthony" in that land reforms have not "...ended the responsibilities of landlords towards their bhutas. From an ideological point of view, the bhuta cult enables the Bunt who possess wealth and prestige to control the political and moral order of the society as they have a very close link to the bhuta of their land who is also the village bhuta of their (previous) tenants. Even if this link is weakened by the land reforms, Bunts still occupy a dominant position."

⁹He explained how groups of all faiths, including Muslims, rich traders embarking on real estate like any common man, hire a Billava priest to check the land out and whether they can calm the disturbed naga by offering a puja at the shrine of Kukke Subramanya located deep in the Western Ghats. Shetty laments that the intensity of this "checking out" is such these days that Muslims and Christians are exploited by Brahmin priests who conduct a simple puja to the extent that now "... you can move the naaga and sanity can be done in your own suited way before taking the property". He himself refuses these easy ways out and when he seeks a place to develop he adopts a proper procedure: "I take the soil from the four corners of the site, and especially the North East corner soil, to the famous Naga temple at Kukke Subramanya and pray to the main Goddess there. If there is any of your (naga) egg, or those of earlier generations belonging to the naga, please forgive me for doing this work on this site, and give me the property free of disturbances. After that, we go and do a thirthanam pooja (a ritual cleansing with holy water to appease the deity) and the prasadam is the anthill powered mud which we sprinkle over to start the work". (30097: 4-50).

were given what he calls “extra strong power”. Anywhere else, Shetty explained “...if nagas are killed, not much happens, but over here in South Canara, a lot of bad things can happen to the person(s) killing them...”.¹⁰

It is hence hardly surprising that almost all land developers such as Manohar Shetty follow a detailed procedure to check whether the property is buildable, and they carefully follow prescribed rituals to ensure that it is. The risks of not doing so go far beyond the loss of clients and there is a threat of far more serious consequences. Shetty related several of his own experiences that convinced him of the power of the Nagas to protect deities. These included accounts of how, in the construction of several mega projects, the contractor, or the company that was insensitive to these issues, suffered huge losses.

Shetty also cited the example of the Nagarjuna Company that built a six-lane expressway with no concern for the Yermal Bhoota's territory. He explained that this large project, one of several involving outsiders who did not understand these beliefs, experienced the consequences in several ways. For instance, not far from the Yermal highway Shetty had visited another site where some of his own work was underway, and there he saw an undemolished bhoota sta-ana surrounded by a site cleared of its undergrowth. Evidently the local people had gathered around the bhoota shrine to appeal to the spirit to stop the work the company was doing. They also asked the deity if the large construction company Nagarjuna would pay for the upkeep of the bhoota Sta-ana. They then prayed to the bhoota saying “*Now that we have been removed from your service, and from this place, you have to do something...to show your powers to these outsiders.*” Not far from this bhoota sta-ana, a 100 m high chimney stood next to the power plant. Every week someone fell off it, adding to the very high rate of accidents in the area, and finally provoking a political and social crisis. One day, one of the workers, a young boy from Orissa, fell into a pit near the bhoota sta-ana and lay there unconscious. When he came round, he was possessed by that particular spirit and started to talk in Tulu—reciting verses relating to the spirit of the bhoota. Over my 2 years stay in South Canara, I had heard partial accounts of these events from several people but the clearest account was that provided by Manohar Shetty. These beliefs shaped the way people remained on their land and, if they were evicted, they left their mark in the form of bad luck, which then formed a web to explain a range of negativities and crises for the large “outsider” developers.¹¹ Shetty mentions that often on his site visits he would see a lot of Naga stones, a clear sign of sacred ground, but they had been abandoned by people who had not been fairly compensated. As a result, Shetty explained “*When the people left, they would leave their bhoota sta-ana and not demolish it, saying to the KIADB officials, “God will curse you”. Even if the house is taken away, the tiles, the wood, the Muslim house demolishers do not*

¹⁰(30100: 1.02). See the account by Devdutt Pattanaik: The axe of Parshuram (online accessed April 2016) <http://devdutt.com/articles/indian-mythology/the-axe-of-parshuram.html>.

¹¹He felt it was hardly surprising that the Suzlon wind turbine plant built on such sacred ground had seen such huge losses.

touch the naga stones as it's sacred territory. These old stories of the land make it a disturbed territory..." and to emphasise that this power is concentrated in this territory, he stated *"...from Kasaragod to Barkur this area is created for naga, the naga ardhane, and only after Bhatkal, the power is not there."*

Interestingly, Manohar Shetty's strong beliefs are relatively recent. As a young Bunt, he grew up in Bombay and returned much later to Mangalore and then to Udupi to join his father's pharmacy business (one of the largest chains in South Canara). He then ventured into the construction industry and became a very successful entrepreneur. Although he was not religious before settling in South Canara, after starting his real estate business he always performs a detailed ritual. After all, if anything goes wrong, he refuses to undertake any construction at that site, as his reputation as a builder is at stake.¹²

When I brought the conversation back to South Canara's urban transformation, Manohar Shetty and Harish Hegde each saw the combined effect of several events as having had a transformational role beyond the effects of "natural" factors. Hence, we can see that, in South Canara, several factors contribute to the type of urbanisation that is taking place.

First, the above account provides a dramatic indicator of how sacredness constitutes the most pervasive logic-shaping territories today. Second, the tenancy legislation in 1961, amended in 1978, which sought to abolish mulagani and chalagani tenancy systems and establish mulagenidars (tenants) as landowners at the expense of the mulgars (landlords), played a major role in transforming land and the relationship to it. By 1982–1983 these laws had an extensive impact and destabilised the Bunt chieftains' access to agricultural surpluses. Their large plots were alienated and divided into smaller parcels, giving control over the land and surpluses to the Billavas, who had earlier made up their militia, and the Poojaris castes. Many middle class Bunts and other non-Brahmin groups found their way to Bombay, seeking employment in the Bollywood film industry or in the small restaurant businesses, particularly the "Udupi Hotels", working under South Canara Brahmin owners. Many others, the Shetty of the Bunt middle level castes, joined the underworld involved in smuggling.

Understanding land and property in these terms is both formative of and influential to other realms that give rise to heterogeneous perspectives. These relate to but also complicate territorial logics, as stated in *Capital's Property* (Elden 2009)¹³

¹²He illustrated this with an anecdote of an occasion when he was asked to upgrade an earlier shrine between Udupi and Manipal by a member of the local ISKCON (Intl. Society for the Krishna consciousness) group. When he reached there, he found that several of his workers had discovered some Naga stones and had also had accidents. On intuition, he decided to enter the shrine alone to pray and seek blessings; he asked the Naga for a concrete sign that it was okay to proceed, and while inside the small room a cobra snake appeared before him. Shetty took this to be a sign and he decided not to work with ISKCON; instead, he decided to consult a Bhoota priest. The priest asked him to carry out a cleansing ritual before proceeding. Shetty also took a vow that he would remain vegetarian until the construction was completed.

¹³Elden usefully sees territory as an *"...account of the emergence of a concept out of a complicated and multi-layer set of chronologies, fragments and aporias. Territory is a concept, as all concepts, with a history. It is also one with geography. Both the concept and the project are political: this*

with, as we also see in the Jacobs (1996) work on aboriginal claims, sacredness shaping an everyday history.¹⁴

8.2.2 *Transport and Connectivity: A Historical Path*

In 1914, the first successful private bus system was started by Canara Public Company (CPC) in Dakshina Kannada, with one bus plying between Mangalore and Bantwal towns, making travel across long distances possible within the Mysore state.¹⁵ CPC was a Public Ltd Company and V.S. Kamath, a prominent Gowd Saraswat Brahmin (GSB), was the Managing Director. Initially, it was popularly known as “CPC Logistics”, and in a few years it expanded to possess a fleet of buses covering the whole of South Canara, North Canara, Mercara/Madikeri and parts of Kerala. The other prominent bus company in South Canara at the time was Hanuman Transport Pvt Ltd.¹⁶ It catered for passengers, goods and mail and they complemented their services by setting up petrol stations.¹⁷ The four partners involved in Hanuman Transport Pvt Ltd. belonged to the dominant communities: Pangal Ravindra Nayak, the former Managing director was a GSB as was his father who had been a freedom fighter, social activist and statesman; Udyavara Sadia Marakala was a Mogaveera from the fishing community and also the chairperson of their federation; and Pathana and Ananth Shetty were Bunts. The third bus company was Shankar Vitthal Public Ltd (whose partners were all Shivalli Brahmin). There was also Gajandra Motor Travel (GMT) that operated from 1944 onwards, with 130 routes, and a last one was Ballal Transport.

The main expansion of public transport via private companies occurred in the early 1930s. Although the geographical factors behind this expansion are important, South Canara transport’s system is layered historically and shaped by a range of social and caste factors embedded in its economy. Ease of transportation in the area existed long before the recent intercity highway development. The latter was conceived as a corridor for logistic purposes associated with the SEZs and the New Mangalore Port Trust.

South Canara’s singular geography, made up of backwaters, rivulets and ferry services, constitutes an important determinant in the establishment of transportation

(Footnote 13 continued)

historical work is part of a wider project that aspires to be a ‘history of the present’ (see Elden 2009: 16).

¹⁴See Chap. 6: ‘Authentically Yours: De-Touring The Map’ in Jacobs (1996).

¹⁵The CPC website is minimal but their subsidiary company Canara Springs that later became an independent entity, provides a useful insight: http://www.canarasprings.in/?page_id=246.

¹⁶See <http://hanumanconcerns.com/business.php>.

¹⁷Interview with PR Nayak, September 2011.

services, but it is not the only factor that drove the evolution of its significant bus system.¹⁸

Another essential element in the state's development is the challenge transportation companies have to overcome to reach the inner land settlements. This involves climbing and crossing the Western Ghats—a hilly landscape that dips steeply towards the coastal plain, crossed by a complex environment of backwaters, 30–50 km wide, adjoining the Arabian Sea. For instance, one such route is the triangulated connection between Mangalore on the coast and Karkala in the foothills of the Western Ghats. Set in a landscape of black granite, this temple town is a particularly important pilgrimage site for the “Jain Bunts”. Presently a district headquarters, it is also the site of St. Lawrence of Karkala, a Roman Catholic Church dedicated to the eponymous saint. It was built in Attur on the outskirts of the town in 1759 and welcomes people from all three religions, who come seeking “miracles”. The highway running from Karkala towards Mangalore has witnessed the development of factories processing cashew nuts. These nuts are both sourced and exported internationally. Karkala's connectivity also encourages the extraction of its black granite, which is transported to Bangalore, but also towards the new Mangalore port to be shipped to Japan and Korea. A highway running westward from Karkala to Udupi, not far from the Coast, makes a further connection northwards to Bombay. Eastwards towards Bangalore the highway passes the temple settlement of Dharmasthala that is revered for its powerful Naga shrine. Here, ideas of sacredness stimulate an expansion of transport facilities when Muslims and Christians alike visit the place before embarking on new real estate projects in the region (Fig. 8.2).

Figure 8.3 illustrates this logic (using the limited possibilities of graphical representation). It draws on my conversations with Harish Hegde and historical documents accessed at the Regional Resource Centre at Udupi. We see the backwaters at Yermal, a coastal settlement between Udupi and Mangalore, and north of Yermal, the natural harbour at Malpe which allowed ships to dock along the international trading routes with East Africa and South East Asia. These geographies were materialised by the maintenance of a militia that would “protect” passing trade, travelling mainly along a north-south coastal axis. Such routes developed, as discussed below, into the major road system, laying the foundations for the region's and country's extensive bus transport system. Thus the factors that shape this geographical structuring include historical factors, such as the military autonomy the chieftains enjoyed in colonial times, which should be seen in relation to the threat represented by the Portuguese to the north, and the British to the south.

These diagrams also depict a triangulated route connected to Karkala. In earlier times, before bridges were constructed across the widening mouths of backwaters as these emptied into the sea at the coast, these zones were difficult to cross,

¹⁸For archival images of Mangalore and South Canara see “Olden (sic) memories of Mangalore” at <http://mangalorespots.blogspot.in/2007/09/olden-memories-of-mangalore.html>. Note the images of ferry crossings on the Netravati river of the Ford and Dodge buses.

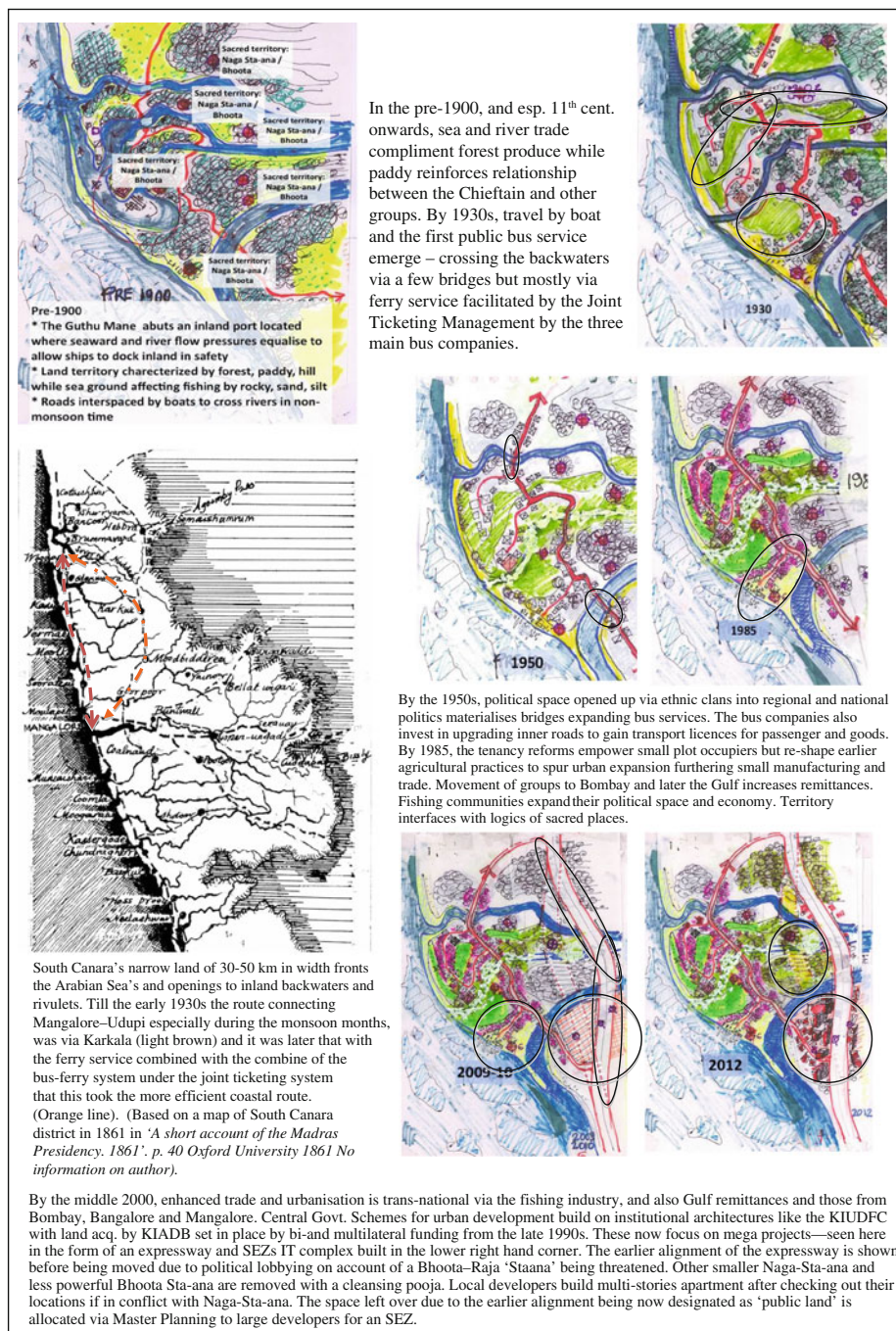


Fig. 8.2 South Canara's transformation as an interface of physical geography and multi-logic urbanisation, a diagrammatic account that draws from several real sites in South Canara, and especially Yermal

ಯಾಂತ್ರೀಕೃತ ಮೀನುಗಾರರ ಸಂಘ (೦)
 ಸಂ:25/94-95
 ಹಂಗಾರಕಟ್ಟೆ, ಕೋಡಿಬೆಂಗೆ - 576 218, ಉಡುಪಿ ಜಿಲ್ಲೆ.

ಸಂ:25/94-95
 ಹಂಗಾರಕಟ್ಟೆ, ಕೋಡಿಬೆಂಗೆ - 576 218, ಉಡುಪಿ ಜಿಲ್ಲೆ.

ಬಂದ 64 ನೇ 23 ನೇ ಸೆ. 11 ರ 24 ನೇ ಸೆ. 11 ರ - ಕೋಡಿ - ದಿನಾಂಕ: 04.09.2012.
 1409 - 2009 4491 74 13 - 4.9.2012.

ಸನ್ಮಾನ್ಯ ಕರ್ನಾಟಕ ಸರ್ಕಾರದ ಬಂದರು ಒಳನಾಡು ಹಾಗೂ ಮುಖರಾಯಿ ಖಾತಾ ಸಚಿವ ಶ್ರೀ ಕೋಟ ಶ್ರೀನಿವಾಸ ಪೂಜಾರಿಯವರ ಸನ್ನಿಧಾನಕ್ಕೆ ಆಹ್ವಾನಿತ ಮನವಿ.

ಸನ್ಮಾನ್ಯರೇ,

ವಿಷಯ: 1. ಉಡುಪಿ ತಾಲೂಕು-ಕೋಡಿಬೆಂಗೆ-ಹಂಗಾರಕಟ್ಟೆ ಬಂದರು ಹೊಳೆ ಎತ್ತುವುದು.
 2. ಕೋಡಿಬೆಂಗೆ - ಜಟ್ಟಿ ತೆಂಕುಬದಿ ಗೈಡ್ ಬಂಡ್ ಕಲ್ಲಿನ ತಡೆಗೋಡೆ ರಚನೆ.
 3. ಹಂಗಾರಕಟ್ಟೆ ಬಂದರು - ಜಟ್ಟಿ ಕಾಮಗಾರಿ ಕೂಡಲೇ ಸಂಪೂರ್ಣಗೊಳಿಸುವುದು.

1. ತಮ್ಮ ಸ್ಥಳದಲ್ಲಿರುವ ಮೇಲಿನ ಬಂದರು ಪ್ರದೇಶ ಆಳವೆ ಬಾಗಿಲು-ಬೋಟ್ ತೆರವು ಕೋಡಿಬೆಂಗೆ ಹಂಗಾರಕಟ್ಟೆ ಬಂದರು ಸ್ಥಳದಲ್ಲಿ ಹೊಳೆ ತುಂಬ ಮೀನುಗಾರಿಕೆಗೆ ತೊಂದರೆ ಆಗುತ್ತದೆ. ಈ ಹೊಳೆ ಎತ್ತುವ ಬಗ್ಗೆ ಹಲವು ವರ್ಷದಿಂದ ಸರ್ಕಾರದಲ್ಲಿ ನಿವೇದಿಸಿಕೊಂಡ ಪ್ರಯತ್ನ ಹೊಳೆ ಎತ್ತುವ ಕಾರ್ಯಕ್ಕೆ ಸುಮಾರು 3 ಕೋಟಿ ರೂಪಾಯಿ ಮಂಜೂರಾಗಿ ಕಾಮಗಾರಿಯು ಸರಕಾರಿ ಅಧಿಕಾರಿಯವರ ನಿರ್ದೇಶನ ಇಚ್ಛಾಶಕ್ತಿಯಿಂದ ಕಳೆದ ಬಹುವಿನಲ್ಲಿ ಆಗಬೇಕಾಗಿದ್ದ ಕೆಲಸ ಈ ವರೆಗೂ ನಡೆಯಲಿಲ್ಲ.

ಸದಿ ಬಂದರಿನಲ್ಲಿ ದಂಡೆ ಬಿದ್ದು ಕಳೆದ ಬಹುವಿನಲ್ಲಿ ಅರ್ಧದಲ್ಲಿಯೇ ಮೀನುಗಾರಿಕೆ ಸ್ಥಗಿತವಾಗಿತ್ತು. ಸಂಬಂಧಪಟ್ಟ ಅಧಿಕಾರಿಗಳಲ್ಲಿ ಅದೇಷ್ಟೋ ಬಾರಿ ಇದರ ಗಂಭೀರತೆಯನ್ನು ನಿವೇದಿಸಿಕೊಳ್ಳಲಾಗಿದ್ದರೂ ಈ ಸಣ್ಣ ಬಂದರು ಅಭಿವೃದ್ಧಿ ದೃಷ್ಟಿಯಿಂದ ಕಾಮಗಾರಿ ನಡೆಯಲೇ ಇಲ್ಲ. *development of small port.*

ಕಾಮಗಾರಿ ಪ್ರಾರಂಭವಾಗಬೇಕಾಗಿದ್ದ ಎಲ್ಲಾ ಪ್ರಕ್ರಿಯೆ ಮುಗಿದಿದೆ ಎಂದು ತಿಳಿದು ಬಂದಿದೆ. ಆದ ಕಾರಣ ತುರ್ತಾಗಿ ಸದಿ ಹೊಳೆ ಎತ್ತುವ ಕಾಮಗಾರಿಯು ಬಂದರು ಸಚಿವರಾದ ತಮ್ಮಿಂದ ಕೂಡಲೇ ಪ್ರಾರಂಭಿಸುವರೇ ತಕ್ಕ ವ್ಯವಸ್ಥೆಯನ್ನು ಮಾಡುವರೇ ಈ ಮೂಲಕ ಈ ಭಾಗದ ಸಮಸ್ತ ಯಾಂತ್ರೀಕೃತ ಮೀನುಗಾರರ ವಿನಂತಿ. ಸಂಬಂಧಪಟ್ಟ ಅಧಿಕಾರಿಯವರಿಗೆ ಬರೆದ ಪತ್ರ ಲಗತ್ತಿಸಲಾಗಿದೆ.

2. **ತಡೆಗೋಡೆ - ಗೈಡ್ ಬಂಡ್ ಹೊಳೆಯಲ್ಲಿ ರಚನೆ:-** ಕೋಡಿಬೆಂಗೆ ಜಟ್ಟಿಯ ತೆಂಕುಬದಿಯಲ್ಲಿ ಕಲ್ಲಿನ ದಂಡೆ ಗೈಡ್-ಬಂಡ್ ರಚನೆ - ಪ್ರಸ್ತಾವನೆ - ಎಕ್ಸಿಮೇಶನ್-ಬಂದರು ಇಲಾಖೆ (ಉಡುಪಿ) ಯವರಿಂದ ಸಂಬಂಧ ಪಟ್ಟ ಇಲಾಖೆಗೆ ಸಲ್ಲಿಸಲಾಗಿದೆ. ಜಟ್ಟಿಯ ಎದುರಿಗೆ ಹೊಳೆ ತುಂಬುವುದನ್ನು ನಿಯಂತ್ರಿಸಲು ತುಂಬಾ ಅನುಕೂಲ ಇದರ ರಚನೆ ಬಗ್ಗೆ ಸ್ಪಂದಿಸುವುದು.

3. **ಹಂಗಾರಕಟ್ಟೆ ಬಂದರು - ಜಟ್ಟಿ - ಕಾಮಗಾರಿ:-** ಜಟ್ಟಿಯ ರಚನೆಯ ಕಾಮಗಾರಿಯು ಮುಂದುವರಿಯುತ್ತಾ ಇದೆ. ಕಾಮಗಾರಿ ಈಗ ಸ್ಥಗಿತವಾಗಿದೆ. ಈ ಕಾಮಗಾರಿಯು ಕೂಡಲೇ ಸಂಪೂರ್ಣ ಆಗುವಲ್ಲಿ ಅಧಿಕಾರಿಗಳಿಗೆ ಸೂಚನೆ ನೀಡುವುದು.

ಉಡುಪಿ ಜಿಲ್ಲೆಯಲ್ಲಿ ಇರುವ ಈ ಕಿರುಬಂದರಿನ ಅಭಿವೃದ್ಧಿ ಆದರಲ್ಲಿ ಮಲ್ಟಿಯಲ್ಲಿನ ಬೋಟುಗಳ ಒತ್ತಡವು ಕಡಿಮೆ ಆಗಿ, ಈ ಪರಿಸರದ ಅಭಿವೃದ್ಧಿ ಆಗಲು ಸಾಧ್ಯ. ಈ ಕಾರಣ ಈ ಕಿರುಬಂದರಿನ ಅಭಿವೃದ್ಧಿಯನ್ನು ತಮ್ಮ ಮುಖಪರ್ಚಿಯಲ್ಲಿ ಮಾಡಬೇಕಾಗಿ ನಮ್ಮ ಕಳೆ ಕಳೆಯ ವಿನಂತಿ. *ಉಡುಪಿ ಜಿಲ್ಲೆ 100-150 ಸೆ. 11 ರ 24 ನೇ ಸೆ. 11 ರ - ಕೋಡಿ - ದಿನಾಂಕ: 04.09.2012.*

ಯಾಂತ್ರೀಕೃತ ಮೀನುಗಾರರ ಸಂಘ (೦) ಹರವಾ:
 ಮೀನುಗಾರರ ಸಂಘ ಹಾಗೂ ಸರ್ವ ಮೀನುಗಾರರು.
 ಅಧ್ಯಕ್ಷರು, ಕೋಡಿಬೆಂಗೆ.

This petition will be forwarded to the Sec. Fisheries Dept.

The petition is to be forwarded to the Sec. Fisheries Dept. for some reason.

Fig. 8.3 A petition by the fishing federation to the District Commissioner and Head of Fisheries Department

especially when the rivers were in spate after the very heavy monsoon. By the 1930s, road transportation of goods and passengers was increasing significantly with several bus companies and the ferry services across the backwaters that provided a perfectly coordinated connectivity along the coast.

The need to coordinate with the ferry services to cross the very dense backwaters pushed the three major bus companies to create the Combined Booking Agencies (CBA) which continued to operate till the mid-1980s. Under this system, a ticket from one company was valid across all the three participating companies. It allowed passengers to use the ferry services and board different buses on the other side, and their earlier bus returned with passengers travelling the other way.¹⁹ At times, the companies also shared minor bus repair services. Post-independence, the political space expanded. The heads of the bus companies had relatives such as U. Srinivas Mallya or Sheenappa Mallya, both freedom fighters. They were also from GSB families. The latter was an MP for 18 years (1946–1965) and a political contemporary of both the Indian Prime Ministers Nehru and Lal Bahadur Shastri. These key relationships were instrumental in the rhizome-like modernisation of the road facilities that bored deep into Canara territory. Sheenappa Mallaya promoted the development of highways and bridges, notably the NH-17 (Mumbai-Kochi) and the NH-48 (Mangalore-Bangalore). By the early 1960s, backed by the solid transport group mentioned above, he lobbied the central government to build an all-weather port and an airport in Mangalore. His political influence also resulted in the establishment at Surathkal, near Mangalore, of the Karnataka Regional and Engineering College, now called the National Institute of Technology, Karnataka (NITK). Another important factor was that Ravindra Nayak's extended family also included key journalists, and incredibly, the most important initiators of private banks that were later, in the 1960s, nationalised and involved in countrywide financial operations.

Such political space allowed the implementation of other institutional ingenuities, to open new routes by “working” the administration. As he recollects:

...When any bridge was being constructed, I would rush and put a bus service there, making our company, the HTC, proactive to expand routes into side roads to connect these to the main roads and, thus, claim that route.

Officially, this was relatively easy and anyone could apply for and obtain approval from the collector at Mangalore. However, there was limited access to public investments that were controlled by suspicious British administrators in Mangalore and even more so in Madras. Fortunately, they had influential relations

¹⁹This information was provided from two sources, separately: a lengthy interview with Ravindra Nayak (then 90 years old) in September 2011 (Tape 30003-05), and Harish Hegde, whose grandfather was a partner with the HMC. HH provided a lot of information to emphasise how land was occupied. Nayak highlighted that this common ticketing system worked without any legal agreement but, rather, as a continuation of a verbal practice—driven by joint interests. During the 1980s, the extensive construction of bridges across the backwaters has for effect to offer continuous roads. It led to the abandonment of the joint ticketing.

and were supported by the “*rice eating Revenue Brahmins*” (Tamilian Brahmins—as termed by the Bunts). He continued:

...We got good contacts with the PWD, and we registered as a “C” class contractor in 1976. In this way, we (HTC) went to Shimoga while CPC went to Chikmagalur. That’s how we developed the Someshwara route to Shimoga and Sagar – to form a monopoly. In this way, I raised my permits from 26 to 65 routes. After that, Hanuman Transport acquired the Gajandran Motor Travel (GMT) company that was in operation since 1944 and had 130 permits. These added to our existing 65 permits...”. HTC today operates 40 buses with Ravindra Nayak as chairman, and brother’s son Vilas Nayak as the managing director.

Thus the heads of the three bus companies, with their strong land holdings as chieftains, instrumentalised their political space. Their investments in petrol pumps allowed them to shift those profits into transport. They also diversified by investing in other repair divisions. All three companies thrived, and were able to pay out double or triple bonus shares to their investors. It also helped that Nayak’s father and, in fact, their entire family was involved in national level politics. Seven members of the Nayak family were involved in the freedom movement, including a lady arrested by the British, and Ravindra Nayak’s brother, Manjunath Nayak, who participated in the national student movement. Ravindra Nayak recollects that they were a “small family of 200 people”. Nayak’s father was a conservative director for the Pangal Naik Bank that merged with Canara Bank. They supported Sheenappa Mallya before he became an important minister representing Udupi, but when the town denied him a ticket for an MLA position, he left the Congress party to contest the Manipal Pais via the Praaja Socialist Party (1952–1972).²⁰

What we can clearly see above is that, instead of a centrally designed metrological transportation system, interventions in bus routes, forms of management, financing or the opening up of new routes involve multiple factors, where transport networks are embedded in the long history of influential families—for the most part Bunt and rich GSB. The transformation of control over property, ideas of sacredness and its political implications, including the changes made to the Aliya-Santana property system with the Tenancy Act that displaced Bunts from landed incomes and led them to develop their connections to Bombay, all influenced the way transport networks have expanded and served the Canara territory. This contrasts with the assumption that efficient mobility is captured by the mantra of the imperative connection between “secondary” and primary centres, here Bombay and Bangalore. Where deviations do happen, they are assumed to be “contaminants” of a rational policy process produced by political or social pressures.

Another equally important rationale is the working of the political-administrative space that is revealed in the manner in which key local families worked the colonial administration in Mangalore and Madras, and later in Bangalore, to appropriate investments on their terms. There are also individual histories that shape Canara’s transport genealogy. Harish Hegde had deep and personal connections to South Canara as a politician; he was a member of the Udupi Zilla Parishad during the

²⁰Naik (2011, Tape30006: 8.17).

1980s. In this role he successfully pressured the Konkan Railways to provide timely compensation to those whose land was acquired. During the following decades he defended the fishing groups who were fighting territorial wars for the deep sea. He also pressured the state and the Central Government Rural Development Ministry to invest in smaller fishing harbours and a network of roads, as well as other types of infrastructure such as cold storage facilities and ice manufacturing machinery, and later, trawler manufacturing.

Significantly, when I first asked Hegde about South Canara's economy, he started by describing the logic of coastal geographies and his own grandfather's and father's experiences (they were partners in the Hanuman Goods and Passenger Services, one of the three transport companies). He then linked this to the emergence of a particular type of trade-based economy. These logics do not need to be mutually exclusive but, rather, they are related in complex ways. A key issue is their ability to adapt to both smaller towns and rural clusters, at the same time connecting these places with distant metro cities. Furthermore, it is this capacity to adapt and appropriate in embedded ways that opens up spaces and creates new geographies. An example of this is the way in which the attribution of new bus licences was a result of the appropriation of the existing bureaucratic space.

Today, South Canara's trade-based economy is intensively connected throughout the state and also has wider connections: to Goa, en route to Bombay in the north, to Bangalore via the Western Ghats and to Kerala in the south. Although the Konkan Railway is a significant connector, some claim the fact that it does not run further south is the result of the political lobbying by the powerful bus companies. Our argument here is not a normative one, but rather a way to reveal the logics that shape small town growth. Transport stimulates a very significant network of related service economies, including that of manufacturing.

As early as 1922, for instance, the CPC bus company, under its patriarch VS Kamath, encouraged the creation of Canara Springs, a large service workshop owned by the Kudva family (also GSB). This was part of its maintenance division. Then in 1949, because of the shortage of imported leaf springs, they started to manufacture springs from imported "spring steel" at a manufacturing unit at Maroli, Mangalore. By the 1960s, the patriarch, V.S. Kudva (1899–1967) started a steel smelting factory inaugurated by the Prime Minister, Lal Bahadur Shastri. It was the first time an Indian entrepreneur used innovative processing to deal with the shortage of spurred metal. Kudva is also credited with establishing several other companies: in 1938 he established Canara Sales Corporation Ltd, in 1941 Canara Motor and General Engineering Company and in 1947 he started Canara Tyre and Rubber Works Limited.²¹ The GSBs, represented by Kudva and TMA Pai, were also instrumental in starting banks and various finance companies, including *the Syndicate Bank* which was later renamed *The Canara Industrial and Banking Syndicate Ltd*, the Corporation Bank and the Canara Bank. As president of the Canara Chamber of Commerce and Industries, he was also influential in the

²¹http://www.canarasprings.in/?page_id=246.

development of the all-weather port and the airport at Mangalore. The actions of these important families were territorialised in South Canara and integrated wider linkages with the drivers of economic rationales co-constituted in complex ways. We also see this complexity at work in the case of the Malpe fishing economy discussed below.

8.2.3 *Embeddedness of the Fishing Territories Inland, at Sea and Ventures Overseas*

Malpe municipality (125,000 inhabitants in 2011) is home to a fishing economy that stimulates vast trade and industry linkages with all the coastal villages of the Udupi district. It galvanises activities within a radius of 30 km around its natural harbour. The sector offers massive direct and indirect employment.²² Together with Mangalore's Bunder area, they form a coastal chain connecting 28 fishing centres,²³ of which Malpe is the biggest.

There has been major expansion along this coastline, involving various types of manufacturing and repairing activities, trawler building, an export fishing net factory and other ancillary activities. The local economy is now highly mechanised and has significant transnational connections.²⁴ Here, the interventions by the fishing community, demanding an improvement in the port facilities, developed around an appropriated bureaucratic space, politicised to shape appropriate arbitrations. Through Harish Hegde I was thus able to meet: BB Kanchan, a senior

²²One source, a relatively reliable news report '... *The foreign exchange through fishing is 30.213 crore INR for the country, while it is 1.21 crore INR for the state. There are nearly 2000 boats involved in fishing at the harbour in Malpe, wherein 50,000 people are directly involved in the business. The people indirectly involved in the fishing trade—including women selling dry fish, vendors, loaders, mechanics, carpenters, fishnet repairers, workshop labourers, boat builders, boat pullers, electricians, fibre workers and daily fish-selling women—are at least 850,000 lakh in number within a 30 km radius.*' See <http://www.coastaldigest.com/index.php/news/77983-fishermen-stage-massive-protests-in-mangaluru-malpe>. If it was unconfirmed precisely, it was broadly indicated in my conversations with Association office bearers. Based on his student's research on the Malpe fishing industry undertaken in 2010, Kailash Rao, Associate Professor at Manipal University's Architecture school MSAP, put the employment in the immediate vicinity of Malpe at 30,000–50,000 persons. Another source that locates the volume of fish as an indicator is Zacharia (2003), who concludes the sector is roughly this size; see also S Giriappa (1996).

²³These websites provide a useful overview: *Udupi Port and Fisheries* at <http://www.udupipages.com/business/fishing-industry.php> and *Malpe Fishing Industry: Fishing for Export* at <https://indianstorytime.wordpress.com/2012/10/19/malpe-fishing-industry-fishing-for-export/> (both accessed April 2016).

²⁴Marine exports and fishmeal and fish oil exports from Karnataka this year have doubled compared to last year, with total exports estimated at 681 crore INR in 2010–11 as against 392 crore INR in 2009–10. See Phadnis Renuka Marine, fishmeal exports from state double The Hindu Aug 2011, <http://www.thehindu.com/todays-paper/marine-fishmeal-exports-from-state-double/article2345590.ece>.

leader of the Fishing Federation whose wife, Ms Sarala Kanchan, at the time of my field research, was an MLA from the Congress Party; an office bearer of the Malpe Fishing Association; senior fishermen who were captains in the late 1990s at the height of the fish wars, and faced serious conflicts with “invading” deep sea industrial fishing vessels; and several manufacturers in the allied industries—fishnet manufacturers and fish meal processors. Via Anil Pai, my research assistant, whose maternal grandmother’s house is in Malpe, I was able to interview people working in the mechanical support services that maintain various types of boats.

This range of contacts provided an entry into the multifaceted aspects of the fishing industry. It highlighted a complex and embedded network including a variety of trading models, technologies with 14 boats and associated net types, social-ethnic diversity and religious belief systems. All these trading models are governed in complex ways. As Bavinck (2005) rightly put it, they are best understood through the lens of legal pluralism, including “sea tenures”. In the context of the Tamil Nadu coast, Bavinck looks at the reshaping of power in favour of the bigger trawlers funded by relatively large capital. The big trawlers and their equipment are owned by powerful Tamil political party bosses and film stars who work within what he terms a “free-for-all” territory at sea. They contest and capture fishing zones from smaller groups operating in accordance with “customary” law. South Canara’s power structure hence seems more diffused and intermeshed with complex relationships involving the dominant political party system headquartered in Bangalore.

Perhaps the key entry point needs to be conceived through the sea and land territories conjointly. Hegde emphasised that, just as on land, diverse deities demarcate the sea territory. The maritime landscape is covered by its own range of protective goddesses, notably Mahadevi and Mahalakshmi, who are also revered in a Bhoota Kola in the same way as the land based deities.²⁵ These in turn intersect with various spaces of fishing and contestations shaped by what Hedge vividly described as follows: “... *What seems like a flat sea is, in reality, the shelf of the sea, the deep part, the triangular part, the mountain part, the valley...*”²⁶. These varied types of submerged terrains host different varieties of fish; some are located in the sandy areas, others on the rocky ocean floors. Some species are only captured in the backwaters and others in the deep sea, depending on varying temperatures and salinity. Hegde emphasised that fishing accounted for 20–35 % of South Canara’s economy and similar to the forest area of *Agumbe*, deep in the Western Ghats, feeds trading activities located between these two. For a politician in the early to middle 1990s it was a significant political constituency. From then, this economy has only increased in both scope and complexity because of the increasing number of interrelated and ancillary processes. As is the case with South Canara’s

²⁵Recorded interview; Carrin (2008). For useful visuals, see ‘Fishing Community Invokes Divine Blessings with Samudra Puja’ in Daijiworld: http://www.daijiworld.com/news/news_disp.asp?n_id=84026 and Neecha-Babbarya Kola <https://www.youtube.com/watch?v=hT7W8iFLRbs> (accessed in April 2016).

²⁶Recorded Interview.

transport system, these processes take place via complex social and institutional embeddedness, the effects of which go far beyond the “local” as these linkages reinforce earlier transnational histories.

8.2.4 *Fishing Politics as Embedded Institutional Spaces*

To understand better the intermeshing of the fishing economy, political life and religious beliefs that functioned in the area, Hedge took me to meet BB Kanchan at his residence not far from the coast. Kanchan, a wiry, alert man in his mid-60s, spent the next 3 hours explaining in detail the interconnections between these different areas.²⁷ His house was large and set in a vast garden.²⁸ He explained how he shifted from “social work” into fishing politics in the 1960s, before extensive mechanisation took place. It was only during the 1980s that Malpe emerged as one of India’s key fishing nodes. He explained the shifts in the types of nets used. Over the years, fishing has moved away from the shore and now takes place in the deep sea, at a depth of 15–20 fathoms.²⁹ Today, Malpe is one of the largest harbours dedicated to fishing with more than 2000 boats (some of the larger ones cost more than 50 crores INR each) and, as mentioned above, this led to the development of a range of allied activities. The fish, caught in the area include large tuna, export-quality shrimp and a range of “minor” fish that are sold within India.

According to Kanchan and Hedge, the better conditions the fishing community enjoy here as compared to the conditions prevalent in Coastal north Karnataka or even other parts of India are the result of their political astuteness and unity, and a better level of education. During the season, the boats are deployed at sea on a 24-h basis and the large numbers of workers are fully employed. Financially, the turnover is also impressive and our rough estimates put it at around 5000 crores INR a year. Of this, 30 % is routed back to the villages. To put the sums involved into some kind of perspective, the famous national Manipal University, with its

²⁷This is evident from websites (accessed April 2016): see Ollanaadu Mogaveera Samavesha: The fishing business is in trouble: <http://barkuronline.com/barkuronline/News/News52.html>; and Prominent Mogaveeras at <http://www.mogaveeracommunity.com/prominent-mogaveeras.html>: Shri Dayanath Kotian, Mangalore, Advocate Founder Member/Secretary of D.K. Mogaveera Hithasadhana Vedike, Uchila. He is also a political activist and a senior Advocate in Mangalore. He was the Secretary of the Fishermen Environment Protection Committee, which launched the historic agitation against the Mangalore Refinery Public Ltd. (MRPL). Also see the organizational diagram of the Bengare Mahajana sabbha 1906 in Fig. 1 in Budhya and Benjamin (2000).

²⁸Although this may be explained by the fact that he was the head of a prosperous federation and his wife was the local MLA, what is striking, as in many of the author’s meetings with even middle level members of the Mogaveera community, is their relative wealth. Their plots of land are massive as are their houses with concrete roofs, connected to piped water and individual electricity connections. This contrasts with the fishing hamlets in other parts of Coastal India—northern Karnataka, Tamil Nadu and Visakhapatnam in AP.

²⁹A fathom is equal to 6 ft or 1.82 m. 15 fathoms are equivalent to 27 m deep.

internationally notorious connections (especially in Malaysia and South-East Asia), is also said to have a turnover of 5000 crores INR (Fig. 8.3).³⁰

The expansion of the fishing trade is also because of the 50-year-old associations and federations that started out as marketing agencies for dry fish. Later, during the 1980s, the federation went onto organise, lobby, and politicise issues to claim funds, subsidies and attract the attention at various political levels. This type of political action is deeply embedded in particular groups, but also broad-based and multi-level. To illustrate this point, Kanchan brought out a thick file containing various petitions and news cuttings. Some of these are presented here, others were obtained from the Malpe Fishing Association office. The accompanying image is a petition signed by the people of the Hangarkatta Kodi Bengre Mechanised Boat Fishing Federation addressed to the then (2010–2011) Karnataka Minister of Ports and Fisheries, Majuraj Srinivas Poojary.³¹ It raises the issue of an incomplete public works initiative and complains about the stoppage of work that had been sanctioned for de-silting the harbour and the construction of a new jetty. It demands that the work be completed, and states that the amount sanctioned for this was 3 crores INR. It also suggests how these demands may be forwarded to the Secretary Fisheries at the Government of Karnataka level. Press clippings of news reports show the boats crowded together in the harbour because of the lack of space. The petitioners underline the threat of fire to life and property and the potential financial losses for people and the banking institutions that have granted loans.

More recently, the fishing community and their representatives have been pressing for ports to be upgraded. When I visited, they were petitioning the Karnataka Chief Minister to upgrade the ports of Hejmady and Gangoli (village panchayat, 35,200 inhabitants in 2011) to allow for an expansion of the fishing fleets there and the use of larger boats. There were demands for subsidised finance, which the Karnataka State Government (GoK) could obtain from the central government (GoI) to fund 20 % of the cost of a fishing boat. They were asking the government to expedite the dredging and deepening of the harbours and accelerate the building of wave breakers and jetties to increase the landing capacity. In their view, the costs should be split between the GoI and the GoK, respectively 70 and 30 %, under the Fisheries Scheme launched by the Ministry of Rural Development. Much of this lobbying was very strategically led by specific associations (the Mechanised Boat unions, and smaller fishing associations) via the Bangalore based Directorate of Fishing.³²

Just as our meeting with Kanchan was ending, an intense drumbeat arose: several youths and children, a group of “Tiger Dancers”, entered BB Kanchan’s

³⁰See “*Brahmins, Khattris, and Babus*” 56–63 in Harish Damodaran (2008).

³¹Poojary is a caste group within the Bunt community in South Canara—and this is an indication of the political space enjoyed and accessed by this community. See also see images of these types of inaugurations as public events at: http://202.138.101.165/kkap/news_and_events.html.

³²See, for instance, the 2014–2015 Karnataka annual fishing report which lists several of the completed civil works that were lobbied for at the time of our fieldwork: <http://www.karnataka.gov.in/fisheries/Annual%20Report/Annual%20report%202014%20-%202015.pdf>.

garden and verandah.³³ Hedge explained that as BB Kanchan is a Chieftain, the troupe would start their performance at his home and it would end at the Hiriyadka town temple (further north-west of Udupi).

On our way back to Malpe we drove past a large industrial shed-like structure used for processing fish, and then an even larger complex where fishing nets were manufactured from nylon fibre sourced from Gujarat in western India.

8.2.5 *Constructing South Canara's Transnational Space*

...The road of the bhutas is marked by a series of rituals, which recall how the bhutas fought each other. Each bhuta won his territory by fighting. Bhutas travel along mythical roads where they encounter different kinds of autochthons as well as foreigners. Sometimes, they themselves incarnate the figures, either of foreigners or of figures descended both from foreign and autochthonous stock... Here there are similarities with the Chinna bhuta who, according to another myth, were Chinese sailors who died in a shipwreck and became bhutas after their death. Their bodies were found near Benakudrn (Basrur) and their statues are in the shrine of Mekkekatu where there are more than a hundred wooden figures of bhutas, among them Bobbarya and the Chinese bhutas... (Carrin 2008: 189).

In the grand sweeps of history, the local configurations, specific to South Canara and open to the world, seem almost natural—shaped by “locational” advantages. We easily forget that these constructed spaces are supported by historical resources, inherited properties and long-distances linkages. Carrin (2008: 189) and the 1976 Census of Karnataka take note of the presence of the “Chinna Bhootas” in Basrur near Kundapura.³⁴ The Regional Resource Centre, an important library and archive dedicated to South Canara’s history and culture, contains several historical texts that highlight the transoceanic routes Malpe has been part of since the second century AD, notably those running towards Greece and Rome in the west. Sea routes existed in the area even during the eleventh to thirteenth centuries AD. There is evidence of trade between the port of Basarur (Basrur near Kundapura) and ancient Greece during that period but also with China and other locations in South-East Asia. In more recent times, South Canara’s connections with the Gulf and beyond, Europe and North America, as well Australia and Singapore, have

³³Mangalore: “Pili Veshā”—High-Flying Dance Form of Tulunadu Daijiworld Media Network—Mangalore (VM) http://www.daijiworld.com/news/news_disp.asp?n_id=150324.

³⁴See: Census of India 5—3 1976/Karnataka/76: (v) Basrur (Coondapur taluk) “...*This ancient river-port and seat of administration is situated 6 km east of Coondapur. In times of yore this place had developed trade contacts with distant countries. A local legend connects it with China as well. The Mudukeri Panjurli Bhutasthana here, which belongs to the Billavas, has 5 wooden figures representing Chinikara Daivas. A hoard of Daivas hailing from China, it is said, were roaming about in this vicinity and, on a particular occasion, made fun of Panjurli. The enraged Panjurli retaliated by seizing 5 of them and caused them to remain in this shrine permanently. These Bhutan are offered periodical worship along with Panjurli...*”.

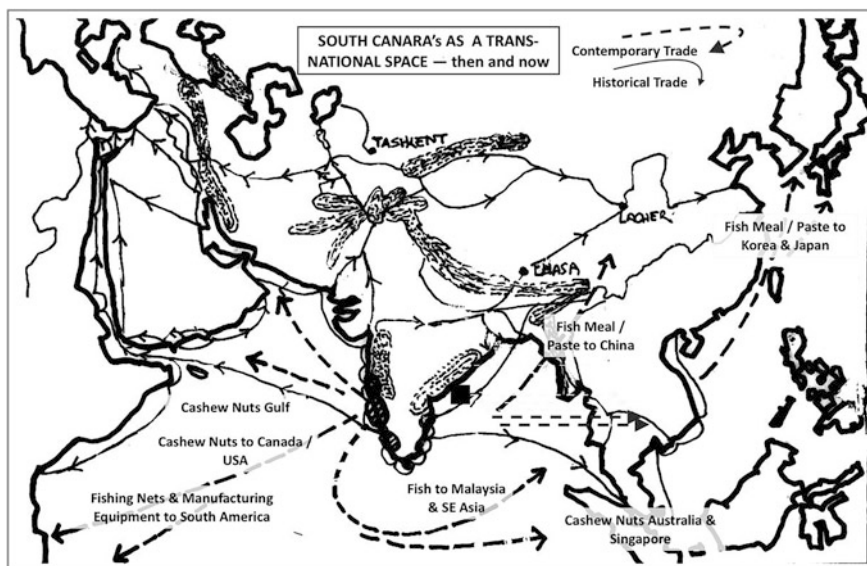


Fig. 8.4 South Canara as a transnational space (based on Bhatt 1975)

played a key role in opening up new transnational opportunities in varied fields, notably around fishing and cashew nut processing (Fig. 8.4).³⁵

One afternoon in November 2011 I met the owner of the largest fishing net factory in Malpe. The conversation quickly moved to his main constraints. His response was at the time startling: *“If I am able to get 200 more workers, then I can capture the entire Brazilian coast, and with that almost all of the Latin American market”*. Other fishing groups or individuals had mentioned how the 2010 Chilean earthquake expanded their market in processed fish to Japan and Korea—pointing to the increasing business visitors to Udupi and Malpe in particular. A major company in Malpe, Raj Fishmeal and Oil Company, focus on “fish meal” and other products that process one-third of the total catch. A significant portion is exported to Japan, Korea and to the USA, Norway and Denmark, and Malpe competes with Chile, the USSR and Peru.³⁶ Another industrial actor is the Coronet Canning Company established much earlier, in 1955. It focuses on processing large fish such as tuna and oily fish such as sardines and mackerel.³⁷ One of the large emerging

³⁵Because of shortage of time, I was unable to research this other important and emerging transnational economy, and only made a few cursory visits to these sites. Cashew nut processing in the Karkala area has become particularly important post-1990s, with several firms exporting cashew nuts and related products.

³⁶Fishmeal is used in a variety of items such as animal feed; see <http://www.rajfishmeal.com/fish-meal.html#>.

³⁷See Coronet Fish Products at <http://coronetfishproducts.com/>.

economies is the “*Surimi*” industry, a fish paste exported to Japan and Korea. This is processed adding shrimp and crab flavourings. Puffer fish is supplied to Malaysia and China.³⁸

Amongst the ancillary industries, Baliga Fishnets has extensive transnational connections. It started with modest net production in 1984; today it is the largest manufacturer of fishnets in south India.³⁹ Located on a 32,000-m² plot, their 18,500-m² plant produces different types of fishing nets, floats, lines and twisted twine. They also manufacture net-making machines. The nets as well as the capital machinery are marketed globally, with a clientele in more than 30 countries. The third related activity is boat building which also involves repair and servicing activities. Although this activity is not specific to Malpe, as there are boat building facilities in several locations in Kerala, Tamil Nadu and Gujarat, the type of boat built here is relatively unique. Malpe is a natural harbour that has been in use for generations, and additional dock areas were added along with improved facilities. As a result, ship repair, and more recently manufacturing, has emerged as an economy with transnational connections. The Public Ltd Company *Tebma* uses part of the harbour, which now has a slipway complex with 14 bays. They have the capacity to build ten offshore vessels per year and repair up to four ships at a time.⁴⁰ *Mahasagar Boats* is a relatively smaller company but more specialised in trawler construction, sailboats, tugs and dhows, most of which are exported to North America, Europe and the Gulf.⁴¹

It is important to view these connections not just as the expansion of an economic market but also as being underpinned by political lobbying and ethnic connections. Not surprisingly, the owners of these companies are important political players and also senior office bearers in the Fishing federations. For instance, Pramod Madhwaraj, the owner of Coronet company, is a senior politician and head of the D.K. Mogaveera Mahajana Sangha Coastal Fishermen Action Committee, a confederation of 55 different fishermen’s organisations.⁴² It is hardly surprising that such political clout and, more recently, connections to the Gulf have created both a transnational space and a local supportive infrastructure. Despite its dangerous location atop a plateau, the Bajpe Airport of Mangalore is an international airport.

The Government of Karnataka is supportive and fishing lobbies work consistently to upgrade and extend facilities. The first motorised boats were introduced in 1957, but by 1970 there were 180 of them in Malpe.⁴³ This motivated the demand for an upgraded harbour. A UNDP-FAO survey conducted in 1968 suggested promoting Malpe to make it a modern fishing port. This support opened up access to central government funds and the port was developed and operational by 1986.

³⁸See Rajesh et al. (2014); Lekshmi and Chaniappa (2013).

³⁹<http://www.baligafishnets.com/aboutus.php>.

⁴⁰See Tebma Shipyards at: <http://www.tebma.com/html/contactus.html>.

⁴¹<http://mahasagarboats.com/>.

⁴²<http://coronetfishproducts.com/about-coronet.html>.

⁴³See: Port and Fisheries <http://www.udupages.com/business/fishing-industry.php>.

Proactive lobbying led to the construction of an all season harbour in Malpe by 2014. It has gone through three phases of expansion and the fourth is already planned. In addition, Karnataka Fisheries Development Corporation is building a 20-ton capacity ice plant to complement a 10-ton capacity ice plant run by a private venture, Marine Production private Ltd.

Agitations over the regulation of subsidised diesel are recurrent. They lead to protest marches and vivid press reports. This has resulted in the Karnataka Fisheries Development Department, Dakshina Kannada District Government Fish Marketing Centre and Malpe Government Centre providing three diesel storage tanks for each boat, among other facilities. There are continuing issues over the access to diesel and fishing territory by boats of varying capacities.⁴⁴ There are also attempts to resolve these via the federation system.⁴⁵ Nonetheless, these issues remain highly politicised with local municipal and panchayat bodies remaining at the forefront of the demands—and they, in turn, are lobbied by various associations. As a consequence, the state government relies on its authority to restrict the powers of local institutions.⁴⁶

8.3 Conclusion: Autochthonous Terrains and Possibilities

Carrin's (2008) further nuanced ethnography in her "*Dialectics of Autochthony*" mobilises the fishing communities' bhoota kola to reveal spaces of uncertainty, fluidity and connectedness between sea and land, and between the coastal land and forests. In an earlier work, Carrin and Tambs-Lyche (2003: 23–31) pose the Bhoota Kola as a contested space related to property and land that destabilises the rationale

⁴⁴Purse-seine fishermen losing their livelihood. The Hindu April 26, 2011. <http://www.thehindu.com/todays-paper/tp-national/tp-karnataka/purseseine-fishermen-losing-their-livelihood/article1768402.ece> and Fishermen take out 'padayatra', oppose sales tax refund system. The Hindu, Aug. 5, 2015.

<http://www.thehindu.com/todays-paper/tp-national/tp-karnataka/fishermen-take-out-padayatra-oppose-sales-tax-refund-system/article7501720.ece>.

⁴⁵See: Guidelines issued by Karnataka Purse Seine Fishermen's Association (Mangalore Branch) to avoid conflicts among purse seine operators. Accessed April 2016 at <http://eprints.cmfri.org.in/4030/>.

⁴⁶See, for instance, Fernandes and Saldanha (2000) Local rights have been suppressed and there has been deliberate distortion of democratic control by duly elected bodies: "... For instance, every panchayat in the project-affected areas has passed unanimous resolutions against the project. The zilla panchayat endorsed the decision of the village panchayats, again unanimously. Not very surprisingly, the State Government used all its powers to advance MPC's purpose (and undermine the democratic rights of the panchayat bodies by) employing crude administrative shortcuts. Utilising its administrative powers through the office of the Chief Executive Officer of the zilla panchayat, a state government employee, it overruled all the decisions made by the village and zilla panchayat ... (in) 1996. When all the members of the Legislative Assembly elected from Dakshina Kannada also rejected the location of the project, once more the state dismissed their appeal..." (Fernandes and Saldanha 2000: 13).

of commerce. They describe how the MLA's desires, based on secular beliefs, have to engage and negotiate with the taunts of a medium, possessed by a spirit, following practices that recall earlier power structures, now reworked post land reforms. Describing intensely material spaces that shape claims to land and property, their research resonates with Manohar Shetty's interviews on his practices related to property development, and reveal South Canara as a "disturbed" territory. These are wider public memories, where Carrin's use of the term "autochthony" senses contemporary forms of transnational conflicts.

During a meeting with one of Harish Hedge's friends and former political supporters, a tall well-built lieutenant from the Malpe Mogaveera community, the discussion soon turned to political issues. The lieutenant recalled the community's armed conflicts with "foreign" trawlers that have been encroaching on their territory since the late 1990s. This conflictual situation has not been resolved and, from then, fishing policy framed at central government level, has aggravated it.⁴⁷

In the past, the sixteenth century warrior Queen, Rani Abbaka Devi (the fearless queen), whose army consisted mainly of Ullal Muslims and Mogaveera militia, successfully battled the Portuguese for over four decades.⁴⁸ The Queen, also known as "Abbaka Chowta" and descended from a matrilineal lineage, is represented as "Abbakka Mahadevi" in Bhoota Kolas where she is portrayed as ".. a commoner, dark and good looking, dressed in simple clothes but a caring queen working late into the night dispensing justice...".⁴⁹ This recalls Carrin's (2009) arguments about how such spaces as forums of justice can play a fundamental role in addressing contemporary issues.

From a conventional perspective, urbanisation driven by globalisation, designed as "*Modernist South Canara Urbanism*" would be premised on a hierarchical narrative where Udupi, and beneath it, Malpe as a smaller town are, in effect, "contingent" spaces driven by the metropolises of Bangalore or Mumbai.

All of this feeds narratives of "modernist developmentalism". The "state" of Karnataka, linked to the nation state, centred on New Delhi would set in motion a policy and programmatic framework united under the law. In this conception, ignoring the wealth and diversity of industry in the area, Udupi's existence would be dependent, in terms of its economic potential both on "Religious Tourism" focused on its Sri Krishna Temple, and ventures to rescue "heritage and culture".

⁴⁷See, for instance, Malpe fishing boat owners blame deep Sea trawlers: deep sea trawlers "bull trawl fishing" Malpe fishing boat owners blame deep Sea trawlers, in Udupi Today, Udupi, 24 October 2013: http://www.udupitoday.com/udtoday/news_Udupi-Malpe-fishing-boat-owners-blame-deep-Sea-trawlers_2860.html Udupi: Deep sea Trawl Association of Malpe object fishing ban, 26th Nov. 2013 http://www.udupitoday.com/udtoday/karnataka_Udupi-Deep-sea-Trawl-Association-of-Malpe-object-fishing-ban_1120.html.

⁴⁸Interview tape 30112: 4:30; see also Mishra, K. (nd) Abbakka Rani: The Unsung Warrior Queen; Indira Gandhi National Council for the Arts <http://ignca.nic.in/nl001903.htm> and Origin of Mogaveeras. accessed in April 2016 at <http://www.mogaveeracommunity.com/origin-mogaveeras.html>.

⁴⁹<http://swarajyamag.com/magazine/the-admiral-queen>.

Malpe's positioning on this grid would be both "seaside tourism" and a cluster of now globally important fisheries just as, further on, the private university complex of Manipal University would exemplify modernist education—a future idea of South Canara's high literacy as a harbinger of the IT industry. To see South Canara in these terms can only be an outsider perspective. In effect this makes it a "local" space contingent on other more pertinent metro logics centred on Bangalore and Mumbai, and driven by Delhi's capital status responding to global trends. These views "naturalise" the geography of urbanisation and, moreover, define it as a singular logic where the benefits of a large economy percolate down its urban effect along a hierarchy of smaller centres.

Interestingly, these views fit into, and perhaps even feed, positions across ideological perspectives. In pro-growth perspective, city systems driven by the economy and relationships to the metropole are modernised to form new markets within a global ordering. This, in turn, shapes social transformations. In the critical posture of the neoliberal perspective which sees space as something to be ordered and capitalised to allow surplus extractions, the existing caste and other class hierarchies are disciplined in complex ways. A detailed critique of the literature is beyond the scope and intent of this chapter. We nevertheless consider here a recent publication by Scott and Storper (2015) and Storper (2010). Although these papers are not about South Canara,⁵⁰ it is useful to consider their views on an emergent "metropolis" geography that locates itself as part of the thinking around New Economic Geography, but which, within their narrative, also takes into account ideas of land and culture. This makes it important to highlight their conceptual assumptions, and below we show how these contrast with this chapter's main findings:

- (a) Land remains imprisoned within economic rationalities in their frame of "urban land nexus". The city's underlying logic, constructed around economic "agglomerations" shaped by transaction costs and associated infrastructures, locates land as a passive ground to be acted upon in a hierarchical way, a claim that the South Canara case invalidates.
- (b) Capitalism's increasingly global connectedness shapes its economic vitality and, in turn, (re)-creates culture. Modernity and "developmentalism", as a transformative force, spreads from the "core" or metropolises to the periphery seen as: "... Feudal relics that abound in Asian cities from Bangkok to Beijing...". Culture is thus a "tail end", operating as a feedback into what can be understood to humanise the rationality of economic agglomeration. In our more "autochthonous" view, the land and its embedded beliefs shape the economy and its transnational aspects.
- (c) Post-Fordism logic chooses to locate economic development in the developing world's "selected" cities—those with local settings conducive to moving ahead and beyond earlier Government sponsored industrialisation programs.

⁵⁰It is evident from the four assumptions behind such forms of analysis, South Canara or its urban areas are unlikely to be discussed except as a "local" case study illustrating particular local cultural attributes.

In fact, this chapter shows how various ethnic groups lobby and appropriate government funds that are re-shaped to suit their contextual priorities.

Thus the world view expressed by Scott and Storper is constructed on an erasure of any alternatives and around an inevitable, singular logic where capital is global and politics is “local”. From this perspective, all territorial forms are shaped by a narrow view of the agglomeration benefits, based on efficient production capable of moving the economy into a post-Fordist mode, accompanied by social transformation. Expertise centred on planning and economic policy increasingly guides this process towards what was earlier introduced as a “*Modernist South Canara Urbanism*”. This emerging urban, to be shaped by economies of agglomeration, around the key elements of a power plant, refinery, international port and airport, and at a lower level, by the redesigning and expansion of its fishing economy and trade, is seen as a way to enable the emergence of a location on the global value chain emanating from North America and Europe. Then, assisted by the prerequisite public policies, this would constitute a precursor to societal transformations away from “cultures of irrationality and deviance”. Here, modern rationality dis-embeds economy from society to expand market opportunities. It is hardly surprising that Scott and Storper’s rationales resonate with visions of the Smart City, ideas of “e-governance” and financial and institutional reforms that forefront current urban policy emanating from New Delhi’s high modernist policy realms.

Critical perspectives, although rightly criticising these high grounds of policy and their underlying ideas of modernity, do not necessarily frame the “local” differently, and hence also assume singular logics. This is the case of the work by Cook et al. (2013) focusing on South Canara, but also looking at land, economy and culture. Their emphasis highlights a political crisis (built around cases of resettlement politics spurred by the setting up of the Mangalore oil refinery and Petrochemicals Limited), provoked by the anchoring of capital in land where the “local” is framed as a contained and marginal political space. This reading of a mega project’s landing is based on a conception of law and bureaucracy as hegemonic. They constitute a form of political management where, on the basis of their ethnicity, the Bunt chieftains, as local elites, manage and disempower lower caste groups. “Culture” is framed as existing within a rigid cartographic boundary—not only as a vestige of a feudal history but also accommodated in a modernist narrative with its singular logic. The complexity of land is dematerialised as a commodity in several ways:

First by its compensatory logic, linked to powerlessness where, through the lens of marginality, we see the political closure of groups that are now subject to the logic of large capital.

Second, because the only viable institutional realms are the laws and institutions operating to clear political space for SEZs, the resulting combination of both global capital and a capitalistic state. As the only acceptable logic, political options are reduced to a resolution, built around a framework of “trade-offs”—in arguments for participation via resistance, to frame a more “inclusive” land acquisition policy

(Bhatta 2013) or to counter politics framed largely as a resistance (Banerjee 2006; Budhya and Benjamin 2000).

Third, because the disembedding of property relations (as a key feature of a narrative of modernity) flattens and simplifies ethnic relationships, producing a vision of “local politics” that consists essentially of elites and higher castes capitalising on their ethnicity within a society deeply marked by class and caste. In contrast to the complexities of fluid political space posed by Carrin (2008), the variety of social groups and their networks remain a contingency within an overarching logic of a large capital driven neo-liberal reform agenda (Cook 2015; Sud 2014a, b; Shatkin 2014).⁵¹

Finally, because the transformation of South Canara forms a local extension, contiguous to a broader process and practices of accumulation by dispossession around the sites of SEZs and megaprojects along with state rescaling. Together they reflect the shaping of India’s neoliberalism by large capital (Sud 2009, 2014a, b; Levien 2011; Kennedy 2013). Such an analytical frame converges with that employed by Scott and Storper (2015) in that it sees singular logics of urban transformation as inevitable.

The problem with the above renderings that homogenise logics, even within “critical” perspectives, is that they miss out on political spaces within power-laden complexities of terrain (Hart 2006: 988). It is not that South Canara’s transformation excludes the world of SEZs, or mega projects such as the Mangalore port trust or the massive expressway that cuts through the region lengthwise. It is also true that these investments were accompanied by institutional changes such as an empowered KUIDFC among other parastatal agencies. The point here is that territory formations associated with institutional restructuring and state rescaling for SEZs and mega projects is only one of the several logics at play. Exploring South Canara’s urbanism as shaped by multiple logics, with land as a living history of embedded culture, shaping property and territorial formations, attempts to complicate and emphasise open-ended conceptual categories and realms of politics that constitute the urban. This approach poses space and power as relatively unresolved and open ended—an approach evidenced in the cross disciplinary works by Carrin, cited above, and also Massey (2005), O’Donnell (2008) and a range of studies around legal pluralism, especially the work by Webber (2009) and Dupret (2007). It also helps us reject the political confinement and subalternisation associated with the view that territoriality is the subject of metacapital and, instead, suggests a commensurate examination of the other constituting logics. The idea is to retheorise “from within” when many of the ways of thinking about “southern” cities are derived from northern city historical trajectories (Roy 2009; Tang 2014). As we

⁵¹This focus on the “local” has two other impacts. First, the limited focus on multilateral institutions such as the World Bank and ADB and bilateral ones like the JBIC or DfID in shaping India’s neo-liberal policy turns opens grounds for what recalls an orientalist frame that plays centrally, local property agents, land developers, touts, and enablers who with local state that extend and materialize broader neo-liberal trends (Shakin 2014; Cook 2015; Sud 2014a, b). Second, it poses what Purcell (2006) cautions about “democracy and citizenship” being naively assumed by progressive activists to be an effective counter to neoliberal challenges.

emphasise in our study, in South Canara, examining how land is culturally situated and understood is a central issue—one that Tang powerfully argues in the Chinese context (Tang 2014). This is also connected to situations of “unsettled” property in land as argued by Haila (2007), again in the context of China.

These observations point to another key issue concerning this form of urbanism and its possible autonomous history. These are not hidden, political, cultural or institutional spaces “in the highlands” as revealed in James Scott’s (2014) *Zomia*. They much more resemble the spaces described in Li’s (2014) “Indigenous Frontier” that emphasises political space rather than marginality, where she shows engagement with multiple parts of the state shaped by the complexity of land practices. The issue of further exploration questions whether such autonomy is actively constructed in ways that allow “other logics” to be appropriated, particularly by those connected to metrocentricity settings.

There is much scope for future research. Apart from the issues raised and the terrain visited in this chapter, the South Canara region is a fertile site at the crossroads of what Scott (1998) calls “High Modernism”, with hugely important transnational impacts, but also a place where these intersect with highly contextual histories and ideas of territory. South Canara remains relatively under-researched. Our case suggests that the dialectic of being autonomous lies in an uneven and fluid connection to the metrocities without being dominated. Harish Hegde mentioned how the fishing groups, including the Mogaveeras between Kasaragod (in present day Kerala) and Kundapura, have had access to significantly larger plots of land, and political and economic prosperity, in comparison to other coastal and fishing communities, both in the north and the south. My travels to various places along this coastal stretch certainly seem to validate this point. Hedge attributes this to their political space and also the matrilineal system of property. From the end of 2009, Mangalore and, to an extent, Udupi have been the sites of right wing fundamentalist violence, within the context of what the media calls “moral policing”. It may be useful to study how, if at all, this relates to the diverse practices of religiosity across ethnic and often anti-Brahminical religious lines.

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Chapter 9

Practices of Territory in Small and Medium Cities of South India

Bhuvaneswari Raman

9.1 Introduction

The conversion of agricultural land to urban usage such as the formation of residential layouts or the establishment of educational institutions is a widespread phenomenon in the outlying localities of India's small towns and large cities. This chapter explores the process of land transformation on the outskirts of two small towns, namely Tiruchengode and Sankagiri in the south Indian state of Tamil Nadu. Both towns are located in the west of Tamil Nadu, along highways that pass through villages and the three large cities Erode, Namakkal and Salem, which are some of the regions in the state that are undergoing rapid urbanisation (Sivaramakrishnan et al. 2005; Pradhan 2012, 2013; Raman 2013). Erode is a key financial and trading centre in the region, Coimbatore is a hub of engineering and textile industry and Salem was once known for its steel manufacturing industry. The headquarters of the district administration is located at Namakkal. Further, along with Erode and Salem, Tiruchengode and Sankagiri were part of a pre-colonial political-economic formation known as the *Naadu* system (Raman 2014; Mines 1984).

The dynamics of urban transformation in metro cities and their frontier territories has been documented in urban scholarship on India (Banerjee-Guha 2008; Roy 2011; Shaktin 2011; Chatterji 2013). The neglect of small towns in urban research is influenced by the dominant perception of the dependency of small towns on metropolitan cities for their growth. In other words, it is believed that small towns do not have autonomous dynamics and the land transformation observed in such localities is driven by the expansion of metropolitan cities. This view of small towns is reinforced by the New Economic Geography (NEG) theory, which depicts

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smaller urban centres as the periphery of metropolitan centres. The perspective of a metropolitan core with smaller urban centres on the periphery underpins the state interventions in the forms of investments in road infrastructure to improve the connectivity of small towns and/or the Special Economic Zones (SEZs). The state of Tamil Nadu, where Tiruchengode and Sankagiri are situated, has a large number of SEZs. An SEZ for heavy engineering units is located just outside Erode city and another is planned for the Information Technology industry in Salem. In such cases, does the expansion of large cities drive the land transformation along the highways leading out of Tiruchengode and Sankagiri towns?

The theory that small urban centres are dependent on metro cities for their growth is questioned by the findings of several studies on India's urbanisation patterns (Pradhan 2012, 2013; Denis and Marius-Gnanou 2011; Denis et al. 2012). These studies, as well as this volume on Subaltern Urbanisation in India, show that there are in fact diverse trajectories of urbanisation in the country. This chapter, and the other contributions in this collection, develop a similar argument describing urbanisation patterns in India which occur independent of metro cities. Here, we examine the process of land transformation in the towns and villages along three highways that run past Tiruchengode, Erode and Namakkal, focussing on the practices of territoriality.

There are very few research studies on the process of land transformation in Indian non-metros in general and Tamil Nadu in particular. Earlier research on non-metro cities of Tamil Nadu looked at their economic organisation and practices (Chari 2004; Harris-White 2002, 2009; de Neve 2008, 2014). This chapter seeks to contribute to filling this gap in empirical research. Balakrishnan (2013) is one of the few researchers whose work has documented the process of land transformation along the highways connecting Pune City with Mumbai and Bangalore. Landowners along the Pune–Mumbai highways converted their land in response to state interventions in land whereas land transformation on the outskirts of Tiruchengode and Sankagiri is driven by the actions of the towns' entrepreneurs, with minimal intervention by the state. This chapter unpacks their land transformation practices drawing on Sack's (1986) theory of human territoriality and Hsing's concept of "civic territoriality". It analyses the practices of different actors involved in land development, namely the landowners, investors, land assemblers and land developers, their actions and their relationship with the state and with one another. Further, it develops Hsing's concept to illustrate the nuanced politics of civic territoriality in intra-community relations and looks at various forms of land tenure to illustrate the role of caste in relation to land tenure.

The remainder of the chapter is divided into five sections. The next section provides a brief outline of relevant research studies and the conceptual lens used. The third section sketches the patterns of transformation along the three highways. This is followed by a discussion of the practices of territoriality in the fourth section. The practices are analysed, drawing on three cases of land assembly and development. Both the third and fourth sections draw on ethnographic research undertaken between November 2011 and July 2012. The fifth section illustrates the

relevance of the anthropological theory of the state to describe state-society relations in the context of this research.

9.2 Conceptual Framework: Civic Territoriality, Tenure and Caste Relations

This chapter draws on the theoretical lens of “human territoriality” (Sack 1986) and the concept of “civic territoriality” (Hsing 2009) to examine the practices of land transformation on the outskirts of two towns.

Sack’s (1986) theory of human territoriality provides a useful entry point to understand the process of land transformation beyond the narrow framework of markets or state-driven interventions. Territoriality relates to spatial practices: how people use the land, organise their activities in space or give meaning to their place. In the contexts described in this chapter, land transformation was driven by diverse actors, with minimal direct intervention by government agencies in terms of land allocation or development. Their strategies for gaining access to land and developing it were characterised by conflict as well as cooperation and they drew on the ties and relationships embedded in socio-spatial, economic and cultural domains. Sack (1986) argues for an understanding of territoriality as a spatial strategy that is socially constructed and geographically rooted and as a process shaped by other actors beyond those of the state.

The practice of territoriality is shaped reflexively by the actions of government agencies and actors who own or develop land. Hsing (2009: 3) developed the concepts of “*urbanization of the local state*” and “*civic territoriality*” to describe the role of state and non-state actors in driving land transformation in China. The urbanisation of the local state is a process that results in the restructuring of power relations between the local and the central state and it entails the commodification of land under state control as well as the consolidation of territorial authority through construction projects. “state territoriality”, which is different to civic territoriality, refers to the top-down practices of various government institutions to shape the use of land and establish control over space. Civic territoriality is defined as the bottom up practices of “...*social actors’ conscious cultivation and struggles to form their own territoriality at both physical and discursive levels*” (Hsing 2009: 15). Such actions are often accompanied by state led efforts towards land acquisition, which in turn trigger three types of politics among non-state actors, namely the politics of resistance, village corporatism and the paralysis of community mobilisation (Hsing 2009:15). Thus civic territoriality is conceptualised as a process triggered by state actions for driving urbanisation through the setting up of SEZs and new townships and implementing infrastructure projects.

This chapter extends the concept of civic territoriality in the following three ways. First, Hsing’s concept reduces civic territoriality to a trigger response by land holders to state interventions for acquiring their land. In the Indian context, several studies articulate the process of land transformation focusing on the conflicts

between the state and land holders over land acquisition and show that it predominantly results in small and medium farmers losing their land and livelihoods (Levien 2012; Sampat 2008; Chakravorty 2013). Chakravorty (2013) highlight the extent of land conflicts around land acquisition in India and analyses the factors contributing to the high cost of land in metropolitan areas. In contrast to these studies, Balakrishnan (2013) found differences between landowners' responses to state interventions to acquire their land and that these were shaped by two factors, namely social relations mediated by caste and the opportunity to capture land value gains. Both Hsing (2009) and Balakrishnan (2013) note that communities respond differently to state actions to acquire their land and their actions may result in different outcomes. This chapter adds another dimension to these discussions. It illustrates that land transformation may be driven by the spontaneous actions of entrepreneurs and is not always a counter response by land holders to state actions for land acquisition. Land transformation along the highways researched is driven predominantly by the town entrepreneurs, whose economic linkages transcend the local boundaries (Raman 2013, 2014). Direct state intervention in land or the economy to attract external investments is limited in the locales researched (Raman 2014) and investment may be driven by the strategies employed by non-state actors to diversify their economic activities or it may be a part of their political strategies.

Another difference with Hsing's (2009) and Balakrishnan's (2013) portrayal of civic territoriality is the departure from a binary framing of state/society relations where the state is conceptualised as an institution above and separate from society. The practices of entrepreneurs and their relationship with the state, mapped in this chapter, underscore the relevance of the anthropological theories of the state, which see it as being embedded in society.

Second, both Hsing (2009) and Balakrishnan (2013) conceptualise civic space as a unitary space within which the members share a common interest with respect to land. Similarly, the village corporatism documented by Hsing (2009) and the farmers' cooperative led land transformation in Pune (Balakrishnan 2013) represent instances of non-confrontational bargaining between non-state and state actors. Balakrishnan's study alludes to inter-caste relations, which have a bearing on land market transactions. In contrast, the process of land transformation observed in our researched locale is marked by coercive cooperation and conflicts between non-state actors that are not easily visible.

In the Indian context, caste is a key variable influencing civic territoriality. Many studies on India, including Balakrishnan (2013), have highlighted the influence of inter-caste relations, particularly between the disadvantaged Dalits and the land-owning upper caste community, in shaping land transformation practices. This chapter draws attention to the intra-caste dynamics that affect landowners with relatively less influence within their caste structures to resist forced sales. Negotiations over land occur via caste networks and the control exercised by influential members of different caste associations. The latter also hold leadership positions in the two regional political parties and have access to and influence over the elected representatives holding positions at different levels of government, namely the local (municipality or the panchayat), the regional (state legislature and ministers), and the National Government.

Third, land tenure as an analytical category is overlooked in many studies on urban transformation. In contrast to Hsing's (2009) context where land is controlled by state tenure, land in India, as is the case in the localities studied, is held by individuals, communities and public agencies under different forms of tenure including ownership, leasehold or the customary forms. In addition, in our locales, land in some areas was controlled by the zamindari system which existed alongside the Ryotwari¹ system, encompassing small and medium holdings under ownership or leasehold tenure. These differences in the forms of land tenure are critical as they influence the complexity of the negotiation process between a potential buyer and landowners. Because of the complexity of the land assembly process, large real estate developers and corporate economic actors lobby the state for land acquisition and allocation for their economic activities (Benjamin and Raman 2011), and Balakrishnan (2013) notes that the state predominantly seeks to acquire the state-controlled common land² to set up SEZs or infrastructure projects. As the common land is controlled by different Government agencies, it is easily obtainable and there is no compensation given to the users. However, the author does not explore the influence of different forms of land tenure on the practices of consolidating agricultural land for non-agricultural use.

The types of land development along the highways described in this chapter required the consolidation of large parcels of land. Landowners in the localities studied land held under different forms of tenure, namely land under zamindari tenure, common land controlled either by government agencies or by the community, and small or medium size holdings owned by individuals. Each of these involves varying degrees of negotiations to assemble large parcels. In the initial stages, entrepreneurs and investors assembled land incrementally. Over time, a hierarchy of land developers and assemblers emerged in the town to consolidate large land parcels. The negotiations here, as in other Indian cities, are mediated by caste structures and relations. The pressure on landowners to part with land or to bear the cost of negative externalities triggered both intra-caste and inter-caste conflicts but such conflicts are not easily visible.

¹The zamindari system was introduced during British rule in 1793. Under this system, land is held by a single person or a few joint owners who are responsible for the payment of taxes. The British-designated land tax collectors subsequently claimed ownership to the land. Under the Ryotwari system, land is held by individuals and the cultivators paid tax directly to the state (Kumar 1975).

²The common land held by different Government agencies is known by different names such as the Gomala in Karnataka or the Poramboke in Tamil Nadu. These forms of land tenure were introduced by the British after they acquired common village land and resituated its control with the Land Revenue Administration.

9.3 Patterns of Land Transformation and Influencing Factors

This section describes the patterns of land transformation in our research locales, which comprised six villages and two towns situated along three state highways, namely the Erode–Rasipuram–Attur highway, the Trichy–Namakkal/Tiruchengode–Erode highway and the Coimbatore–Salem–Namakkal highway. Agricultural land along these highways and in the interior villages is converted for urban usage. The conversion of agricultural land in the villages immediately outside Tiruchengode town increased from an area of 5.38 km² in 1992 to 6.39 km² in 2001 and to 10.63 km² in 2011. The built-up area of the town increased by 66 %, as can be inferred from the aerial images of Tiruchengode town and its surroundings shown in Fig. 9.1.

However, the specific forms of land development differed along the three highways, as can be inferred from the discussion in Sect. 9.3.1. The transformation was dominated by the development of educational institutions along two highways and the expansion of small workshop clusters involved in lorry reengineering and borewell vehicle assembly activities on the third highway. Two of the key factors that influence the process of land transformation are considered in Sects. 9.3.2 and 9.3.3. One such factor is the manner in which land is held, specifically the forms of land tenure and the size of land holdings; this is described in Sect. 9.3.2. Both these aspects have a bearing on the type of land development as the setting up of educational institutions and workshops entailed different scales of land assembly and different levels of complexity to mobilise resources for land development. The contemporary dynamics of land transformation in the region are influenced by its spatial histories described in Sect. 9.3.3.

9.3.1 *Patterns of Land Development*

The specific forms of transformation vary along the three highways running along the south western and south eastern outskirts of Tiruchengode town. The town is located at a distance of 20.5 km from Erode, 48 km from Salem and 127 km from Coimbatore. Land along the stretches researched on two of these highways, namely, the Attur–Rasipuram–Erode highway and the Erode–Tiruchengode/Namakkal–Trichy highway, commands a high price. The landscape is interspersed with a dense development of educational institutions and vacant land taken out of agriculture. For example, along the Attur–Rasipuram–Erode highway, there are eight sprawling campuses that are occupied by residential schools and colleges for engineering, medicine and the natural sciences. Each campus can accommodate between 2000 and 3000 residents besides the daily visitors. The demand for large parcels to set up such institutions resulted in the rapid increase of land prices along the three highways. Currently, the real estate value of these locations ranges from 1500 to

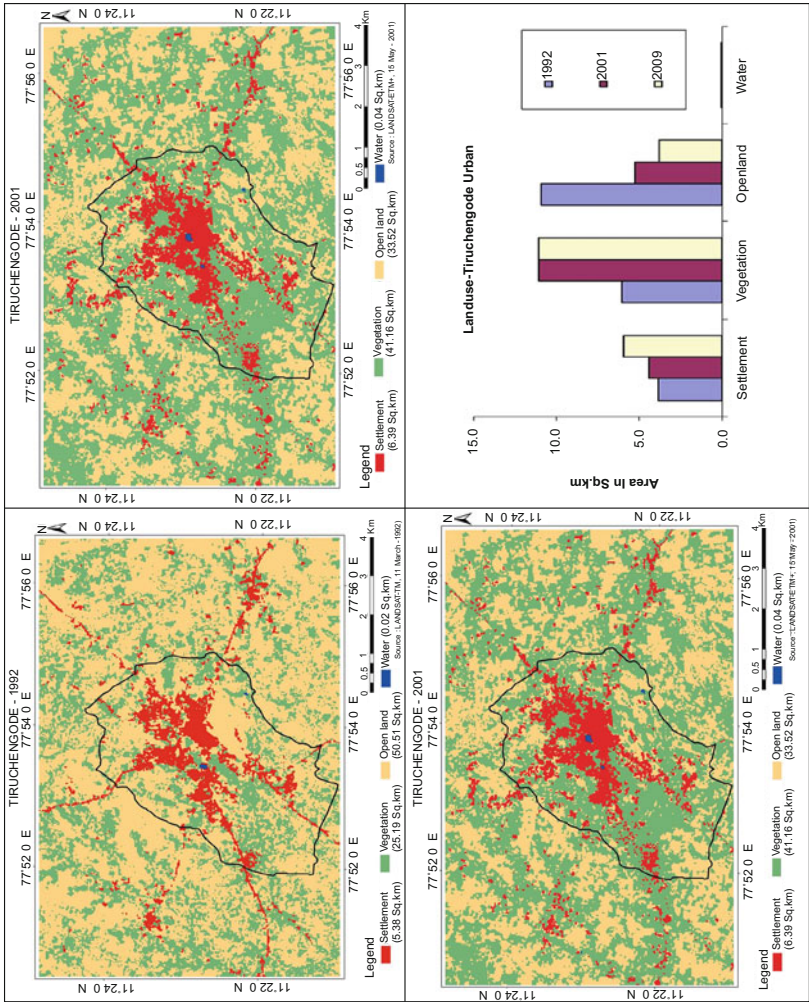


Fig. 9.1 Land use changes in Tiruchengode town and surroundings between 1996 and 2009. *Source* IFP (2013). Sources Derived from the GIS maps prepared for the SUBURBIN project. Permission granted by Dr. Eric Denis

3000 INR per square foot, which is comparable with the price of land in the neighbouring large cities. This pattern of land development and intensification of land prices is driven by town entrepreneurs as shown below.

Our interviews with different actors in land development suggests a shift in the scale of land assembly and development patterns over time and development along the three highways. Until the late 1980s, agricultural land was converted on a small scale, often between 1 acre to less than 5 acres, to form residential layouts. One example of this small scale assembly is the pattern of land development along the Attur–Rasipuram–Erode highway, where some of the prestigious colleges such as the KRS educational institutions for engineering and medical sciences, the Vidya Vikas (VVK) School and engineering college and the Mahendra Engineering College are located. All these institutional complexes were developed along the 20-km stretch on the outskirts of Tiruchengode town. Many of these institutions came up after the early 1990s. Prior to this, large developments along this stretch included a private company called the Seshayee Paper Boards and Kootapalli housing Colony, a parastatal agency formed in the 1970s by the Tamil Nadu Housing Board. The company enclave is a residential colony built for the employees and it was their demand for residential plots that spurred the conversion of land along the main road in one of the adjoining villages. Agricultural land on the main road in the vicinity of Kootapalli housing colony remained undeveloped till 2000. Even today, with the exception of these colleges, although agricultural land has been converted for residential layouts, it has remained undeveloped.

Similarly, along the Tiruchengode–Namakkal–Trichy highway, the setting up of Vivekananda College for women and Sengunthar engineering college spurred the conversion of agricultural land. According to the real estate agents and residents interviewed, the creation of a residential school and a group of colleges, namely the VVK and the KRS educational institutions, led to an increase in land values along this highway and the conversion of agricultural land for urban use. The demand for rental units for residential and commercial usage spurred construction activities in the housing colony and on vacant land and, with the exception of one engineering college along the two highways, all the other institutions were initiated by entrepreneurs residing in the region. The entrepreneurs involved in setting up schools or colleges can be differentiated into four groups (Raman 2013, 2014). The first comprises the retired school teachers living in the villages off the highway, who invested incrementally in building their school, as was the case of VVK. The second consists of those who were involved in the local rice or textile mill economies that have declined over the years; they needed to diversify their business portfolios and now have large parcels of land available for conversion. One example of this is the Raja rice mill, which has been converted into an international school. The third group is a diverse range of entrepreneurs, including owners of lorry reengineering workshops, oil rig assembly workshops, financiers, small business owners and retail traders. The fourth incorporates the caste associations in the town. There are several caste-based associations, in addition to the occupation-based ones, and each caste association invests in a college or a polytechnic. They see this as vital to the mobility of their community. Besides being a

revenue generator, each college has a certain percentage of seats reserved for their community members, who may also be eligible for fee concessions.

The third locale researched is Sankagiri town located along the Coimbatore–Salem highway and the villages off the highway. This town is developing as a centre for rig well assembly locations and allied trade. It is a panchayat town with a registered a population of 29,467 in 2011. To start with, the expansion of automobile workshops triggered land conversion along the main road. Subsequently, the inauguration of a district court led to the eviction of workshops along the highway, forcing them to shift to the interior villages. With the rise of land rent inside Tiruchengode town and the regulation banning the parking of large vehicles, borewell workshop owners also moved out to interior villages off Sankagiri highway. As a result, the interior areas around the highway have developed as locations for allied trade in spare parts for lorries and rig wells, or as a cluster of automobile industries. The case of Karaveppampatti discussed in the next section is an example of this transformation.

9.3.2 Influence of Land Tenure and Size on Land Development

Land is held under diverse forms of tenure in the researched localities. These include the agricultural land under individual control (citizen or state), community controlled land and common land held by the Government. Each of these categories of land is held under different forms of tenure, namely ownership, lease/rental or use-based rights. These details are vital to an understanding of the dynamics of land transformation as they determine the complexity of land transactions and assembly for different types of development.

9.3.2.1 Land Under Individual Ownership or Lease Tenure

Agricultural land belonging to individuals in the villages around Tiruchengode town is held under two forms of tenure, namely the zamindari and the ryotwari systems. Land under zamindari tenure is located predominantly in the villages along the south/south western outskirts of the town near the Cauvery River. The zamin properties were located along one of the highways researched, the Namakkal–Trichy highway, where the zamindars were predominantly from the Gounder caste community and a sub-sect of the Chettiar caste community. The Namakkal district, where Tiruchengode is located, had around 35 zamindari properties by 1835, including the zamin properties in the villages of Kumaramangalam, Suriyampalayam and Mandapalayam. Land parcels in the villages along the river were controlled by zamin families, some of which still exist today. Although the Kumaramangalam zamin still exists, other zamin property has been subdivided and

sold by the landowners. An example of this transformation is the zamin land owned by an Agaram Chettiar—which is a sub-sect of a trading caste in the Mandapalayam village panchayat; the family moved to Tiruchengode because of their rice business so one part of their land was sold to the Sengunthanar College and the other part was developed as a residential colony.

Land within Tiruchengode town was once controlled by members of the Mudaliar caste who claim to be the first generation of settlers. At the time of our field research, the survey along this road suggested that it was owned predominantly by Gounder farmers or workshop owners, who control 2–5 acres of the land located along this road. Many farmers have levelled their land and rented it out to lorry reengineering and rig well servicing workshops. The land parcels abutting the main road have been developed for retail and wholesale trade in spare parts for trucks and borewells.

The agricultural land abutting the Attur–Rasipuram–Erode highway and the interior villages is owned by Gounder entrepreneurs. This highway, discussed earlier, is the site of several educational institutions that belong to Gounder entrepreneurs. They own property both in the town and in the surrounding villages, they identify themselves as a farming community and own agricultural land holdings of varying sizes. Over time, the Gounders invested their agricultural surplus in the town's other economic activities including textiles, lorry reengineering, borewell drilling related businesses, as well as educational institutions. Irrespective of their business, they continue to invest to some extent in agricultural land and maintain a base in both places.

The Dalit households in the villages researched had invested in land after the 1980s and owned smallholdings.³ Previously, they were predominantly working as labourers for Gounder landlords or zamindars from other castes. They accessed capital for investment in several ways: one group secured jobs in the borewell drilling units as drivers or labourers when their landlords entered the business. The Tiruchengode town entrepreneurs in borewell drilling operate predominantly outside the town, in other regions including Jharkhand, Bihar and Maharashtra. Along with their vehicle drivers and labourers, these entrepreneurs migrate out for a period of 9 months in a year. The lorry drivers also work as labour supervisors and are paid relatively high wages compared to the labourers. Another group of Dalit households who secured government employment or entered small business in the town, invested in land using their savings or by obtaining loans from private financiers.

Unlike the Erode–Rasipuram highway, agricultural land along the Erode–Namakkal–Trichy highway is held under the zamindari tenure system. Because of the availability of already assembled large land parcels, this location is attractive to school and college entrepreneurs. Currently, several colleges for women and

³Interviews with the panchayat presidents and members in the villages of Unjanai and Kumarapalayam, July 2012.

engineering colleges are located along this highway, including the renowned Vivekananda College for women and the Sengunthanar Engineering College.

The land along the Sankagiri main road on the north and north eastern outskirts of Tiruchengode town is either rocky terrain or dry land used for rain-fed agriculture. Land ownership takes the form of small to medium holdings. Besides the land under individual ownership or leasehold, there is land classified as poramboke⁴ or waste land. Small clusters of engineering or borewell rig shops have developed along the main road and in the interior villages off the highway.

9.3.2.2 Community Controlled Land

Land is held collectively by two caste communities, the Mudaliars and Chettiers, who are involved in the weaving industry in the localities researched. They use common land, locally known as “*pavadis*”, for stretching the thread and starching it before weaving. There are three *pavadis* in Tiruchengode town and one each in the villages dominated by the two weaving communities. The Mudaliar caste community weavers predominate in the villages along the Erode–Namakkal–Trichy highway and the Chettiar weavers in a village along the Namakkal–Tiruchengode–Salem highway (Raman 2013). Of the three *pavadis* in the town, the Mudaliar caste panchayat used to control two *pavadis*, namely the “*periya pavadi*” the “*chinna pavadi*”. The chinna pavadi was acquired by the municipal corporation to promote clusters (as a result of lobbying by the entrepreneurs). The periya pavadi is administered by the town’s Mudaliar caste panchayat, which has leased part of the periya pavadi land to the municipality for organising weekly markets. The third *pavadi* is located in the town, inside a weavers cooperative housing colony formed in the 1950s for Mudaliar caste weavers. The title to these *pavadis* is held under an individual’s name but the assumption is that the community control over this land, along with the role of the caste panchayat, deters the individual who holds the title from selling it. For example, the pavadi land in a Mudaliar residential colony in the town is still in the name of its founder, Kasi Visvanatha Iyer, a freedom fighter who belongs to the Brahmin community and subsequently an influential local leader of the Congress party. The founder negotiated the land transaction between the Mudaliar weavers, loyal supporters of the Congress party, and the Gounder landowners, who then held key leadership positions in the party (Raman 2013). The title to the *periya pavadi* inside the town is still in the name of an ex-president of the Mudaliar caste panchayat, known as the pavadi panchayat. In both cases, the mutation or the change of name on the title has not been carried out as it is a time-consuming process. Moreover, the pavadis held by the Mudaliars are registered by the caste panchayat as industrial plots. According to the secretary of the

⁴Poramboke is an administrative category of land introduced under colonial rule, when the British acquired the village common land and shifted its administrative control to various government institutions. This administrative practice was continued after India’s independence.

Pavadi council in Tiruchengode town, one of their pavadis, namely the Chinna pavadi, was acquired by the town municipality to allot plots to workshop clusters. The fear of losing more land through acquisition by different government departments, including the town municipality or the revenue administration, influenced the council's decision to secure the title to that land.

The size of the pavadis held by the Mudaliar caste and the Chettiar Caste weaving communities differs. The area of the pavadis depends on the type of cloth and the type of weaving involved (Raman 2013). The Mudaliars specialise in the weaving of rough white cotton and the Chettiars in raw silk. The length of the thread for raw silk is relatively shorter than that of the cotton yarn. The *pavadis* that belong to the Mudaliar weavers occupy a larger area as compared to those held by the Chettiars. Since 2000, local land developers have been interested in acquiring the *pavadis* as locations to develop colleges and residential real estate. The large tracts of land held under the zamin and pavadi tenure systems are in high demand. For example, the Mudaliar pavadis occupy a minimum area of 800 m² and can be as large as 2000–3000 m². With the Mudaliar weavers shifting to power looms for textile production or moving to other professions, several *pavadis* are vacant and used only twice a year for community festivals. In some of the villages around Tiruchengode, for example villages such as Pudur, Chittambalam and Puthanapalayam, the pavadi land has been sold and the proceeds distributed among the member households. However, the number of households linked to a particular pavadi has increased over the years because of the formation of new households. The amount distributed to each household from the sale proceeds is considered too low to allow them to make alternative investments in land. In other councils, there are disagreements about selling off the land as the members feel that it would affect the Mudaliar caste community's balance of power vis-a-vis the Gounder majority, who control the majority of the land in the town and villages.

9.3.3 *Spatial Histories and Civic Territoriality*

A narrow focus on the contemporary economic logic to conceptualise the land transformation along the three highways is limited. The towns and villages along the highways operate as a unified cultural and political space and an understanding of the region's cultural and political economic histories is critical (Raman 2013). Two inter-related processes are significant to our discussion: the manner in which the town is embedded in a supra-territorial network for textile production and trading, dating back to the seventh century AD (Mines 1984) and the practices of claiming the town's space around its temple. The towns and villages along the three highways form part of a pre-colonial political economic organisation known as the *naadus* or the English equivalent of region (Raman 2013; Mines 1984). The two dominant castes, the Mudaliars and the Gounders, have their distinctive *naadus*, the *Ezhukarai naadu* and the *Kongu naadu* (Raman 2013).

The ten-day temple festival serves as a moment that brings together intra- and inter-caste networks spread over the villages of the *naadu* region which today belong to the administrative districts of Western Tamil Nadu. Although the contemporary economic linkages of the region's entrepreneurs are both national and international, inter- and intra-caste networks serve as a connection between the *naadu* residents who are widely scattered today. The *naadus* represent more than a cultural space, as these networks regulate the political-economic transactions among the members of the two dominant castes in the Naadu region and beyond.

The contemporary patterns of control over land by different social/caste communities, the terms of control, the property relations and the mediation of conflicts, particularly over land and property within a household or community, are influenced by these Naadu systems. Subsequently, the political mobilisation of the members of the two dominant castes around the struggle for independence and then in post-independent India provided an anchorage for the region's entrepreneurs in party politics and the bureaucracy at the regional and national levels (Raman 2013). These regional and caste networks linking landowners, land developers and entrepreneurs to different geographical and political spaces are the key domains for negotiation over land regulation, land allocation, permission for development or concessions relating to economic activities.

In an earlier work, I had argued that Tiruchengode town and the surrounding villages should be conceptualised as a node in a network of towns and villages in the region, which are interlinked by their cultural and political economic histories (Raman 2013). Another contextual specificity is the straddling of the rural/urban boundary, which is shaped by two processes, the role of the town temple and the two way flow of resources between the town and the surrounding villages. The town's temple is claimed and controlled by the villagers in the surrounding areas and it is an axis for claiming the town's spaces. Further, the entrepreneurs locate their economic activities and residences in both the town and the villages. The town and village economies are closely interlinked as agricultural surplus was circulated via credit finance in the town's various economic sectors, including textile production and, subsequently, the mill economy. The entrepreneurs ploughed their profits from the town's economy into agricultural land in the surrounding villages. They invested in land for several reasons: as a way of accumulating surplus, mobilising loan capital to expand their businesses and to hedge their risks (Raman 2013). This practice continues today with the ongoing circulation of agricultural surplus into urban economies and surplus from the latter invested back into land in the surrounding villages (Raman 2014). A binary lens of rural/urban relationships is inadequate to capture the reflexive influence of urban/rural dynamics and the flexible location identity of entrepreneurs.

The following section presents a discussion of the role of land capital and land developers from within the town in this phenomenon of land transformation.

9.4 Practices of Territory

Baken's (2003) work illustrates the role of private developers in assembling and developing land on the outskirts of metro cities. Similar studies are limited in the context of smaller urban centres such as Tiruchengode and Sankagiri, which is discussed in this section drawing on three case studies. Some of the key findings are as follows:

1. I expand on how territorial practices are driven by the cyclical circulation of surplus from the town economy and the rural regions along the highways. Land is assembled for different purposes, namely residential, institutional and work-shop clusters. The demand for land is predominantly from the region's entrepreneurs. The investors in the new layouts under formation are mainly settlers from the old parts of Tiruchengode town, where real estate values have risen sharply. However, their properties are often jointly owned and have to be subdivided with the expansion of new families. The subdivision of properties over two or three generations left them with little space and this influenced their decision to leave the town and invest in the outskirts. Their town properties are bought by the region's entrepreneurs who reside in the villages along the highways and divert their surplus from agriculture or the town economy into land and property in different places within the town and outside the region.
2. The expansion of the town economy and its diversification altered the scale of land development. The constitution of territory for setting up colleges necessitated large-scale assembly which in turn led to the specialisation and reorganisation of the real estate industry around a hierarchical chain of actors.
3. Negotiations are mediated via the caste networks and conflicts are not easily visible. The actors involved in such conflicts adopt different strategies to consolidate their position and achieve varying outcomes. A related aspect is that decisions to sell land are not always motivated by the prospect of capturing real estate gains. The pressure from within the caste networks is one of the reasons cited by farmers with small to medium holdings for selling their land. Intra-caste dynamics is just as critical as inter-caste relations here. The bargaining power in decisions to part with land among landowners from a similar caste background is influenced by their position in the caste hierarchy. Where transactions involve inter-caste negotiations, the outcomes vary depending on the balance of economic and political power between the groups involved.

9.4.1 Residential Layouts Along the Highway

The practices of land assembly and the formation of residential layouts are explored below. The residential layouts have developed on land with different forms of tenure and have varying degrees of compliance with the planning regulations.

The first case is the Kosvapalayam residential colony situated in the administrative jurisdiction of Mandakapalayam Village panchayat. The layout was formed in 1983 on agricultural land, which was once under the zamindari tenure system. It was owned by a zamindari household belonging to an Agaram Vellar Chettiar Caste community. As large tracts of land are already consolidated under the zamindari system, they are sought after for large-scale development such as colleges and schools. The zamin land is managed by a trust that subdivided one part of the zamin land to create a residential layout and sold another part to a caste panchayat to set up an engineering college. The Sengunthar college of Engineering, controlled by the Mudaliar Caste Panchayat of Tiruchengode town, is located on zamin land. The trust manager played an active role in mobilising small retail investors and organising a cooperative for registering the residential layout and securing planning permission from the village panchayat. Besides the Sengunthar College, the Kosvapalayam layout is accessible from another large college of engineering and natural sciences. Although the layout was completed in 1983, the investors only started to develop their plots from 2000 onwards. Planning permission for the layout is issued by the village panchayat. According to the president of the village panchayat, the panchayat issues a no-objection certificate to the development by passing a resolution and collecting a nominal development fee. As the layout is approved, there are water supply and electricity connections, but there is no underground sewerage network as is the case with several other layouts in the vicinity.

Both migrant households and residents of the town employed in weaving/power loom units, or colleges, as well as small workshop entrepreneurs have purchased plots in the Kosavapalayam layout. All the investors are members of the cooperative trust, which is administered by the manager of the zamin trust. When we visited the layout in 2012, although the first phase of 1500 plots had been sold, less than one-third of the plots had been developed. C and his wife live here. They migrated from Bhavani to Tiruchengode in the mid-1970s to work in their relative's power loom unit and subsequently found employment in one of the town's large sizing and spinning mills. After the mill was closed, the couple worked in different power loom units on job contracts and they moved into this layout in 2003, when they decided to set up their own power looms. Over the last 10 years they have been working on job contracts for the mills in Tiruchengode and for a wholesale cloth trader in Erode. The latter supplies the yarn and collects the woven cloth. Both the mill and the trader pay them on a piece-rate basis. The layout is located at a distance of 5 km from the main road. They purchased the plot measuring 40 ft \times 30 ft (roughly 4 m \times 3 m) in 1983 for around 2500 INR or roughly 2 INR per square foot. In 2003 they invested in developing the plot for their residence and to set up four power loom units. My informants possess a title to the plot for which the General Power of Attorney to develop zamin land was accorded to the trust manager. The value of their plot appreciated to 70 INR per square foot in 2003 and to around 160 INR per square foot in 2011. The price of land along the main road in the same area was around 1600 INR per square foot. Thus although the land prices in the interior villages have been rising at twice the inflation price index, the

increase is tenfold more than the inflation index along the highways. In 2005, the couple invested in three units for rental income. The rooms are rented out for an amount ranging from 400 to 2600 INR. Single room rental is in demand from single female and male migrants employed in the textile economy and 1 BHK rental is sought after by college employees. The rent is used to repay the housing loan, largely mobilised through private financiers, chit savings and family loans.

The second layout, SVK Nagar in Varapalayam village panchayat, is located along the main highway opposite two large educational institutions namely KRS and VKS, discussed earlier. SVK Nagar has around 100 plots and was formed in 1996 by a residents' cooperative. The cooperative was organised and led by a group of transport workers from the Tiruchengode town and its membership included transport workers, government employees and employees of the KRS institutions. The cooperative leaders identified this land which belonged to the KRS educational trust through a regional land assembler and developer. The founder of the KRS educational institution owns several mills and had invested incrementally in agricultural land along the Rasipuram–Erode–Namakkal highway as a form of investment since the 1970s, although at that time there were no clear plans for land development. When the Government of Tamil Nadu promoted private sector involvement in setting up professional engineering and medical colleges, the entrepreneur established a residential school and college along with a hospital on one side of the road. The KRS trust still owns large tracts of land, which have remained undeveloped, in the vicinity of SVK Nagar.

The cooperative leaders enlisted the support of their caste and area-based ties to influence the landowner to sell the land to the land assembler/developer to create the layout. They were supported in this process by the employee-members who lobbied the KRS trust and the founder, of the same name, to sell the land to them at a concessional price. At the time when the SVK Nagar cooperative identified the land for their layout, the KRS trust had already converted it from agricultural to urban use through an application to the District Collector who heads the Revenue administration. The KRS trust sold the land to the land assembler/developer who then formed the layout and transferred the plots to the individual members. As the members paid in instalments, the developer/assembler and cooperative leaders drew predominantly upon their caste ties. There is now a proposal to develop another cooperative layout for the employees of KRS College.

In 2012 prices along the highway near KRS college and SVK Nagar, ranged from 1600 to 2500 INR because of the location of educational institutions. Land prices in the SVK layout increased from 30 INR per square foot in 2000 to 700 INR per square foot in 2010. Rental values for a built property ranged from 2000 to 3000 INR in 2010. The first investors were predominantly workers with the State Transport Corporation in Tiruchengode town and the surrounding localities. Many of them sold their land through their caste networks to weaver households. The current occupiers include employees of the transport corporation, KRS college employees and weaver households from similar caste backgrounds, who invested in land on the town's outskirts for want of space. A weaver household predominantly operates from its residence with a minimum of four looms. My informants included

transport workers and second buyers working with KSR college or in power loom units. Their town properties had been subdivided over time and their move was influenced by the possibility of securing large plots along with the possibility of paying in monthly instalments. Many of the plots were developed incrementally. The layout was regularised after a majority of investors settled there. This was done by registering the property for tax assessment and paying the tax to the Thokkavady village panchayat. The cooperative members paid in monthly instalments.

Although the residential layouts are formed drawing on caste networks, they are not entirely free from conflicts. As in the SVK nagar case, conflicts arise between the land assembler/developer and the investors, all of whom share a similar caste and location background. The layout has access to water from a borewell and electricity. Although the developer had agreed to develop internal roads and build a stormwater drainage from the layout to the main road, these promises were never fulfilled. The occupants have now formed a committee to pressurise the developer to fulfil his obligations. Despite the unfinished work at SVK Nagar, the same developer had also purchased the land behind SVK Nagar from the KRS trust to form another residential layout. In 2010, the residents constructed a temple to block the right of way to the land behind the layout. This conflict is yet to be resolved.

The third settlement, Shanmugha Nagar (SNGR), is located on a piece of Government controlled common land classified as poramboke. There are 200–300 plots here and the layout is one of the locations with relatively cheap rental units; it is mainly occupied by first and second generation migrant households employed in the power loom industry. One of our key informants' parents had occupied the land in the early 1980s; they then subdivided it and sold part of the occupied land. Our informant moved to this plot in 2003 when he decided to set up a loom unit; until then, he and his wife had worked as labour contractors. The practice among power loom entrepreneurs is to pay lump sum amounts as an advance to ensure the labourers' continuity for a year. Our informant and his wife secured an advance of 1 lakh for a 1-year contract for both of them and they invested part of this sum in the property. His plot, where he set up 12 looms on the ground floor and installed his residence, measures 100 ft (30 m) \times 40 ft (12.5 m). The weavers say that the high advance payment for sourcing labour, combined with erratic electricity and loom prices, encourages them to invest in a property to secure a stable income. In 2006, our informant sold six looms and invested in the construction of rooms for rental purposes. The land occupancy was regularised in 2010 on the basis of a regularisation scheme announced by the Revenue department. The department surveyed the land occupied in various parts of Tiruchengode town with a view to regularising occupancy and to protecting the vacant poramboke land.

In all three cases discussed, information about land and negotiations circulates via the caste network. The three layouts described are dominated by Mudaliar caste households. Along the same highways, households from the other dominant caste, namely the Gounder caste, have developed their own layouts. The land under the zamin or ryotwari tenure system is predominantly owned by the Gounders or the Chettiars. As mentioned above, agricultural land along the highways was controlled predominantly by Gounder caste households or the zamin belonging either to the

Agaram Vellala Chettiar or the Gounder caste. In the context of zamin property, the management trusts have either developed the land by forming cooperatives or sold it to large investors such as college entrepreneurs and large developers. Where inter-caste negotiations are concerned, as in the case of KSR trust land, where the land assembler is from a Mudaliar caste household, negotiations are facilitated via the political/business network. In layouts such as SVK nagar or Kosavapalayam, retail buyers who belong to another caste, such as the Mudaliars, prefer to invest in a place where other investors from their caste networks dominate or the land assembler/developer is from a similar caste background. This in their view is essential as it would enable them to bargain collectively with the landowner or land broker/developer. Conflicts arise between investors and land developers from a similar caste background as we can see from the SVK nagar case, as well as between the new occupants and agricultural landowners from different castes. Because many of these layouts do not have underground drainage, the sewage and sullage is released into the stormwater drain. Farmers allege that the leach from solid and liquid waste has affected the quality of the soil and forced them to sell their agricultural land to real estate developers.

9.4.2 Constitution of Educational Institution Territory

The setting up of educational institutions led to a shift in the scale of land assembly. Until the late 1980s, land assembly occurred on a relatively small scale and was carried out by the farmers themselves or town level brokers over areas ranging from 2 to 5 acres of land. Large tracts of land were assembled, predominantly for textile mills, some of which are located along one of the three highways, namely the Salem/Namakkal–Tiruchengode–Trichy highway adjacent to Tiruchengode town.

The earlier generation of entrepreneurs assembled land incrementally. Negotiations took place directly between the local landowners and the investors. Some examples of this pattern of assembly are the Vidya Vikas (VVK) schools and colleges along the Rasipuram–Tiruchengode–Erode highway. The VVK educational institutions, started by a group of retired teachers, initially acquired 5 acres of land. Over the last 20 years the school has steadily occupied (purchased) land sprawled over about 15 acres. The L-shaped configuration of its layout reflects the difficulty in obtaining land, particularly near the main road. With the exception of zamin land, landowners in the surrounding villages of Tiruchengode are largely small and medium farmers, holding between 5 and 20 acres. As the college expands, the profit is ploughed back into acquiring more land.

The current generation is targeting already assembled land parcels such as the land under zamindari control, or land assembled by large investors such as the KRS trust land discussed earlier and the Mudaliar community controlled production spaces, namely the pavadis. An example of this is the manner in which land was assembled for a Women's College situated along the Namakkal–Tiruchengode–Trichy road. The concerned entrepreneur K converted his poultry farm into a

nursing college. The success of this enterprise led him to invest in other educational institutions, particularly colleges for engineering and medicine, which require large tracts of land. The college tried to purchase a pavadi space in Unjanai but did not succeed because of resistance from the Mudaliar caste community who control the land. The same entrepreneur had earlier managed to pressurise individual farmers from his caste to sell their land for his college.

Interviews with real estate agents in the town suggest that the demand for large tracts of land led to an organisation of land assembly through a hierarchical network of agents—the large assemblers, small developers and brokers. The large assemblers invest in consolidating an area of 100 acres. Land assemblers and dealers from the town operate across Tamil Nadu. The brokers, assemblers and developers are from diverse caste backgrounds including the Mudaliar, Chettiar and Gounder castes. As mentioned earlier, the agricultural land is predominantly held by the Gounders whereas the Mudaliars and Chettiars control the pavadi land collectively. Neither of these latter communities is involved in agriculture. However, when the real estate boom occurred along the three highways, members of all three castes, the Gounders, Chettiars and Mudaliars, entered into various aspects of land assembly, development and sale. In fact, one of the large land assemblers/developers from the Tiruchengode town is from the Chettiar caste. Inter-caste negotiations over land are mediated through a location-based relationship and involvement in party politics. The manner in which caste influences the process of land assembly and development is not limited to intra-caste relations. Both inter-caste and intra-caste relations affect the dynamics of land sales and development. Their trajectory is, however, unpredictable, depending on the balance of power between the parties involved.

Land prices in the towns and villages along the highways are high, commanding a price of 50–75 lakhs for an acre of dry agricultural land. The land in the interior villages, at a distance of 15–20 km along the three highways, differs and ranges from a minimum of 5 lakhs to 15 lakhs per acre according to the 2011–2012 price. The diversification of profit investment in land for setting up schools or colleges is a strategy adopted by several entrepreneurs in the town. The promise of high returns from the real estate value of land for educational institutions has shaped the aspirations of small and large investors alike. A, belonging to the Dalit Caste and a native of Unjani villages, is a recent investor in agricultural land along the Namakkal–Erode corridor. He used to work as a class 4 level employee of the central Government and invested his provident fund back into a 5-acre plot of land. His land borders one of the large colleges on one side and a large land parcel under zamin administration along the Namakkal–Erode highway. His hope is that, even if the land does not yield, it can be sold to colleges. The adjoining landowner hailing from a zamindar family has recently invested in 100 acres of land. To my question as to what if the school or college declines, an entrepreneur who founded a famous residential school in the town quipped: *“No problem. We can get back the money from selling the land ...”*. Although the lure of high real estate prices led the town and village residents from different income groups off the three highways to invest in land, the land prices and the ability to influence the agricultural landowners to sell their land are mediated by power relations.

The role of the caste network is critical in these stories. Agricultural land in the villages along the highways is predominantly owned by members of the Gounder caste. Very few members of Dalit caste households, such as the case of A mentioned above, own agricultural land in the villages around the towns of Tiruchengode and Namakkal. Land assembly—that is securing information about land, lobbying landowners and price negotiations—is all mediated by caste networks. The transactions between college entrepreneurs and farmers are invisible as they are conducted through networks. Such transactions need not necessarily be voluntary, as illustrated by M's account described below.

...I did not want to sell the land...it was on the highway...K [the principal of the college] used to come to my house every day...my caste man...asked me to sell the land...K is close to the zamin family...The zamin family head is also president of our caste association...K lobbied through our caste president NG...Our caste president [NG] and his sons hold senior posts in the Dravidian party...one is a lawyer working in close association with the law firm run by the kin of a Central Government Minister from Tamilnadu...NG repeatedly asked me to give up the land for the college...Then I had an accident and broke this leg...I was staying at home...every day I used to have influential members from our caste association visiting my house and forcing me to sell the land to NG...we [our caste] depend on land...on agriculture for our livelihood...we will not give up land even if we take up other work...The pressure from within my caste was high on all sides...I decided to give it up. I still have 15 acres of dry land left but in the interior...I used the money to buy another 20 acres of dry land a few km along this road, where land values are less...

M belongs to a Vellala Gounder caste, and owned 15 acres of wet land abutting the Erode Namakkal highway college. The demand for land from college entrepreneurs started along this highway in the late 1990s (Raman 2013). Though land values are high along the highways, not all farmers wanted to part with their land. In some cases, the landowners' decision to sell the land is forced by the college entrepreneurs' drawing on their status in the caste hierarchy and their alliances with political and economic agents in the town. Specifically in what concerns the small and medium farmers that I interviewed along the highways, their decisions were shaped by their perception of their bargaining power in such transactions. M's case discussed above represents their position, where they enter into a land deal with limited space to manoeuvre out of it because of social and economic power within their own caste.

The literature on the dynamics of land transformation in Indian cities predominantly highlights two dimensions, namely the role of state interventions as a catalyst of changes in land use and land prices (Hsing 2009; Balakrishnan 2013) and inter-caste relations as a factor influencing agricultural landowners' decision to sell their land (Balakrishnan 2013). The findings reported bring to light other dimensions of land transformation, specifically the role of non-state actors and the complex influence of both inter-caste and intra-caste relations over land transactions. The transformation of agricultural land along the three highways is driven predominantly by the actions of the region's entrepreneurs.

M's situation discussed above represents the ways by which intra-caste power relations affect the bargaining power of landowners. Inter-caste negotiations are equally complex and are mediated via the political ties between members of

different castes. This does not mean that these dynamics can be read off as a reflection of position in the caste hierarchy. In the case of Vivekananda Women's college, the entrepreneur sought to acquire community-controlled *pavadi* land. The *pavadis*, as mentioned earlier, are controlled by members of the weavers' caste, the Mudaliars. The college borders the land once used as a pavadi but now reserved solely for community festivals, as many Mudaliar families have moved out of weaving into urban trade in the nearest city, Erode. The community members had secured an industrial patta⁵ to prevent the government from acquiring their pavadi, but the patta is issued in the name of an individual. In this case, the title holder, who is the president of the *pavadi* panchayat, is a trader based in Erode. Negotiations were conducted outside the village and in the neighbouring town of Salem. The founder and board members of the Vivekananda College negotiated with the trader to sell in order to expand their existing premises, but the transaction did not take place because of the opposition of the Mudaliar *pavadi* council who reside in the village and control the space in everyday life. There have been other instances where community leaders of the Mudaliar caste had transferred the *pavadi* land to the local government who then allotted it to workshop entrepreneurs (Raman 2013).

9.4.3 Small Workshop Territory

Autonagar, a cluster of 50 workshops located in Karuveppampatti village, is an example of recent development in the villages off the main Sankagiri road along the Coimbatore–Salem–Namakkal highway. There are two rows of workshops, predominantly for borewell drilling vehicle assembly, and there are signs of more agricultural land under conversion for setting up such units.

The first group of workshops were developed by entrepreneurs who moved to the village following the demolition of their workshops along the main Sankagiri road. They were followed by another group who moved from the pattarimedu⁶ inside Tiruchengode town either because of lack of space or high rent as well as the enforcement of a government regulation banning the parking of vehicles. The pattarimedu group included those who already had workshops and new entrants to the trade. Many of the workshops in the village function on a land rental basis. Each workshop occupies an area of 5,000 square feet, and landowners levy a monthly rent of 2 INR per square foot. Two or three entrepreneurs rent the workshop space together. V is a mechanic specialising in both borewell vehicle assembly and lorry reengineering. He moved to Autonagar from a cluster in Tiruchengode town to start a workshop. Previously, he was working with the one of the town's large entrepreneurs—Velliangiri Engineering Works. He rented a workshop along with his

⁵Patta is the title document to land.

⁶Pattarimedu is the local name for the workshop cluster inside the town. The English equivalent of "pattarai" is the workshop and "medu" is a highland.

partner who is a painter. They share this space with a welder who deals with pumps, valves and chassis.

Land in these villages is predominantly in the hands of Gounder owners or the Tiruchengode town temple trust. The land in the village is dry with rocky outcrops and serves to cultivate rain fed crops. The absentee owners and new investors in the area tend to rent out their land, generally for workshops, which proves to be a desirable investment. The landowners level the land and are responsible for providing the electricity connection, which remains in the owners' names.

9.5 State Embedment in Society

Land along the three highways is administered by village panchayats (rural administrations). Interviews with the elected officials of the panchayats show they have limited control over the conversion taking place. The community leaders from both the Mudaliar and Gounder castes are embedded in the two regional political parties as well as the national parties but have different levels of bargaining power. The Gounder caste leaders dominate in the party political structure both at the local and regional levels. They are more numerous, own agricultural land of varying sizes and belong to a backward caste community traditionally involved in agriculture. The Mudaliar caste leaders command influence predominantly at the local level and via their caste panchayats at the regional level. Unlike the Gounders, members of Mudaliar caste households secured education and hold key positions in the bureaucracy. The conversion of agricultural land for urban use is regulated by two administrative processes. One is the permission to take the land out of agriculture issued by the Collector heading the Revenue Department; the other is the planning permission for the specific type of construction on that land. The administration of agricultural land is beyond the purview of the village panchayat, whose role is limited to issuing No Objection Certificates to process the application for conversion. The role of panchayats in issuing planning permission is not clearly defined. Although it is the panchayat that issues a No Objection Certificate, in theory land development is to be regulated by the District Town and Country Planning office. In reality, the regional development plans are rarely established. The authority of the Municipality's town and country planning department is limited to the municipal boundaries and it is the village panchayat who issues the no-objection certificate for land development and subsequently enrolls the properties for tax collection, hence the process for regulating land development remains ambiguous.

The lobbying of the District Commissions of the Revenue Administration for land conversion and the village panchayat for the no objection certificate for land development are organised through caste networks. Although members of other castes, the Dalits in particular, have managed to secure the panchayat office in some villages, their voice is limited. According to some of the panchayat officials who belong to the Dalit caste, they do not have any influence over the colleges that have sprung up along the highways as these are controlled by the Gounders and the

Mudaliars who have both economic power and clout within the party structure. It also remains unclear whether all land developers comply with the Revenue Administration norms regulating the conversion of agricultural land for other urban use. Electricity connections, which are organised by the landowners, require clearance from the panchayat. Besides land rental, occupancy of poramboke land is common in the villages. The state space is an arena for shaping economic or residential territories as we can see from the strategies employed by lorry reengineering entrepreneurs from a neighbouring town—Namakkal—to have a piece of land declared as an SEZ. With the multiplication of lorry engineering units in the clusters inside the town, it was difficult for entrepreneurs to secure space to expand existing units or to start new units. They hence decided to invest in 100 acres of land in a place outside Namakkal and at the time of our fieldwork they were lobbying to have it declared an SEZ which would allow them to benefit from tax concessions.

9.6 Conclusion

This chapter has explored the process of land transformation, focusing on the everyday practices of constituting territory. The practices were enacted by local actors; the chapter unpacked the characteristics of the actors and their actions with respect to land transactions, assembly and development. The process of transformation in the localities studied was driven by the region's entrepreneurs, in contrast to the assumptions of the NEG theory which places small towns in a hierarchy of dependence on larger cities. In contrast to this assumption, the localities along the three highways are experiencing rapid growth driven by the expansion of small town's economic activities. This growth is influenced by the specific cultural-economic history of the region and is not limited to the contemporary economic dynamism. Further, the NEG theory situates the expansion of small towns and surrounding villages in a hierarchically dependent relationship with the large cities or metros. By contrast, the dynamics of land transformation in the towns and villages along the three highways is driven by the internal dynamics of the region.

Further, land transformation in the localities along the three highways is reflexively influenced by the two-way flow of investment between the villages and the towns. Here, the regional entrepreneurs flexibly used both the rural and the urban domains to accumulate surplus. As shown in the chapter, the boundaries between the towns and villages are fluid as surplus from urban and rural economies are continuously circulated between these spaces. Tiruchengode's land dynamics is driven by the strategies of the region's entrepreneurs who use land to mobilise capital and to hedge their risks (Raman 2014). Investment in land and educational institutions is relatively risk free unlike the earlier local economies which were based on mills followed by lorry reengineering or the borewell business. The migrant demand as well as the subdivision of property of old settlers in the town triggered the flow of investment from the town to the residential layouts at the

outskirts. The town properties are taken over by the village entrepreneurs who diversify the surplus from different sources including agriculture and the town's economy. The flow of capital between these regions erodes rural and urban boundaries as shown in Sect. 9.3.2. on the practices of territory. In addition to narrow economic interests, investment in land by some entrepreneurs and caste associations is also driven by the political interest of supporting the mobility of their caste members. These findings not only question the key tenets of the NEG theory in terms of the dependency of small towns on large urban centres for their growth but they also point to a reexamination of the boundaries of rural and urban. In our study, the rural–urban and the local/extra-local boundaries are straddled by the actions of entrepreneurs in the region. The town and its surrounding villages function as a unified, semi-autonomous political economic and cultural space, which is not always reliant on larger urban centres for growth.

Another key contribution of this chapter is the highlighting of the complexities of civic territoriality. Both Hsing's (2009) and Balakrishnan's (2013) works conceptualise civic territoriality as a response to state actions. In contrast, the dynamics of land transformation illustrated in this chapter is driven by the spontaneous actions of regional entrepreneurs. As illustrated in the section on the patterns of transformation, the development on land parcels abutting the three highways is driven by the region's entrepreneurs' actions to expand their activity or diversify into new educational entrepreneurialism and the expansion of existing small cluster economic activities around lorry reengineering. Land in the interior villages off these highways and built property is being developed for setting up power looms and as rental housing for migrant labour. Moreover, Hsing's (2009) work suggests civic territoriality as a process of egalitarian cooperativism. In contrast, this chapter illustrated the cooperation and conflict that have emerged around the negotiations for land transactions and land development.

In the Indian context, caste relations have a significant influence on civic territoriality as shown in this chapter. Land transformation, as the case studies discussed in Sect. 9.4 show, is regulated by networks embedded in caste and spatial relations. Caste networks serve as a key vehicle for mediation between landowners and land investors. Although land values are high, in many cases the alienation of land is often not voluntary but influenced by pressures from within the caste community. Conflicts, particularly between members of the same caste, remain invisible. There are also inter-caste conflicts between the new investors/entrepreneurs and agricultural landowners over the deterioration of natural resources. However, the manner in which intra-caste and inter-caste relations shape negotiations over land prices or land development is not straightforward.

The chapter has also highlighted the influence of land tenure in shaping the dynamics of land transformation. Land in the towns and villages along the highways is held under different forms of tenure and each offers different opportunities for assembling/consolidating large parcels of land. Finally, the process of land transformation needs to be situated within specific spatial and social histories. This chapter has illustrated the importance of understanding territory as a social process rather than as spatial units with defined administrative boundaries.

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Chapter 10

Territorial Legends: Politics of Indigeneity, Migration and Urban Citizenship in Pasighat

Mythri Prasad-Aleyamma

10.1 Introduction

Social relations in small towns in India are co-constituted by caste, class and gender. The literature on social relations in small towns clusters around these identities and their interrelationships with markets, land and accumulation, especially that of small capital (Harriss-White 2003; De Neve 2005; Chari 2004; Vijay 1999; Raman 2014; Coelho and Vijayabaskar 2014). Although this is an extremely useful analytical formulation, another pivot around which social relations in towns revolve rarely figures in the literature: indigeneity. Of special significance are towns where regimes of indigenous rights protection operate as an organiser of social and economic life. There are many cities and towns in areas where the fifth and sixth schedules of the Indian Constitution are in operation, which recognise the specific disadvantages and vulnerabilities of adivasis and restrict land transfers and reserve electoral representation. Small towns in these areas draw on an economy that is largely dependent on timber and non-timber forest produce, trade, mining and plantations. Baviskar (2010) observes that these legal safeguards have largely proved ineffectual as increasing differentiation within tribal groups is reflected in the emergence of political and economic elite that has used the levers of electoral and bureaucratic office to become partners with non-tribal industrialists and contractors. Harriss-White et al. (2009) too note the creation of an elite that has benefitted from the interaction of these protective regimes and the capitalist economy.

These regimes are turbulent sites of political conflict framed by migration, indigenous agency and shifting governmentalities—colonial, national and provincial.

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Macro, large-scale dispossession such as dam building, township formation and road building are co-present with the micro processes of trade that draw on an indigenous rights regime (Ghosh 2010). Pasighat, in Arunachal Pradesh, is a case in point which offers fresh insights into how politics in a town is shaped by various actors and processes whose locations are as much determined by history as by everyday life. Both the “migrant” and the “tribal” are encased in memories of migration. Entitlements in the town are determined by various proscriptions based on when and how one migrated. At the same time, the acquisition of land for the township, for dams and for roads does not abide by these rules of protection. This chapter is an exploration of how the policy of protection of indigenous people works on the ground, in relation to a town and its politics. It draws on fieldwork carried out during October and November 2011 and in February 2013 in Pasighat.

Pasighat is a town in the East Siang district of the state of Arunachal Pradesh, which is in the north east of India. Located in the foothills of the Bapi hills in the eastern Himalayas, at an average elevation of 153 m, it covers approximately 17 km². The Siang River flows through its east and several smaller rivers are near it. After arriving in Dibrugarh in Assam, I crossed the Brahmaputra in a ferry, which took 2 h. The riverbed had dried up in summer and it forced boatmen to travel downstream or upstream instead of moving straight across. Passengers, at times, had to alight and cross the riverbed in a jeep and then board another boat. During the 2-h van ride between the boat jetty and Pasighat town, near the border between Assam and Arunachal Pradesh, police officers stopped vehicles and searched for migrants without a permit. Two young men who were in shabby clothes were told to get down and were asked for their inner line permits. They paid 100 INR to the police officers, and we passed through. I was spared even though I looked quite similar to someone from outside Arunachal Pradesh. I had a research permit issued in Itanagar, the state capital, which no one demanded to see. Regulating belonging and citizenship in the town, inner line permits are laden with history and everyday practice, and opened up for me, a field worker from the south of India, ways of thinking about their role in shaping the politics of a town.

Migration and indigeneity are co-constitutive of the politics in Pasighat. Pasighat arose as a base for the British during their military expeditions to tribal areas to its north and east. The market served the needs of soldiers and officers, and shops were set up by Marwari and Bihari businessmen brought in by the British from the town of Sadiya in Assam in the 1920s and 1930s. In the 1970s, people from strife-torn Bangladesh migrated to different parts of Assam and some eventually came to Pasighat. As per the 2001 Census, the total population of Pasighat was 21,965. In 2011, the total population increased to 24,656, a 12.25 % growth. Of the total population in 2001, the “tribal” population was 7618. The majority of the town’s inhabitants were “non-tribal”. Adis, the people who were living in the Siang valley and in Pasighat before these migrations, had histories and memories of migration. However, they think of themselves and are thought of as indigenous to the valley. It is in this context of migration and mobility that I investigate the politics in Pasighat.

In Sect. 10.2 I trace the different streams of migration of the people in Pasighat and their memories of it. In Sect. 10.3 I relate this to the entitlements and

enfranchisements of the people in Pasighat and to the state policy on migration. This entitlement regime, in turn, determines what a town is and how its boundaries are determined. In Sect. 10.4 I trace the conflicts, contestations, and opportunities for politics that follow from these differing entitlements. In Sect. 10.5 I consider indigeneity as politics. In Sect. 10.6 I take up the case of occupancy of a property in the town and its fallout for municipal ward delimitation. Section 10.7 concludes the discussion and Sect. 10.8 presents a postscript on methodology.

10.2 Migration and Indigeneity

“I came with my father in 1953 in a Dakota plane. There were no roads to Pasighat after the massive earthquake in 1950. We came with supplies of groceries and set up shop in the “new market”. My father had a shop in the old market near the river, which was washed away in the earthquake. He had come in 1935 from Sadiya in Assam along with the British”.

A history of migration is shared by all the people in Pasighat in varying degrees, including those who claim to be indigenous. The contrasting and overlapping histories of migration that I explore in this section help us question the opposition between migration and indigeneity. I argue that stories of migration are central to the Adi people’s understanding of indigeneity. Jagadeeshwar Singh, 74, whom I have quoted above, runs a Godrej franchise selling safes and almirahs, along with his sons. He is one of the few remaining descendents of the traders who came to Pasighat in the 1920s and 1930s. The early Marwari and Bihari traders had come from Sadiya at the behest of the British. Most of the Marwari traders left Pasighat in the wake of the decline in the timber trade after the Supreme Court banned the felling of trees in 1996.¹ Hiralal Bux, who has a shop selling clothes and ayurvedic medicines, is the lone Marwari trader left in the town, and his father arrived there in 1927.

The earliest non-Adi settlers in Pasighat were porters and personnel that came with the British army for waging the war of 1911–1912.² Most of them were

¹In 1996, the Supreme Court completely banned, with minor exceptions, tree felling in three whole states and parts of four other states in the north east; it ordered sawmills to close down where a complete ban was directed; and it banned any transportation of timber out of the North East states. In 1998 the Supreme Court suspended all licenses to all wood-based industries in the seven North Eastern states and ordered relocation of those industries to state-specified industrial zones where they could be more closely monitored (Rosencranz et al. 2007).

²The Anglo-Abor war was fought in 1911 between the English and Adis. It followed the killing of the political officer of Sadiya, Noel Williamson, by Matmur Jamoh and his fellow warriors. The British retaliated with an expedition of 8500 men, of whom 3000 were porters. This was the culmination of hostilities between the British and the Adis (Minyongs) in the previous century, mostly a fallout of the British playing intermediary in longstanding disputes between Miris and Minyongs on the one hand and between Minyongs and Beheea (a community of migrant gold washers from Bihar) on the other (Srivastava 1990).

Nepalese. Some of them never went back and settled down in Pasighat. The Nepalese constitute a sizeable portion of the population now. They are mainly engaged as agricultural labourers, sharecroppers, livestock keepers, peons and chowkidars. For instance, Krishna Bahadur from Nuwakot district in Nepal came to Pasighat 40 years ago and is a sharecropper in a wet rice cultivation plot owned by an Adi. Geeta Pujal, whose forefathers came to Pasighat, works as a sweeper in a hotel after her husband abandoned her 10 years ago.

The second group of non-Adi inhabitants consists of employees of government and private establishments. There were many Malayali and Tamil teachers, nurses and government officials in the 1970s and 1980s. They have retired and been replaced by people from Arunachal Pradesh over time.

The third group comprises those engaged in trade, business, transport and similar endeavours, and they are mostly from north Indian states. Biharis constitute a sizeable proportion of these new migrant traders. For instance, Mukesh Kumar, a migrant from Madhubani district in Bihar, was an embroidery worker in Ludhiana before coming to Pasighat. He was on the verge of losing his job when the design and production of embroidered clothes was computerised, and he decided to move to Pasighat. Migration and employment in Pasighat could be viewed as related to ongoing technological change elsewhere, even on a supranational scale. Mukesh's brother was in Pasighat and was married to the daughter of a government employee there. He set up a shop selling pans, cigarettes and other assorted goods in the main square. Thomas Mathew from Kottayam in Kerala runs a bakery in Pasighat and came 8 years ago.

The fourth category is labourers engaged in construction work, barbers, cobblers, launderers, sweepers, pushcart pullers and so on from north India. Jaiprakash Associates (Jaypee), a construction company that is building the Lower Siang Hydro Electric Project 22 km upstream of Pasighat, is a major employer, as is the Border Roads Organisation of the Indian army. Ganesh Sethi was born in Pasighat to a Nepali family and has worked for Jaypee as a driver (trucks, jeeps and motorcycles) for the past 13 years. He has travelled to many parts of India to work on dam projects undertaken by Jaypee.

The people from other states in the north east and Bengali refugees also constitute a sizeable portion of the population of Pasighat. For instance, Shahnawaz Hussain, who lives on communal land belonging to the Adis, said that he was from Borbetta in Assam. He said that his family migrated in 1978 from Bangladesh (later changed to 1973) after the war of independence. The land around his house has tomato plants. He said that he looked after the land of his *malik* (owner) and kept encroachers away, and that sometimes the *malik* took some vegetables from his field. There was, however, no fixed sharecropping involved. He said he provided labour in the adjoining fields. In a wet rice cultivation plot that belonged to Okom Jamo, an Adi man, I met many harvesting workers from Assam. In a shed, some 30–40 women were preparing to have lunch. One of them, Ritika, was from Ruksin in Assam and belonged to the Mishing tribe. Migration to Pasighat, thus, has occurred in different periods in different ways, and has been intimately connected to colonialism, developmentalism in post-independent India, and war in South Asia

and the formation of a new nation. What, then, of the Adis, who are considered indigenous to the valley?

Béteille (1998) asks how widely people can move and still retain their entitlement of being indigenous as part of asking the broader question of the meaning of indigeneity. Xaxa (1999) writes that defining tribes as indigenous people in relation to territories within a country, rather than the country as a whole, gives rise to problems, and that using the term “indigenous” to describe tribal people in India does not reflect an empirical reality. It is more of a political construction. My intention in this chapter is to look at *the empirics of this political construction* in relation to a town. I feel that instead of positing migration as undermining indigeneity, it is important to trace the ways migration, especially micro migrations and their memories, become a way of affirming indigeneity. I use “tribe” and “indigenous people” interchangeably, in accordance with the particular context in which they were heard and used during fieldwork and in the secondary material I rely on. Tribe is a word the Adi people in Pasighat use to identify themselves, whereas interlocutors who were social activists used “indigenous people”.³ Tribe also has more administrative currency. Although the word “adivasi” means indigenous people, it was not used much in Pasighat. Their difference lies in the specific form of social articulation that they serve (Li 2000).

Post (2012) writes that there is a near universal belief among the Tani people that they have not always occupied the area they currently occupy, but migrated to it. The Tani people is a broad term for tribes in central Arunachal Pradesh, including the Apatani, Nyishi, Adi, Galo, Tagin, Hill Miri and Mising peoples, who consider themselves to have descended from a common ancestor, Abo Tani, literally the father of mankind. A commonly held view among the Tanis is that they migrated from somewhere in the “north”. Tani accounts of migration are typically framed such that the direct ancestors of a specific, currently identifiable population—usually a tribe, a sub-tribe, clan grouping or even a single clan—are viewed as having shifted, en masse, from one geographical area to another.

This is true of the migration legends I heard from Minyongs in Pasighat, according to which a place where everyone groups together is called a *kumting*. The nearest *kumting* to Pasighat is the Sikel *kumting* where many groups came to settle. Some migrated further south west from there over a period.⁴ Blackburn (2003) suggests that the trade in beads with Tibet and the material culture surrounding them as well as the migration legends point to the north, across the Himalayas, as the origin of the Tani people.

Aabangs, the oral legends of the Adis, are histories of movement, inter-tribe warfare, and migration. Padung (unpublished manuscript) notes that, according to the Census report of 1931, none of these tribes had any tradition of origin that went very

³To put things in order, Adi means hill people and according to several sources (Roy 1960; Barooah 2007) was a name chosen by the Adis themselves in preference to “Abor”, which meant “unruly”.

⁴Interview with Banyok Siram, 18 Feb 2013.

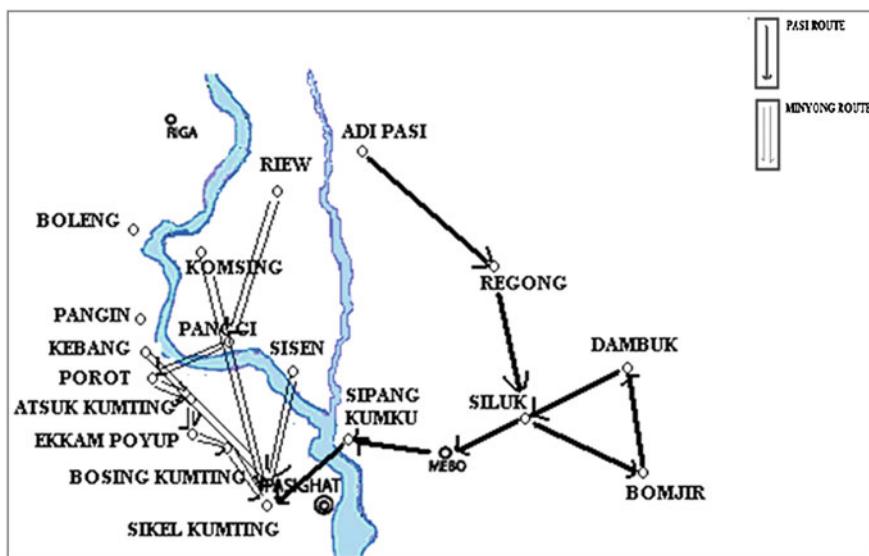


Fig. 10.1 Migration routes of Adis to Pasighat. *Source* Egul Padung (unpublished manuscript)

far back. All claimed origin from a tribe settled at Killing in the Bomo-Janbo country. They crossed the Dihang (Tsang pho) or settled on its banks or in the close neighbourhood. In the Census report of 1961 they were stated to be immigrants from the Kham province of Tibet (Mibang 1994; cited in Padung, unpublished manuscript). Figure 10.1 is a map of these micro-migrations to Pasighat of Pasis and Minyongs compiled from oral narratives and legends by Padung in his unpublished manuscript.

These legends and sources are cited only to drive home the point that all the people in Pasighat share a history of migration, albeit in varying degrees. That various people in Pasighat share memories and legends of migration does not place them on an equal footing, for each of these migrations have an asymmetrical effect on meaning making and construction of identities. It does not follow from these though that everyone was once a migrant; rather, these legends sharply draw the boundaries between Adis, other tribes and non-tribal outsiders. Blackburn (2003) points out that in the context of fundamental cultural changes in Arunachal Pradesh today, these migration legends have played a crucial role in consolidating and presenting a coherent identity to a tribe and a clan. This emergent cultural politics is exemplified by the centralisation of celebration and fixed dates for festivals, the spread of Christianity and the rise of neo-traditional religions such as Donyi Polo.⁵

⁵For example, Solung, a festival of the Adis, is celebrated in the Solung ground in Pasighat as a festival of the town, as opposed to its celebration in villages at earlier times. Donyi-Polo is a religion that has given a codified form to the animistic practices of the Adis and it literally means sun and moon. It arose as a response to Christian conversions among the people of Arunachal Pradesh.

Hansen (2001) argues that communities do not exist “out there” as groups but only come into being when they are named as such through public performances, rituals and ceremonies. These migration legends provide affirmations for early inhabitation and occupation of places and, through telling and retelling, generate a sense of belonging to a place. They shape perceptions of the past and construct current identities by placing the tribes of central Arunachal in relation to each other, and to the people in the plains. In addition to this, and more importantly for this chapter, these stories of migration spatialise the town by exerting an influence on trade and politics.

10.3 Rights, Licences and Claims

At the checkpoint the police demanded my inner line permit. I said that I had not known that I needed a permit to go to a part of my own country. I told them even if you turn me away here, I intend to get to Pasighat somehow; I'll go because I have to go.

Mukesh Kumar came in 2000 and he obtained his inner line permit after entering Pasighat. He pays 1000 INR as rent to Pertin, an Adi, who has a trading licence. Traders in Pasighat lease trading licences from Adis and pay rent as they are not allowed to possess licences. Only a handful of migrant traders whose forefathers migrated during 1930s, such as Jagadeeshwar Singh and Hiralal Bux, have trading licences.

The trading license can only be understood in the broad context of land possession and ownership practices in Arunachal Pradesh. Land is not alienable to non-tribal people. Land can only usually be sold to people belonging to the same tribe. There is a limitation on the transfer of land from people belonging to one tribe to people belonging to other tribes. There were multiple ways of occupying and possessing land; some were communal and clan lands, some were individually owned and some were allotted to migrants temporarily and reviewed continuously. Inter-tribal transfer of land is found in urban areas and rarely in semi-urban areas, according to the Arunachal Pradesh Development Report (2009). Harriss-White et al. (2009) point out that in villages in East Siang district, which are fairly near Pasighat, there is a noticeable correspondence between relatively frequent land sales, the commercialisation of agricultural production and personalised transactions in the informal credit market at high, exploitative interest rates. Because no cadastral survey was ever done, there is no title deed to the land owned by an individual, and this lack of collateral has limited channels of formal credit. The logic of a trading licence follows from land practices, as only people who possess/own property can apply for one. As non-tribals cannot own property, the local elites, who are Adis, extract rent in four ways—from rented land, from house and business sites, from business licences and from the state (Harriss-White et al. 2009).

Arunachal Pradesh Development Report (2009) points out that the arrangement means that the local people own the fixed capital and the migrants own the variable capital. The variable capital here could mean labour, including entrepreneurial labour.

Traders with shops in Pasighat market are from Bihar and West Bengal, whereas vegetable vendors and fruit sellers are Adi women from neighbouring Mebo, across the Siang River. The shopkeepers pay their rents to the Adis from Pasighat who have trading licences. Many of the trading licences are with a clan called Moyong who had close associations with the British and later with the central government in New Delhi. When a trading licence was once awarded to a man who was the son of a Nepali man and an Adi woman from Upper Siang district, it was resented by the Adis in Pasighat.

The autorickshaws in Pasighat are also bound by indigeneity. Sujit Mondal, an autorickshaw driver from West Bengal, said that the STs (scheduled tribes) do not let drivers such as him wait in the main stand.⁶ Of the five main autorickshaw stands in Pasighat town, they are allowed to wait only in one near a bank. They are all members of the same autorickshaw drivers' trade union, but are not allowed there. There are about 75 migrant autorickshaw drivers out of 200. They pay a monthly membership fee to the union. According to Nino Dai, an Adi autorickshaw driver, the job is reserved for Adis, and even if an Adi owns an auto and rents it to a Bengali or Bihari driver, the auto has to wait in stands on the fringes of the town or those near a bank, but not in the main market.

How did this structure of entitlements come about? The inner line provides a clue to understanding the colonial state's policies in Arunachal Pradesh and its legacy in contemporary times. It prohibited British subjects in general from going there without a licence and the tea planters in particular from acquiring lands beyond a demarcated line (Kar 2009). Promulgated by the Bengal Eastern Frontier Regulation of 1873, it was supposed to demarcate "the hills" from "the plains", the nomadic from the sedentary and the jungle from the arable—in short, the tribal areas from "Assam proper". The communities that were forced to stay beyond the line were seen as belonging to a different time regime—where the temporality of law did not apply. The inner line, thus, created a sharp split between the indigenous people and those from the plains. Further, for outsiders, land holding and trading were also restricted (Murayama 2006).

Although "non-tribals" cannot own land in Arunachal Pradesh as a whole, in Pasighat the workings of the land regime are convoluted. The government owns the land in the township. The township and the villages that lie within and outside it form the functional town. We go into the details of these categories in Sect. 10.4.

⁶The term "scheduled tribes" refers to specific indigenous peoples, but it has become a way of referring to all indigenous people, which could at times be derogatory. However, in the context of Arunachal Pradesh, it need not always be so as the indigenous people have a degree of power and control in matters of the state compared to other areas in the country.

The government here means the district administration and the office of the deputy commissioner.⁷ The deputy commissioner allots land in parcels of 500 or 250 m² for residential and commercial purposes. These plots are charged a premium and an annual lease rent. The lease is for 30 years. The only way for individuals and families to possess land legally is to obtain an allotment certificate and a passbook in which the annual rent is marked. This also applies to the indigenous people who are not Adis, such as Galos or Adis who are not from the Bogong *Banggo* (the name of the group of villages around Pasighat town).

The restriction on land holding has created the geography of the town, which is drawn along lines of ethnicity. The Banskota and Muri lines towards the south east of the town are inhabited by Nepali and Bihari migrants who have no land allotment licences and live in crowded settlements. The land was allotted to a community leader called Banskota, who was one of the first Nepali migrants. The Adi villages, Mirku and Mirbuk, are in the town but are not part of the township. These villages are inhabited by Adi migrants from other villages outside the town and outside the district. However, there are only limited transfers of land and only the Adi owners have possession certificates, but not *pattas* or title deeds. These possession certificates have only limited value as collateral to take loans and they are not supported by any cadastral survey. Only 182.4 ha were surveyed during 1989–1994 in Arunachal according to a report by the department of land resources under the central ministry of rural affairs.

Murayama (2006) comments that territory as a justification for an entitled claim by a specific group of people needs to be marked by boundaries and borders. Once created, borders divide groups of people into “migrants” and “locals” and “insiders” and “outsiders”. In this sense, borders are politically constructed and they produce social categories and hierarchies. However, Pasighat is farther from the international border than many other places in India and Arunachal Pradesh, and the inner line works as a border within the nation, limiting citizenship—economic and political. The presence of borders indicates the social categorisation of people into “migrants” or “outsiders”, and lays the basis for conflicts among residents at various scales. The inner line, in this sense, creates the conditions of urban citizenship in Pasighat.

⁷In the middle of 1954, the administrative system was reorganised on the basis of a “Single-Line System” (Elwin 1957: 4). The single-line system of administration was a legacy of the British. After the establishment of Pasighat in 1912, the assistant political officers posted there were selected from the police service. It was introduced as a way to order tribal ways of life and involved channeling all the administration through a single officer in whom all powers of execution and judiciary were vested. “Under the Single-Line System of administration, the Deputy Commissioner or the then Political Officer, acted as the head for all departments such as maintenance of law and order, Revenue, Community Development, Socio-cultural affairs of the people and the exercise of authority over the various installations and schemes of various technical departments such as schools, hospitals, roads, agriculture and so on” (Luthra 1993: 22). This rested on a peculiar division of labour between the indigenous people and administration, the contours of which were decided by the colonial government and subsequently by the government in Delhi. The division of labour had been such that most disputes were heard and settled in *kebangs*, or village councils, and very few were heard by the political officer or deputy commissioner.

However, it would be a mistake to overlook the dimensions of territoriality other than the inner line that configure citizenship in Pasighat. Restrictions on migration to Pasighat were not the exclusive domain of the state. It was much more nuanced than a crude opposition to north Indian migrants by the Adis. In 1960, to curtail the rising population of Pasighat because of migration of people from other banggos of Siang valley to Bogong Banggo, a *kebang* (village council) was held at the premises of the additional political officer, Pasighat.⁸ It decided that people from Nugong Banggo, Kebang-Rolging Banggo and Adi Pasi would be given the first chance to migrate to Bogong Banggo. Nevertheless, people from these areas too would not be allowed to settle in the Bogong area without the consent of the banggo. The banggo kebang (a meeting of village councils in the banggo) discouraged the migration of people from upper Minyong Banggo, Padam Banggo and Galo Banggo to Bogong Banggo. If anybody from those banggos comes to settle in Bogong Banggo, he or she must take the consent of the banggo and get registered in the office of the additional political officer, Pasighat (Padung, unpublished manuscript). There are people from other banggos in the town despite these proscriptions, as we see in the next section. These territorialities, which arise from an acute sense of boundaries and ethnicities, are mediated by the state as the office of the deputy commissioner arbitrates on decisions of the banggos. It is relative indigeneity in the sense of prior occupation that plays a role in land politics and the right to the town. Peters (2009, 2010) observes this in her work in Africa where ethnic differences along with relative indigeneity appear to play a divisive role in shaping land politics.

10.4 Development as Territoriality

Another aspect of this territoriality is the Indian policy of using developmental projects to extend the institutions of the state all the way into international border zones, thus nationalising the frontier space (Baruah 2005). Building roads and dams

⁸A banggo is a territorial subdivision of the Adis. A collection of villages and clans form a banggo. The village council, or kebang, has extensive judicial and formal powers and stakes in matters to do with people, land and the town. Kebang *abus* or village elders preside over the proceedings of such meetings. A *dolung* kebang administers a village. The banggo kebang has jurisdiction over a number of villages. The bogum bokang kebang settles inter-banggo disputes and some disputes of a complex nature. In that sense, it is the apex body whose powers of arbitration extend to the entire East Siang district. Barooah (2007) notes that there are 129 villages with 129 dolung kebangs, and 12 banggo kebangs in East Siang district. At the top is the bogum bokang kebang. Though kebangs existed long before British rule, they were given a codified three-tier form by the British. Regarding the origin of the banggo kebang, Elwin (1957: 64) writes “Even before independence, a more elaborate institution, known as the Banggo was introduced under official inspiration. The Banggo represents a number of villages and is attended by at least one leading gaum from each. It is mainly concerned in settling inter-village disputes. It is rather more fully organised than the village kebang, for it has a ‘secretary’ and it maintains a funds.” This points to the reorganisation and codification that indigenous ways of life were subjected to during colonial rule.

seem to be the most visible form of this strategy. A network of 168 dams is proposed in the tributaries of the Brahmaputra all over Arunachal Pradesh, some of them mega dams and some medium sized. If the political economy of resources that shaped politics in the state was centred on the timber trade in the 1990s, in the past few years its locus has been power generation. Between 2006 and 2009 the Congress government in Arunachal Pradesh signed 130 memorandums of understanding (MoUs) with companies, allowing them to build hydel power projects in the state.⁹

A report of the Comptroller and Auditor General (CAG) of India has criticised the state government for handing over several hydel power projects to private companies with little expertise in the field, avoiding the public sector North Eastern Electric Power Corporation Ltd. Even when these projects have been handed over to companies with experience in dam building—for example, Jaiprakash Associates, which built the Sardar Sarovar dam in Gujarat—institutional structures that facilitate financial opacity and neoliberalisation such as special purpose vehicles have been formed to build these dams. Jaypee was awarded the contract for building the Lower Siang Hydro Electric Project on a build-operate-transfer basis. The special purpose vehicle for this is called Jaiprakash Power Venture Ltd. The MoU provides for the state government to hold 11 % of the special purpose vehicle. The company has agreed to provide 12 % of the power generated as “free power” in the first 10 years and 15 % from the 11th year onwards.¹⁰ Roads are being built by the Border Roads Organisation even on terrain that is unstable and prone to landslides. Many of the smaller construction works have been sub-contracted to Adis. There are new migrants from many small towns in Bihar and Uttar Pradesh who work on the dam site.

The emergence of local elites is crucial to understanding Arunachal Pradesh’s political context as the development discourse has been able to capture their imagination and bring their aspirations in line with New Delhi’s goals driven by national security and energy requirements (Baruah 2005). This development discourse materialises as a claim on territories and destabilises the ethnicised polity by appropriating the land and resources of the Adis and by undermining the authority and autonomy of Adi institutions. The *kebangs* were never consulted when decisions were taken or MoUs were signed on building a dam across the Siang. Egul Padung, a resident of Pasighat and a college professor, said that the dam builders were bringing in surveyors from outside.

They are doing it on paper. They don’t go to the field because our land is almost inaccessible. No vehicle can enter and they do not want to go on foot. Because of IT [information technology] development, everything can be accessed from your table. Through what you call Google Maps. They invite the villagers to their office. They ask how much

⁹For a detailed investigation of the political economy of power generation in Arunachal Pradesh, see the series of reports by M Rajshekhar available at <http://blogs.economictimes.indiatimes.com/Anomalocar/entry/contours-of-a-hydel-scam> (accessed 17th February, 2014). See the CAG report at http://cag.gov.in/html/reports/commercial/2009_27PA/chap_8.pdf.

¹⁰See <http://www.jp powerventures.com/arunachal-projects.htm> (accessed 1st March, 2014).

land do you have and who are the people who own the land and what kind of land do you have. They show Google Maps to villagers and ask them to show their land. They do not do any real field survey.

Although it is interesting to delve further into the interfaces between IT and land acquisition, for the purposes of the present chapter it should be noted that Arunachal Pradesh, as a “lightly administered” area, lacks a fully operational land revenue department that could carry out proper surveys in the areas that could be submerged.

The absence of certain mechanisms of the state aids capital in making inroads into Arunachal. For example, if there were cadastral surveys and records of land administration, people in the submergence areas could have asked meaningful questions about the dam. The people who live in Pongingg village in the submergence area told me that the government had not done any survey and that it was Jaypee that had done them. They were informed by an additional circle officer, a Bihari, that their village was in the area. There have been no replies to their petitions submitted to the chief minister, deputy commissioner, and member of the legislative assembly (MLA). Pongingg was difficult to reach as one had to clamber down a mountain and cross the Siang on a bamboo hanging bridge, stones breaking loose and falling from a road under construction above. It took nearly 1 h of trekking from the Maryang-Pasighat road that was being built. Very few officials have bothered to visit the 44 families in the village. Lenjing Taying, a resident and a farmer who owns 4 acres of paddy land on the slopes of the hill, told me that Jaypee promised “contracts” but nothing has happened so far, and that in any case it would be impossible to give them to everybody in the village. Many in the village were working on the road construction site and had not sown the winter crop of vegetables and corn because of that. Taying said that roads and dams are different, though both displace people. “Roads are needed locally, but dams are not. All India will develop, but Pongingg will die if the dam comes up”. In April 2012, protesters from Pasighat burnt down a Jaypee labour camp and a *pandal* (open canopy) for public hearings.

These protests and their insurgent nature bring to mind another aspect of territoriality and points to a certain altered continuity in the history of Adi resistance. Pasighat and nearby villages could be thought of as part of what James C Scott (2009) calls Zomia, following Willem Van Schendel—the largest remaining region of the world whose peoples have not yet been fully incorporated into nation states. It is the name he gives to virtually all the lands at altitudes above roughly 300 m, all the way from the central highlands of Vietnam to north eastern India, traversing five south east Asian nations (Vietnam, Cambodia, Laos, Thailand and Myanmar) and four provinces in China (Yunan, Guizhou, Guangxi and parts of Sichuan). The people of Zomia are refugees from state taxes, conscription and corvée labour and, for the most part, are in a condition of servitude, which has emanated from the plains. These neglected and seemingly useless territories to which stateless people had been relegated suddenly became of great value to capitalism as many of them abounded in minerals and other natural resources. This has prompted attempts to subjugate these people and to render their life legible and transparent to the state so

that they can be ruled. This process of subjugation, however, has been violent and incomplete. The people of Zomia have resisted and fled attempts at state building and bureaucratic insertions. One could view the absence of certain aspects of the state—for example, land revenue and an administration system—not as an anarchist characteristic peculiar to areas inhabited by insurgent indigenous people but as closely interwoven with capitalist incursions. Being illegible to the state does not provide any refuge from capital. A detail that makes me wary of using the term “insurgent indigenous” is that many of the Adi people I met were enthusiastic Indians and Hindi speakers and, unlike many other states in north east India, Arunachal Pradesh does not have a credible insurgent movement.

Current structures of enfranchisement in Pasighat are built on these territorialities of different scales. The scale of the ethnicised town polity that was a product of colonial and post-colonial governmentality is challenged by corporate capital on national and supranational scales. A closer look at indigenous politics is indispensable to understanding the current structure of enfranchisements in the town. My intention in bringing in the dam story, which looks somewhat distant and removed from the politics of indigeneity in Pasighat, was to bring out the connections between these multi-scalar units—the dam and the town. The central place that capital, and specifically the nexus between state and corporate capital, has in fashioning the political economy of the town is clear. The contracts for repairing boats of the company that builds the dam were given to the president of the market association of Pasighat, as we see later in the chapter. The resistance against dams too is based out of Pasighat. Siang Dialogue, an organisation formed by a few anti-dam activists—a college professor and a farmer who also have trade licences in Pasighat, among others—ran campaigns and coordinated with kebangs, and in April 2012 stopped the public hearing on the effects of the dam convened by Jaypee and the state pollution control board. Siang Dialogue, the Adi Students’ Union, the Siang Peoples’ Forum, and the Siang Bachao Federation called for a Siang valley bandh against the public hearings. Indigeneity, as Li (2010) points out, can act as a means to counter dispossession and has enabled people to resist mass evictions and enclosures. At the same time, it can also be a vehicle of micro dispossession and accumulation. It is important to look at indigeneity as an element that shapes territorialities that extend beyond the town. Together, they determine the right to the town of the inhabitants. These demographic engineerings on various scales—colonial, national and town—have determined the ethnic mix of Pasighat and its resultant politics.

10.5 Indigeneity as Politics

Harriss-White et al. (2009) observe that in Arunachal Pradesh:

With the emergence of the capitalist economy a powerful minority of local elite tribes and of elites within these tribes has developed with considerable power over the state apparatus.

The economic basis of this class lies in access, through both lawful and unlawful means, to the resources of the state. Occupationally this group consists of politicians, businessmen and traders and bureaucrats. The expansion of the state bureaucracy, of construction and infrastructural activities undertaken by the military and the civil administration, the timber trade and general trading and business opportunities in consumption goods created by the emergence of the urban, service class has nurtured these elites. However, the key to their economic base is their access to the resources of the state, which has depended in turn upon their capacity to exploit an ethnicised polity and society.

The state policy that protects indigenous people from the onslaught of capital and the capitalist culture of the rest of the country has opened up avenues of accumulation in the informal economy and created an elite among the Adis. This would have been impossible without the practice of a politics of ethnicity and indigeneity, and an ordering of the space in the town on that basis.

The Bogong Banggo kebang was also active, along with the Adi Students' Union, in demanding eviction of "illegal occupants" from areas in the town. The students' movement against migrants and refugees has a long history in Arunachal Pradesh. It campaigned against granting citizenship rights to Buddhist Chakmas and Hindu Hajongs, who were refugees from Bangladesh, as well as against granting "trade licences and land allotment permits to non-Arunachalees" (Prasad 2007). In the 1990s it evicted many of the holders of pattas granted by the British and subsequent state governments to migrants from other states. As a result of struggles in the 1990s by the Adi Students' Union and the Bogong Banggo kebang, *khiraj* patta holders were evicted from their lands or were forced to sell off their land and leave.¹¹ The land that was thus freed was occupied mostly by Adis from outside Bogong Banggo and people belonging to other tribes. The banggo kebang and the Adi Students' Union routinely contest the validity of these pattas and transfers and gifts of them in the court of the deputy commissioner. The outcomes of such cases vary, at times in favour of the patta holders and at times in favour of the banggo kebang. The state cabinet has regularised the *khiraj* pattas granted prior to 1986, thus granting ownership rights to these tenants. Another locus of struggle for the banggo is with Adis from outside who occupy/encroach land in the township. There have been 127 such cases registered against indigenous people, mainly Adis, Galos and people born out of inter-tribal marriages with people from other parts of the state or from other parts of the district who do not belong to the banggo. These court cases are fought on behalf of the banggo by a few of its members who are resourceful and active in the community sphere. They have also

¹¹ *Khiraj* pattas were issued to people from Nepal and Assam for cultivation. It is a word that was used in the Brahmaputra valley in Assam where the British government introduced ryotwari settlement. Depending on the form of rent, land under ordinary cultivation (as opposed to plantation) was further classified into three categories—*khiraj* (full revenue), *nisf-khiraj* (half the revenue) and *lakhiraj* (revenue free). The *khiraj* land was predominantly owned by individual peasants (Saikia 2010). However, it is not clear what the revenue arrangement in Pasighat was, for many of these peasants were brought into demonstrate the merits of settled agriculture to the Adis as opposed to *jhuming* (shifting cultivation).

been involved in complaining against overfishing in the Siang, excessive hunting, and the illegal felling of trees on common/clan lands and in the reserve forest.¹²

Traders in Pasighat cannot own property or directly engage in trade, but they lease trading licences from the Adis and pay rent to them. Most of these traders are Biharis and Bengalis who migrated after 1935. They had to redraw the boundaries of their businesses as indigenous politics emerged. Jagadeeshwar Singh said: “We do not do the same business as tribals do. They only do contract supply and road work. And we do market *ka kaam* (work). You know, they can’t do work that requires long hours of sitting. I used to do road work, but left it when Adis came forward to do it”. Some migrant traders were unable to renew their licences and have been wiped out from contract work. However, corporate groups have been able to circumvent these restrictions based on indigeneity, as the work of companies on road and dam building testify.

This ethnic politics generates opposition among migrant traders, whose discontent is harvested by an Adi man who has been the president of the Pasighat market association for the past 6 years. Before that, he used to lead the unions of handcart pullers, autorickshaw drivers and truck owners (in that order). All the handcart pullers in Pasighat are Biharis. He gave protection from extortion to truck drivers, mainly by Adi students who wanted to take the trucks for picnics and such things. They even demanded that the drivers fill up with fuel. He became the market president through a process of selection, not election. There are 920 members in the association, and only shop owners are given membership. The Adi women who sell vegetables on the pavement are not part of the association. Most of the members are men, of whom approximately 80 % are Biharis. There are also some Bengalis (Muslims and Hindus) and Nepalīs. He represents them and protects them from local associations and Adi students who extort money in the form of donations. “Suppose previously they had to give 100 INR to a particular association, I have reduced it to 20 or 50 INR” he said. He felt that the difference between tribals and non-tribals should not be exaggerated:

We need outsiders to bring food, cement, roads and everything. How will we develop without them? They have also come to earn their keep here. Some of my own people (Adis) don’t like me for standing up for the traders against the students’ union. Once an Adi youth beat up Bindeshwar Singh, a shop owner, and I filed a case on behalf of the association against the Adi youth and refused to withdraw it even after repeated requests and pressures from my own community.

The traders have votes and the president gets to influence them during elections. He said that his politics differed from the politics of the students’ union:

Adis cannot do business, so we are dependent on outsiders. These youths just roam around on bikes, get drunk and do nothing. They don’t study. They don’t finish their studies, so

¹²A memorandum was submitted by the Bogong Banggo youth kebang listing all three issues: illegal encroachment of land, overfishing and excessive hunting, and the illegal felling of trees—interview with Dejir Tamuk, president of Bogong Banggo youth kebang and former president of the Adi Students’ Union.

they don't get any government jobs. They have trading licences and get rents out of these traders. Without these traders, they will lose their livelihoods. Yet they keep creating problems for them, making unjust demands. I resist such things and support the traders. Even if there is some problem at 2 o'clock at night, I will go. Sometimes, I have to use force. I have people.

In October 2012, the Pasighat market association demolished the sheds of women vegetable vendors at Gandhi Chowk, the main market in Pasighat.¹³ These demolitions, using an earthmover, had no sanction from the administration. The Adi Students' Union and All Vegetable Vendors' Committee protested against the demolitions. There was no action against the Pasighat market association.

The president obtained contracts from Jaypee for making and repairing boats. He is remarkable in his critique of his own community and people, and is clearly an outsider among the Adis, with stakes in the larger economy and development of the region. He defends the interests of migrant traders against his own community. This is an act of defiance that gives rise to intense conflicts on an everyday basis, as he has to give "protection against his own people". He has been relegated to the margins of the communal life of Adis and in their customary institutions, despite wielding considerable influence among traders, and possibly feared by many. This points to the contradictions that emerge from state policies, capitalist penetration, and indigenous politics.

Another important insight is about the variegated and heterogeneous nature of the indigenous elite. There are important voices within the elite who oppose dams and the destruction of ways of life of the Adi people, and these oppositional efforts draw on indigeneity as a rubric of rights and claims. Li (2000) writes about two peoples in the hilly regions of Central Sulawesi in Indonesia, both of whom could claim indigenous status. Yet it was the more affluent of the two who persuasively articulated a collective indigenous status when opposing a hydel project. The process of resistance against dams by NGOs and activists involved carving out a repertoire of indigenous practices and presenting them as a coherent way of life. Li's point is that not everybody is successful in fitting into a clear-cut territorial and ethnic niche. It is not clear if indigeneity alone can suffice in the resistance against dams in East Siang and the intertwining agendas of capital and the state. The enforced mobility that development projects engender also needs to be understood in all its complexity.

10.6 Town, Village and Municipality

Town and village are interlinked in multiple ways and through myriad channels. Williams (1975) questions the distinction between urban and rural; he pointed, instead, to the historical lived space and how both these worlds are inextricably

¹³See <http://www.thearunachalpioneer.in/state/2012/10/11/vendors-protest-illegal-eviction/> (accessed 15th December, 2013).

linked. In the case of Pasighat, however, town and village are literally inseparable as much as the village is within the town. Arunachal Pradesh did not have local governments in its towns, including Itanagar, the capital. The government announced municipal elections in two towns, Itanagar and Pasighat, in 2013. Forming municipalities and local governments was necessary for securing funds earmarked for the state under the Jawaharlal Nehru National Urban Renewal Mission (JNNURM). When looking at the map showing proposed demarcation of wards in the assistant town planner's office, I was struck by white patches of agricultural land that were excluded from the municipality surrounded by housing and administrative areas. Further, there were villages called Mirku and Mirbuk that were in the town yet not part of the township and hence not included in the municipality. As the assistant town planner remarked, they are villages with urban characteristics. These villages have houses closely packed together, most of them made of bamboo with just a few in concrete or a combination of concrete and bamboo.¹⁴

In ward 7 there is a white rectangle that does not belong to the municipality. It belonged to Kabang Borang, a former state minister of home affairs, I was told, and there is a case pending in the Guwahati High Court to exclude it from the proposed municipality. The owner died a few months ago and it now belongs to his sons. His wife refused to speak to me when I revealed what I wanted to know. He was the state home minister in 2001–2003 and was born in a village on the outskirts of Pasighat. The plot is close to 20 acres in area and is in the township. It was bought from khiraj patta holders several decades ago and the land was developed by the minister. There is a cluster of huts that are being rented out for 1000 INR per month. However, as Egul Padung suggests, land that is granted through khiraj pattas are inalienable and the possession of this land is not entirely legal. The land in question is of mixed usage with a timber-processing unit, a strip of cabbage plants, bamboo thickets, and houses of poor migrants. The notification of municipal wards says: "It runs right along the arterial road of Bazar and covering Lal Bahdur Shastri School, Naamghar and Balaji temple, and then run southwards behind Market square *excluded the Wet Rice Cultivation area of K Borang* and meet NH 52 encompassing the Police Station Jail and meet Ramro Nallah" (emphasis added).

A few owners of agricultural land in wards 7 and 11 chose to be with the town rather than be outside. Many of them had bought land from khiraj patta holders, mostly Nepalis and Assamese, who were brought in as agriculturists to set an example to Adis. All the land in the township is owned by the government, whereas the land in Adi villages such as Mirku and Mirbuk, where many old inhabitants reside, is individually occupied, though without any title of ownership. Many of my interlocutors who had built concrete houses had not applied for possession certificates. Mirku and Mirbuk, though they are in the town, opted out of the

¹⁴Bamboo is used for building houses even by people who can afford cement and bricks, and these are often combined in ingenious ways. While in many parts of India materials such as bamboo, coconut leaves and palm leaves have a lower status and are almost exclusively used by the poor, in Arunachal they are used extensively by all.

municipality for they felt that the panchayat raj system and kebangs served them better.

That an area or a household could and would choose to be outside a municipality is perhaps remarkable and demonstrates that village and town are stand-ins for political choices in the case of Pasighat. Naming an area as part of the town jeopardises some modes of living. This is closely related to the land administration system in Pasighat where “township” meant a certain way of administering land that did not apply to the Adis from Bogong Banggo. The town was not only ethnically divided but also constituted by indigeneity as an entitlement regime. In that sense, a town is a spatial expression of urban political systems (Barlow 1981, cited in Giraut and Maharaj 2002). Although the Adi people of Bogong Banggo live in what is locally called villages, these areas are part of an organic town. What we see is a functional unity and spatial continuity that is in discord with administrative and political categories. Denis et al. (2012) also think that many villages oppose the move to become urban to preserve their lifestyles and to avoid the type of land speculation especially prevalent in the periphery of metropolises. It could also be because of divergent political affiliations or religious identities. Town and village, here, are articulations of political intent and are two ends of a spatial-developmental-political-institutional nexus (Giraut and Maharaj 2002). In the case of Pasighat, the overlap and divergences between the categories of township, town, Banggo and municipality educate us about the relational nature of space, society and identities.

10.7 Discussion

The case of Pasighat brings to the fore the interlinkages between urban politics and indigeneity as an entitlement regime. Once boundaries are operationalised on the basis of territorial belonging, politics revolves around a discourse on indigeneity and who is from a particular place and who is not. Such politics has created opportunities for accumulation for the “indigenous” through rents. At the same time, the state plays what I call a double role by simultaneously installing and destabilising this politics of indigeneity. It actively creates these boundaries between “indigenous people” and “migrants” through the inner line and trade licences and customs of land ownership and occupancy. It also nationalises this frontier space by developmental interventions and infrastructure building, thus disenfranchising through appropriating resources. However, this is not only a question of the state and its nature and interventions. There is a strong notion of indigenous and migrant people, which has been spatialised in the town as rights and claims, and their absence for different groups. It brings out how the state and capital are implicated in the figure of the town dweller and in the structures of enfranchisement that have been historically shaped in the town.

A caveat I have to offer is that this chapter is not intended as a comprehensive critique of the policy of protection of indigenous people but only as an exploration

of how it works on the ground in relation to a town and its politics. In other words, I am trying to shift the focus from the contradictions between a nation state and indigeneity to explore other sites of interaction and conflict. There are other micro scales such as that of the small town in which indigeneity holds ground. Li (2010) observes that indigeneity is a mobile term which could be the basis of mobilising people, resources, struggles and capital. Although dams, plantations and townships in lands where indigenous people live lead to wholesale dispossession, it is important to look at other processes that are “from below” and draw on regimes of protection for indigenous people. As Ghosh (2010) suggests, there are newer fault lines in indigenous communities created by the essentialism around collective land tenure and identity. It is also important to understand the pathways between corporate capital and the indigenous elite in a more nuanced way. For this, one would have to explore the political economy of accumulation in more detail, focussing on resource politics and sub-contracting in Arunachal Pradesh.

It is also important to note similarities with other contexts where settlers and indigenous people live together and produce the “local” through differential citizenships. These are not stable identities, as being tribal and migrant have different meanings depending on where exactly one is from and when one or one’s ancestors migrated. The literature on small towns in India, even though scant and only beginning to take off as a distinct area of study, needs to explore questions of indigeneity and migration if it is to address the politics of these towns. Although in Pasighat indigeneity takes on an unambiguous political and administrative form, in other places it frames discussions on belonging in different ways. As my own work (Prasad-Aleyamma 2011) about migrant workers from north and north eastern India in Kerala shows, an identity such as “worker” could peddle a xenophobic and exclusionary Malayali identity. Xaxa (1999) too makes a similar point when he writes that Tamilians, Malayalis and Telugus, even though they could stake claim to an indigenous status by virtue of having been prior inhabitants of their territories, have little in common with tribals who are dispossessed, exploited and marginalised. Rather, Tamilians, Malayalis and Telugus constitute part of the dominant national community. Baviskar (2007) observes that it is easy to demolish Adivasi claims to indigeneity in “objective” terms. She argues that these claims, at first glance, look different from Hindu claims to indigeneity, which exclude religious minorities. Adivasi indigeneity is a demand for inclusion in the Indian polity and provides a basis for resistance against alienation from resources and means of livelihood. Yet, it can produce exclusions as we have seen in this chapter.

Small towns are a viable medium through which we can understand the “complexities of local situations” (Shah 2011) that spring from political indigeneity. The material context of a town and the politics of indigeneity are intimately connected—in historical and quotidian ways. What a researcher perhaps needs is a bifocal lens, one to see the appropriation of resources from the Adi people by the state and capital, and another to see how the politics of indigeneity can serve as a tool against this appropriation, and at the same time be used as a means of exclusion and oppression of relatively newer migrants to the town.

10.8 Postscript on Methodology

The SUBURBIN project has come out of a critique of representations of the process of urbanisation in India. The meta narrative of growth and economic dynamism of metropolitan and big cities was challenged through empirical work that brought out the resilience and importance of an urban system comprising a large number of small towns and the diversity of these settlements in terms of their economic base and social structure (Raman et al. 2015). From this alternative location, which looks at towns from below and accumulation from below, the project participants embarked on ethnographies of small towns.

In this section I want to flag certain questions of methodology that emerge from treating a small town as an ethnographical object. I feel that the small town could well become the new village as far as anthropology or any discipline that uses its methods is concerned if one is not careful. Small towns as research objects locate themselves at a distance from the metropolis; this distance could be physical or relational/conceptual as the chapters in this volume indicate. How does one go about studying a small town ethnographically? In urban studies one sees practitioners borrowing methods and ways of doing research from anthropology. The conception of field as a bounded category can be smuggled in through these methods although anthropology itself has long discarded this idea of boundedness and spatial representation through narrative coherence. My attempt in this chapter was to establish the connections—material and ideological—that shape Pasighat.

I was careful to document dissonance whenever I found it in the field. Indigeneity, being a traditional object of anthropological research, is a useful artifice to introduce dissonance in narrative. At the risk of seeming to do too many things at one time and introducing too many voices, one can trace the diverse forms of articulation of indigeneity in the town. By following a category such as indigeneity, which is all about purity, one can introduce many impurities. The traction of small towns as an object of study comes from the necessity to deal with accumulation from below and subaltern economic agency. Mapping a small town means mapping the cacophony of economic activities and social locations that it engenders. It demands a certain faithfulness to and readiness to digest plurality. It also tries to look for meaning in thin cultural forms. Through this, the researcher can produce a representation that is in dialogue with the actual town. What does potentially save ethnography of a small town from becoming another village study? When it is studied as *open* in the world in a system of circulation and flows that produce its territories, internal boundaries and groups. One of the ways to achieve this openness is by allowing traffic across categories such as city, town and village and by refusing to trade their interconnections for certainties and definitions.

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Chapter 11

Wealth, Mobility, Accretive Citizenship and Belonging: Why Everyone Comes to Kullu and How they Remain

Diya Mehra

My case study for the SUBURBIN project have been Kullu (population 18,536, Census of India 2011) and Bhuntar towns (population 4475, Census of India 2011) and the growing metropolitan region “between and betwixt them” in Kullu district, Himachal Pradesh.

The site was initially selected because of my own personal familiarity with the district and as initial Indiapolis data showed a heightened and continuous “built-up” area close to but outside Kullu and Bhuntar’s municipal borders. The Indiapolis morphological agglomeration approach (see Swerts 2017) thus, appeared to show not only extra-urban expansion but also heightened rates of demographic growth, taken at the outset to be a sign of a quickly expanding urban area.

Working within the framework of the SUBURBIN project, I started my field-work¹ with two questions, which also partially frame this chapter, namely:

1. What was driving economic growth and spatial expansion in Kullu and Bhuntar?
2. What kind of urbanism was emerging in the Kullu area, in terms of morphological structure and governance?

In trying to address some of these questions, I locate Kullu’s contemporary urban growth in the context of its historical urbanisation—that is, its role as an

¹Fieldwork for this project was primarily conducted in June, July and September 2011, March, May, June and August 2012 and June, September and October 2013. Fieldwork mainly consisted of interviews as well as the collection of official data and maps. Historical narratives are drawn mainly from colonial accounts of travels together with histories and settlement in the Kullu valley.

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economic, religious and political capital of a Himalayan kingdom under successive rulers; an urban agglomeration amidst pastoral accumulation, and also a transport and trading hub along trade routes linking the Punjab to Tibet. What this cumulatively points to, I argue, is an urbanisation informed by longstanding modes of mobility and interaction across increasing altitudes and within interconnected valleys. It is hence critical to consider Kullu's urbanisation within conceptual and practical "zones of interaction" (cf. Harper and Amrith 2012), between the urban centre and its rural hinterlands, and also trade networks connecting the North Indian plains and the cold desert regions of Lahaul, Spiti, Ladakh and Tibet. Such continuous interaction partially explains the unexpected diversity of the town and its multi-ethnic inhabitants whom I encountered during fieldwork, a diversity that is explored in the last part of this chapter.

In emphasising the importance of Kullu's historical role and location, in the first part of the chapter, I briefly detail a genealogical history of Kullu's urbanisation, based on both primary colonial and secondary sources, extending my reading to the post-Independence period. If histories of the colonial period focus on trade and Kullu's role as princely capital, critically, state policies from the postcolonial period have yielded a relatively broad-based prosperity for the district's rural hinterland, as horticulture has expanded and land has been distributed to the landless, creating district-wide capacities for consumption, which appear as diverse presences in the urban area. Increasing and widespread agricultural wealth has thus cemented and augmented Kullu's historic urban importance as a site for service provision for the rural hinterland, including financial, market, and administrative services for the Kullu valley as a whole, *as defined historically*.

In the contemporary moment, older dynamics continue to inform urban growth even as the area is transforming through the intersection of a number of new dynamics, for Kullu district is also seeing various kinds of relatively new economic and infrastructural capital flows into the region. Thus, apart from the local and regional diversification of agricultural wealth, there are also state-level, national and international flows mainly in the form of building by state institutions, hydroelectric power projects and tourism. In this sense, the recent growth of Kullu-Bhuntar should be read as the *multi-layered and multi-axial production of a town* (and district), suggesting the impact of economic flows emerging from different geographical scales and sites. The second part of the chapter describes this multifaceted and productive process. It also speaks of the kind of urban form that is emerging, in terms of urban morphology itself, as a form of *metropolitanisation*.

In the last part of the chapter, I consider the implications of Kullu's historical and contemporary growth in terms of the relationships between so-called "locals", settled migrant communities and various streams of newer migrants who have come to work in the expanding urban area. I consider diverse experiences of movement, settlement and co-existence, and how they correlate with the town's own adage that *anyone who comes to Kullu remains*. What the latter refers to are the comforts of a town located within a valley with overwhelming natural resources, distributed somewhat widely, suggesting that a capacity for a languid plenitude is among the

most critical dynamics shaping Kullu's expanding urban growth; the second being movement across the town, its rural hinterland and the surrounding, unfolding mountains.

11.1 Histories

11.1.1 *Historical Urbanisation, Mountains, Mobility and Movement*

Within Himachal Pradesh's contemporary geography, the state can be broadly divided between the flatter, and sometimes more industrial south and the higher altitude agricultural/tourist north. Kullu district and valley (roughly 5503 km², Singh 2009: 67), is one of the high altitude valleys in Himachal. The district includes the main valley formed by the Beas River together with the various smaller valleys formed by its tributaries.

Kullu town is situated in the middle of the valley "upon a triangular spur of tableland projecting from the foot of the mountains" (Moorcroft and Trabeck 1970: 171). Spatially, the position Kullu-Bhuntar occupies along the river Beas is at the broadest point of the Beas valley, a relatively open space surrounded by mountains. As with other indigenous hill towns, which are usually situated on rivers as sites of confluence (as compared to colonial hill stations which are usually on high mountain ridges), Kullu town is located around the intersection of several rivers, mainly the Beas, the Parvati and the Sarvari, and thus the meeting point of their large and small valleys, making it a strategic link and a centre for the convergence of people, goods and services (Fig. 11.1).

The history of the town is intimately linked with that of the Kullu hill state. Chetan Singh writes that "in pre-colonial times, Kullu was an ancient principality that grew into a strong and unified monarchy in the seventeenth century" (Singh 2009: 67). The first capital of the Kullu hill state was Jagatsukh, later Naggar, transferred in 1660 to Sultanpur, or Kullu town, under the aegis of the medieval Rajput kingdom, which had replaced the earlier Pal rulers. According to Vogel and Hutchinson (1933), at the height of its prosperity, the hill kingdom of Kullu, first established in the first century AD, included the Upper Beas Valley, from the Rohtang Pass to Bajaura, including Lahaul and a portion of the Sutluj Valley. It comprised 7 *waziris* (revenue provinces, *jagirs*)² namely:

1. Kullu Proper (drained by the Beas, and its tributary, the Sarvari).
2. Waziri Rupi including the Upper Parvati Valley (drained by the Parvati river).

The current Raja of Kullu is in fact the titleholder of this *waziri*.

²It should be noted that Singh (2009) considers Kullu kingdom as having six *waziris*, and does not include Banghal, but does include Spiti.



Fig. 11.1 Aerial view of Bhuntar. *Source* Sanjay Sandhu/Bhuntar Nagar Panchayat website, <http://npbhuntar.com/>

3. Outer and Inner Saraj (southern parts of the district, adjoining Mandi district, and the Sutlej).
4. Lug Valley.
5. Lahaul (separated from Kullu by the Great Himalayan Range, with peaks averaging over 18,000 feet in height, and where passes leading into the Kullu valley are closed for half the year).
7. Banghal.

Around 1810 the kingdom came under the overlordship of the Sikhs, who ceded the area to the British in 1846, when Kullu was attached to the Kangra district (Harcourt 1871: 84). Thus in 1881 it was possible to talk about the Kullu subdivision of the Kangra District of the Punjab (Singh 2009; Vogel and Hutchinson 1933), even as the local Rajaship continued.

From 1660 onwards, thus, Kullu or Sultanpur, as it was then known, was “successively the seat of administration under the Kullu Rajas, the Sikhs and the British, and of Kullu *tehsil*” (Hunter 1881: 446). Once fortified, at its core was the palace of the Kullu rajas, along with temples and *bazaars* (such as the Akhara, also a site for visiting “faqirs”; Harcourt 1871: 309) and a *maidan* (Kanwar 1999). By 1871 it appears to have had a police station, post office, dispensary and *sarai* (native rest house) (Harcourt 1871: 309–310).

Apart from being a princely capital, what was also critically important with regard to Kullu's urbanisation was its role as a trading centre along the Indo-Tibetan trade route, linking Tibet to the Punjab via Lahaul and Ladakh. Hunter (1881: 466) reports of the existence in 1870 of a transit trade on this route annually worth £150,000. Shuttleworth (1923: 522) notes that after the first Sikh War in 1846 "the British Government retained this strip of country, barely 120 miles wide north to south and mostly consisting of sparsely populated and barren mountain wastes, in order to secure a route under its own control between the wool districts of Tibet and the Punjab plains". Minhas (1998) writes that the British particularly encouraged the widening of Himachal roads to facilitate the Indo-Tibetan trade.

The Indo-Tibetan trade route was important in terms of commodities such as salt, borax, wool and animals which came down from the high mountains, and cotton and food which went up from the lower hills and the Punjab (Shuttleworth 1922). In the case of wool, for example, Shuttleworth (1923: 558) reports "it is sold either to down-country purchasers from Amritsar, Dhariwal and Hoshiarpur or to local dealers, who distribute small quantities to consumers in the hills. Most of this buying and selling takes place during the Kulu *Dussehra* fair, when large crowds from all parts attend Sultanpur to join in the religious festival or engage in trade".

In his description, written in 1871, Harcourt (1871: 310) notes that:

"The sudden increase of the Central Asian trade has tended to make Sooltanpore (sic) a place of some importance, and receiving, as it does, the entire traffic, passing upwards from Kangra, the hill states, and the adjoining districts, which all stops here onto Leh, besides the merchandise from East Turkestan and Ladakh on its downwards route to Mundee (sic) and the Punjab".

Resultantly:

"In 1839, some 400 houses were in use. There are now nearly 500 houses in all, with a population that varies according to the season from 700–800 in summer to near 2000 souls in autumn and spring... (and) the large *sarai* during the winter and spring is filled with traders from the north" (Harcourt 1871: 309).

What this also reflects is that Kullu has historically been a gateway for trade and produce from the high altitude, cold desert districts of Lahaul and Spiti into the larger Indian mainland, with these areas bordering Ladakh and Tibet on the one side and Kullu on the other, and historically being included within the remit of the Kullu kingdom. The connection between these areas was cemented not only by trade but also, as Chetan Singh writes, by transhumant-pastoralism—where flocks would move from the Kullu valleys into Lahaul and Spiti, and vice versa. Thus, the connection between these valleys was also the search for seasonal pastures, critical at a time when herding was among the principle economic activities of the Kullu valley (Singh 2009). Indeed, in his work Singh (2009) shows how rather than agriculture, "the produce of the flocks and herds in the shape of wool and *ghee* (clarified butter)...generated cash for market purchases and the payment of a part of the state taxes" (*Kangra Gazetteer*, 1918: 155 as quoted in Singh 2009: 69) (Fig. 11.2).

Within the district, the main Kullu Valley is flanked by a number of smaller valleys whose villages are connected by a matrix of social, economic and ritual

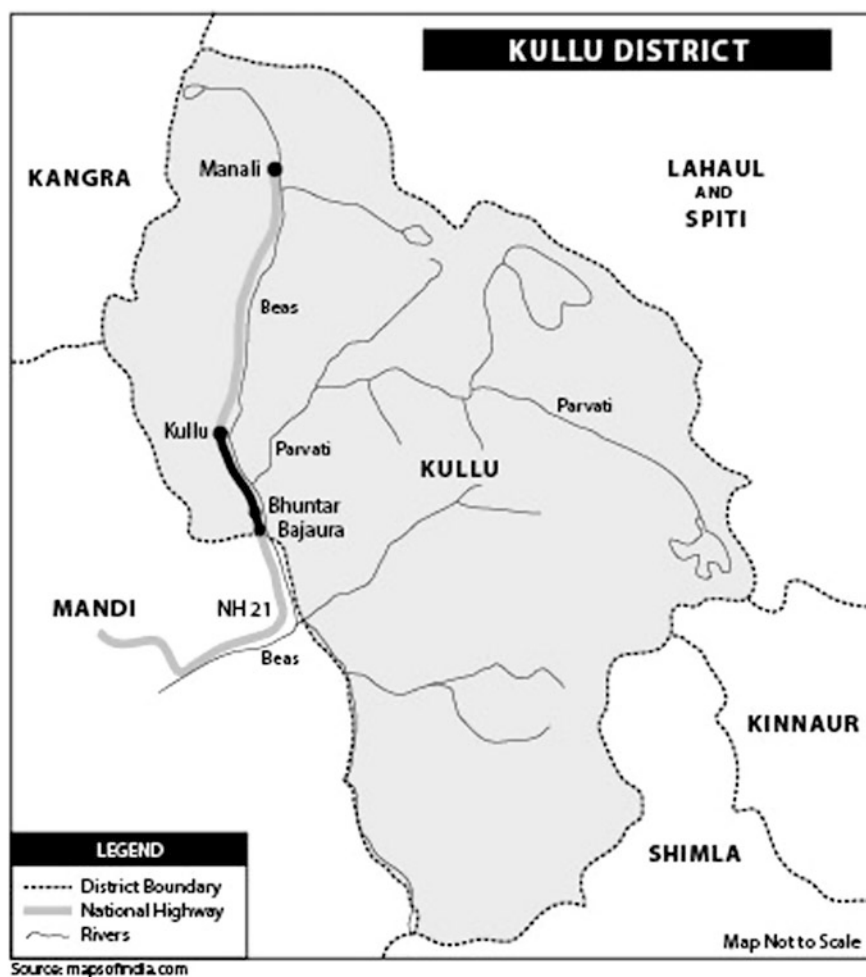


Fig. 11.2 Map of Kullu district, showing the metropolitan/study area from Kullu to Bajaura

networks which bind the region. Broadly speaking, villages were, and are, attached to particular *devtas* and *devis* (deities) who form a part of a larger, complex sacred geography with numerous points of intersection such as *melas* (fairs), visitation, etc. When Sultanpur was established as capital, it was co-terminous with the establishment of Raghunath, or Rama, as the main *devta* of the area. The well-known Kullu *Dussehra mela* is important in this context as it involves the annual visitation of myriad rural *devtas* to Kullu (80 in 1881 according to Hunter 1881: 446). They come to the seat of Raghunath (“the orthodox superior deity”, Hunter 1881: 446) and of the Kullu raja who is his kingly representative. Although the *Dussehra* festival represents the symbolic tying in of various villages to the principality, until recently the *devtas* were often landowners, paying tribute to Kullu (Berti 2009).

Within the economic ambit of the Kullu kingdom then, such religious activity also represents economic ties and revenues, taxes on land, grazing and herding, mainstays of the economy until the introduction of fruit cultivation that began in the early part of the twentieth century. The *Dussehra*, Kanwar (1999) writes, and as we have seen, was also coterminous with the arrival of the Lahauli trade into Kullu, that is from higher altitudes into Sultanpur.

In the colonial period, another important state-wide economic development, which would greatly impact Kullu's future urbanisation, was the introduction of apple cultivation by an American, Satyanand Stokes, first in the Shimla valley, from where it spread, encouraged by the British administrators. As most market sales in the towns of Kullu and Bhuntar are currently to rural consumers, the widespread expansion of horticulture introduced in this period has had a significant impact on the contemporary growth of the urban area.

11.1.2 The Post-independence Period—A Broad-Based Prosperity

In the contemporary period, Himachal Pradesh is generally considered a fast growing state. In 2011–2012 the state economy grew at a rate of 7.3 % (Government of Himachal Pradesh 2014). Further, household incomes are also high; one marketing report shows that a majority of households in the state fall into the educated and self-employed or medium-to-high income salary classes (India Brand Equity Foundation 2010).

Not only does Himachal have high growth and incomes—it also reports high levels of infrastructure provision inasmuch as piped water supply schemes, it is claimed, have been constructed for “all urban centres and fully or partially cover 98.19 % of rural settlement” (Sanan 2004: 975). Accessibility to electricity is reported at 94.5 % for “actually connected” rural households (Sanan 2004: 975). About 60 % of all villages are connected by road which, Sanan writes, is “significantly higher than any other hill state in the country” (Sanan 2004: 975).

Scholars also suggest that Himachal Pradesh is not only fast growing but also progressive on a number of different socio-economic indicators. It has a progressive demographic record in terms of low rates of child mortality and of child marriage, and a high use of contraception (Bose 2007). There has been a “tremendous expansion in the school system” and “a huge increase in the institutional set-up to provide health facilities. The availability of infrastructure for both elementary education and health care in Himachal is even greater than that in Kerala”, even as the quality of such services remains questionable (Sanan 2004: 976). Although such state services are evenly distributed across Himachal Pradesh, some districts are better off than others, including the high altitude valley district of Kullu. This is in comparison to some of the southern districts including Kangra, Una, Hamirpur and the high altitude district of Chamba.

Some important features of post-Independence Himachali growth and governance are vital to understanding the contemporary textures of growth in Kullu town and district, most important being that of a relatively broad-based prosperity. During fieldwork I was often told that there are no really poor people in the district—"everyone has a house, food, and warm clothes in the winter".

Following its separation from the Punjab in 1966, Vedwan writes, for one, a "state policy of promoting high-value crops (or horticulture) has been the chosen path to development in Himachal Pradesh" (Vedwan 2008: 87). The move from pastoralism and subsistence agriculture to commercial horticulture has been speeded up by a concerted state push. Vedwan argues that "to understand the salience of horticulture in general and apples in particular for the people and policy makers of Himachal Pradesh, it is hard to overstate the role of development as the *raison d'être* of the political struggle for independent statehood from the Punjab. Because the lack of development in the hilly areas fuelled calls for a separate state, the governments that came to power had a specific mandate to promote economic growth in the region" (Vedwan 2008: 87). An "array of government subsidies for the production and marketing of horticultural crops has been the single most important factor in the successful diffusion of horticulture in Himachal Pradesh" (Vedwan 2008: 93), leading to what has, since the late 1970s, been called the "apple revolution". "Inputs, such as pesticides, fungicides and packing material account for over 80 % of the total agricultural subsidies provided by the state" (Vedwan 2008: 93).

"Apples emerged as the 'natural choice' for this horticultural revolution, not only because the mountainous parts of the state provided ideal biophysical conditions for their production, but also because of the rather limited competition for state resources owing to the state's often high altitude geography, whose characteristics, such as inaccessibility and dearth of broad arable land, render other kinds of agricultural intensification and industrialisation unfeasible" (Vedwan 2008: 88). Apples, as other fruits trees, can grow on marginal mountainous land. Horticulture in the Kullu valley also includes other fruit crops—pears, plums, apricots, peaches, pomegranates etc. and increasingly vegetables, especially in the lower reaches of the valley, for as the climate changes, making it too warm for apples to flourish, local farmers are growing alternative fruit and "off season" vegetables which fetch high prices during the summer of the North Indian plains. In the case of Lahaul and Spiti, suitable climate, horticultural innovations in irrigation and planting technologies and collective farming have allowed for horticultural expansion, mainly in potatoes and peas, although increasingly in other crops, with this wealth also finding a home in the Kullu valley, as we shall see later.

Apart from the specificities of horticultural crops that can be grown in marginal mountainous areas, augmenting broad-based prosperity is the fact that, "economically, Himachal Pradesh.... is one of the few states in India to have seriously implemented land reforms, which were instituted in the 1960s and 1970s. In the first round in 1962, large estates were broken up and land that exceeded the ceiling set by the government was appropriated by the government. The second round occurred in 1972 when village commons and forest wasteland were distributed,

mostly to the landless rural residents of low castes, effectively ending rural landlessness in the Kullu Valley” (Vedwan 2008: 89).

The latter was done under the *nautor* policy (as administered by the postcolonial state), allowing the landless to access forest wasteland, and commons. “Over time, the number of, and area under, operational holdings in the case of marginal and small farmers have increased significantly” (Vedwan 2008: 89). In this, the imperatives of a developmental state coincided with the interests of a large section of its population, which was engaged in horticulture, producing a “synergy between state and society” (Heller 2001: 1058; quoted in Vedwan 2008: 87). Thus, although the current rapid growth of Kullu town comes from 2000 and extends to growth in different economic sectors, horticulture and ownership of at least some land resources in the rural hinterland makes for a relatively widespread and broad-based prosperity within the district as a whole. Vasan reports that there were only 159 landless households in the entire Kullu district in 1991 (Vasan 2007), even though the extent of land owned can differ widely, critically varying by caste, in both rural and urban areas.

The post-Independence period also saw Manali emerge as a new tourist site through state intervention, visited by Nehru in 1958 who flew in, landing on the site that would become the airport at Bhuntar. Tourism grew, especially after the Kashmir uprising in the 1980s made it increasingly unattractive to tourists to visit that state. Kullu town also continued as the administrative centre or “district headquarters” for the new Kullu district formed in 1966, following the reconfiguration of the existing Himachal state, enlarged by including certain areas of the Punjab, including Kullu.

By all accounts, Kullu and its diversified economic base have grown visibly since 2000, with the town’s remit expanding both spatially and economically. It is linked increasingly to Bhuntar Nagar Panchayat, making Kullu, currently a municipal council itself, the historically salient hub of an expanding metropolitan region as discussed in the section below.

11.2 Contemporary Urban Metropolitanisation and What Drives It

11.2.1 Kullu Town’s Urban Form

Within Kullu town itself, which has 11 wards, there are 3 older core areas, which represent the earlier settlement of the town. These are, as we have already seen, (1) Sultanpur—original capital and seat of the Kullu rajas, (2) the older trade *bazaars*—Akhara, Sarvari, Sultanpur, and their adjoining areas, including residential areas, and (3) the wide open *maidan*—site of the Kullu *Dussehra* festival, adjoined by the outdoor theatre, the Kala Kendra. The open green of this central *maidan* is surrounded primarily by government offices (situated in the wards of

Lower and Upper Dhalpur), housing the offices of the District Commissioner, Sub-Divisional Magistrate, Irrigation and Public Health department, Public Works department and the mini secretariat which has various offices of state government departments, as well as the district hospital and the circuit courts among other state institutions. The remaining wards are newer, outlying areas—such as Gandhi Nagar and Shastri Nagar, Kahudhar—and usually a mix of housing, commerce, hotels and offices, which vary by socio-economic class.

Contemporary urban growth is both horizontal and vertical, with three different levels of urbanisation within Kullu itself—along, and moving above the river banks, at the level of main roads and highways, and the construction of parts of neighbourhoods higher up the mountains. These higher areas are often inaccessible by car after a point, as the landscape gets steeper—roads get narrower and houses are built close to each other because of the difficulties of carving into the mountain. As urbanisation has increased, wards have densified, with there being little space for new growth within the older areas. I was often told that the older wards, especially in Kullu town, were saturated (*“bhar gaye hai”*), with “no place left” for new construction.

Unsurprisingly, then, Kullu is increasingly linked, for one, to Bhuntar, 10 km to the south, via NH-21 which hugs the Beas. Bhuntar, once a collection of villages and now a Nagar Panchayat, has long been a transportation hub, lying as it does at the junction of the Parvati and Beas rivers. Initially, it was the crossing point on the Beas providing access to the Parvati valley using buffalo skin boats (*bhuin*, hence its name) as well as a site for resting horses travelling between Punjab and Tibet. It was also the site chosen for the Kullu-Manali airport. It is now a central staging point for the vast number of tourists headed to Manali, Manikaran and the Parvati valley, especially as a highway bypass has been built on the left bank of the Beas to bypass Kullu town, (which is mainly located on the right bank). Most tourists thus, no longer go through Kullu to reach Manali (hence the idea of visiting Kullu-Manali) but most stop en route at Bhuntar, including those whose destination is the Parvati valley (Fig. 11.3).

Not only are Kullu and Bhuntar spilling onto both sides of rivers but also the different villages between and beyond them form a continuous stretch of urban growth—primarily in the form of ribbon development, radiating out of Kullu town. Contemporary urbanisation in Kullu valley thus includes the densification of the core towns (Kullu and Bhuntar) and ribbon development along the main transport corridor, NH-21, which runs along the Beas, including Kullu Municipal Council, Bhuntar Nagar Panchayat, Shamshi Census town (population 8870; Census of India 2011), Mohal, Badah, Sarabhai and Bajaura villages among others. For the purposes of this discussion, Bajaura is taken as an outer limit of continuous urbanisation on the south side (see Fig. 11.1). On the northern side, the stretch of urbanisation ends where the newly built bypass links to Kullu proper. On this end, what we also see is the intense urbanisation of peripheral rural land, adjacent to the main town proper, such that an outsider cannot tell where the city stops and where the rural area or village *panchayats* begin. Broadly, what we are seeing is the growth of a metropolitan region around Kullu town, wherein many residents told

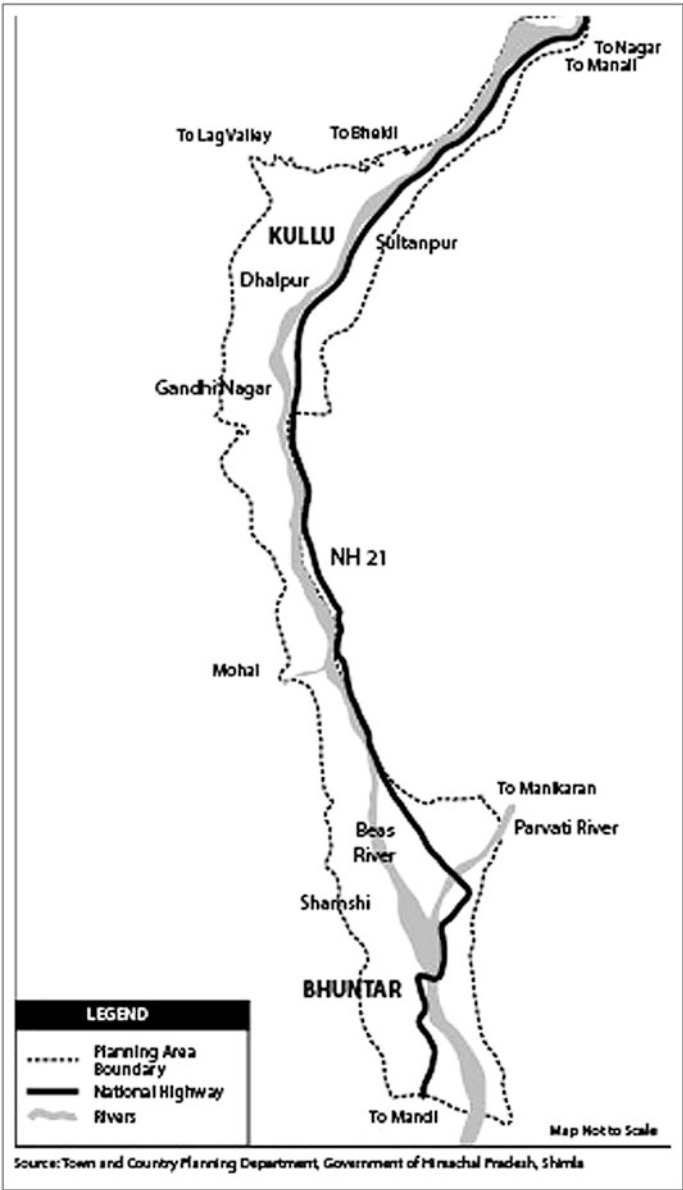


Fig. 11.3 Kullu-Bhuntar Agglomeration

me that they are not aware of the difference between Kullu and Bhuntar either, or the rural areas surrounding them, as it all functions as one metropolitan area, that is extending beyond and encompassing both rural and urban jurisdictions.

11.2.2 *From the Urban Core to the Metropolitan Outskirts*

If you drive southwards from Kullu on NH-21 you cross multiple different jurisdictions, both urban and rural. In a large number of villages between Kullu and Bajaura, including the Census town of Shamshi and the “education hub” of Mohal, it is not uncommon to find commercial areas on the main road itself, and residential housing as well as some agriculture/horticulture as you go further inwards. Further, some villages within the growth polygon are quite far away (including vertically) and, indeed, the availability of land at different heights means that settlements can be quite dispersed when lying within the metropolitan ambit. What strengthens the sense of being connected is the common set of infrastructures for water and electricity built by the state electricity and water departments, as well as the building of roads, small and large, especially the bypass and highways on the river, which have come to define a metropolitan settlement that is not entirely filled out yet when compared to the dense core of Kullu town, but which is filling up fast.

Visible within the metropolitan area, including and between Kullu, Bhuntar and Bajaura are:

- Agriculture/horticulture and related infrastructure—vegetable fields and fruit orchards, *mandis* (local markets), some specialised farming in greenhouses, trucking network for transporting agricultural produce
- Professional services—doctors, lawyers, accountants, insurance, financial services, including their homes and offices
- Government offices and residential colonies, with Himachal state being a large employer
- Government social infrastructure—schools, the district hospital, a college, an Industrial Training Institute (ITI) which serves the entire Kullu, Lahaul and Spiti area etc.
- Shops, *bazaars* and markets with commerce of all kinds—selling construction materials, food, clothes, household goods, everyday and electronic “items” etc., as well as tens of Kullu shawl “showrooms”
- Religious architecture
- “Factories”—especially for Kullu shawls, but also including 35 other concerns in the industrial area in Shamshi Census town
- Hydroelectric companies—residential complexes for employees, and offices
- Private social infrastructure—clinics, hospitals, private schools etc.
- Military infrastructure—such as a Sashastra Seema Bal (SSB) camp
- Tourism/transport infrastructure—hotels, restaurants, airport, taxi and bus stations, river rafting camps
- Residential areas—mainly multi-storied housing—self built however in different combinations, to house tenants, and especially on the main road frontage, shops and offices

There are broadly two processes of urbanisation at work:

1. Institutional urbanism or state-sponsored urbanisation for different purposes linked either to the regional presence and functioning of different parts of the state apparatus and their bureaucracies or to the nation-building/development function: transport and communication networks, schools, hospitals, socio-cultural installations. Increasingly, institutional urbanism includes allotment of land by the state to private and commercial actors, especially hydro-electric projects.
2. Self-urbanisation—defined here as urbanisation driven by the economic and spatial requirements of families and households (in whatever form families are defined—nuclear, joint, diasporic etc.).

Self-urbanisation is both residential and commercial. It is linked to (1) the expansion of new and existing areas and buildings to make space primarily for commercial and residential tenants, (2) the flow of myriad forms of agricultural wealth from horticulture³, tourism and other businesses, as well as money received from land acquisition for roads and hydroprojects, into urban or urban-like areas in the form of investments, and (3) in some cases, the sale and purchase of land, including from farmers, especially in the rapidly urbanising villages—the Census town of Shamshi and Mohal, Bajaura, Badah etc.

11.2.3 Drivers of Urban Growth and Metropolitan Expansion

11.2.3.1 Institutional Urbanisation: The Varied Presence of the Institutional State

From my interviews with civic officials it appears that institutional urbanisation and infrastructure provision does not come through the local municipal or rural governments but through different arms of the state and national governments with their own strategic investments that cross jurisdictions. At one level such investments are directed towards setting up offices and residential campuses—the Sashastra Seema Bal (Armed Border Force) has a camp, the hydroelectric companies have established offices and residential colonies, there are numerous state offices, and an industrial estate in Shamshi. Additionally, even when not housed in government housing, there are a large number of ‘government servants’ in the area, attached to Kullu as the district headquarters, some of who go on to retire in the area.

³It should be noted that it is possible that horticultural wealth also includes capital generated through technically ‘illegal’ means, mainly in the form of marijuana cultivation and sale, and trade in medicinal plants, both of which have longstanding historical roots in the Kullu valley. However, it is difficult to assess the value of such trade.

Given the district's generally mountainous terrain, steep vertical inclines and inaccessible locales, access by motorable road is the prime aspiration for the movement of people, things, crops and money in the district. Roads and highways are added by state agencies for different purposes, and also on different scales linking different parts of the region together. When asked, interviewees told me that new rural roads were built mainly through the Pradhan Mantri Gram Sadak Yojna (PMGSY, a scheme initiated to build rural roads by the then Prime Minister, Vajpayee, a long time Manali visitor), allowing for increasing village access to transport, markets and consumption. Highways—such as the Kullu bypass—have been built by the National Highway Authority of India to facilitate trade, tourism and the needs of hydroelectric power companies who required large roads to give their men and very large machines access to the rural hinterland, where a number of large hydroelectric projects have been built.

11.2.3.2 Hydroelectricity

Indeed, within the district, apart from road building, large tracts of land have also been acquired for hydroelectric projects by the state government, both large or microhydel (up to 25-MW). There are six large-scale hydroelectric projects in the district: (1) the Bhilwara corporation's Malana 1 (86-MW) and (2) its Allain Duhangan project (192-MW), (3) Everest Power's Malana 2 (100-MW), (4) the Himachal state built Larji (126-MW) and (5) Sainj projects (100-MW) and (6) the massive National Hydroelectric Power Corporation (NHPC) promoted Parbati 2 (800-MW) which has been under construction for 14 years.

According to the local HimUrja office in Kullu, the state facilitator for small hydroelectric investment, at the time of interview there were 12 microhydel projects (approved via Shimla) in the area, and 8 under execution, including a project where work had stopped because of the opposition of local villagers. The average microhydel project generates about 5 MW of power per day. The concession given by Himachal state is for a period of 40 years, with microhydel being "one of the most profitable industries in Himachal" given that the cost of building the project is quickly made up once power generation starts, as the private operator is not required to provide free electricity to the state for the first 12 years (Baker 2014). Builders for such projects include concerns promoted by Himachali elite themselves, both from Kullu and from other districts, as well as investors from Delhi, Chandigarh and Hyderabad, including the Sathya Sai Baba's microhydel wing SaiUrja. One local official suggested that "more" investors came from the "outside" because agricultural land cannot be used as collateral by the largely horticultural locals when seeking bank loans. One "outsider" microhydel electric builder told me that, after the initial 10 years, 80 % of the revenue generated appeared as profit.

The presence of large and small hydro projects have impacted the urban areas in numerous ways—there has been large-scale import of labour, both white and blue collar, including through labour contractors. Housing was—and is—required for offices and company officials and sometimes labour (which may also be housed at

the site itself) as well as access to transport services, schools, clinics, markets etc. In the case of microhydel projects, one visit to a site revealed that 250 people were working on 4 or 5 sites for a Delhi-based company. About 230 of these people were contract labour from Bihar, Punjab and Uttaranchal, many of whom lived in Kullu, brought in through local Kullu contractors. Additionally, 30 employees were “executives” including from neighbouring Mandi and the North Indian plains; they were also living in Kullu at that time, and would stay for up to 4 or 5 years.

11.2.3.3 Self-urbanisation: Markets, Horticulture, Trade and Transport

Such migrants—white collar and working class, temporary or seasonal—also shop in the metropolitan area’s large *bazaars*. Between 1957 and 1999, the state excise office issued 212 Tax Payer Identification (TIN) numbers to commercial establishments in the area between Kullu and Bajaura. A total of 1284 new TIN numbers were issued between 2000 and 2011 (Fig. 11.4)⁴.

This corroborates interview data, where most informants suggested that the intensification of the *bazaar* landscape, and the urban landscape in general, started after 2000. Further, these TIN numbers were, and are, issued to shops and businesses but also to contractors, with the first TIN number issued to a contractor in 2000. Between 2000 and 2011, a total of 499 contractors received these identification numbers. Many of these contractors were, and are, linked to institutional building efforts—roads, water supply, and the generation of hydroelectric power. Although contractors may vary in the size of their operation, given their new found wealth, contractors are, shopkeepers told me, also the prime consumers of finer and “branded” goods in the Kullu-Bhuntar *bazaars*.

As we have seen, Kullu has historically been a trade centre and many Kullu and Bhuntar residents continue to be involved with trade, as both towns remain significant centres for consumer goods for the district as a whole (although rivalled by Mandi and by increasingly “self-sufficient” Manali and Banjar). This includes importing products made by large corporations or “MNC” (multinational companies) as well as cheaper “unbranded” goods, construction materials and foodstuffs (*dal* or lentils, *gur* or unrefined sugar made from sugarcane) etc. The clients for all these products are mainly rural customers for “when the fruit do well, the sales are larger”, as one trader explained. By one Sood trader’s account, 80 % of retail sales are to rural customers coming into town to shop for products ranging from clothes to cars, hardware, electronics etc.

Large companies supply products through networks developed by their marketing departments. In other cases, businessmen and traders from the plains may

⁴It should be noted that although the TIN number is a fairly recent innovation, TIN numbers were issued to older concerns, replacing their older Central Sales Tax/registration numbers. Source: <http://www.tinxsys.com/>, accessed April 14, 2015.

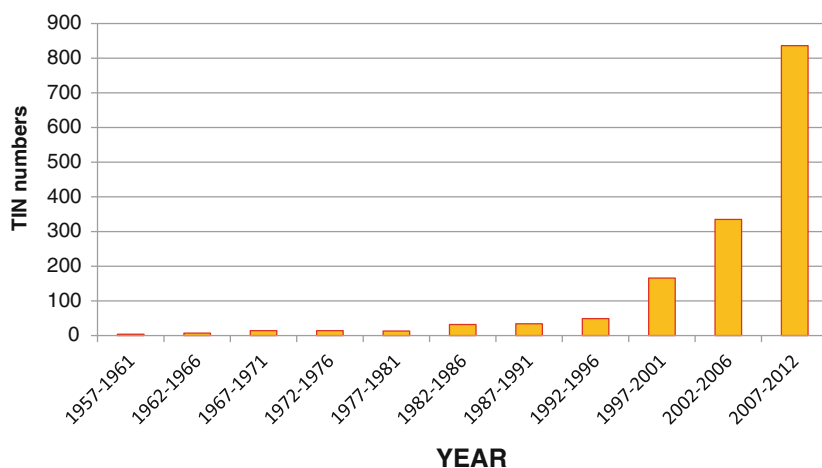


Fig. 11.4 TIN numbers issued by year. *Source* Excise and Taxation Department, Government of Himachal Pradesh, Kullu

come to the area both to purchase (for example, horticultural products) and also to sell (for example, cloth merchants from the Punjab). According to our survey of 80 shops in different *bazaars*, there are a considerable number of traders from the Punjab, Rajasthan, Kangra and Mandi districts running commercial establishments in Kullu and Bhuntar. One Kumhar Prajapati trader from the Punjab reported that all of the major trading castes found in the *bazaars* are from the “outside”, that is Mandi, Kangra, Lahaul and the Punjab etc. This is unsurprising for, as early as 1871, Harcourt reported that many shops in Sultanpur were owned by traders from Kangra, Lahaul and Ladakh, even though traders from Ambala and Amritsar could also be found in the town’s *bazaars* (Harcourt 1871: 119, 309, 310). Increasingly, “locals” from surrounding villages are also coming into town to set up shops and businesses, seeking new and alternative investments as rural incomes grow and diversify.

Market trade networks—from start to finish—include wholesalers, distributors, retailers and transporters. Apart from consumptive commodity trade, there is also a large trade in horticultural products through the *mandis* (or trading centres for agricultural and horticultural goods at Bhuntar and further afield at places such as Patlikul) and also a much larger movement of horticultural goods directly to national agricultural hub markets (Delhi, for example, mainly for apples, pears and plums, and the Punjab, mainly for vegetables) from villages in the rural hinterland (bypassing *mandis*). Transport services for all of this trade are also located in Kullu and Bhuntar in the form of various truckers’ unions. The transport services in these

areas also serve the Lahaul area, both in terms of delivering crops (potatoes and peas), and also supplies. And of course, they deliver goods from the plains to be sold in the area's bazaars, mainly from the Punjab.

In terms of horticultural export, a good apple crop, according to one truck union official, sees as many as 100 trucks leave every day, loaded with 9 tons of fruit per truck. An agreement is reached yearly through the mediation of the District Commissioner to establish the price at which horticultural produce is transported. Given that many farmers are small or marginal, fruit transporters are central to linking local farmers who are selling perhaps "50–60" boxes of fruit to large fruit traders mainly in Delhi's Azadpur Mandi. Transporters collate this produce for delivery to Delhi's fruit traders, whose *arthis* or commission agents arrive when the apple/fruit trees flower to place their orders. These transport and trade networks, I was told, are often long-standing, along which money travels "quite safely", and where most business can now be conducted over the phone.

Rural wealth, as noted earlier, generated from such horticultural trade, is also spent in the *bazaars*. Increasingly, rural residents are also residents of Kullu for various reasons—aspiration to urban living, education, health and to make investments. This is most evident in the investments made of agricultural surplus from the cold desert district, particularly of Lahaul, but is also applicable to villagers from the Kullu valley itself.

11.2.3.4 The Agricultural Surplus of Lahaul (and Spiti)

Kullu-Bhuntar (and Manali) have benefited greatly from being the primary investment destinations for the district of Lahaul and Spiti. In particular, potatoes and peas from Lahaul are significant cash crops both domestically and for export, even though there is some diversification into other vegetables. The surplus from the agricultural produce has been invested in the form of homes, hotels and other businesses in Kullu and Manali. Indeed, many interviewees suggested that the large growth in Kullu-Bhuntar-Manali can be attributed in no small part to Lahauli capital.

Lahaul and Spiti have the highest per capita incomes in the state (partly because of their small populations) but no urban centres (either for services or for investments). As noted earlier, historically, people from these areas came down in the winter months, both for trade and in search of pasture. As early as 1881, Hunter (1881: 446) writes that Sultanpur included a "suburb inhabited by Lahaulis who seek a refuge in Sultanpur from the severity of their own winter". Currently, some Lahaulis have summerhouses in Lahaul and winter homes in Kullu, but many families have also settled permanently in the area for a number of reasons. For one, I was told, because Lahaulis are classified as a "Scheduled Tribe" for government

purposes⁵, they have a large representation in government and thus in Kullu as district headquarters, especially as they are highly educated as well. People also send their families to live in Kullu for better education and access to health care. Finally, many Lahaulis retire in Kullu because the weather is better in the winter. Within Kullu town, certain areas, such as Ward 9 which has a Lahauli councillor and the Greenpeace colony above Upper Dhalpur, are known to have been built by Lahaulis. There is also a community from Kinnaur in Bhuntar which has also similarly invested horticultural profits in the area, and established businesses.

11.2.3.5 Tourism

For both rural and urban residents, tourism provides an important additional stream of income. In 2012 it was reported that the Kullu district had seen 2.2 million tourists⁶. Although Kullu and Bhuntar are not major destinations in their own right, they are staging points for travel to Manali, the Parvati Valley and other places in the rural hinterland. In this context, the Bhuntar area is a major transit centre for the region for incoming tourists as the site of the airport and as a stop for long-haul buses from the North Indian plains. There are also restaurants and hotels (62 in Kullu) which cater for the journeying tourist, and river-rafting operators who work the main Beas channel starting near Bhuntar.

11.2.3.6 Professional Services/Additional Transport Networks

Finally, Kullu and Bhuntar are hubs for professional services for the district, both public and private. This includes health services (district and private hospitals/clinics), education (a college, an ITI or Industrial Training Institute, private schools), insurance, accounting, legal and banking services. Kullu town itself has 26 bank branches, following a Reserve Bank of India directive to open branches in remote areas, for which Kullu qualifies.

Apart from this, there are large numbers of taxi drivers, which I am including here as professional services, attached to the taxi unions at Kullu (200 cars) and Bhuntar. They drive tourists during the tourist season but also villagers coming to and from the area. Some cars are also contracted to the hydroelectric companies. Thus, the National Hydroelectric Power Corporation had, according to one taxi union official at the time of interview, hired 100 cars, which are attached to their project at Sainj.

⁵Under Indian law, “Scheduled Tribe” suggests recognition by the national or state government of communities as a “tribe or tribal community”, for whom affirmative action policies are available in education and state employment.

⁶This information was received from the Himachal Pradesh Tourism Development Corporation office in Manali.

11.3 Migration, Accretive Citizenship and Belonging: Why Everyone Comes to Kullu and How They Remain

11.3.1 Migration

Given such multifaceted and increasing economic growth, unsurprisingly Kullu and Bhuntar are areas of in-migration. Migration is from (1) other Himachali districts such as Una, Mandi and Kangra, where agricultural production is not as vibrant and thus employment is sought in trade and wage-earning “jobs”, something I was often told, the Kullu locals had little interest in given their multiple options for prosperity from horticultural wealth to tourism, (2) Lahaul and Spiti, the richest district in Himachal, (3) the Punjab based on historical trade linkages, starting with the Indo-Tibetan trade, later post-Partition resettlement as Kullu was then part of the Punjab, and more recent migrations, (4) working-class migrants, largely construction (skilled, semi-skilled and unskilled) labour, who come to build both private residential and commercial buildings for individual residents, as well as roads and hydroelectric projects for state and corporate interests, and who come from other parts of the country and Nepal, including Bihar, Orissa, Uttar Pradesh, Rajasthan, Jharkhand etc., (5) a smaller white collar migration from other Indian states, as we have seen, in the context of hydroelectric projects, and other large and corporate organisations, such as banks.

There is a longstanding seasonal migration of traders from Jammu and Kashmir (*pheriwalas*, as they are called) who sell shawls and blankets who have been coming to Kullu in the winter for many seasons (40 years I was told in one interview). Indeed, many Punjabi traders were once also *pheriwalas* (literally travelling salesmen/vendors), although they now appear sedentarised, even as new hawkers and vendors appear in bazaars from other parts of the state and the country (Punjab, Uttar Pradesh, Mandi etc.). Increasingly, villagers from surrounding areas have also come to be located in Kullu and Bhuntar.

11.3.2 Land, Accretive Citizenship and Belonging

In the remainder of this chapter I would like to consider the migrant experience, particularly to assess how migrants come to make Kullu their home and whether, if any, tensions arise in this process.

Two important contexts are critical to my considerations. First, the Himachal Pradesh Tenancy and Land Reform Act, 1972 which bars non-agriculturalists (and

by extension non-Himachalis, as they cannot be Himachali agriculturalists by definition) from buying greenfield⁷ land in the state. They can only do so by going through the extremely difficult process of trying to obtain state permissions or living for 20 years in the state to become a resident of Himachal. Second, and in the context of presenting fieldwork-based data, a noted Kullu phenomena wherein conflicts are rarely publicly articulated even if they occur (Vasan, personal communication). Thus, within the *devta* system which integrates Kullu villages, for example, both low-caste and high-caste members of a village are accorded ceremonial roles in the ritual life of the *devta*, with the *devta* him/herself being the integrator of the village, even though distinct caste-based and usually highly discriminatory practices separate low-caste and high-caste communities in everyday life.

In the towns, caste-based discrimination no longer holds quite the same sway I am told by both low-caste and high-caste residents. Indeed, one local electricity official notes that caste-based discrimination is not visible in politics, and that strict action is taken if caste-based discrimination is found in state offices. Across civic offices and in interviews with local councillors, this suggestion of caste discrimination not being as strong in Himachali towns is repeated, and thus no discernible pattern of caste-embedded politics was readily apparent or suggested to me vis-a-vis the municipal politics of Kullu or Bhuntar towns beyond the presence of reserved constituencies, with the Kullu raja being the current and independent MLA (member of the state legislative assembly). That is except, as one local councillor's husband noted, that the state itself has always been ruled by upper-caste Brahmins and Rajputs; he added this quietly, at the end of our long interview, a hint at something that has critical valence but no public discursive prominence.

In our survey of bazaar traders, however, it appeared that communities such as the Khampas (from Lahaul and Spiti), the Soods (from Kangra) and the Pashupati Kumhars (from Punjab) do have local "community", caste or ethnicity-based associations working alongside trade associations. Many retailers who responded to the question of whether they belonged to a caste/ethnic association affirmatively, noted that these were apolitical; indeed, we do not have a single example of an association which is avowedly political. As a way of assessing this, I attempted a few interviews with people who head caste/ethnic associations. One interview was with the individual who heads the association of the Pashupati Kumhars of Hoshiarpur who, similar to many other longstanding Punjabi migrants, had first arrived for reasons of trade, in this case, I was told, *pashmina* wool that was taken down from Ladakh and *masala* (spices) brought up from the Punjab via Una.

Throughout the interview my respondent appeared a little nervous with my questions, which did not shy away from asking about the linkages between caste, ethnicity and politics, suggesting, instead, that there was no political motive in forming the association but just an attempt to do some "social work" (a long-standing euphemism for politics in North India) and to bring about a sense of

⁷The only exceptions are already built-up structures.

community in a situation where there was none, where people could not tell who was Kumhar and who was not and where many have married locally; in other words, they had dispersed among the “local” population. Simultaneously, he was also keen, as was the case of many others in our survey of retailers and wholesalers, to trace his family, and his Pashupati ancestors’ long association with the Kullu area, suggesting that they had come over a 100 years ago. The gentleman stated that the Pashupati Kumhars were the oldest Punjabi migrants to the area, and had arrived, as many other Punjabi migrants also noted, when Himachal was a part of the Punjab. He also made it clear that his family no longer had any connection to Hoshiarpur from where many Punjabi migrants came, that his children were “local” and that they had no community temple. He also asserted that the Prajapati Kumhars were similar to Thakurs, that is the “local” upper-caste *kanets* or Rajputs, as they were well-to-do, prosperous and mainly involved in business. This was an interesting “local” placement in the caste hierarchy, given that Kumhar Prajapati is “scheduled” as Other Backward Caste in Himachal. Indeed, in his opinion, all were equal in the area, except for the large section of scheduled castes, for whom distinctions remained.

For another Sikh trader in the Bhuntar *bazaar*, things were not as rosy, and he noted that Punjabis did not get the same respect from the administration ever since this part of Himachal Pradesh had been carved out of the Punjab. This carving out also meant that newer Punjabi residents and migrants are unable to start the process of buying agricultural or virgin land for development under the Himachal Pradesh Tenancy Act, 1972, unless they have at least first obtained a Himachali domicile certificate on completing 20 years residence. Indeed, local belonging can, in part, be indexed by this distinction—between those who can buy land and those who cannot—noted widely in everyday discourse through the ubiquitous use of the terms “local” (in English) and “outsiders” (*baharwale*, *bahar ke*, in Hindi). It is this distinction, I argue, and its important role in marking belonging, which perhaps explains the insistence of my Pashupati Kumhar informant in emphasising the Pashupati Kumhars’ long association with the area, measured, as seen above, in decades. Indeed, in our survey of bazaar traders, many traders answered in this fashion: 50, 80 and 100 years ago when asked when their shop was started or when they arrived from where they had originated.

What this suggests then, in terms of migration and urban citizenship, is a long period of acquiring what is an *accretive citizenship*—moving from the category of “*baharwale*”, or “outsider”, to “*purane*” or “longstanding”, a status achieved through the passage of time. Thus, recently arrived or temporary migrants, even though large in number, are not accounted for by most political representatives as voting constituents. In the Akhara ward in Kullu town, for example, I am told by one former Sikh councillor that there are 1700 voters but 10,000 residents. Lower Dhalpur had 1700 voters but a population of 5000 according to their local councillor. The same is true for Bhuntar: the population figure for 2001 was approximately 4000 residents but as I was informed “this included only the electorate and not the *kirayadar*” (tenants), by the head of the Nagar Panchayat. In Bhuntar, a councillor explained that her ward had 261 voting residents, and 700–800

kirayadar from Bihar, Rajasthan and Gujarat, many of whom were working class labour or “*majdoor*” brought to the area by contractors, some for as long as 2–3 years. There were also those with “jobs” who typically work for the “projects” or hydroelectric-related concerns, or those who choose to maintain their vote in their home areas—Lahaul or nearby villages. These 261 “voting” families were described as mostly “*purani*” families, a diverse mix of Soods (from Kangra), Brahmins, OBC Kumhars (Punjab) and *dalits*, all of whom have a voice in ward affairs as home owners, whereas the only *kirayadars* (or tenants) who counted were long-standing residents of the area.

Our small survey of migrant market vendors shows that non-Himachalis do not have local documents, only acquired in the same way as fruit orchards in the case of traders, by those who stay long enough, and of these there are some. Thus, although many working class migrants reported their satisfaction with working and living conditions in the Kullu-Bhuntar area, they all sought access to state provisions such as cooking gas, unavailable to them, Aadhar cards and Aadhar claims notwithstanding⁸. Among non-Himachali migrants in slum settlements, and among vendors, there were a few suggestions that the “locals” do not mix with outsiders, suggesting proximate but separate communities, that the “locals” look down upon them, create disturbances (the reference here is to local drunks), and that the police, similar to the general administration, were definitely pro-local. One vendor noted that the “locals” are recently more resentful of “outsider” influx. This is reflected, as I have noted elsewhere, in a number of instances of attempting to halt “illegal” land sales to outsiders—a phenomenon which does occur, and is happening, as often witnessed in Manali, whose urban development is closely linked to “outsider” capital in area narratives.

11.3.3 Lahaulis and Kullu

Although the Himachal Pradesh Tenancy Act may ensure some local control over land and hence over territory, the most publicly articulated tension in my interviews appeared in the tensions between Lahaulis and Kulluwallahs, both of whom are Himachalis. I was often told about Lahauli family structures and structures of belonging by both Kulluwallahs and Lahaulis, inasmuch as land and the family homestead are never subdivided between Lahauli brothers; indeed, the subdivision of ancestral property is socially stigmatised among Lahauli families. As a Lahauli diaspora has emerged, some family members remain in Lahaul and continue working in agriculture, whereas others have moved away to start new business ventures, join the government or become professionals, including in the plains. This

⁸“Unique Aadhar” numbers have recently been issued to Indian citizens, with the idea that such numbers would provide portable identification of citizens by the state, irrespective of their location within the country, and hence seamless access to government services.

dispersal, and the diaspora, remain anchored by the original family homestead in Lahaul, which remains intact in terms of lands and housing, and to which dispersed family members can return—a return to a home that they all legally own, and to which they remain emotionally attached, as one Lahauli councillor noted.

From the *pahadi* (literally from/of the mountain) perspective, the presence of the Lahaulis in Kullu, and their prosperity, are a sign that they are coddled, given Scheduled Tribe status and thus entry to government service and educational facilities through affirmative action “reservations”, a policy which appears discordant with their current prosperity. I was told by one prominent elderly Lahauli businessman that Lahauli success has come despite the attempts by Kulluwallahs to “keep them down” in various ways. He cited, in this regard, two examples from an earlier history—the fact that Lahaulis were not declared agriculturalists until 1947, stymieing their attempts to buy agricultural land in the Kullu valley, and that, in the 1952 general election, the polling booth for Kullu and Lahaul was located near Kullu, and, as the election took place in the winter months, Lahaulis were effectively disenfranchised, cut off by snow from the Kullu valley. In 1952, the Lahaulis were declared a “scheduled tribe”, leading to increased opportunities in education and employment in government services through reservations, and finally, with the coming of potato and pea agriculture much later in the 1980s, to a great deal of prosperity.

Lahauli success, as far as Mr. Thakur was concerned, was based on several superior cultural characteristics—a long history of being traders on the Indo-Leh-Tibetan routes and thus being shrewd businessmen, a superior moral outlook and the capacity to work hard, engendered by a tough, cold desert/high altitude mountain environment and an open and progressive attitude to opportunities that arose. All this differentiated them from the “weaker” *pahadis*, who were jealous of Lahauli success but had not attempted to educate themselves even while being resentful and envious of the “tribal” reservations.

Simultaneously, of course, my Lahauli informants, also acknowledged the linkages between the communities, part of the longstanding transhumance and trade movement across the mountains, from lower valleys to higher valleys, which in this case, as with many others, is being sedentarised as a new seasonal migration has started, linking this time Nepal, Rajasthan, the eastern Gangetic plain (Uttar Pradesh, Bihar, Jharkhand, Orissa) and the Kullu valley. Further, for the younger generation, all affirmed that things were different. Mr. Thakur’s daughter and niece are both married to Kulluwallahs, and it is very common to meet people from Mandi married to residents of Kullu. Eventually, despite the distinctions between them (another being that the Lahaulis do not “get along” with the Khampas from Spiti/Kinnaur, practicing two versions of Buddhism), eventually they are all Himachalis despite belonging to different districts and sometimes cultural regions, the dividing line being much stronger between them and those who are complete “outsiders” from Punjab or elsewhere.

11.3.4 *Anyone Who Comes to Kullu Remains...*

However, in Kullu and Bhuntar towns who really is an outsider? As a researcher, I spent a great deal of my fieldwork time trying to assess how many people lived in the Kullu-Bhuntar area, and from where they originated, given the unexpected multi-ethnic nature of Kullu and Bhuntar that I was encountering—a diversity driven partly by the shifting economic and migration landscapes of liberalised India but also by the historical movements that inform Kullu's mountainous landscape. Our bazaar survey revealed that even in the core of the Akhara Bazaar, Kullu's historic trading area, most shopkeepers are, or once were, "outsiders"—those from surrounding villages, Kangra, Mandi, many places in the Punjab, post-1947 refugees from Pakistan etc. In the new Census town of Shamshi, the *panchayat* (village council) head complained about "outsiders" and then informed me that actually he is not from Shamshi either but originally from Lahaul; ditto the *panchayat* head at the region's new "education" hub Mohal who is from a nearby village, having bought land in the area. When I go to see the oldest elite resident I can find in Bhuntar, who is to tell me his history and that of the town, I find he is from Bilaspur district, coming to Bhuntar via Government College, Lahore. I stop looking for the "locals" in the town, because locality or belonging I realise is in many ways about a relationship to the pastoral and the mountains, critically tied to land and living in the rural hinterland.

Kullu town, by contrast, is the place where anyone who comes, stays. *Jo bhi Kullu ata hai, vo yahi reh jata hai* appears to be the town maxim: "anyone who comes to Kullu, remains here". The Prajapati Kumhar association head tells me this, as do many others. Life is easy here, says Mr. Thakur, acknowledging that few younger Lahaulis return to a cold desert valley where life is harsher. In the state agricultural office they ask whether I've already rented my house as I've now been here for a few years; in their experience, it is at this point when I should be considering staying, or rather remaining, as many others have before me.

In the slums, in the *bazaar*, many have been here for years, despite restrictions on land-ownership and processes of accretive citizenship. The time spent varies, ranging from 3 to 20 years for vendors, a few months to 50 years for slum dwellers, 1–60 years for shopkeepers and even the seasonal migrants have spent many seasons. Indeed, the majority of non-Himachali migrants, particularly vendors and slum dwellers whom we surveyed, and who in some ways represent the newest and least privileged of migrants, reported that they had no "problems" with their work and life situation. The survey was admittedly quite small, but all respondents sought to comment, unsolicited, on how nice the weather was in Bhuntar town!

This sentiment appears to be part of a larger culture of contentment, as I was told by the *maulavi* of the Akhara bazaar mosque, who himself has come from Uttar Pradesh. Indeed, it is rare to meet a Kulluwallah who has migrated to Delhi seeking economic or employment opportunities, particularly out of dire necessity, and those who come to the town appear to remain. In the many interviews I conducted over the course of doing fieldwork, there were very few complaints about living in the

metropolitan area, and very few people, it appeared, had any problems at all. Unlike the rest of the Indian subcontinent, they had ample water and electricity (from the rivers and hydropower plants), access to diverse streams and multiple forms of income (government jobs, trade and services, tourism, construction and rentals etc.), were surrounded by the beauty of the mountains and had milder weather than areas either north or south of Kullu and Bhuntar towns. Further, the area is not solely driven by the rhythms of seasonal tourists and the competition of the tourist trade as is the case in Manali and the Parvati valley, nor does it face the difficulties and inconveniences of remoter, rural living. Instead, it stands, unhurriedly, almost as it always has, at the intersection of diverse district-wide flows which articulate via Kullu-Bhuntar, given the area's historically strategic location.

11.4 Conclusion: Languid Plentitude, Contentment, Movement

In some ways, the idea that “anyone who comes to Kullu remains” is reminiscent of Ashis Nandy's (2002) writing on the city of Cochin. Nandy describes it as a city that can be “habit-forming”, “those who come to the city do not go back..... Cochin is for everyone” (Nandy 2002: 185). “Nobody here actually belongs to this place. It is built by immigrants” (Nandy 2002: 200). However, unlike the Cochin that Nandy describes, Kullu's history is not devoid of ethnic violence. In 1947, Muslims were killed and driven out in the Partition violence, and in 1984, a *gurudwara* was attacked following the prime minister Indira Gandhi's assassination. Coexistence between “locals” and “outsiders” is inflected, as I have tried to show, through the security provided by the Himachal Pradesh Tenancy Act, which tries to ensure Himachali dominance and control over land, and ties between people, as we have seen, are built through accretive connections and interactions.

Yet despite this, Kullu is a town built by, and through, the habits of movement, migration and in-migration, an ease of interaction which also emerges because of the relatively widely distributed prosperity in the district and because the metropolitan area and its rural hinterland provide multiple opportunities for income and investment with an enviable calmness. The *gurudwara*, burnt down in the 1984 riots, has subsequently been rebuilt and is larger; the colonial era mosque in the Akhara bazaar is undergoing expansive renovations as it seeks to accommodate new Muslim migrant labour communities from Uttar Pradesh and Bihar. Tourists, traders, migrants, workers, all can be located across a continuum of points of origin and destination.

Indeed, in the dispersed metropolitan site, and as is visible in my efforts to “count” the people in Kullu, much movement and settlement remains unnoticed and undocumented, even as a habitus of movement informs the process of the city's urbanisation itself. As proof, I offer in conclusion a vignette from my fieldnotes:

“I am learning slowly about the extent of the Lahuali presence in the city. Yet, I cannot find any evidence of any public acknowledgement of this fact—there are no temples anywhere. One evening, at a height, I see the outlines of a *gompa* in the distance. I feel as if I’ve found what I have been looking for. I hire a car for the day and we drive towards the *gompa*, up from Sarabhai (village), across the Himachal State Electricity board’s campus to the top of the hill. The *gompa* is massive and resplendent. It is not even, as I am to learn, even Lahuali, but instead built by Tibetan Buddhist communities from apple-rich Kinnaur district. I meet the man who is in charge who explains its construction. The ornate main temple, beautifully carved and painted, represents the crafts and skills of various Tibetan Buddhist communities—from Nepal (plasterwork), Tibet (painting), Kinnaur (copper work), Bhutan (statues), and migrant Bihari labour (cement) who were taught how to do this work. The architect is Japanese and from Dharamshala. Most of the money funding the project comes from Himachal’s Kinnaur district.

The complex is still being constructed even though the main temple is complete, and young apprentice monks are living there. The weather in the area is good for students to study, I’m told. The “outside” labour has also brought their families to live in the area, because they have been here a long time.

We get back into the car when the visit is over. Neither my “local” research assistant who went to college in Kullu nor the “local” taxi driver has ever seen the *gompa* before; they little knew it existed. There is a little muttering about what the *Khampas* (Tibetans) have achieved, but I’m assured by the temple “incharge” that they have “no bad relations”. Kullu appears to function in this way—it is the place where those who come are happy to remain for its languid contentment, plentitude and conveniences, but in some ways it is also hyper mobile—tourists, migrant labourers, seasonal migrants moving from the rural—to the urban—to the rural and back again, taxi drivers, bus drivers, commuting villagers and employees, all part of movement across the mountains (Fig. 11.5).



Fig. 11.5 A view from the *Gompa*. *Source* The author

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Chapter 12

Hindu Temples and Development of Localities in Tamil Nadu (South India)

Pierre-Yves Trouillet

12.1 Introduction

Temples (*kōvil* or *kōvil* in Tamil) have been places of major importance for South Indian society for more than 15 centuries. Today they are present in most settlements in Tamil Nadu, as is the case everywhere in India. They come in many sizes, ranging from small village shrines to large pilgrimage centres, and some have become very rich institutions thanks to the lands and money they have been endowed with over the centuries. According to the Hindu Religious and Charitable Endowment Department (HR&CE¹), which is in charge of the supervision of all the Hindu temples in Tamil Nadu, the 36,000 temples registered in the state owned over 4 lakhs² of agricultural lands. They were rented to more than 1 lakh of tenants in 2014. Their immovable assets generated an income of more than 200 crores³ INR between 2011 and 2014.⁴

In addition, temple buildings and renovations have increased manifold throughout Tamil Nadu over the last three decades.⁵ Small and large temples are

¹The HR&CE succeeded the Hindu Religious Endowments Board formed in 1926. For a complete report on the temple policy in the Tamil country from the nineteenth century to the 1980s; see Presler (1983, 1987).

²In the Indian numbering system, a lakh is a unit equal to one hundred thousand.

³A crore is equal to ten million.

⁴Tamil Development, Religious Endowments and Information Department, Hindu Religious and Charitable Endowments Department, Demand N°47, *Policy note 2014–2015*, 2014, 165 p.

⁵As Fuller (2003) noticed, the arrival of the Brahmin Jayalalithaa at the post of Chief Minister of Tamil Nadu in the early 1990s encouraged the growing involvement of the regional government in ritual renovations of temples (*kumpapiṣēkam*). It proves the weakening of the atheist and non-Brahman ideologies in the state.

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multiplying in villages as well as in towns and metropolises, and pilgrimage sites attract increasing numbers of devotees, which leads to urban growth, a phenomenon that we also observe in many other regions in India (Das and Ray 2008; Shinde and Pinkney 2013). The development of *guru* (saint) devotion and the growth in religious activities among the urban middle class⁶ and “backward classes”⁷ have also generated numerous new temple sites. Another noteworthy tendency concerns the countless temples involved in charitable activities and local development projects. Indeed, thanks to their regular incomes and the legislation of religion in India (especially in Tamil Nadu), Hindu temples are allowed to develop such activities on the lands with which they have been endowed.

All these current trends and observations lead us to ponder the relationships that exist between Hindu temples and the development⁸ of settlements in Tamil Nadu. Astonishingly, this issue has received little attention in urban and development studies in India, although there are a few notable exceptions (Reiniche 1985; Guilmo et al. 1990; Gaucher 2007; Shinde and Pinkney 2013; Narayanan 2015). Indeed, although there is extensive literature on urban dynamics as well as on Hindu “traditions”, gurus, temples and pilgrimages in India, there is a gap when it comes to works dealing with the connections between temples and the development of localities, especially in recent times.

Based on a study of several old and new temples, this contribution examines how these religious institutions are central to triggering local development and settlement growth, and shows to what extent these religious institutions contribute to a form of in situ urbanisation. As Denis et al. (2012: 56) argue, urbanisation in India is also characterised by an “autonomous growth of settlements generated by market and historical forces which are not ‘dependent’ on large metropolises [...] or ‘planned’ cities”. Following this observation, this contribution aims to show that temples are involved in such phenomena of “subaltern urbanisation” (ibid.), first by identifying different situations where a Hindu temple produces a centrality and accompanies the development of its locality and second by presenting the diversity of relationships that exist between temples and the growth of settlements in Tamil Nadu.

More broadly, another objective of this contribution is to highlight the role the “spatial prohibition of ownership” (Desmarais 2001) associated with sacred places plays in the emergence and structuration of localities. Indeed, structural geography

⁶Because of increasing incomes and time available for leisure, the Indian middle class is becoming a significant target for religious tourism and other “businesses of devotion” (Shinde and Pinkney 2013; Obadia 2013). Besides, Punzo-Waghome (2004) demonstrated that white-collar professionals who solicited donations from a similar class of people sponsored most of the mushrooming temples in the suburbs of Chennai.

⁷Official terminology to classify castes which are socially and educationally disadvantaged.

⁸The term “development” is understood here only in its most basic sense, which refers more to the spatial, economic and demographic growth of localities than to their human or sustainable development, although many trusts affiliated to Hindu temples in India are involved in charitable activities (hospitals, educational institutions, etc.).

considers that human settlements emerge from such spatial prohibition of ownership, which mediates the transformations of the natural environment into culturally invested spaces (*ibid.*). In addition, this chapter provides an illustration of the interest of the “economics of religion” (Iannacone 1998; Obadia 2013) in addressing the role played by Hindu temples in their settlements, for it becomes apparent that these religious institutions are not only symbolic landmarks but also real actors in local economies.

In this perspective, fieldwork was conducted in two sets of localities (Fig. 12.1) in June/July 2012 and in April 2013. The first three sites studied were towns of less than 100,000 inhabitants, where the Government of Tamil Nadu (HR&CE) directly manages old temples. The three other localities studied are much smaller

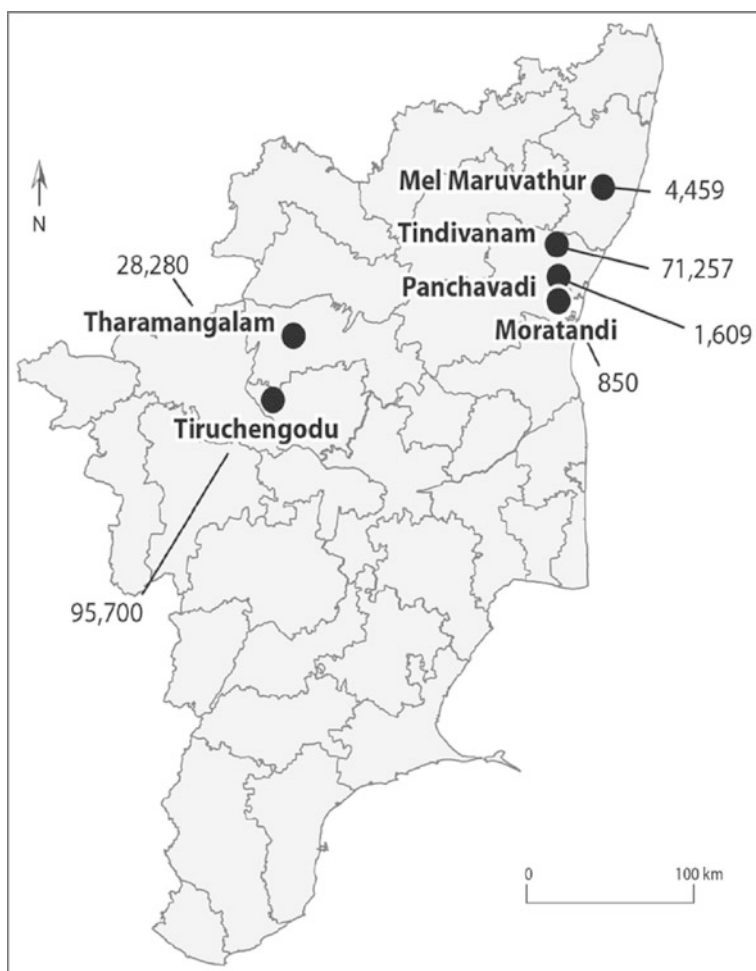


Fig. 12.1 Locations of fieldworks in Tamil Nadu and their census population in 2011

settlements of less than 5000 inhabitants, where private individuals have founded recent temples. The first set of localities enables us to evaluate to what extent old temples managed by the Government participate in the growth and the economy of their town, whereas the second allows us to identify some emerging processes through which new temples stimulate local developments and economies. Before describing these fieldworks and phenomena in detail, we present the historical importance of Tamil temples in local development and their current administrative patterns.

12.2 The Historical Importance of Temples in Tamil Nadu and Their Contemporary Administration

The involvement of temples in the development of settlements in south India is not a new phenomenon. Nevertheless, contemporary situations reveal several differences from the ancient contexts, especially because of the new modes of administration of religious institutions introduced by the British. This section provides insights into the historical linkages between temples and local development in the Tamil country; it then presents the current administrative systems governing temples, which dictate the temples' capacity to take part to the growth of their locality.

12.2.1 The Historical Linkages Between Temples and Local Development

Historians of the region have profusely commented upon the economic importance of Hindu temples in medieval south India. Without exception, the temple is seen as a central place in the agrarian economy of south India, before the extension of British control in the eighteenth and nineteenth centuries. Historians emphasised the variegated economic functions of many medieval temples, which were landholders, employers, banks and consumers of goods and services (Nilakanta Sastri 1937; Stein 1960, 1961; Karashima 1984; Dayalan 1992). Most importantly, temples were strongly connected with the expansion of south Indian urbanism and the development of irrigation.

Since the Pallava dynasty (sixth to ninth centuries AD), temples have developed a growing influence over the rising political and commercial networks in south India. During the following reigns of the Chola kings (ninth to thirteenth centuries), who succeeded in uniting the whole of the Tamil country under their rule, many areas of the region experienced the growth of small towns around temples. This process complies to a large extent with the definition of subaltern urbanisation because, according to James Heitzman, the urban development of these places around temples during this period “were relatively independent, indigenous

developments that were quite new in south India”, and whose developmental patterns “were subject to few external influences” (Heitzman 1987: 818).

The process often started with the endowment and establishment of a Brahmin settlement (*brāhmadēya*) whose resources shifted slowly into the hands of deities of important temples. Religious endowments were made by kings, secular donors and Brahmins to provide income for the temple maintenance and the performance of festivals honouring the deities. These endowments were generally of two kinds: lands and money. Land endowments included plots of cultivated land, portions of villages or entire villages, and became the main resources of temples. These temple lands (*dēvadāna*) could be located inside or outside the temple village and this could create extended networks of temple landholdings in a large number of villages. Of course, the development of local temples interacted with the expansion of commercial networks centred on the mercantile communities.

Small settlements of Brahmins, merchants and artisans gathered near holy places and enjoyed important capital inputs from the donations received by the temples, and employment within the temple ritual and administrative complexes incited larger numbers of people to gather around temples. Although it remained concentrated in the streets surrounding the temple enclosure, the expansion of the residential areas followed the patterns of prior settlements with their spatial segregation into distinct neighbourhoods based on caste and/or occupational identities. Nevertheless, as James Heitzman noted, “the “urban” character of these administrative units rested on the integration of a number of individual settlements, grouped around ritual centres, which preserved in themselves the characteristics of the village” (ibid.). Besides, the centrality of the temple sites and their interactions with their broader hinterland occurred at religious as well as economic and political levels.

Temples were also among the most important agencies for agricultural development during the Chola and Vijayanagar periods (900–1610 AD), especially in what concerns irrigation (Stein 1960, 1961; Heitzman 1987). Indeed, neither the Chola nor Vijayanagar empires had a department of irrigation nor public works to deal with agricultural improvements, and irrigation programmes were frequently carried out by temples. Alongside irrigation programmes, temples were also important centres providing capital inputs for the agrarian development of their area. The money belonging to the temple was frequently loaned to village assemblies for developmental purposes, but also to commercial firms and individuals.

12.2.2 *Temple Administration and Taxation*

During the pre-colonial period, temples and political authorities were mutually supportive. Kings looked after temples by offering lands and money, whereas the religious institutions supported and consecrated the legitimacy and authority of the kings during rituals through symbolic considerations (Appadurai 1981; Appadurai and Breckenridge 1976; Reiniche 1985).

The modern state changed the situation as far as its legitimacy was no longer based on the temple, nor was it dependent on these institutions (Presler 1983, 1987). From the colonial period onwards, successive governments became involved in the control and the management of temples and the regulation of the use of their resources. The aim was to avoid wastage and misappropriation of “public goods” that the resources of the temple represented, as well as problems of mismanagement and corruption (ibid.; Tarabout 2006). To this effect, after different legislations were implemented, with the Madras Regulation VII of 1817, the state instituted itself as the new protector of most of the main temples of the Tamil country, which are defined as “public trusts”.

Today, the legal framework of the public practice of religion in India is defined by the Constitution.⁹ Article 26 guarantees the right to establish and maintain religious and charitable institutions, but also to own and administer movable and immovable properties dedicated to this purpose. Yet there is no uniform legislation concerning the practice of religion in public, valid all over India and for all Indians. As Clémentin-Ojha (2010: 345, my translation) noted, “the Indian Constitution entrusts the states of the Union to exert their responsibilities over the administration and control of pious institutions, and to legislate according to their own historical traditions”. Nevertheless, the public legislation applicable to Hindu temples is governed by a double set of laws, a combination of Hindu and British legislation.

The legal personality of a temple deity exists once there is a regular worship addressed locally and the necessity to manage some assets in order to perpetuate the worship (Annoussamy 2001: 299). For this purpose, the founder has to register the deed of donation of properties to the temple deity and the trust that is to be in charge of the temple. Indeed, all the resources of any Hindu temple belong to its tutelary deity (more precisely to its local “image”) and are inalienable (Varadachari 1968; Presler 1983, 1987; Reiniche 1989; Mukherjea 2003; Clémentin-Ojha 2010). The deity is legally represented by its custodian(s), called “trustee(s)”, who can be either the founder of the shrine and the trust, the person(s) designated by him or by the administration to assume this function or the successor(s) of this person. Trustees have extensive powers as they carry out the worship of the temple deity and administer its assets (money, jewellery, lands, movable properties, etc.), which can be considerable.

Hindu temple trusts can be public or private. This distinction is an important one as it determines their taxation obligations. A public religious trust is a dedication of property for the use or benefit of the public at large, whereas a private religious trust is the dedication of the property for the worship of a family (or community) god in which the public is not interested. The public or private status of the trust in charge of a temple depends on the purposes and on the beneficiaries of the trust defined by its founder when he registers the trust deed (which cannot be changed after registration). This point is crucial as the Income Tax Act of 1961 exempts public

⁹For a complete overview of the connections between religion and justice in India and Nepal, see Berti et al. (2016).

religious trusts (and charitable trusts) from taxation but not private ones. This implies that, to be exempted, a religious/temple trust must be open to the public or recognised as a public-interest organisation (it is then considered a “charitable trust”). It is worth noting that one or several charitable trusts (exempted from taxation) can be affiliated to a private religious trust, which permits strategies for investments and local development. Indeed, the tax exemption of public religious institutions is an important issue for local economic development because, as we show, temple founders and trustees can acquire movable and immovable assets (including lands, buildings or colleges) through religious and charitable trusts. Nevertheless, public religious trusts and charitable trusts must neutralise their benefits to enjoy the exemption from taxes. They can save a maximum of 25 % of their annual income, but to benefit from tax exemption they must spend 85 % of their total annual income for the purposes of the trust.

As soon as a temple is open to the public and/or receives money offerings from devotees (in *hunḍi-s*) and collects an income of over 10,000 INR per year, it falls under the supervision of the HR&CE,¹⁰ whose inspectors audit the temple accounts yearly. As long as there is no report of mismanagement, internal conflict or tax fraud, the initial trust can continue to manage the temple and to appoint its trustees. Otherwise, the HR&CE takes control of the temple and appoints a fit person (*takkār*), an Executive Officer and a new board of trustees.¹¹

The public temples directly administered by the HR&CE (which include those generating the largest incomes, such as Palani, Madurai, Tiruchendur, Srirangam and Rameshwaram¹²) are managed by a board called “Devasthanam” (*tēvastānam*, “the place of the god”), consisting of a staff of civil servants and a board of trustees. The term Devasthanam refers to the temple as well as the board. The board of trustees of public temples, which is appointed for a period of 2 years, can be composed of “hereditary” or “non-hereditary” trustees. Hereditary trustees are involved in the management of former private temples that have been declared public but in which a particular community still has honorary rights; they are hence chosen from this community. The non-hereditary trustees are appointed to each temple by the HR&CE. Each board of trustees should consist of no less than three persons and no more than five. Boards of non-hereditary trustees should consist of members, one of whom is from a Scheduled Caste or Scheduled Tribe, and one of whom is a woman. Besides, as Franklin Presler noted: “The board of trustees, especially its managing trustee, is the temple’s top legal authority. Trustees stand high in the order of precedence in temple rituals, temple honours and other such regards. They can influence who gets land leases, how much rent is paid and which contractors get the lucrative building and renovation contracts [...]. The choice of

¹⁰Hindu Religious and Charitable Endowments Act, 1959 (Sect. 4).

¹¹Interview with an Assistant Commissioner (Legal) at the HR&CE Office, Chennai, April 2013.

¹²In 2014, the HR&CE controlled the 320 temples that had an annual income of 10 lakhs INR and above in Tamil Nadu. Palani temple, which is the richest and busiest of Tamil Nadu, generated more than 9 crores INR of income in 2012 according to the HR&CE.

trustee is thus at the heart of a temple's politics" (Presler 1983: 237). It is also noteworthy that, after a change of government, all temple trustees in Tamil Nadu are generally discharged, and new ones, who support the party in power, are appointed.

Nevertheless, the HR&CE is the real commanding presence in the main temples in Tamil Nadu. Furthermore, the Department controls the activities of the trustees and the budget of all the registered temples in the state. Many HR&CE civil servants, from the Commissioners in Chennai and at the districts headquarters to the subordinate officers, inspectors, auditors and clerks in the localities, monitor the temple's activities. Executive Officers have a strong power of authority and are key decision makers in most important public temples in which they hold office. They look after the accounts, frame the budget, supervise the staff (including priests) and organise the festivals (*ibid.*).

12.3 Old Public Temples and Their Localities

A first kind of relationship between temples and local development concerns the temples directly administered by the HR&CE, which means that they are open to the public and that their trustees and Executive Officers are appointed by this department. This type of temple encompasses most of the "old" Tamil temples (built during the colonial and precolonial periods), including the busiest, largest and richest ones. It refers to the temples studied in the small towns of Tiruchengodu,¹³ Tharamangalam and Tindivanam.

Tindivanam is a municipality, populated by 71,257 inhabitants in 2011, where several old temples managed by the HR&CE have a subregional audience. Tiruchengodu is another municipality with a population of 95,700 inhabitants in 2011, and which is renowned all over Tamil Nadu for its two large Śiva temples, also controlled by the government. Tharamangalam is a panchayat town of 28,280 inhabitants (in 2011), famous for its Śiva temple and, to a lesser extent, for its power loom industry. These three localities serve as examples for us to consider the different ways in which old, public temples participate in the development of Tamil towns.

The temples in Tiruchengodu and Tharamangalam (as well as many other cities, such as Madurai or Tiruvannamalai) illustrate the "temple city" archetype (Geddes 1919), which is quite well known and represents a good example of how a temple can impact the growth of a town and its morphological structure. In these localities the temple is at the centre of the town's identity, morphology and activity. However, similar to Guilmo et al. (1990), I only acknowledge the morphological pertinence of the "temple city" concept, as the temples of such towns rarely

¹³For more information about Tiruchengodu, see Raman and Tastevin's contributions in this volume.

structure their whole socio-economic orientation today. Furthermore, temples administered by the HR&CE have other ways of taking part in the economy of their locality.

12.3.1 *The Temple and the Origin of the Town*

The main shrine of “temple towns” often provides the locality with its singularity and gives it a symbolic importance making it attractive to devotees and activities, hence creating a certain centrality. Furthermore, in such cases, the temple is often associated with the founding myth of the locality. The shrine can thus be mythically at the origin of the town and its “proto-historic centre” (ibid.: 15). Indeed, no south Indian town has been founded at random (at least a posteriori), but always where a myth recounts that the divine manifested itself there (generally a buried statue of a *liṅga* or a goddess). In other words, “the manifestation of the divine determined the foundation of a locality” (Reinicke 1985: 76, my translation). Hence, the temple erection and worship predate the settlement, in principle or in a local story, in accordance with the theory of structural geography mentioned in the introduction.

For instance, the temple of Tharamalangam has mythically “built” its town because the place was a jungle area before its construction. According to the *sthala purāṇa* (the “story of the place”) of the temple, a local king named Ketī Mudali, who was living nearby, decided to establish a temple at the site of the *Śivaliṅga* he found in the forest. Then Ketī Mudali, his son and grandson succeeded each other to complete the temple. Today the devotees can experience this founding myth thanks to three Vināyaka (Gaṇeśa) statutes which are supposed to have been installed by each of these kings at the entrance to the temple. The fact that the temple is at the origin of the settlement is also symbolised by the name of the town itself. Indeed, Tharamalangam is considered the place (*dharā*) where Śiva married Pārvatī, the spouse (*maṅgalā*) form of the Goddess.

Many other examples attest to the importance of local myths and temples for the identity and reputation of their settlements in Tamil Nadu. It is particularly the case of Madurai, which is probably the most famous temple city of the region, or Tiruvannamalai, which is supposed to have been created around a fire *liṅga* represented by the inselberg overlooking the city and by the śaivite sanctuary, which leans against it. In such cases, also observable in Palani for instance, the temple consecrates a natural landmark and vice versa.

12.3.2 *Urban Morphology of the “Temple City”*

Similar to Madurai and Tiruvannamalai, the small towns of Tharamalangam and Tiruchengodu can be regarded as “temple cities” as their urban morphology is clearly structured around the main temple. This is not the case with Tindivanam

where no specific temple gained sufficient importance to influence the morphology of the whole town but, here, several temples produce multiple religious centralities and sub-town morphologies in their surroundings.

The temple city archetype constitutes a good example of how a temple influences the growth of a town, and in particular its urban form. Indeed, as Guilmoto, Pichard and Reiniche pointed out, in such towns (Fig. 12.2), the temple is “the guiding principle of the urban morphology”. It “dictated the framework of past circulations and settlements by structuring the urban space until recently”, it “is the fulcrum of the morphology of the whole town”, and it is the “point of convergence of all the communication routes” (Guilmoto et al. 1990: 15–25, my translation).

In temple towns the main temple is located at the principal crossroads of the locality, it defines the centre and determines the best location for retail trade because it attracts many visitors. In Tharamangalam and Tiruchengodu, the biggest concentration of retail shops and trading activities are clustered in the main streets surrounding the temple. Logically, a number of these shops sell religious goods, especially near the entrance to the temple, but many other shops trade in different kinds of products. This variety of goods sold near the temple is highly significant of the central importance of the main shrine for the locality.

The structuring influence of the temple also involves spatial restrictions based on socio-religious norms. Many trading activities are restricted near the temple: the sale of meat, alcohol or tobacco, because of the impure (*aśaiva*) nature (*guṇa*) of such products is incompatible with the holy nature of the temple. The combination

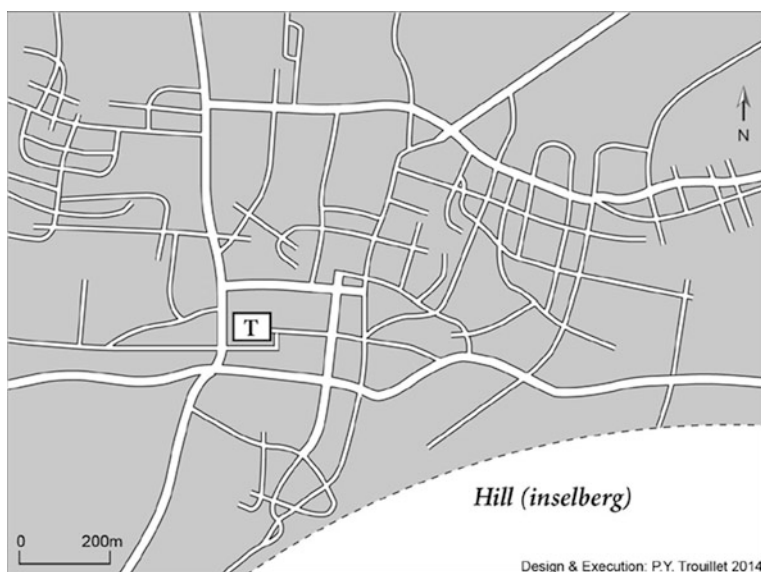


Fig. 12.2 The central location of the main temple of Tiruchengodu and its influence on the urban morphology (the other large Śiva temple of Tiruchengodu is situated on the top of the southern hill)

of attraction and prohibition around the temple is also valid with regard to residence. For centuries, the “lowest” castes (Scheduled Castes) have been forbidden to live near the main temples, whereas the “upper” castes used to reside close to it. In “traditional” Tamil localities, Brahmins used to settle near the main temple in a mono-caste neighbourhood called “*agrahāram*”. In Thiruchengodu, the southern street adjacent to the main temple is also called “Gurrukkal street”, which means the street where the Brahmin priests live. Such observations are not new but deserve attention as they concern the role of the temple in the segmentation of residence and activities, and thus in the design of urban morphology.

12.3.3 Activities on Public Temple Lands

What is also highly noteworthy is that some lands on which shops are implanted belong to temples (Devasthanams). This is not only the case of temple towns because most Devasthanams own lands in Tamil Nadu. In such cases, the economic role of the temple is more obvious as far as economic activities take place on its landed properties. It is notably the case in Tharamangalam, where the 44 shops located on the 4 streets surrounding the temple belong to the Devasthanam. These shops sell different kinds of products such as religious goods, fabric, jewellery, household goods, food and so on. Of course, no *aśaiva* (non-vegetarian) restaurant is allowed on temple lands in Tamil Nadu because of the socio-ritual norms mentioned above. In the case of Tharamangalam, the Devasthanam owns the land and the shop buildings, and rents them out for a period of 1–3 years. As in all the public temples controlled by the HR&CE, the lease amount is defined by auctions.

Devasthanams possess agricultural lands as well, in the locality and outside of it; these are rented by lease and auctions, the frequency of which depends on the type of property (buildings, dry or wet lands etc.). (I mentioned earlier that the HR&CE temples control more than 4 lakhs of acres of land). This land can be cultivated, unoccupied or occupied by private houses whose owners enjoy a low rent in comparison with market prices. Devasthanams always retain possession of the title deeds of the land (*pattā*) although houses can be sold on the black market between private individuals. It is also worth noting that, as in former times, the lands owned by Devasthanams can be situated far from the settlement where the temple is located as these lands have been donated by a great variety of donors. For that matter, as is the case in some other states, the Tamil Nadu government recently launched a program to collect data on lands belonging to public temples to identify the temple lands that have been lost over the years and often encroached. Officially, “encroachments of temple lands, to the extent of 1,564.75 acres of land, 286,1004 grounds of sites and 76,2375 grounds of buildings, were cleared and returned to the possession of temples”¹⁴ by the previous Jayalalithaa Government (May 2011–September 2014).

¹⁴Tamil Development, Religious Endowments and Information Department (2014/2015), p. 32.

The total value of these assets is approximately 1,687.44 crore INR.¹⁵ Furthermore, subject to certain conditions, steps were taken to regularise the persons who have encroached upon temple lands in groups and have been living there for more than 30 years as tenants.¹⁶

To sum up, temples participate in the identity and reputation of their locality even beyond the urban limits, and many of them take part in the structuration of urban morphologies and economies. Furthermore, Hindu temples own land resources on which economic activities are implanted, and these can be located in or outside the temple locality. Thus their role is not only symbolic because they also contribute to structuring urban form by enabling the development of economic activities, by influencing land use through spatial restrictions, and by expanding their zone of influence through rural-urban linkages. As such, they are actors per se. The following cases share most of these features, yet they have other effects on the growth of their locality, especially because they are much newer and are managed by private individuals.

12.4 Melmaruvathur: Guru Temple Trusts and Local Development

The case of Melmaruvathur is quite different because it has recently been constituted in a much smaller settlement than the towns mentioned previously, and because its main temple has given rise to two very rich religious and charitable trusts associated with it. Moreover, its founder is the spiritual leader of the place. Indeed, the Ādi Parāśakti Temple of Melmaruvathur, which has gathered increasing crowds of devotees since its creation in 1977, was founded by its living guru Bangaru Adigalar, better known by the name “Ammā” (“Mother” in Tamil). This case is particularly interesting because the temple and its connected trusts are undoubtedly the main factors and actors of the development of the locality. It also provides a good illustration of the contemporary creation of religious sites in unknown localities, which progressively succeed in being included in the venerable network of famous Hindu pilgrimage centres.

12.4.1 *The Place and the Guru*

In 2011, the locality of the Ādi Parāśakti Temple was inhabited by 4459 people living in two adjacent panchayat villages: Melmaruvathur itself (1748 inhabitants)

¹⁵*Ibid.*

¹⁶i. The land must have been utilised for more than 30 years for residential purpose only. ii. The fair rent fixed as per relevant Government Order should be agreed. iii. The fair rent has to be given effect from 01/07/1998. iv. The rent due must be remitted in equal instalments in a period of 12 months and 10 months rent has to be paid as donation (*ibid.*).

and Sothupakkam (2711 inhabitants). Astonishingly, in this small place one can find a police station, 2 bus stands, a railway station, a 1000-bed hospital, 11 high schools and colleges, a lot of accommodation and many others amenities. Why is this so? Partly because it is situated on National Highway 45, between Chennai and Trichy (92 km from Chennai), but above all because of its Ādi Parāśakti Temple and its living guru.

Following its construction, the number of visitors to the temple has increased manyfold and nowadays when driving along the NH 45 it is commonplace to see numerous groups of pilgrims and devotees dressed in red, walking along the highway towards the temple. The kind of Hinduism practiced in this temple can be associated with the *bhakti* (devotional) and “reformed” movement: the shrine and its guru do not claim any link with Vedic rituals, the priests are not Brahmins, everyone can enter and worship in the temple and they can touch the temple deity (*mūrti*), which is not permitted in orthoprax Hinduism. As such, the temple is very popular among “backward” and “most-backward classes” (B.C. and M.B.C.).

The guru himself is not a Brahmin but a Telugu Naidu who does not wear the sacred thread (*pūnūl*) of the “high” castes. Bangaru Adigalar was born in 1941 in the very village of Melmaruvathur. According to the legend, he was attracted to meditation and religion during his childhood, and in 1966, beneath a tree, he “discovered” a *svayambhū*, a “self-created” stone form of the Goddess (*Dēvī*). He is now considered an *avatār* of Śakti, the Hindu divine feminine power, and can be regularly seen and worshipped by devotees during a daily *darśan*.

12.4.2 Temple Trusts and Local Amenities

The main *sanctum sanctorum* and the *maṇḍapam* of the temple were installed in 1977 on Bangaru Adigalar’s initiative. The following year he created the Adhiparasakthi Charitable, Medical, Educational and Charitable Trust (ACMEC), of which he is president. In 1988 he founded another trust, the Adhiparasakthi Siddhar Peetam Women’s Charitable Trust (ASPWC). The reputation of the guru and the temple grew quickly and devotees rapidly began making large donations to the trusts; the funds were used to establish many amenities and institutions in the village (and elsewhere).

The first two educational institutions started by the ACMEC Trust were a Polytechnic College and a College of Pharmacy, founded in 1983. An Engineering College was established in 1984 and a Matriculation Higher Secondary School in 1985. The following year, the ACMEC Trust opened its hospital, which started out as a 300-bed facility, which is now able to handle 1000 inpatients and 1200 outpatients.

The Melmaruvathur railway station was also set up in 1986, and the first police station of the village 2 years later. A College of Physiotherapy opened in 1994, a Dental College and an Annai Illam for handicapped children in 2005, a High

School and an Institute of Medical Sciences and Research in 2007 and a GB Public School in 2009.

All these institutions have been established in the village thanks to Bangaru Adigalar and his temple. The educational and medical institutions have been created directly under his authority through the charitable trust he founded, whereas the Tamil Nadu government implemented the transport infrastructure (railway station, bus stands and highway) and the police station, which recognised the importance and the potential of the locality since the 1980s. This shows the location's strong capacity for attraction and polarisation.

12.4.3 The “Real” Population of Melmaruvathur

Although the 2011 Census only mentions a population of 4459 inhabitants, the “real” population present everyday in Melmaruvathur is much higher. Indeed, the activities organised by the temple and its trusts regularly attract other populations that remain invisible in the Census data. Among them, there are approximately 3000 college students and 55 hospital doctors and their families who reside in Melmaruvathur. Between 50 and 250 volunteers are present daily to support the trust's religious and charitable activities. In addition, 2000–75,000 free meals are offered (*aṇṇatāṇam*) by the temple every day, and this represents a useful indicator to estimate the number of devotees who come to Melmaruvathur at important moments of the religious calendar (of course, the highest number of meals corresponds to the main festivals). Finally, the 1200 outpatients who visit the hospital daily must also be included in the estimation of the population regularly present in the locality.

In addition, even if some of this population comes from the surrounding villages, and although the easy accessibility of the place allows many devotees to return home on the day of their visit, many lodges are available for their accommodation and the ACMEC Trust recently constructed a great marriage hall.

12.4.4 Extended Landholdings and Worldwide Connections

Similar to many other temple trusts, the ACMEC trust owns landed properties outside of the locality where the temple is situated. It thus participates in the development of other places. The ACMEC trust has some lands in the panchayat town of Kalavai (Vellore district), where its first 72 acres were donated by the very influential Śaṅkarācārya of Kanchipuram who owns a monastery (*maṭam*) there. As in Melmaruvathur, the ACMEC trust has also established colleges there. A College

of Arts and Science, the foundation stone of which was laid by former Prime Minister Rajiv Gandhi, was opened in 1988. In 1999 the trust also established the first self-financing Agricultural College in Tamil Nadu in this town. A College of Engineering was founded by the ASPWC Trust in 2001, a Teachers Training Institute was created in 2004 by the ACMEC Trust followed by a College of Education in 2005.

In addition, the temple and its trusts receive devotees and donations from all over Tamil Nadu, as well as from other sites in India and in the United States, Canada, the United Kingdom, France, Singapore, Australia and Dubai. The trust also claims to manage over 5000 branches (called “mandrams”) in different part of the world and the guru often travels within the country and overseas for spiritual tours. This shows that, thanks to the temple, the locality of Melmaruvathur is connected to other places not only in the country but also in the diaspora (hence to globalisation) independent of any metropolis.

In sum, although the accessibility of the village from Chennai and other towns should not be underestimated, this guru temple and its trusts are clearly at the origin of the emergence of a centrality. The development of this locality is thus a perfect example of how temples and temple trusts can trigger local development, especially here, as a religious, educational and medical hub.

It is worth noting that such an emergence of a centrality in a very small locality, provoked by the presence of a living guru who encouraged the foundation of temples, trusts, schools, colleges and hospitals, is in no way an exception, because it occurs in other places in India. Another good example can be observed, for instance, in the Kokamthan village (Ahmednagar district, Maharashtra), where the Vishwatmak Jangli Maharaj Ashram Trust has established and runs 10 schools, a hospital, a Doctorate of Education College, a Center for Wrestling Education and a School of Music. These activities are not limited to private temple trusts. For example, the temple of Palani, which is administrated by the HR&CE and is the richest shrine of Tamil Nadu, runs four colleges, three schools, two schools for priests, a hospital and a children’s mercy home. Finally, regarding the shrines of deceased gurus, Shinde and Pinkney (2013) recently reminded us that the town of Shirdi (Maharashtra), where the saint Sai Baba (ca.1832–1918) lived, was transformed from a humble village into a pan-Indian, even global, pilgrimage centre in less than a century.

12.5 New Temple Trusts: Landmarks, Real Estate and New Local Geographies

The two following cases concern the creation of new temples in even smaller settlements. Both temples share the same religious ideology of claiming to host the “world’s highest statue” of a Hindu god: Hanumān for the first temple, Śani

(Saturn) for the second. Of course, this is not always true,¹⁷ but these assertions show that the aim of the temple founders was to make the place as attractive as possible through the transfiguration of the local landscape.

More broadly, these two last cases illustrate the capacity of new temples to create a landmark and thus to attract economic activities in their surroundings (especially in what concerns retail trade and real estate) and to reformulate local geographies. They also show how a temple trust can be a tool to buy lands and increase the land value. In addition, these last cases allow us to examine the motivations of some current temple founders.

12.5.1 *Evergetism at the Private Hanumān Temple*

The Pañcamukha Āñjanēya Svāmi (Hanumān) temple was consecrated in 2007 at Panchavadi, which is a settlement of 1609 inhabitants (2011), included in the Rawthankuppam panchayat village and situated 12 km from Puducherry, very close to National Highway 45, which makes it easily accessible. Its gigantic Āñjanēya statue, which stands 36 feet tall and 15 feet wide (“not seen anywhere else on this Earth” according to the temple website), is very striking in the village landscape. The reputation of the temple and the number of visitors increase year after year. It attracts an ever-increasing number of devotees and embodies the growing popularity of Hanumān worship in India. Indeed, major old temples dedicated to Hanumān are very rare in south India, but worship of this deity has expanded in size and popularity all over India with many temples vying to produce the largest statue (Lutgendorf 1994).

The Panchavadi temple has a very significant feature similar to another famous Hanumān temple located in Chennai (Nanganallur), both establishments being private and having the same founder. In fact, according to the regional press, it was S. Ramani Anna, the founder-trustee of the Nanganallur temple, who “got the inspiration when he visited Pondicherry along with Veeravalli S. Santhanam, a philanthropist [cofounder of the Sattva Group, a successful company]. On passing through Panchavadi, it struck them that the temple should be built there. The latter agreed to give a portion of the land he had bought for starting an industry [...]. Dr. M. Palaniappan [the Managing Director] of Nagappa Motors has agreed to meet the cost of the Vināyaka shrine [of the sanctuary]”.¹⁸ The estimate for the entire project was 2 crores INR.¹⁹

Thus, the founder of the temple and the main donors are not residents of the locality and play complementary roles: Ramani Anna, who is well-known for his involvement and devotion to Hanumān worship in Tamil Nadu, personifies the

¹⁷For instance, one can find higher Hanumān statues in Delhi or Andhra (Lutgendorf 1994).

¹⁸*Ibid.*

¹⁹“Hanuman's special avatar as Annihilator”, *The Hindu*, Friday, March 07, 2003.

religious and spiritual figure, whereas the Sattva Group and Nagappa Motors are companies that embody the economic and “kingly” entities, in reference to the duty of the past Tamil kings.

The Sattva Company settled in Panchavadi in 1999 and donated the first 1.5 acres of land for the temple, then another 13 acres to reach the current area. The Sattva Group originally specialised in transportation and logistics. Its head office is located in Chennai, but it has many other business units around Chennai and Puducherry. The Company decided to buy lands in Panchavadi in order to set up warehouses and rent containers thanks to the proximity of the site to Puducherry and its good accessibility from Chennai. In the media, the Group displays a religious and philanthropic image, especially in what concerns its founding member, Veeravalli S. Santhanam, who is depicted as a pious Vaishnavite. This explains the involvement of the Sattva Group in the construction of a Hanumān temple in this very locality, because this deity belongs to the Vaishnavite Hindu tradition.

Once the Sattva Company had provided the first 2 acres, S. Ramani Anna launched two trusts: the Panchamukha Sri Jayamaruthi Seva Trust, which is private and “entrusted with all capital works for the temple”, and the Panchamukha Sri Jayamaruthi Charitable Trust, which “takes care of all the charitable activities associated with this *kṣētram*”.²⁰ Thus, the first private trust is not exempt from taxes, whereas the second one, which is charitable, is. Today, 12 trustees, most of whom hold very good positions and high-powered jobs²¹ mainly in Chennai, manage the two trusts.

The purposes of the donors and trustees seem to correspond to the notion of evergetism which consisted, for the Greco-Roman notables (Veyne 1976), in maintaining their status by sponsoring the welfare of the community through the building of monuments, organisation of festivals, gifts of food, and so on – a phenomenon which has already been observed in India as well. For instance, Singer (1972) noted the religious observances of industrial leaders in Chennai, especially their involvement in pilgrimages, the patronage of religious festivals, financial support of monasteries and temple endowments. Furthermore, Clémentin-Ojha and Lachaier (2008) observed that the social status of Hindu merchants and industrialists depends not only on their wealth but also on their generosity, especially in terms of religious activities. Furthermore, the participation in temple trusteeship establishes and maintains reciprocal trust relationships among members, facilitating the exchange of professional information or the pooling of resources. Finally, we should bear in mind

²⁰ www.panchavatee.org.

²¹ The 12 trustees are: Prop. of Tours and Travels (Chennai); Vice President of Sattva Group of Companies (Chennai); Chairman of G.E.T. Power Projects (Chennai); Managing Director of Nagappa Motors (Chennai); Management Consultant and Former Dean of SCS Kothari Academy for Women (Chennai); Senior Advocate at Madras High Court (Chennai); Former Standard Chartered Bank (Bahrain) Manager and President of Guruvayurappan Asthika Samajam (Chennai); Managing Director of Dhinamalar (Puducherry); Chairman of Aravind Traders (Karur); Former Judge in Madras High Court (Chennai); Former General Manager of BSNL (Chennai); Former Engineering Director of Metro Water Board (Chennai).

that the position of temple trustee has been highly honorific for centuries in Tamil society. The growing involvement of the former Chief Minister Jayalalithaa and other MLAs as well as local politicians in temple building and renovations since the 1990s attests to the symbolic capital inherent to the participation in temple matters. Thus the involvement of “big men”²² in religious activities should not be underestimated for an understanding of why temples are profusely endowed and able to trigger the emergence and development of localities in south India.

12.5.2 *Real Estate Development*

What is particularly striking in this case is that the Panchavadi temple provoked a real estate development in the former agricultural lands surrounding the site. Indeed, this new big temple has given a religious importance, and thus a higher value, to the locality. As a result, many agricultural lands have been converted into plots destined for residential use. A first company led the main real estate program in 2011. In July 2012, 57 plots ranging from 20 feet by 60 feet (sold at 3 lakhs each) to 20 feet by 65 feet (3.6 lakhs) were available in close proximity to the temple and several residential houses had already been built. This new residential area has been named “Jaya Ram Nagar” in reference to the Vaishnavite deities worshipped in the new big temple, which illustrates its symbolic importance.

Surprisingly, the real estate company has neither connections with the temple nor the trustees, excepting the fact that it set up an office right in front of the temple. The company merely recognised the development potential of this area as it is close to the highway and to Puducherry and this was enhanced by the erection of the massive new temple. The fact that the temple serves as the main argument in the advertisements for these plots is also very significant to the added value provided by the presence of the temple.

Another company in a neighbouring locality (Sedarapet) has carried out a second real estate program of approximately the same size. It confirms the interest in real estate development around the temple, and therefore the connection between the temple and the development of the locality, which contributes to the transformation of the local geography.

Nevertheless, the establishment of the Sattva Company in Panchavadi did not have a real impact on employment in the locality because the place is used essentially for storage and very few local people work for the company there.²³ Most of the population works in agriculture and the small industries of Sedarapet. However, in 2012, there were already a dozen shops near the temple as well as numerous women who sold ritual offerings (*tulasi*) for the devotees.

²²See also De Neve (2000).

²³In 2012, of the four guards, the cleaner, the inspector, the superintendent and the nine supervisors employed there, only one person lived in Panchavadi.

12.5.3 *Reformulation of the Local Socio-Religious Geography*

The Pañcamukha Āñjanēya temple was founded in a very surprising place. Indeed, this great orthoprax temple, its priests being Brahmins, is located in a Scheduled Caste colony (*cēri*), that is a hamlet of Dalits (Paraiyars) who have no relation with the temple founders. Actually, the Panchavadi hamlet is the *cēri* of the Rawthankuppam panchayat village, whose main settlement (*ūr*) is located a few hundred yards towards the north east of the temple. This location is thus completely contrary to the regular model of organisation of the settlements of castes, gods and temples in Tamil villages, because temples with Brahmin officiants are never located in *cēris* because of the “ideology of the pure and the impure” (Dumont 1966) which defines *cēris* as “impure” spaces, where great Puranic gods never settle and Brahmins never officiate.

This disconnection of the new Hanumān temple from the local socio-ritual geography is also apparent in the fact that the only other temple in Panchavadi (a very small shrine dedicated to the local goddess Māriyamman) is worshipped only by the local Paraiyar community. Similarly, the main temple of the whole panchayat village, which is located in the *ūr* of Rawthankuppam and dedicated to another local goddess, is also visited only by the local population. Furthermore, there is no ritual interaction between the new temple and the older local temples during any festivals or processions, and this is particularly revealing of the disconnection between the new Hanumān temple and local society, at least for the moment.

In addition, Philip Lutgendorf, who studied the flourishing devotion to Hanumān worship in the 1990s, associates the increasing popularity of the monkey god with “India’s growing middle class” (1997: 325). Indeed, to date, the Panchavadi temple mainly attracts devotees belonging to the urban middle class coming from nearby towns and cities. The Paraiyars are permitted to enter the Hanumān sanctuary but most local people interviewed in the vicinity prefer worshipping in the older temples of the area, which they have known for a longer time, instead of at the private Hanumān temple, where, according to some of them, “the donations go to a few rich people”. The temple is thus far better connected to external social networks than it is anchored in local society. As in the following case, its founding must then be regarded as a strategy for it to be placed on the map of the increasing religious cum spiritual tourism in India, related to the increasingly wealthy middle class.

To sum up, as the real estate development programs suggest, this new private temple has truly provoked the development of the locality. However, this new landmark also reformulates the local social and ritual geography, which no longer corresponds to the usual configuration of Tamil rural localities.

12.5.4 A New Temple Trust to Buy Lands and Create Centrality

The last case study is Moratandi. It is another small settlement (850 inhabitants in 2011), situated a few kilometres from Panchavadi. This example shows not only that temple trusts enable the stimulation of local economic activity, but also how they are instrumental in purchasing land and raising land values.

The Śrī Lalithambigai Vēda Śivāgama Trust was formed in 2002 by Chidambaram Gurrukkal, a Brahmin astrologer who wished to build a temple dedicated to the nine planets (*navagrahā*, tam. *navakkirakam*) and especially to the god Śani (Saturn), which is in itself uncommon. Indeed, although most Tamil Shaivite temples contain a small shrine devoted to the nine planets (including Śani) in their sanctuary, temples specifically dedicated to these deities are very rare in Tamil Nadu, whereas astrology is very important in social life and has been growing increasingly popular for several decades. Hence, a great Śani-Navagrahā temple should be particularly attractive.

As a trained astrologer having worked in a small goddess shrine in Puducherry for many years, Chidambaram Gurrukkal decided in the early 2000s to found a temple trust to create a large shrine to Śani and the nine planets. The temple trustees he designated were his two sons (also priests and astrologists) and their wives.

For this purpose, Chidambaram Gurrukkal bought 2.5 acres of land in the locality of Moratandi, where plots were available, located a few hundred yards from the first tollgate on the highway leading to Chennai. The area was previously occupied by fields of casuarina trees until a real estate company converted 60 acres of this land into residential plots. The ritual consecration (*mahā-kumpapiṣēkam*) of the Śrī Viśvarūpa Mahā Śaṇīśvara Bhagavān temple took place in 2006.

Just as for the Panchavadi Hanumān temple, the trustees claim that this temple is the “world’s tallest 27-feet pañcaloka statue of Śani”, as everyone can read on the donation receipts. The temple also contains a huge (at least 12 feet high) golden statue of Vināyaka, and each of the Navagrahā statues are more than 7 feet high instead of the usual height of 1–2 feet in regular temples. Furthermore, the trustees have named the sanctuary the “Śrī Navagrahā Parihāra Kṣētram”, asserting that this astrological “sanctuary” (*kṣētram*) is supposed to “heal” (*parihāra*) people’s problems. All this is particularly revealing of the founder’s ambition to attract a maximum of people to this new religious site. Even the names of the gods in the temple are written in Hindi (beside Tamil and English), something particularly unusual in Tamil Nadu, a state well known for its aversion to Hindi.

Six years after the temple was consecrated the project seems to be a real success, surfing on the increasing interest for astrology in India, the scarcity of Śani temples and the accessibility of the place. Indeed, this new Śani temple is located very close to Puducherry, which ensures a reservoir of devotees. Moreover, people driving along the highway are forced to stop when they arrive at the tollgate, and this can contribute to their urge to visit the temple. Of course, the choice of this very location is in no way a coincidence.

As a result, more and more devotees visit the temple and make donations to the trust, which has been able to buy 7 more plots in Moratandi and 3 acres in another village (near Auroville) thanks to this income. The trust built a school for priests on one of the Moratandi plots, but the others were still vacant in 2013. Nevertheless, they represent a good investment for the trust, which can sell the plots at a much better price after the presence of the temple raised the land value by approximately 50 % within 10 years, according to local informants who took part in the real estate development of the site. Many residents denounce the speculative strategy of the founder who buys lands through his temple trust (but who has not sold any plots yet in 2013). What is certain is that all the landowners of Moratandi have benefitted from the installation of the temple through the increase in the land value.

Furthermore, the presence of the temple probably generates more profitable revenues than the previous use of the place for casuarina trees. For instance, during the 2011 edition of the main festival dedicated to Śani (*Śani peyarcci*), a local informant earned 18,000 INR with the three stands selling ritual offerings she installed for the occasion. In Panchavadi, there are already a dozen shops dedicated to the devotees of the temple, and very many more in Melmaruvathur and elsewhere.

Hence, the Moratandi case illustrates another major aspect of the economic and development potentialities of temple trusts: temple legislation enables investors to buy lands for and through temple trusts, but also to increase the land value thanks to the presence of a temple. Once again, this temple created an attractive place and participates in the economic emergence of the locality. Nevertheless, the presence of a highway tollgate and a prior real estate program in the temple vicinity, as well as the proximity of urban settlements, are also noteworthy in this process of local development.

12.6 Conclusion

Although Hindu temples are unanimously considered by historians as important actors in the expansion of urbanism and irrigation in medieval south India, their role in the development of localities has been neglected by recent urban studies. Yet temples must be seen as real actors of local development in contemporary India as well, especially because temple deities are regarded as having a juristic personality as they are still endowed with economic resources and landed properties managed by religious trusts.

South Indian temples partake in the development of their localities in many ways, as has been the case for centuries. They provide their settlements with specific symbolic identities, they attract visitors and investors from outside, they take part in the shaping of urban morphologies, they influence land usage through spatial restrictions and they are given lands on which economic activities are often implanted. Furthermore, although the geographical situation always plays a significant role in local development, among other things, the case studies show that

contemporary temples can generate growth and development in small settlements. This is the case in Melmaruvathur, Panchavadi and Moratandi, where the emergence of economic activities (shops, real estate programs) and development amenities (schools, colleges, hospitals) has been triggered by the creation of local temples. In such localities, the consecration of non-market places (temples) instates the possibility of a market around them. This exemplifies the importance of the “spatial prohibition of ownership” associated with sacred places in the emergence and structuration of human settlements, as proposed by structural geography. Indeed, the lands on which Hindu temples are founded belong to their deity only, but temples are able to motivate the rise of their localities and to structure their immediate environment.

Finally, the role of temples and temple trusts in the local development strategies implemented by investors deserves to be studied. Indeed, the Panchavadi case illustrates the capacity of a temple to stimulate real estate development in its vicinity, and the Moratandi case shows how a temple founder succeeded in developing an attractive religious site on the lands exempted from taxes he bought through his temple trust. Such strategies can also be observed in much bigger south Indian localities, such as Bangalore, where a charitable trust belonging to the International Society for Krishna Consciousness (ISKCON) is currently developing a township which include hundreds of residential units as well as a commercial centre and a business centre, close to a large religious and touristic complex dedicated to Krishna. The purpose of this complex is to generate income to promote the aims of the trust.²⁴ It shows that, although urban studies neglect the influence of temples on local development, probably because they are non-market places, many investors are perfectly aware of the possibilities that temples and religious trusts offer in terms of business and development in areas in south India. More broadly, these examples illustrate the interest of the “economics of religion” in the study of the connections between Hindu temples and local development.

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²⁴“Temple trusts chant new investment mantras”, Namrata Acharya, *Business Standard*, Feb 06, 2010.

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Part III
Small Towns Between Rural and Urban
Administration: Public Policies,
Governance and Urban Services

Chapter 13

The Other Jawaharlal Nehru National Urban Renewal Mission: What Does It Mean for Small Town India?

Sama Khan

13.1 Introduction

Urban planning has been at the forefront of the political agenda in recent times. However post-Independence development planning primarily focussed on rural India. The need to focus on urban India was recognised only after a few decades. At the time of the first five-year plan (1951–1956) around 80 % of the population was rural, and hence rural development was seen as a major challenge by nationalist leaders and was prioritised over the need to develop and assess the role of cities in India's future. The first two five-year plans focussed on housing and industrial development, and the need to focus on urban planning was recognised in the third five-year plan. This plan (1961–1966) noted the need to prepare master plans for urban areas and provided an outlay for housing and urban development programmes. Today, however, urban issues are prominent in public discourse and government policies. This realisation can be attributed to the growing importance of cities as engines of economic growth in the globalising world and the subsequent adhesion of the Indian government and the political class to this vision.

However, in the recent past, urban development programmes have been criticised by scholars for focussing on the big cities and ignoring smaller towns that are in greater need of financial assistance. There was discussion about “urban bias” in the 1970s and 1980s in development circles where, following Lipton (1977), development economists increasingly recognised a widespread tendency, nearly always among urban-based governments, to pursue policies that overtly taxed agriculture and transferred resources to industry and other urban activities. Similarly, Ferré et al. (2010: 21) examine the case of eight developing countries, namely Albania, Brazil, Kazakhstan, Kenya, Mexico, Morocco, Thailand and Sri Lanka, and believe that there may be a “metropolitan bias” in the allocation of

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resources (including policy attention) to larger cities, at the expense of smaller towns, where most of the urban poor reside. They argue that “*any strategy for urban poverty reduction that places greater focus on, or allocates more resources to, metropolitan areas, suffers from a “metropolitan bias” analogous to the urban bias of old*”.

A similar bias in favour of big cities can be seen in urban policy in India as well. From the very beginning, all urban-based schemes in India have focussed on the big cities, neglecting hundreds of small towns. During the nationalist period, a top-down approach was implemented that gave priority to urban-based industrial development, focussing on already developed areas, that is the large cities and particularly the metropolitan cities (Shaw 2013). Similarly, at that time, 75 % of the nation’s industries were located in the three major cities of Bombay, Calcutta and Madras (Banerjee and Schenk 1984). This pattern, however, further led to polarised development inherited from 200 years of colonial rule. Thus a bottom-up policy was also adopted for industrial decentralisation, focussing on small towns. The government tried to support the growth of small-scale industries through the formation of industrial estates in small towns because the infrastructure required for the growth of cottage and small industries was weak. However, investment allocations to small and cottage industries fell to 1.6 % in the fourth plan partly because of their limited success. The fifth plan introduced the Integrated Urban Development Programme (IUDP). The programme focussed on metropolitan cities such as Calcutta, Bombay and Madras and areas of national importance. The scheme was discontinued in 1979. The sixth five-year plan (1980–1985) further laid emphasis on the development of small and medium towns and noted that:

The thrust of the urbanisation policy during the next decade would be to give greater emphasis to the provision of adequate infrastructural and other facilities in the small, medium and intermediate towns which have been neglected hitherto in this respect. The aim would be to strengthen these market centres to equip them to serve as growth and service centres for the rural hinterland. For this purpose, increased investments are proposed in these towns in housing, water supply and communication facilities (Sixth Five-Year Plan, 1983, Para 23.31).

The Integrated Development of Small and Medium Towns (IDSMT) was thus launched in 1979/1980. The IDSMT was applicable to all towns/cities with a population of up to 0.5 million. The scheme continued till the middle of the 10th plan period and covered 1854 towns until 2004/2005, after which it was subsumed into the Urban Infrastructure Development Scheme for Small and Medium Towns (UIDSSMT).¹ Thereafter the mega city scheme was initiated in 1993/1994. The objective of the scheme was to undertake infrastructure development projects of city-wide/regional significance covering a wide range of components such as water supply and sewerage, roads and bridges, city transport, solid waste management etc. The scheme was applicable to Mumbai, Kolkata, Chennai, Bangalore and

¹UIDSSMT is a sub-mission under JNNURM launched in 2005, which is discussed in detail in the following sections.

Hyderabad. This phase of urban policy was marked by an emphasis on megacities as central to urban development. This period also saw the passage of the 74th Constitutional Amendment Act in 1992 that sought to make the third tier of governance more autonomous and participatory. However, the larger municipal corporations with adequate finances were able to benefit from this act, whereas the municipalities in the smaller towns have not benefitted much from it. The inability of the smaller municipalities to take advantage of this amendment is discussed in greater detail in the chapter.

Thus, the top-down approach continued to be the recurring theme in Indian development planning, whereas the success of the Chinese lower order cities is a result of the bottom-up approach (Banerjee and Schenk 1984). There has also been an academic bias towards large cities in the conceptualisation of urban culture as it is these metropolitan cities that have fascinated anthropologists, sociologists and urban ecologists (Gill 2013). Simmel and Weber and many other theorists identified large urban centres as different from spaces that are community based and rural in character. Engels also studies the modern city as the centre of wealth and poverty. Marx identified the city as organised by capitalism, a place of class struggle determined to a large extent by the economy. The term city thus became synonymous with big cities.

Especially following the rise of the discourse on global cities, the word city is generally equated with large infrastructure, skyscrapers, beautified landscapes and similar, and rarely evokes the image of a small town. In contrast, the image of the small town is more rural in character. This vision is shared in India where small towns have no place in the discourse on cities, despite their role in urban growth.

In India, urban areas have expanded rapidly, in absolute numbers, despite a relatively slow pace of urbanisation: the level of urbanisation increased from 27.8 % in 2001 to 31.2 % in 2011 to reach 377 million people living in cities. For the first time, India has added more people to cities than to its rural areas: over the decade from 2001 to 2011 Indian cities and towns added 91 million people whereas agricultural areas added 90.4 million.² Further, the last decade witnessed a rapid rise in small town populations. Between 1991 and 2001, the population living in class 1 (100,000 and above) to class 3 (20,000–49,999) towns increased by 85 % whereas the population in class 4 (10,000–19,999) to class 5 (5000–9999) towns increased by only 15 % and the population living in class 6 (less than 5000) towns decreased by 15 %.³ However, from 2001 to 2011, the population living in class 1–3 towns increased by 88 %, whereas the population in class 4 towns increased by 41 % and the population in class 5 and 6 towns doubled. The increase in population represents the increase in the number of towns in each category and natural population growth as well as other factors such as migration.

²Census of India 2011.

³Class 1: 1,00,000 and above population, class 2: 50,000–99,999, class 3: 20,000–49,999, class 5: 5000–9999 and class 6: less than 5000.

In this context, the increase in population needs to be backed by an increase in infrastructural investment which improves the delivery of services and the quality of life in these towns and cities. Urban transition, partly located in small towns, continues to be a major challenge which needs an enormous development of urban infrastructure and services. Therefore, even though the history of urban policy in India clearly points to an early realisation of the need to invest in small towns, every scheme for urban development after independence focussed instead on the relatively big cities. This trend could have ended with the Jawaharlal Nehru National Urban Renewal Mission (JNNURM) as it was launched in 2005 as the largest urban development scheme in India, both in terms of investment and coverage, including both big cities as well as small and medium towns.

As Indian development planning has traditionally focussed on rural development, JNNURM was a first of its kind scheme, directed at the redevelopment of Indian cities, with the largest central funding, covering all towns and cities with an urban local body as defined by the 2001 Census. Since 2005, JNNURM has been the main source of central funding for big cities as well as small and medium towns. As it is the largest and the only scheme targeting urban rejuvenation, research on this programme would contribute to an understanding of the course that urban policy in India has followed. The question of the bias towards the development of big cities, at the cost of small and medium towns, is an important one, and requires serious consideration when developing subsequent policy on urban development.

The chapter is structured as follows. The first section presents the content of the JNNURM mission and its four sub-missions. The following section reviews the commitments to central assistance and the funds released by the central government. Because all the four sub-missions cover different towns and cities, I go on to provide a state-wide comparison of the central assistance committed and released, arguing that the big city schemes have received a larger share of central assistance in comparison with the small and medium town schemes. Section 13.4 begins by analysing the two big city schemes—Urban Infrastructure and Governance (UIG) and Basic Services to the Urban Poor (BSUP), arguing that most of the cities covered under these two schemes are large and have thus received a considerably larger share of central assistance. The next section proceeds with a review of the small and medium town schemes, arguing that, even amongst small towns, the larger ones have received a greater share of central assistance compared to the smaller towns. The following section discusses some of the reasons that could explain this bias by looking at the issue of governance in small towns and arguing therefore that central funds could have been more useful in these smaller towns than in big cities. Finally, the last section discusses the way forward by outlining the benefits of small town development, arguing that small town development can help reduce rural poverty by providing access to employment and other services to surrounding rural areas.

In terms of methodology, the JNNURM website provides the UIG and UIDSSMT project details, whereas the BSUP and IHSDP data was collected from the Ministry of Housing and Urban Poverty Alleviation. The Census of India classifies all the towns and cities according to their size/population in the town

directory. A database was prepared by matching the towns and cities under all the four sub-missions of the JNNURM with the town directory to classify their size and the population residing in each of them. The resulting database reveals the share of central assistance committed and released by city size. Because the mission was launched in 2005, for the purposes of this chapter, the urban population figures pertain to the 2001 Census. Finally, the chapter is mainly concerned with the question of the variations in fund allocation between different types of urban settlements and does not deal with other questions raised by the JNNURM programme such as the urban reforms that were conditioned by the JNNURM (Sivaramakrishnan 2011a, b) or the impact the programme had on poorer communities (Mahadevia 2006, 2011).

13.2 Contents of the Jawaharlal Nehru National Urban Renewal Mission

The JNNURM was launched to address the growing challenges of urbanisation and the need to invest in infrastructure and improve the quality of life in cities. Urbanisation in India has had an evident downside with the proliferation of slums, increasing homelessness, growing urban poverty, pollution and ecological damage. The then Prime Minister, Manmohan Singh,⁴ in his speech at the launch of the JNNURM on 5th December 2005 mentioned the drawbacks of urbanisation as a challenge to be overcome by the JNNURM.⁵ The aim was to encourage reforms and to fast track the planned development of identified cities, with a focus on efficiency in urban infrastructure and service delivery mechanisms, community participation, and accountability of ULBs/parastatal agencies towards citizens (GoI n.d.-A: 5).

The JNNURM incorporates four sub-missions: (1) the Sub-Mission for Urban Infrastructure and Governance (UIG) administered by the Ministry of Urban Development, with a focus on infrastructural development covering 65 cities, (2) the Sub-Mission for Urban Infrastructure Development of Small and Medium Towns (UIDSSMT) administered by the Ministry of Urban Development, aimed at planned urban infrastructural improvement in all towns/cities as per the 2001 Census, except for the cities covered under UIG and BSUP, (3) the Sub-Mission for Basic Services to the Urban Poor (BSUP) administered by the Ministry of Housing and Urban Poverty Alleviation with a focus on integrated development of slums

⁴M. Manmohan Singh was the Prime Minister of a Congress led government till May 2014. The 2014 general elections propelled the Bharatiya Janata Party (BJP) to power and its leader Narendra Modi hence became the new Prime Minister on 26 May 2014.

⁵Prime Minister's speech at the launch of JNNURM, Dec 3, 2005.

covering the same 65 cities as UIG and (4) the Sub-Mission for Integrated Housing and Slum Development Programme (IHSDP) administered by the Ministry of Housing and Urban Poverty Alleviation (MHUPA), aimed at holistic slum development, applicable to all cities and towns as per the 2001 Census, except for the cities covered by UIG and BSUP. The JNNURM is applicable to all the statutory towns in India as per the 2001 Census, that is towns that have an elected local body. Census towns, however, are not included in the mission because they are under rural panchayat administration.⁶ The JNNURM was launched with an estimated investment of 1,205,360 million INR (USD 26.7 billion)⁷ during the mission period of 7 years, beginning in 2005–2006 (GoI [n.d.-A](#): 3). Assistance under the JNNURM is Additional Central Assistance (ACA), which would be provided as grant (100 % central grant) to the implementing agencies or to the special purpose vehicles (SPVs) that may need to be set up (GoI [n.d.-A](#): 8).

13.2.1 Present Status

The mission, which came to an end on 31 March 2012, was extended for 2 years as a transition phase, to allow for the completion of the ongoing projects and to take up new projects by 31 March 2014. A new government came in place in May 2014 to recast the urban landscape of the country for which a new scheme called the Atal Mission for Rejuvenation and Urban Transformation (AMRUT) was launched in June 2015 with an outlay of 500,000 million INR (USD 11.06 billion) for 5 years from 2015/2016 to 2019/2020.⁸ In principle, AMRUT seems to be a remodelled version of the JNNURM as it relies primarily on earlier components of the JNNURM such as augmentation of water supply, collection and treatment of sewage and garbage and building roads and flyovers. The new additions that are being introduced include digitisation and wi-fi zones in cities. The incomplete projects under JNNURM, are however, covered under the AMRUT. The present government plans to fund the incomplete JNNURM projects which are at a stage of more than 50 % completion with an estimated allocation of about 80,000 million INR (USD 1.8 billion).⁹

⁶Since the mission was launched in 2005, some urban areas that were classified as Census towns in the 2001 Census had transformed into urban local bodies by 2005 and thus were included in the mission. Thus for the purposes of this chapter the urban population figures pertain to the 2001 Census.

⁷The average US Dollar to Indian Rupee (INR) exchange rate from 31 March 2005 to 30 March 2012, that is 45.20813 INR to the US Dollar, was taken as the figure to calculate the exchange rate.

⁸AMRUT website (<http://amrut.gov.in/>).

⁹The Economic Times “Centre to fund pending JNNURM projects worth 8000 crore INR: Venkaiah Naidu” 23 August 2015.

13.2.2 The Four Sub-missions

13.2.2.1 Urban Infrastructure and Governance (UIG)

The UIG is administered by the Ministry of Urban Development with a focus on infrastructure projects relating to water supply and sanitation, sewerage, solid waste management, road networks, urban transport and redevelopment of old city areas, with a view to upgrading infrastructure therein, shifting industrial and commercial establishments to suitable areas etc. (GoI [n.d.-A](#): 5). Initially the sub-mission had identified 63 cities, although two more cities, Tirupati and Porbandar, were added in 2009. The list of 65 cities included 7 cities/UAs with a 4 million-plus population as per the 2001 Census, 28 cities with a 1 million-plus population and 30 cities of religious, touristic and historic importance with a population of fewer than 1 million. The financing patterns of these cities differ based on their population and these are provided in Table [13.1](#).

13.2.2.2 Urban Infrastructure Development Scheme for Small and Medium Towns (UIDSSMT)

The UIDSSMT is also administered by the Ministry of Urban Development. It subsumed the Integrated Development of Small and Medium Towns (IDSMT) and Accelerated Urban Water Supply Programme (AUWSP) schemes. All towns/cities as per the 2001 Census, except the 65 mission cities/urban agglomerations covered under UIG and BSUP, are eligible to benefit from the scheme (GoI [2009a](#)). The initiatives eligible for assistance under the scheme include all urban infrastructure development projects such as water supply, roads, parking space, drainage, solid waste management, sewerage, urban renewal, preservation of water bodies and prevention of soil erosion. The objectives of the scheme are to improve infrastructural services and help create durable public assets and quality oriented services in cities and towns, enhance public-private-partnership in infrastructural development and endorse planned integrated development of towns and cities (GoI [2009a](#)). The sharing of funds between the central and the state government is in the ratio 80:10 and the remaining 10 % can be raised by the nodal/implementing agencies, including ULBs, from their internal resources or from financial institutions. However, in the case of cities/towns in the north eastern states and Jammu and Kashmir, the sharing of funds between the central and state government would be in the ratio of 90:10 (GoI [2009a](#)).

13.2.2.3 Basic Services to Urban Poor (BSUP)

The BSUP is administered by the Ministry of Housing and Urban Poverty Alleviation. It focuses on an integrated development of slums through projects for providing shelter, basic services and other related civic amenities and utilities to the urban poor (GoI

Table 13.1 Funding pattern under JNNURM

Scheme	Category of cities/towns/UAs	Centre (%)	State (%)	Local (%)
UIG	Cities/UAs with four million plus population as per the 2001 Census	35	15	50
	Cities/UAs with one million plus but less than four million population as per the 2001 Census	50	20	30
	Cities/towns/UAs in north eastern states and Jammu and Kashmir	90	10	–
	Cities/UAs other than those mentioned above	80	10	10
BSUP	Cities with four million plus population as per the 2001 Census	50	50	
	Cities with one million plus but less than four million population as per the 2001 Census	50	50	
	Cities/towns in north eastern states and Jammu and Kashmir	90	10	
	Other cities	80	20	
UIDSSMT	Cities/towns	80	10	10
	Cities/towns in north eastern states and Jammu and Kashmir	90	10	–
IHSDP	Cities/towns	80	20	–
	Special category states	90	10	–

Source Ministry of Urban Development, Govt. of India, Modified Guidelines for Projects of Jawaharlal Nehru National Urban Renewal Mission on Urban Infrastructure and Governance (September, 2006) p. 13; Ministry of Housing and Urban Poverty Alleviation, Govt. of India, Modified Guidelines for BSUP, February 2009, p. 10

Note 1 Under UIG, for setting up desalination plants within 20 km of the seashore and other urban areas predominantly facing water scarcity because of brackish water and non-availability of surface sources, the funding pattern is divided between 80 % central share and 10 % each for state and ULB

Note 2 Under the UIG scheme, the ULB share can include parastatal share/loan from financial institutions. Under the BSUP scheme, the state/ULB/parastatal share includes beneficiary contribution

2009b). The objective is to provide Basic Services to the Urban Poor, including security of tenure at affordable prices, improved housing, water supply, sanitation and ensuring delivery through convergence of other already existing universal government services in the areas of education, health and social security (GoI 2009b). The sub-mission concerned the same cities as the UIG programme.

13.2.2.4 Integrated Housing and Slum Development Programme (IHSDP)

The IHSDP is also administered by the Ministry of Housing and Urban Poverty alleviation. It aims at combining the schemes implemented by the Valmiki Ambedkar Awas Yojana (VAMBAY) and the National Slum Development

Programme (NSDP) under the new IHSDP scheme for an integrated approach in ameliorating the conditions of the urban slum dwellers who do not possess adequate shelter and live in dilapidated conditions. The basic objective of the scheme is to strive for holistic slum development, along with a healthy and enabling urban environment, by providing suitable shelter and basic infrastructure facilities to the slum dwellers of the identified urban areas (GoI 2009c). The scheme is applicable to all cities and towns as per the 2001 Census except cities/towns covered under UIG and BSUP (GoI 2009c). The funds would be shared in the ratio of 80:20 between the central and the state governments/ULB/parastatal agencies. State governments/Implementing Agencies may raise their contributions from their own resources or from beneficiary contributions/financial institutions (GoI 2009c). However, in the case of special category states, the sharing of funds would be in the ratio of 90:10 between the central and state governments.

13.3 Allocation of ACA: A Bias Towards Large Cities

13.3.1 Central Assistance Committed

The government of India had proposed substantial assistance through the JNNURM over a period of 7 years. During this period, funds were provided for proposals that would meet the Mission's requirements. The project sanction process involves a project proposal prepared by the Urban Local Bodies (ULBs) to be sanctioned by the Central Sanctioning and Monitoring Committee (CSMC). The Ministry of Urban Development and the Ministry of Housing and Urban Poverty Alleviation are the repository of funds earmarked for the JNNURM scheme. On approval and sanction of assistance by the CSMC, funds are released by the Ministry of Urban Development and the Ministry of Housing and Urban Poverty Alleviation. Under the JNNURM, financial assistance is made available to the ULBs and parastatal agencies which can deploy these funds for implementing the projects themselves or through the special purpose vehicles (SPVs) which may have to be set up. Assistance under the JNNURM is ACA, which would be provided as a grant (100 % central grant) to the implementing agencies (GoI n.d.-A: 8). It represents the amount of the project cost the central government has agreed to share, approved as per the sharing formulae applicable to different categories of cities over a period of 7 years as shown in Table 13.1. Out of the JNNURM's estimated investment of 1,205,360 million INR (USD 26.7 billion) over the mission period of 7 years, beginning in 2005/2006 (GoI n.d.-A: 3), as of March 2012, the central government had committed 629,676 million INR (USD 13.9 billion) to JNNURM projects.

Table 13.2 presents the central share committed to some of the major states under the JNNURM. I argue that the big city UIG and BSUP schemes have received a larger share of central assistance as compared to the small and medium town UIDSSMT and IHSDP schemes, even though these small and medium towns

account for a larger share of urban population. Table 13.2 shows that in Karnataka 71 % of the total central share has been committed to the UIG and BSUP cities of Bangalore and Mysore that account for only 2 % of the total urban population of India, whereas the remaining 29 % of the total central share has been committed to all the remaining small and medium towns in the state under the UIDSSMT and IHSDP that account for 4 % of the total urban population of India. Similarly, in Tamil Nadu, 74 % of the total central share has been committed to the UIG and BSUP cities of Chennai, Coimbatore and Madurai that account for 3 % of the total urban population of India, whereas the remaining 26 % of the total central assistance has been committed to all the remaining small and medium towns under the UIDSSMT and IHSDP which represent 7 % of the total urban population of India.

For the ten major states, 71 % of the central assistance has been committed to the big city UIG and BSUP schemes which account for 36 % of the total urban

Table 13.2 Central share committed for some major states (INR in millions)

State (% of total urban population)	UIG	UIDSSMT	BSUP	IHSDP	Total
Maharashtra	51,711.7	22,343.8	30,199.5	17,039.7	121,294.7
(14 %)	(43 %)	(18 %)	(25 %)	(14 %)	(100 %)
Uttar Pradesh	26,966.0	9428.2	11,490.4	8434.5	56,319.1
(12 %)	(48 %)	(17 %)	(20 %)	(15 %)	(100 %)
Tamil Nadu	21,267.7	7062.6	10,476.7	3970.6	42,777.6
(10 %)	(50 %)	(17 %)	(24 %)	(9 %)	(100 %)
West Bengal	25,761.3	4941.4	20,576.0	7089.0	58,367.7
(8 %)	(44 %)	(8 %)	(35 %)	(12 %)	(100 %)
Andhra Pradesh	21,138.4	19,921.3	16,088.7	6753.2	63,901.6
(7 %)	(33 %)	(31 %)	(25 %)	(11 %)	(100 %)
Gujarat	24,750.1	3519.6	10,154.6	2496.2	40,920.5
(7 %)	(60 %)	(9 %)	(25 %)	(6 %)	(100 %)
Karnataka	14,540.2	5511.6	4126.3	2225.7	26,403.8
(44 %)	(55 %)	(21 %)	(16 %)	(8 %)	(100 %)
Madhya Pradesh	12,592.0	9989.5	3442.6	2557.8	28,581.9
(6 %)	(44 %)	(35 %)	(12 %)	(9 %)	(100 %)
Delhi	25,189.8	–	14,727.2	–	39,917.0
(5 %)	(63 %)		(37 %)		(100 %)
Rajasthan	7655.6	4906.5	1726.8	6266.2	20,555.1
(5 %)	(37 %)	(24 %)	(8 %)	(30 %)	(100 %)
Subtotal	231,572.7	87,624.3	123,008.8	56,832.9	499,038.8
(79 %)	(46 %)	(18 %)	(25 %)	(11 %)	(100 %)
Others	57,251.7	25,465.5	27,912.7	20,007.3	130,637.2
(21 %)	(44 %)	(19 %)	(21 %)	(15 %)	(100 %)
Total	288,824.4	113,089.8	150,921.5	76,840.2	629,676.0
(100 %)	(46 %)	(18 %)	(24 %)	(12 %)	(100 %)

Source Census 2001; JNNURM database as on March 2012

Note The figure below represents the percentage of total central share committed

population of India as per the 2001 Census, whereas only 29 % of the total central share has been committed to the remaining small and medium towns under the UIDSSMT and IHSDP which account for 43 % of the total urban population. The scenario is the same with regard to other states as well, where 65 % of the central share has been committed to the big city UIG and BSUP schemes which account for 6 % of the total urban population, whereas 35 % of the total central share has been committed to the remaining small and medium towns under the UIDSSMT and IHSDP which account for 15 % of the total urban population.

However, in three states, namely Haryana, Himachal Pradesh and Punjab, 51 % of the total central share has been committed to the UIDSSMT and IHSDP as they account for 4 % of the total urban population whereas UIG and BSUP cities have received 49 % of the total central share committed as they account for only 1 % of the total urban population.

Nonetheless, this does not impact the national scenario, and overall, under the JNNURM, 70 % of the total central share (i.e. 46 and 24 % under UIG and BSUP, respectively) has been committed to the big city UIG and BSUP schemes, even though these schemes cover only a few big cities in these states which account for only 42 % of the total urban population, whereas only 30 % of the total central share (i.e. 18 and 12 % under the UIDSSMT and IHSDP, respectively) has been committed to the small and medium town UIDSSMT and IHSDP which cater to the remaining 58 % of the total urban population.

In practice, there is a difference between the amount committed and the amount released, so therefore, for the purposes of this analysis, it is necessary to take into account the amount actually disbursed by the JNNURM.

13.3.2 Central Assistance Released

Central Releases refer to the ACA released by the central government. The MoUD and MoHUPA are repositories of funds; on approval and sanction of assistance by the Central Sanctioning and Monitoring Committee, funds are released by the MoUD and MoHUPA. As far as possible the funds are released in four instalments as ACA to the state government or its designated state level Agencies (GoI [n.d.-B](#): 9). Funds from the state government or its designated State Level Nodal Agency are released after this. The nodal agency can disburse central assistance to ULBs or parastatal agencies, as the case may be, as soft loans or grant-cum-loans or grants (GoI [2006](#): 10). The first instalment of 25 % is released on the signing of a Memorandum of Agreement (MoA) by the state government, ULB or parastatal agency. The balance is released as far as possible in three instalments upon receipt of Utilisation Certificates that cover up to 70 % of the central fund allocation and the state/ULB/parastatal agency share and the disbursement is subject to the achievement of milestones agreed upon for the implementation of mandatory and optional reforms at the state and ULB/parastatal agency level, as envisaged in the MoA (GoI [n.d.-B](#): 9). Under the UIDSSMT, 50 % of the central share is released on the signing of an MoA with the state government/state level

nodal agency, after ascertaining the availability of the state share. The remaining 50 % of the central share is released on the submission of Utilisation Certificates by the nodal agency for 70 % of the funds (central and state grants) released earlier (GoI 2009a: 4). Under the IHSDP, 50 % of the central grant is released to the state nodal agency after verification of the state share, and on signing the tripartite MoA. The second instalment is released based on the progress (GoI 2009c: 4).

Out of the total ACA committed, 629,676 million INR (USD 13.9 billion), 392,902.9 million INR (USD 8.7 billion) or 62 % has been released to the respective states/ULBs as of March 2012.¹⁰ Table 13.3 depicts the same pattern as Table 13.2 where a larger proportion of the central share was released to the big city UIG and BSUP schemes. In Tamil Nadu, 70 % of the total central share was released to the UIG and BSUP cities of Chennai, Coimbatore and Madurai, whereas only 30 % of the central share was released to the remaining small and medium towns, a ratio similar to that calculated for the committed funds. Similarly, in Karnataka, 64 % of the total central share was released to the UIG and BSUP cities of Bangalore and Mysore, whereas the remaining 36 % of central assistance was released to small and medium towns. For the ten major states, 67 % of the central assistance was released to the big city UIG and BSUP schemes, whereas 33 % of the total central share was released to the remaining small and medium towns under the UIDSSMT and IHSDP. The scenario is the same with regard to other states as well, where 59 % of the central share was released to the big city UIG and BSUP schemes which account for 6 % of the total urban population, whereas only 41 % of the total central share was released to the remaining small and medium towns under the UIDSSMT and IHSDP which account for 15 % of the total urban population.

However, in a few states such as Goa, Bihar, Himachal Pradesh, Kerala, Punjab, Rajasthan and Tripura, 62 % of the total central share was released to the UIDSSMT and IHSDP, as they account for 11 % of the total urban population, as compared to the cities under UIG and BSUP which received 32 % of the total central share released, as they account for only 3 % of the total urban population of India. One of the reasons for this could be that central assistance under the UIDSSMT and IHSDP is released in two instalments (of 50 % each) whereas under the UIG and BSUP schemes it is released in four instalments (of 25 % each).

Nonetheless, under the JNNURM, for the whole of India, 66 % of the total central share (i.e. 44 and 22 % under UIG and BSUP, respectively) was released to the big city UIG and BSUP schemes, even though these schemes cover only a few big cities in these states that account for only 42 % of the total urban population, whereas 34 % of the total central share (i.e. 22 and 12 % under UIDSSMT and IHSDP, respectively) was released to the small and medium town UIDSSMT and IHSDP which cater to the remaining 58 % of the total urban population. In other words, there is a very similar pattern in the amounts released when compared to the committed amount. It is now important to turn towards an examination of the big city UIG and BSUP schemes to disaggregate our analysis of the JNNURM at the city size level.

¹⁰JNNURM database, as on March 2012.

Table 13.3 Central share released for some major states (INR in millions)

State (% of total urban population)	UIG	UIDSSMT	BSUP	IHSDP	Total
Maharashtra	39,588.1	18,581.3	17,494.7	6448.6	82,112.7
(14 %)	(48 %)	(23 %)	(21 %)	(8 %)	(100 %)
Uttar Pradesh	20,476.8	8421.6	8234.8	6822.8	43,956.0
(12 %)	(47 %)	(19 %)	(19 %)	(16 %)	(100 %)
Tamil Nadu	14,116.9	5669.0	6493.6	3254.8	29,534.3
(10 %)	(48 %)	(19 %)	(22 %)	(11 %)	(100 %)
West Bengal	10,942.7	3189.1	10,004.6	6462.5	30,598.9
(8 %)	(36 %)	(10 %)	(33 %)	(21 %)	(100 %)
Andhra Pradesh	15,245.4	19,519.3	12,876.0	5579.1	53,219.8
(7 %)	(29 %)	(37 %)	(24 %)	(10 %)	(100 %)
Gujarat	18,371.7	3286.7	6801.0	1185.0	29,644.3
(7 %)	(62 %)	(11 %)	(23 %)	(4 %)	(100 %)
Karnataka	9528.1	4893.1	3167.3	2186.1	19,774.7
(6 %)	(48 %)	(25 %)	(16 %)	(11 %)	(100 %)
Madhya Pradesh	6688.0	5459.5	2264.8	1339.9	15,752.3
(6 %)	(42 %)	(35 %)	(14 %)	(9 %)	(100 %)
Delhi	6991.6	–	4404.2	–	11,395.8
(5 %)	(61 %)		(39 %)		(100 %)
Rajasthan	4249.3	2842.2	854.6	3017.3	10,963.4
(5 %)	(39 %)	(26 %)	(8 %)	(28 %)	(100 %)
Sub-total	146,198.7	71,861.9	72,595.6	36,296.1	326,952.3
(79 %)	(45 %)	(22 %)	(22 %)	(11 %)	(100 %)
Others	25,680.3	15,291.8	12,985.7	11,992.8	65,950.6
(21 %)	(39 %)	(23 %)	(20 %)	(18 %)	(100 %)
Total	171,879.0	87,153.7	85,581.3	48,288.9	392,902.9
(100 %)	(44 %)	(22 %)	(22 %)	(12 %)	(100 %)

Source Census 2001; JNNURM database as on March 2012

Note The figure below represents the percentage of total central share released

13.4 Looking at the Two Big City Schemes: UIG and BSUP

Table 13.6 in the Appendix shows that cities with a 4 million-plus population contribute 54 % of the total population of the 65 cities under the UIG and BSUP schemes and account for 36 and 42 % of the total central share committed under the UIG and BSUP schemes, respectively. Million-plus cities contribute 36 % of the total population of the 65 cities defined as UIG and BSUP cities and account for 42 and 34 % of central assistance committed under the UIG and BSUP schemes, respectively. In contrast, cities with a population lower than one million that contribute 10 % of the total population of the 65 cities under the UIG and BSUP

schemes, account for 22 and 24 % of central assistance committed under the UIG and BSUP schemes, respectively. As all the three categories of cities consist of large cities, all three categories have also received a considerably larger share of central assistance from the UIG and BSUP schemes. However, under the UIG and BSUP schemes, a larger share of central assistance has been committed to the metropolitan cities such as Mumbai, Bangalore, Hyderabad, Chennai, Kolkata, Delhi and Ahmedabad as compared to the remaining cities that come under the UIG and BSUP criteria. These seven metropolitan cities account for 36 and 42 % of the total central assistance committed under the UIG and BSUP schemes, respectively. The total central share committed for these cities under the UIG and BSUP schemes is 168,032.1 million INR (USD 3.7 million), which is far more than the total central share committed for the UIDSSMT and IHSDP for small towns, that is 113,089.8 INR (USD 2.5 billion) and 76,840.2 INR (USD 1.7 billion) million, respectively. Delhi alone accounts for 9 and 10 % of the total central share committed under the UIG and BSUP schemes, whereas north eastern cities such as Agartala, Aizawl, Gangtok, Guwahati, Imphal, Itanagar, Kohima and Shillong together account for only 4 and 3 % of the total central share committed under the UIG and BSUP schemes, respectively.

Among the large megacities, Delhi, being the capital city, has always received considerable attention. Even under the UIG scheme, Delhi accounts for the highest central assistance committed of 25,190 million INR (USD 0.6 billion).¹¹ Whether the capital city requires this kind of infrastructure investment when there are less developed cities in need of proper infrastructure is to be questioned. In December 2009, the Cabinet Committee on Infrastructure (CCI) approved 24 ongoing and fresh projects in Delhi with an estimated cost of 503,390 million INR (USD 11.1 billion). Generally, such projects are approved by the Ministry of Urban Development. However, in this case the Cabinet Committee on Infrastructure had to consider and accord sanctions, as the government of Delhi had to be exempted from some of the reforms and procedural requirements, in view of the fact that land as a subject does not fall within the government of Delhi's jurisdiction and because of the urgency created by the Commonwealth Games in 2010.¹²

Does India's urban future consist only of these metropolitan cities? Even though smaller cities such as Patna, Bhubaneswar, Raipur, Guwahati and Agartala are not as populous, the need to strengthen their infrastructure to reinforce and improve their governance is critical. The metropolitan cities account for a considerable proportion of the urban population, although the smaller towns contribute a much

¹¹JNNURM database as on March 2012.

¹²Government of India, Press Information Bureau "Cabinet Approves Fresh Projects for Delhi under JNNURM", December 11, 2009.

larger share of urban population as is discussed in detail in the following section. In addition, the prominent cities have had access to a variety of private sector investments over the years. The bigger cities continue to attract central funds as their problems are more visible, but the smaller urban centres continue to be neglected. Local urban bodies in small towns depend almost entirely on grants from the state government or centrally sponsored schemes to finance even the delivery of basic services (Sharma 2012).

The following section reviews the small town schemes under the UIDSSMT and IHSDP, arguing that, even within these schemes, a greater share of central assistance has been committed to the larger of the small and medium towns.

13.5 Focus on the Allocation of Resources for Small Towns

The JNNURM also includes small and medium towns under its sub-missions on UIDSSMT and IHSDP. However, the UIDSSMT and IHSDP account for only 18 and 12 %, respectively, of the total central share committed under the JNNURM. In contrast, the 65 big cities under the UIG and BSUP schemes account for 70 % of the total central share committed under the JNNURM. It is clear that the mission targets the big cities and the remaining smaller and medium towns only receive limited attention in this mission aimed at large-scale urban development. Nevertheless, it is important to understand in greater detail how the money allocated to small towns was shared among them.

Table 13.4 shows that, so far, the IHSDP has covered 903 towns which represent 25 % of the total urban population and, the UIDSSMT had covered 671 towns which represent 20 % of the total urban population. In all, 3734 statutory towns, excluding the 65 mission cities, are applicable for UIDSSMT and IHSDP funding and they account for 49 % of the total urban population. Together, the UIDSSMT and IHSDP have covered 1274 of these towns which represent 32 % of the total urban population so far. However, Census towns that are not eligible for the JNNURM, as they are still under rural panchayat administration, account for a considerable 7 % of the total urban population. Thus Table 13.4 shows that a larger share of towns and urban population exists outside the purview of the big city UIG and BSUP schemes and hence need greater central assistance and policy attention to survive.

As is the case of the UIG and BSUP schemes, under the IHSDP and UIDSSMT as well, the larger and more prominent class 1 (100,000 and above population) cities have received a larger share of central assistance. Table 13.5 shows that under the UIDSSMT and IHSDP, respectively 46 and 37 % of the total central assistance has been committed to the class 1 towns, 46 and 49 % of the total central share has been committed to class 2 and 3 towns whereas 9 and 15 % of the total central assistance has been committed to class 4–6 towns, but of these, the smaller class 5

Table 13.4 Class-wise distribution of towns and population

Scheme/towns	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Grand total
UIDSSMT	52 (4 %)	66 (2 %)	117 (1 %)	95 (0 %)	29 (0 %)	12 (0 %)	371 (7 %)
IHSDP	84 (6 %)	103 (3 %)	196 (2 %)	143 (1 %)	58 (0 %)	19 (0 %)	603 (12 %)
Towns included in both the UIDSSMT and IHSDP ^a	90 (9 %)	98 (2 %)	86 (1 %)	23 (0 %)	2 (0 %)	1 (0 %)	300 (13 %)
Total (UIDSSMT + IHSDP)	226 (19 %)	267 (7 %)	399 (5 %)	261 (1 %)	89 (0 %)	32 (0 %)	1274 (32 %)
Statutory towns	370 (18 %)	466 (11 %)	1158 (12 %)	1115 (6 %)	502 (1 %)	123 (0 %)	3734 (49 %)
Census towns	10 (1 %)	29 (0 %)	226 (2 %)	448 (2 %)	540 (1 %)	109 (0 %)	1362 (7 %)

Source UIDSSMT and IHSDP database, as on March 2012; Census 2001

Note Class 1: 100,000 and above population, class 2: 50,000–99,999, class 3: 20,000–49,999, class 5: 5000–9999 and class 6: less than 5000. The first number in the cell indicates the number of towns and the percentage in parentheses represents the percentage of total urban population. Statutory towns exclude the 65 cities under the UIG and BSUP schemes. Some Census towns that were transformed into urban local bodies by 2005 have been included under the UIDSSMT and IHSDP. Siddharthnagar town in Uttar Pradesh and Junardeo town in Madhya Pradesh could not be located under UIDSSMT. VAMBAY schemes under the IHSDP in Kolkata, Chennai, Manipur, Jammu, Srinagar, Rajkot and Vadodara and Kohima have not been included. Saona town in Uttar Pradesh could not be located under the IHSDP

^aSilvassa and Amla have been included together under the UIDSSMT whereas only Silvassa has been included under the IHSDP

and class 6 towns seem to be the most neglected, with only 2 and 5 % of the total central assistance committed under the UIDSSMT and IHSDP, respectively. Tables 13.7, 13.8, 13.9 and 13.10 in the Appendix provide a detailed state-wide and class-wise distribution of towns and the central assistance committed and released.

Tables 13.7 and 13.8 in the Appendix show that by March 2012, under the UIDSSMT, 46 % of the central share had been committed and released to class 1 towns which account for 21 % of the total towns covered by the UIDSSMT, whereas 26 % of central assistance had been committed and released to the class 2 towns which account for 24 % of the total number of towns covered under this scheme (2012). However a much smaller share of central assistance had been committed and released to the remaining class 3–6 towns. Around 25 % of the central share had been committed and released to class 3 and class 4 towns which account for 48 % of the total towns covered so far (2012), but for the same period, only about 2 % of the central share was committed and had been released to class 5 and class 6 towns which account for 7 % of the total number of towns covered. Tables 13.9 and 13.10 in the Appendix show that, under the IHSDP, 37 % of the central share had been committed and released to class 1 towns which constitute around 19 % of the total towns covered under the IHSDP, whereas 22 % of the total central assistance had been committed and 25 % of the total central share had been released to class 2 towns which account for 22 % of the total towns covered under the IHSDP. In

Table 13.5 Class-wise distribution of central share committed and released under the UIDSSMT and IHSDP (INR in millions)

Scheme/towns	ACA	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Total
UIDSSMT	Committed	51,440 (45 %)	29,010.2 (26 %)	22,004.4 (19 %)	7894.4 (7 %)	1587.2 (1 %)	1153.6 (1 %)	113,089.8 (100 %)
	Released	39,939.6 (46 %)	23,036.5 (26 %)	16,168.8 (19 %)	5865.2 (7 %)	1376.5 (2 %)	767.1 (1 %)	87,153.7 (100 %)
IHSDP	Committed	28,105.9 (37 %)	17,094.7 (22 %)	20,412.8 (27 %)	7809.1 (10 %)	2774.6 (4 %)	643.1 (1 %)	76,840.2 (100 %)
	Released	17,773.6 (37 %)	12,215.4 (25 %)	11,348.8 (24 %)	4688.6 (10 %)	1864.5 (4 %)	398 (1 %)	48,288.9 (100 %)

Source UIDSSMT and IHSDP database, as on March 2012

Note The first number in the cell indicates the central share committed and released and the percentage in parentheses represents the percentage of the total central share committed and released under the IHSDP and UIDSSMT. Siddharthnagar town in Uttar Pradesh and Junardeo town in Madhya Pradesh could not be located under the UIDSSMT. VAMBAY schemes under the IHSDP in Kolkata, Chennai, Manipur, Jammu, Srinagar, Rajkot, Vadodara and Kohima have not been included. Saona town in Uttar Pradesh could not be located under the IHSDP

Class 1: 100,000 and above population, class 2: 50,000–99,999, class 3: 20,000–49,999, class 5: 5000–9999 and class 6: less than 5000

contrast, 37 % of the central share had been committed and 33 % of the total central share had been released to class 3 and class 4 towns which constitute 50 % of the total towns covered under the IHSDP. However by 2012 only 4 % of the total central share had been committed and only 5 % of had been released to class 5 and class 6 towns which account for 9 % of the total towns covered under the IHSDP. The analysis clearly shows that the class 1 and 2 towns have received a larger share of central assistance even though a larger number of class 3 towns have been covered under the two schemes. In addition, the class 5 and 6 towns have received the least amount of central assistance when the smallest should have gained more. A more equitable distribution of central assistance across towns would have helped the smallest of the small towns to improve their quality of life.

13.5.1 Larger Share of Urban Population in Small Towns

The United Nations Population Fund identifies that 52 % of the world's urban population continues to live in settlements of less than 500,000 people and indicates that smaller cities have always been home to over half of the total urban population during recent decades (UNFPA 2007). Figure 13.1 indicates that the scenario is no different in India where the 65 cities under the UIG and BSUP schemes account for 70 % of the total central share committed under the JNNURM, with 42 % of the total urban population residing in these cities, whereas only 30 % of the total central share has been committed to the remaining small and medium towns that account for 58 % of the total urban population as of 2001. Even outside the 65 cities, class 1–3 towns account for 87 % of the total central assistance committed even though these towns constitute 79 % of the total urban population. Class 4–6 towns account for 11 % of the total central assistance committed even though these towns constitute 12 % of the total urban population. Census towns account for a meagre 2 % of the total central assistance committed even though they constitute 9 % of the total urban population. If access to JNNURM funds is indeed based on the size of the urban population, then the small and medium towns should have benefitted more from the mission.

13.5.2 Census Towns

Even though Census towns are not included in the mission, they seem to have evolved into an important element of urban growth. Urban areas in India consist of three types—statutory towns, Census towns and outgrowths. Statutory towns are all places that have an elected local body such as municipality, corporation, cantonment board, notified town area committee etc. Census towns are places that satisfy the following criteria: (1) a minimum population of 5000 (2) at least 75 % of the male main working population engaged in non-agricultural pursuits, and (3) a

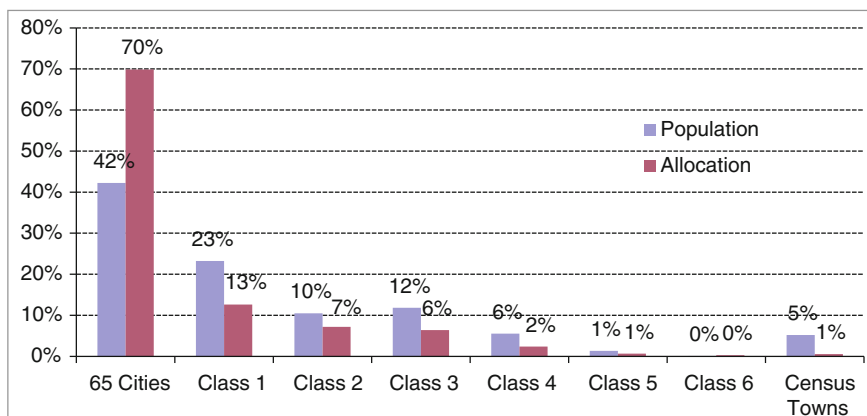


Fig. 13.1 Share of population and central share committed under JNNURM. *Source* JNNURM database as on March 2012; Census 2001. *Note* Allocations include UIG, BSUP, UIDSSMT and IHSDP. Class 1: 100,000 and above population, class 2: 50,000–99,999, class 3: 20,000–49,999, class 5: 5000–9999 and class 6: less than 5000. For the 65 big cities, JNNURM covers the Urban Agglomeration (UA) population. UA is a continuous urban spread constituting a town and its adjoining urban outgrowths (OGs) or two or more physically contiguous towns together and any adjoining urban outgrowths of such towns. Some of the 65 UAs covered under JNNURM may include Census towns as well

density of population of at least 400 per km². An outgrowth is a viable unit, such as a village or part of a village contiguous to a statutory town, which possesses urban features in terms of infrastructure and amenities. All statutory towns are supposed to be included under the JNNURM as they have an elected local body in place which is compulsory in order to access JNNURM funds. However, among the smaller (non-class 1) towns, a large component—the Census town—is ignored and cannot access the JNNURM funds because they remain under rural panchayat administration. The number of Census towns increased from 1362 in 2001 to 3894 in 2011, whereas the number of statutory towns increased marginally from 3799 in 2001 to 4041 in 2011. The population of these Census towns has more than doubled between the 2001 and 2011 Censuses and their share of the population of non-class 1 towns has grown from 18 % in 2001 to 32 % in 2011. Census towns account for almost 30 % of the urban growth in the last decade (Pradhan 2013). As a result, a large, growing and substantial share of the small town population is being denied access to the JNNURM programme.

The following section discusses the rise in urban poverty, lack of capacity building and poor performance in the delivery of basic services in small towns in India, arguing that central funds could have been more usefully invested in these smaller towns than in big cities.

13.6 Self-governing Cities

The JNNURM was launched to enable self-governing cities and provided an incentive for the implementation of the 74th Constitutional Amendment. It strengthened the commitment towards devolution of responsibilities at the local level, as access to Mission funds is linked to the achievement of compulsory urban reforms to create greater autonomy among municipal governments. One of the mandatory reforms under the JNNURM is the implementation of the 74th Constitutional Amendment. The JNNURM's funding pattern was also supposed to encourage the notion of self-governing cities further by attributing a share of the project cost to the urban local bodies. Some of the ULB reforms such as E-Governance and property tax reforms are also mandatory under the JNNURM. However, even though the 74th Constitutional Amendment was successful in creating a third tier of governance, municipalities in smaller towns are unable to perform most of the specified functions and their performance is dismal compared to municipal corporations in big cities. Municipal corporations in big cities perform better and have a stronger revenue structure as compared to the smaller municipalities. The 74th Constitutional Amendment Act endowed ULBs of all sizes with a single structure, ignoring the several administrative constraints faced by the smaller ULBs. These financial and administrative constraints make it difficult for the smaller local bodies to carry out all their functions successfully.

13.6.1 Local Capacity Building

The then Prime Minister, ManMohan Singh, in his speech at the launch of the JNNURM in 2005 mentioned that *"The JNNURM is a city-based programme. It will seek to build the capacity of our cities for management. Cities have the financial muscle and the technical resources to rebuild themselves"*.¹³ However municipalities in smaller towns find it difficult to contribute even their share of the cost for JNNURM projects and hence depend entirely on the state or parastatal agencies. They lack the requisite staff and vision to implement JNNURM projects. Many lack technical skills and orientation, at the local level towards developmental works. Lack of project management affects the delivery of basic services in these small towns as infrastructure projects fail to achieve the desired goals. In the case of Asansol urban area¹⁴ in West Bengal, under the UIG scheme the ULB share has been borne by the Asansol Durgapur Development Authority (ADDA). This is because under the JNNURM, parastatals have been equated with ULBs. However,

¹³Prime Minister's speech at the launch of JNNURM, 3 Dec 2005.

¹⁴Asansol and Durgapur were linked to form an Asansol Urban Area including two municipal corporations (Asansol and Durgapur) and three Municipalities (Raniganj, Kulti and Jamuria) according to the Asansol CDP (May, 2006).

such ULBs could have been enabled to shoulder more responsibilities without depending on the parastatal agencies. The funding pattern under the JNNURM provides that cities with million-plus but less than four million population receive 50 % central share/grant, 20 % state share and 30 % ULB share. However, the funding pattern for the JNNURM in West Bengal in 2006/2007 suggested that, in the case of water supply projects, the costs would be shared between the centre and the state and there would not be an ULB share. One of the main reasons for such a division could be the inadequacy of the ULB. However, the funding pattern was later revised by the state. The ULB/Development Authority share was reinstated, representing 15 % of the total project cost. In the case of Asansol regarding the 15 %, the ULB share represents only 5 %, whereas ADDA's share is 10 % in projects sanctioned after 2009/2010. According to the UIG scheme database, as of March 2012, smaller cities such as Patna, Shimla and Nainital had not released their ULB share into the project account.

De Bercegol (2014) examines four small towns in Uttar Pradesh, of similar demographic size, (20,000 inhabitants as of 2001) and notes that the internal revenue of municipalities has remained very small despite the 74th Constitutional Amendment. Mathur and Thakur (2004) argue that the average internal revenue of municipalities in India stood at 482 INR per inhabitant in 2001/2002. De Bercegol notes that this figure was 79.5 INR in Uttar Pradesh and “struggled” to reach 60 INR in the small towns studied. He further notes that collection of taxes itself is challenging in small towns, as the municipality does not really have the resources available to collect local taxes.

13.6.2 Delivery of Basic Services

Poor financial health and lack of capacity at the local level also leads to poor performance in the delivery of basic services. Sharma (2012) highlights the limitations of the existing system of governance in small towns after examining the case of seven small towns in north India—Madhubani, Jhunjhunu, Sehore, Janjgir and Rajnandgaon in Chhattisgarh, Narnaul in Haryana and Mirzapur in Uttar Pradesh—and she argues that municipal bodies in small towns are caught in a vicious cycle of low capability resulting in low collection of revenue, leading to poor performance in the delivery of basic services. Infrastructure provisions such as water supply, wastewater management and solid waste management are much better in metropolitan cities. The coverage of population with basic services is higher for metropolitan cities than other urban centres because of the large concentration of population in these cities (Raghupathi 2005). Further, declining governmental investment in infrastructure and basic services in smaller towns over the years and their failure to attract private or institutional investment has increased the disparity within the urban economy (Kundu 2003). De Bercegol and Gowda (2012)

examined four small towns in Uttar Pradesh, of a similar demographic size (around 20,000 inhabitants in 2001), and noted that small towns are poorly endowed to support new tasks, they have weak municipal resources, both financial and technical and are unable to support a complex management system or to implement an improvement of local public services. They further argue (De Bercegol and Gowda 2012: 5) that *“the water distribution system suffers from inadequate maintenance, which causes deterioration of the network and users’ disaffection (only 18–45 % of the population is connected); the establishment of an unplanned system of nalas, necessary for sewage disposal, remains insufficient to clean the streets (one of the main nuisances according to the population); and more broadly, all development work, mediocre as it is, is handicapped by a lack of expertise”*.

Thus, although the institutions in the big cities are functional, municipalities in smaller towns are still a work in progress. The United Nations Population Fund (2007: 10) states that *“Smaller cities—especially those under 100,000 inhabitants—are notably underserved in housing, transportation, piped water, waste disposal and other services. In many cases, poor urban people are no better off than poor rural people”*. The Planning Commission (2011: 108) also rightly notes that *“A holistic approach to spatial development is needed if the country wishes to achieve more inclusive growth”*.

13.6.3 Urban Poverty

As small towns receive a much smaller share of central assistance, their poor financial health contributes to the increase in the incidence of urban poverty. Kundu and Sarangi (2007) observe that large cities exhibit lower poverty ratios when compared to the lower order towns. The incidence of poverty seems to be higher in small towns as a larger section of the population resides in these towns. Small and medium sized towns contain about 72.6 % of the urban population and, because they are poorer, they are home to 84.5 % of urban poor (Lanjouw and Murgai 2011). As a much smaller share of central assistance is given to the small towns, the quality of employment, productivity and education provided by small towns is much lower compared to the big cities. Ferré et al. (2010) examined the case of eight developing countries, namely Albania, Brazil, Kazakhstan, Kenya, Mexico, Morocco, Thailand and Sri Lanka, and found that, in all cases, poverty is lowest and service availability is greatest in the largest cities.

13.7 Rural–Urban Linkage

Urban development schemes in India favour the big metropolitan cities with large amounts of central investments, whereas the small cities get only a small fraction,

which is not enough to realise their potential. Small towns have long been neglected and hence have stagnated to the point where they seem more rural in character than urban. In the process, many benefits of small town growth have also been neglected. Increasing literature points to the possible link between small town development and rural development and rural poverty reduction. Many scholars argue that the development of small towns can serve as a link that can help rural areas transform into urban zones, as developing small towns help the surrounding rural areas access employment and other services in these small towns and thus help in rural poverty reduction. Because a larger percentage, that is 58 % of the total urban population resides outside the 65 big cities that have access to the UIG and BSUP schemes, villages surrounding these small and medium sized towns would be able to access employment in these towns and build trade and commerce links and eventually transform into urban areas. Krishna and Bajpai (2011) examine the case of “distance from town” that has affected villages located more than 5 km away from the nearest town. They find that average per capita income has grown rapidly in villages that encircle towns within a radial distance of 5 km, whereas real per capita income has fallen in villages located beyond the 5-km limit. They further note that there is a decline in rural incomes (in absolute as well as relative terms) with the fewest gains being made by people living the furthest away from India’s growing towns; this means that the village residents who live closer to towns can more easily gain from the lineal patterns of economic development, their lands grow in value and their labour is in greater demand.

Developing small towns can help neighbouring villages to access urban amenities. Rondinelli (1983) argues that these towns serve as the links in the system of distribution and exchange between agricultural areas and urban centres. He further notes that (Rondinelli 1983: 379) “*towns and small cities have helped to transform the economies of rural areas by providing access to services, facilities, and nonagricultural employment opportunities and by providing incentives for the commercialization of agriculture*”. Himanshu et al. (2011) find that small towns facilitate rural non-farming activities and therefore have a role in urban and rural poverty reduction. They examine the case of Palanpur village in Moradabad and argue that (Himanshu et al. 2011: 38) “*a key feature of non-farm diversification in Palanpur is that it takes the form of many villagers commuting on a daily basis to nearby towns to seek casual, regular and self-employment opportunities in those localities*”. They further argue that it is in such small towns and cities that the bulk of the urban poor are concentrated and these towns and cities are also more tightly connected to surrounding rural areas. Further, Denis et al. (2012) argue that many of the large towns today were relatively small in the past, which signifies the vitality of some of these small towns and cities. Pradhan (2013) finds that 37.2 % of the new Census towns are in the proximity of class 1 towns, many of them are not around the megacities and there are many more that are widely spread across the

countryside. This further validates the need to develop small towns, as their growth is likely to benefit and spill over to adjoining rural areas and help in the reduction of rural poverty by providing access to employment opportunities in these small towns. Policy makers need to focus on these benefits of small town development instead of overlooking their potential by allocating a much smaller share of central investments to these towns, something that is straining their very existence.

13.8 Conclusion

The challenges of urbanisation can be met by building inclusive cities, improving urban governance and funding, planning and promoting capacity building at the local level. Urban local bodies need to be strengthened with clear functions, independent financial resources and autonomy to take decisions on investment and service delivery. The central government has to take the lead in financing, facilitating and encouraging the involvement of state governments and ULBs in the urbanisation process. Allocating adequate investments to smaller towns that are unable to generate independent revenue and lack even the delivery of basic services would be the first step in this direction.

Inter-city spatial inequality can be dealt with by creating greater equity in the provision of central assistance. Small and medium towns should receive a larger share of assistance from the central government as most of the inadequacies faced by the smaller ULBs are a consequence of the inequality in the distribution of central assistance across cities. If access to JNNURM funds is indeed based on the size of the urban population, then the smaller towns should have benefitted more from the mission. Small towns not only comprise a larger share of urban population, but also depend almost entirely on central and regional investments for better governance and infrastructure provisions. The provision of central assistance therefore should not only depend on the size of the cities but also be need-based, as there are numerous small towns that comprise a considerable proportion of the urban population but which have historically been in a disadvantaged position and have not been provided with sufficient investments to redeem themselves.

What seems to be forgotten is that urban Indians also live in small towns which are witnessing rapid population growth and which are growing because of the expansion of public and private sector industries. However, this growth will be limited if the central government does not allocate sufficient resources to these towns. The growth in the number of towns has not been accompanied by the provision of basic services, a result of which is that most small towns appear more rural in character than urban, although their economy is non-agricultural. Policy makers need to focus on reducing the strain on these small and medium towns and on maximising the opportunities they offer. In a country such as India, which has a

significantly higher share of rural population, central investments should be directed to these smaller towns to enable them to transform into key urban centres, as, even more than big metropolitan cities, a well spread network of cities enables the rural–urban transformation of people more effectively.

Appendix

Table 13.6 City-wise central share committed and released under the UIG and BSUP schemes (INR in millions)

City	% of total population of 65 cities/UAs (%)	UIG		BSUP	
		ACA committed	ACA released	ACA committed	ACA released
<i>Megacities/UAs</i>	53.85	104,214.5 (36 %)	56,630.5 (33 %)	63,817.6 (42 %)	34,530.3 (40 %)
Greater Mumbai	13.61	18,817.3	14,867.4	12,133.6	7405.7
Kolkata	10.93	22,113.8	9433.0	17,706.8	8288.3
Delhi	10.66	25,189.8	6991.6	14,727.2	4404.2
Chennai	5.43	12,944.1	8200.0	6004.1	3644.7
Hyderabad	4.75	8802.6	5529.1	8071.1	6512.9
Bangalore	4.72	7980.6	5076.5	2412.7	1731.0
Ahmedabad	3.75	8366.3	6532.8	2762.1	2543.5
<i>Million Plus Cities/UAs</i>	35.80	121,799.6 (42 %)	82,566.1 (48 %)	51,236.9 (34 %)	32,663.1 (38 %)
Pune	3.11	15,537.9	13,219.6	5832.0	4139.1
Surat	2.33	9091.4	7229.8	3324.8	2814.3
Kanpur	2.25	5984.3	4759.4	2115.1	1553.5
Jaipur	1.92	3610.4	1831.9	881.1	431.8
Lucknow	1.86	8080.6	6741.3	1725.7	935.4
Nagpur	1.76	7498.5	3572.7	3196.1	1111.2
Patna	1.41	2911.6	726.9	2740.5	685.1
Indore	1.26	4075.9	2094.9	750.3	547.2
Vadodara	1.23	3764.8	2876.3	2505.1	1083.9
Coimbatore	1.21	4131.0	2649.4	2656.2	1377.6
Bhopal	1.21	5155.3	3266.0	2122.8	1431.3
Ludhiana	1.16	1207.0	301.7	523.8	249.5

(continued)

Table 13.6 (continued)

City	% of total population of 65 cities/UAs (%)	UIG		BSUP	
		ACA committed	ACA released	ACA committed	ACA released
Kochi	1.12	2546.1	1210.6	678.3	503.0
Visakhapatnam	1.11	7765.5	6380.1	3193.7	3159.6
Agra	1.10	1575.8	1429.1	2804.6	1895.4
Varanasi	1.00	4632.7	2817.4	1138.6	720.2
Madurai	1.00	4192.6	3267.5	1816.4	1471.3
Meerut	0.96	2378.0	1662.0	1804.9	1768.9
Nashik	0.95	3995.8	2704.7	1287.1	827.6
Jamshedpur	0.91	166.8	41.7	719.8	179.9
Jabalpur	0.91	2446.9	884.7	436.9	186.8
Asansol	0.88	3647.5	1509.7	2869.2	1716.3
Dhanbad	0.88	2108.5	801.5	561.6	140.4
Faridabad	0.87	3474.1	2395.7	311.8	311.8
Allahabad	0.86	3087.6	2362.8	316.6	207.7
Vijayawada	0.86	3890.5	2983.1	3666.4	2840.6
Amritsar	0.83	2420.0	1165.6	319.8	14.4
Rajkot	0.83	2422.6	1680.1	937.7	359.3
<i>Cities/UAs with less than one million population</i>	<i>10.35</i>	<i>62,810.3</i> <i>(22 %)</i>	<i>32,682.4</i> <i>(19 %)</i>	<i>35,867.0</i> <i>(24 %)</i>	<i>18,387.9</i> <i>(21 %)</i>
Srinagar	0.82	3531.6	1711.7	930.5	232.6
Thiruvananthapuram	0.74	3909.4	1092.5	1657.3	825.3
Ranchi	0.71	2718.3	1025.6	2006.0	501.5
Guwahati	0.68	2845.0	2481.3	976.0	488.0
Chandigarh	0.67	1529.6	268.5	4461.3	3742.8
Mysore	0.66	6559.5	4451.7	1713.6	1436.3
Raipur	0.58	2429.1	2186.2	5364.2	1692.9
Bhubaneswar	0.54	4586.1	1846.4	461.6	292.0
Jammu	0.51	1346.0	465.2	414.0	238.9
Dehradun	0.44	1877.6	1195.6	480.4	131.3
Pondicherry	0.42	2024.5	725.0	832.0	229.3
Ajmer-Pushkar	0.42	4045.2	2417.5	845.7	422.8
Ujjain	0.36	914.0	442.5	132.6	99.5
Nanded	0.36	5862.2	5223.7	7750.7	4011.1
Bodhgaya	0.33	1036.0	259.0	387.1	96.8
Mathura	0.27	1226.9	704.8	1584.9	1153.7
Tirupati	0.25	679.8	353.1	1157.5	362.9
Shillong	0.22	1961.6	1220.0	403.5	261.2

(continued)

Table 13.6 (continued)

City	% of total population of 65 cities/UAs (%)	UIG		BSUP	
		ACA committed	ACA released	ACA committed	ACA released
Imphal	0.21	1385.6	554.2	439.1	329.3
Aizawl	0.19	1149.5	75.7	801.1	400.6
Haridwar	0.18	933.4	538.6	29.0	21.7
Porbandar	0.16	1104.9	52.6	624.9	0.0
Agartala	0.16	1604.3	641.7	139.6	139.6
Puri	0.13	1785.2	446.3	80.2	20.0
Shimla	0.12	1260.0	326.3	182.7	73.7
Panaji	0.08	598.7	7.2	46.0	11.5
Kohima	0.06	1043.5	351.8	1056.0	792.0
Nainital	0.03	369.6	133.5	74.3	36.0
Itanagar	0.03	1624.3	1082.7	544.6	126.7
Gangtok	0.02	868.8	401.4	290.6	217.9
Grand total	100.00	288,824.4	171,879.0	150,921.5	85,581.3
		(100 %)	(100 %)	(100 %)	(100 %)

Source JNNURM database (as on March 2012); Census 2001

Table 13.7 Class-wise distribution of towns and central share committed under the UIDSSMT (INR in millions)

State	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Total
A and I Islands		44.7 (1)					44.7 (1)
Andhra Pradesh	8294.2 (21)	8634.6 (33)	2992.4 (15)				19,921.3 (69)
Arunachal Pradesh			41.5 (1)	198.7 (3)	93 (3)	21 (2)	354.2 (9)
Assam	145.7 (1)	64.8 (1)	747.6 (8)	458.8 (8)	393.6 (7)	84.7 (2)	1895.3 (27)
Bihar	868.5 (2)		1138.7 (8)	104.7 (1)			2112 (11)
Chattisgarh	1311.2 (2)		36.1 (1)				1347.3 (3)
D and N Haveli			213 (1)				213 (1)
Daman and Diu			75.4 (1)				75.4 (1)
Goa				183.2 (2)	46.8 (1)		230 (3)
Gujarat	1013.1 (8)	1481.6 (19)	738.6 (17)	286.3 (8)			3519.6 (52)
Haryana	1504.2 (5)	65 (1)	56.7 (1)				1626 (7)
Himachal Pradesh			104.4 (1)	578.7 (2)		331.9 (1)	1015 (4)
J and K		1815.8 (5)	266.6 (1)	1523.7 (6)		255 (1)	3861.1 (13)
Jharkhand	46.4 (1)	960.7 (3)	36.5 (1)				1043.6 (5)

(continued)

Table 13.7 (continued)

State	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Total
Karnataka	1340.4 (3)	561.5 (3)	1741.1 (12)	1147.8 (10)	720.8 (2)		5511.6 (30)
Kerala	783.2 (1)	1227.3 (10)	1442.7 (11)				3453.2 (22)
Madhya Pradesh	4958 (13)	1792.4 (11)	2910.7 (17)	202.3 (4)	40.1 (2)	86 (1)	9989.5 (48)
Maharashtra	13,669.3 (19)	5006.3 (24)	3133.2 (33)	534.9 (10)			22,343.8 (86)
Manipur			246.2 (2)	268.9 (2)	51.8 (1)		567 (5)
Meghalaya		75 (1)		54 (1)			129 (2)
Mizoram			78.1 (1)	61.9 (1)			140 (2)
Nagaland				228.3 (2)			228.3 (2)
Orissa	901.1 (3)	576.1 (3)	431.8 (7)	163.9 (1)			2072.8 (14)
Pondicherry			313.4 (1)				313.4 (1)
Punjab	2119.2 (4)	620 (5)	335.8 (1)	103.5 (4)			3178.5 (14)
Rajasthan	3265.5 (11)	779.5 (5)	833.9 (16)	27.6 (3)			4906.5 (35)
Sikkim						361.7 (5)	361.7 (5)
Tamil Nadu	834.6 (7)	3037.2 (23)	2051.8 (28)	954.6 (43)	171.1 (14)	13.2 (1)	7062.6 (116)
Tripura			136 (1)	504.1 (2)	69.9 (1)		710 (4)
Uttar Pradesh	8287.3 (31)	843.8 (7)	206.7 (5)	90.3 (2)			9428.2 (45)
Uttarakhand			493.9 (1)				493.9 (1)
West Bengal	2098.2 (10)	1423.8 (9)	1201.3 (11)	218.1 (3)			4941.4 (33)
Total	51,440 (142)	29,010.2 (164)	22,004.4 (203)	7894.4 (118)	1587.2 (31)	1153.6 (13)	113,089.8 (671)

Source UIDSSMT database, as on March 2012; Census 2001

Note The first number in the cell shows the central share committed and the figure in the parentheses represents the number of towns covered as per the 2001 Census. Siddharthnagar town in Uttar Pradesh and Junardeo town in Madhya Pradesh could not be located

Class 1: 100,000 and above population, class 2: 50,000–99,999, class 3: 20,000–49,999, class 5: 5000–9999 and class 6: less than 5000

Table 13.8 Class-wise distribution of towns and central releases under the UIDSSMT (INR in millions)

State	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Total
A and N Islands		22.3 (1)					22.3 (1)
Andhra Pradesh	8275.5 (21)	8297 (33)	2946.8 (15)				19,519.3 (69)
Arunachal Pradesh			41.5 (1)	198.7 (3)	93 (3)	21 (2)	354.2 (9)

(continued)

Table 13.8 (continued)

State	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Total
Assam	74 (1)	32.9 (1)	497.5 (8)	274.3 (8)	316.2 (7)	41.6 (2)	1236.5 (27)
Bihar	434.3 (2)		579.9 (8)	53.3 (1)			1067.4 (11)
Chattisgarh	1311.2 (2)		36.1 (1)				1347.3 (3)
D and N Haveli			74.6 (1)				74.6 (1)
Daman and Diu			3.1 (1)				3.1 (1)
Goa				91.6 (2)	19 (1)		110.6 (3)
Gujarat	1006.9 (8)	1308.8 (19)	706.1 (17)	265 (8)			3286.7 (52)
Haryana	1051 (5)	32.5 (1)	28.4 (1)				1111.9 (7)
Himachal Pradesh			104.4 (1)	319.3 (2)		163.6 (1)	587.3 (4)
J and K		916.3 (5)	135.5 (1)	769.8 (6)		129.6 (1)	1951.2 (13)
Jharkhand	23.6 (1)	486.8 (3)	18.6 (1)				529 (5)
Karnataka	1327 (3)	406.2 (3)	1381 (12)	1092.9 (10)	686.1 (2)		4893.1 (30)
Kerala	398.5 (1)	609.2 (10)	726.4 (11)				1734.1 (22)
Madhya Pradesh	2765 (13)	944.3 (11)	1586 (17)	101.1 (4)	20 (2)	43 (1)	5459.5 (48)
Maharashtra	10,368.9 (19)	4781.6 (24)	3047.4 (33)	383.4 (10)			18,581.3 (86)
Manipur			124.2 (2)	134.5 (2)	25.9 (1)		284.5 (5)
Meghalaya		37.5 (1)		27 (1)			64.5 (2)
Mizoram			39 (1)	30.9 (1)			70 (2)
Nagaland				348.4 (2)			348.4 (2)
Orissa	457.6 (3)	288 (3)	217.3 (7)	81.9 (1)			1044.9 (14)
Puducherry			313.4 (1)				313.4 (1)
Punjab	1264 (4)	310 (5)	167.9 (1)	51.8 (4)			1793.6 (14)
Rajasthan	1879.3 (11)	436.8 (5)	502.6 (16)	23.5 (3)			2842.2 (35)
Sikkim						361.7 (5)	361.7 (5)
Tamil Nadu	572.4 (7)	2368.3 (23)	1652.1 (28)	918.3 (43)	151.2 (14)	6.6 (1)	5668.9 (116)
Tripura			68 (1)	501.1 (2)	65.1 (1)		634.2 (4)
Uttar Pradesh	7283 (31)	842.9 (7)	206.6 (5)	89.1 (2)			8421.6 (45)
Uttarakhand			246.9 (1)				246.9 (1)
West Bengal	1447.6 (10)	915 (9)	717.4 (11)	109.1 (3)			3189.1 (33)
Grand total	39,939.6 (142)	23,036.5 (164)	16,168.8 (203)	5865.2 (118)	1376.5 (31)	767.1 (13)	87,153.7 (671)

Source UIDSSMT database, as on March 2012; Census 2001

Note The first number in the cell shows the central share released and the figure in the parentheses represents the number of towns covered as per the 2001 Census. Siddharthnagar town in Uttar Pradesh and Junardeo town in Madhya Pradesh could not be located

Class 1: 100,000 and above population, class 2: 50,000–99,999, class 3: 20,000–49,999, class 5: 5000–9999 and class 6: less than 5000

Table 13.9 Class-wise distribution of towns and central share committed under the IHSDP (INR in millions)

State	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Total
A and N Island		136.4 (1)					136.4 (1)
Andhra Pradesh	3395.1 (19)	2507.3 (26)	850.8 (11)				6753.2 (56)
Arunachal Pradesh				89.6 (1)			89.6 (1)
Assam	153.6 (2)	96.7 (2)	249.1 (5)	122.9 (3)	47 (3)	32.9 (1)	702.2 (16)
Bihar	1129.1 (7)	1003.2 (7)	842.4 (10)	611.1 (3)	222.1 (1)		3807.9 (28)
Chhattisgarh	1113.7 (5)	101.3 (2)	220.5 (6)	133.7 (3)	19.2 (1)		1588.4 (17)
D and N Haveli			33.4 (1)				33.4 (1)
Daman and Diu			5.8 (1)				5.8 (1)
Goa				14 (1)			14 (1)
Gujarat	630.4 (8)	814.2 (13)	835 (13)	216.6 (5)			2496.2 (39)
Haryana	2128.9 (9)		246.8 (5)	98.7 (1)			2474.4 (15)
Himachal Pradesh			217 (3)	100.3 (2)	119.7 (2)	50.8 (1)	487.8 (8)
J and K		205.9 (3)	181 (3)	232.9 (9)	247.2 (9)	252.7 (11)	1119.7 (35)
Jharkhand	113.8 (1)	414.8 (4)	623.2 (4)	161.5 (1)			1313.3 (10)
Karnataka	766.1 (8)	659.9 (8)	737.2 (14)	62.5 (2)			2225.7 (32)
Kerala	473.1 (7)	654.9 (16)	861.3 (22)				1989.3 (45)
Madhya Pradesh	1483.1 (14)	245.6 (6)	185 (6)	437.1 (18)	207 (8)		2557.8 (52)
Maharashtra	6618.6 (17)	3463.7 (20)	5923.9 (42)	937.7 (11)	95.8 (2)		17,039.7 (92)
Manipur			156 (2)	130.6 (2)	33.8 (1)		320.4 (5)
Meghalaya		89.7 (1)		134.6 (2)			224.3 (3)
Mizoram			129.3 (2)	142.6 (3)	26 (1)		297.9 (6)
Nagaland		407 (1)					407 (1)
Orissa	579.3 (6)	576.6 (10)	487.9 (13)	301.7 (6)			1945.5 (35)
Puducherry		54.8 (1)					54.8 (1)
Punjab	663.6 (3)	135.9 (2)	231 (3)	425.9 (3)			1456.4 (11)
Rajasthan	2044.1 (10)	1288.4 (9)	2374.7 (28)	559 (10)			6266.2 (57)
Sikkim					179.2 (1)		179.2 (1)
Tamil Nadu	1064.7 (13)	1483.6 (34)	954.7 (22)	399.3 (18)	68.3 (5)		3970.6 (92)
Tripura			70 (1)	310.4 (4)			380.4 (5)
Uttar Pradesh	2740.2 (23)	791.5 (13)	1716.4 (28)	1738.3 (47)	1162.9 (20)	285.2 (6)	8434.5 (137)
Uttarakhand	124.6 (1)	143.2 (2)	302.9 (7)	104.2 (3)	282.8 (5)	21.5 (1)	979.2 (19)
West Bengal	2883.9 (21)	1820.1 (20)	1977.5 (30)	343.9 (8)	63.6 (1)		7089 (80)

(continued)

Table 13.9 (continued)

State	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Total
Grand total	28,105.9 (174)	17,094.7 (201)	20,412.8 (282)	7809.1 (166)	2774.6 (60)	643.1 (20)	76,840.2 (903)

Source IHSDP database as on March 2012; Census 2001

Note The first number in the cell shows the central share committed and the figure in the parentheses represents the number of towns covered as per the 2001 Census. The table excludes VAMBAY schemes in Kolkata, Chennai, Manipur, Jammu, Srinagar, Rajkot, Vadodara and Kohima. Saona town in Uttar Pradesh could not be located. Class 1: 100,000 and above population, class 2: 50,000–99,999, class 3: 20,000–49,999, class 5: 5000–9999 and class 6: less than 5000

Table 13.10 Class-wise distribution of towns and central releases under the IHSDP (INR in millions)

State	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Total
A and N Island		55.3 (1)					55.3 (1)
Andhra Pradesh	2585.2 (19)	2209.5 (26)	784.4 (11)				5579.1 (56)
Arunachal Pradesh				44.8 (1)			44.8 (1)
Assam	76.8 (2)	48.4 (2)	124.6 (5)	61.3 (3)	23.6 (3)	16.5 (1)	351.2 (16)
Bihar	355.5 (6)	330.2 (6)	367.7 (10)				1053.4 (22)
Chhattisgarh	829.8 (5)	101.3 (2)	157.3 (6)	75.5 (3)	19.2 (1)		1183.1 (17)
D and N Haveli			16.8 (1)				16.8 (1)
Daman and Diu			2.9 (1)				2.9 (1)
Goa							
Gujarat	264 (5)	628.6 (13)	209.8 (7)	82.6 (2)			1185 (27)
Haryana	1316 (9)		165.2 (5)	57.6 (1)			1538.8 (15)
Himachal Pradesh			108.5 (3)	50.2 (2)	59.9 (2)	25.4 (1)	244 (8)
J and K		107 (3)	115.7 (3)	152.4 (9)	163 (9)	158.9 (11)	697 (35)
Jharkhand	56.9 (1)	207.4 (4)	311.6 (4)	80.7 (1)			656.6 (10)
Karnataka	726.5 (8)	659.9 (8)	737.2 (14)	62.5 (2)			2186.1 (32)
Kerala	244.8 (7)	1255.6 (16)	709.9 (22)				2210.3 (45)
Madhya Pradesh	745.6 (14)	152.3 (6)	99.6 (6)	242.3 (16)	100.1 (7)		1339.9 (49)
Maharashtra	3022.5 (14)	1367.1 (18)	1743.1 (30)	293.1 (7)	22.8 (1)		6448.6 (70)
Manipur			156 (2)	130.6 (2)	33.8 (1)		320.4 (5)
Meghalaya		44.9 (1)		67.3 (2)			112.2 (3)
Mizoram			129.3 (2)	142.6 (3)	26 (1)		297.9 (6)
Nagaland		293.2 (1)					293.2 (1)
Orissa	302.6 (6)	430.9 (10)	314.2 (11)	109.5 (3)			1157.2 (30)
Puducherry		27.4 (1)					27.4 (1)
Punjab	293.6 (2)	67.9 (2)	93.2 (2)	213.1 (3)			667.8 (9)
Rajasthan	1260.1 (10)	626.6 (8)	894.5 (21)	236.1 (9)			3017.3 (48)

(continued)

Table 13.10 (continued)

State	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Total
Sikkim					89.6 (1)		89.6 (1)
Tamil Nadu	919.8 (12)	1228.4 (31)	633.9 (16)	405.5 (18)	67.2 (5)		3254.8 (82)
Tripura			35 (1)	310.4 (4)			345.4 (5)
Uttar Pradesh	2094.4 (23)	743.3 (13)	1346.7 (28)	1470.2 (47)	981.7 (20)	186.5 (6)	6822.8 (137)
Uttarakhand	62.3 (1)	34.8 (1)	217.4 (7)	88.3 (3)	214 (5)	10.7 (1)	627.5 (18)
West Bengal	2617.2 (21)	1595.4 (20)	1874.3 (30)	312 (8)	63.6 (1)		6462.5 (80)
Grand total	17,773.6 (165)	12,215.4 (193)	11,348.8 (248)	4688.6 (149)	1864.5 (57)	398 (20)	48,288.9 (832)

Source IHSDP database as on March 2012; Census 2001

Note The first number in the cell shows the central share released and the figure in the parentheses represents the number of towns covered as per the 2001 Census. The table excludes VAMBAY schemes in Kolkata, Chennai, Manipur, Jammu, Srinagar, Vadodara, Rajkot and Kohima. Saona town in Uttar Pradesh could not be located
Class 1: 100,000 and above population, class 2: 50,000–99,999, class 3: 20,000–49,999, class 5: 5000–9999 and class 6: less than 5000

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Chapter 14

Shedding Light on Social and Economic Changes in Small Towns Through the Prism of Local Governance: A Case Study of Haryana

Marie-Hélène Zérah

14.1 Introduction

Since the beginning of the 1990s, urban governance has been transformed by a set of reforms that were mainly deployed in large metropolitan cities. However, political decentralisation was a universal reform that was enacted regardless of the size of the urban local body. There is a double consensus on the 74th Constitutional Amendment on political decentralisation for urban settlements: it is an imperative and the outcomes have failed to yield the expected results. Apart from respecting the rules regarding the conduct of elections and the implementation of quotas for women and scheduled castes/tribes, other aspects of this decentralisation seem to have failed: women remain proxy candidates despite an empowering process (Ghosh and Lama-Rewal 2005; John 2007); the notion of proximity between the elected representatives and the inhabitants is defeated by the size of the constituencies (Baud and De Wit 2009; Kennedy 2009); the power relationships between the local councillors and the bureaucracy is tilted in favour of the administration and the skills and expertise of elected representatives are insufficient. The scant literature on the impact of decentralisation on small towns underlines similar issues and a process of elite capture at the local level, despite low skills and competence (De Bercegol 2012; Sharma 2012).

This chapter aims at expanding the existing work on local governance in small towns. A first objective is to deepen our understanding by trying to understand precisely the role and the functions of the elected representatives and their relationship with higher levels of government and the bureaucracy. I argue that one main lesson to be drawn is the position (in their practices and in their perceptions) of councillors who are sometimes part of the state and sometimes outside the state.

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Second, though a number of studies have looked at the profile of councillors (Ghosh and Lama-Rewal 2005; De Wit 2009), they have focussed on their individual characteristics or at best on the family unit in the case of women. In this research, elected representatives are examined as members of various family, caste and professional networks that shape their “positional space” (Boltanski 1973). By mapping their social surface, I try to understand further where their power is located in formal and informal structures of governance. Third, I argue that, despite being a weak locus of power, the study of urban local bodies constitutes in itself a research site that opens up the complex stakes that are played out in small towns on particular issues, specifically the reconfiguration of power relations and economic shifts that are partly the result of their urbanisation process.

14.2 Methodology of the Research

The research is based on a study of five small towns in different districts of Haryana, all located in the National Capital Region of Delhi. Fifty-eight in-depth semi-qualitative interviews of local councillors were conducted¹ as well as qualitative interviews and interactions with a wide range of other actors (administrators, other politicians, labour contractors, shop owners and residents among other).

The choice of these cities was based on a set of criteria. All of them had a population below 50,000 and were chosen in different growth rate ranges to test the hypothesis that high growth rate and low growth rate towns would have different stories to tell. Preliminary field visits were then conducted among potential town candidates (Fig. 14.1) and five of them were chosen to represent social and economic diversity (Table 14.1).

The questionnaire designed for local councillors was divided into four sections. Their family background (caste, assets, education, mobility), their own political career and the political background of their family and their personal and family professional profile were central to the first two sections. The third section aimed at capturing the relationships between the councillor and the city through their social engagement (participation in associations, trusts, caste networks, etc.) and their representation in terms of the changes in the city (land use, economic, social). A fourth section focused on their governing power, which includes their formal powers, their capacity to govern and their relationships with other scales of government.

In terms of analytical methodology, we choose to use a combination of the results provided by the statistical analysis of the questionnaires as well as excerpts from the full transcriptions that unveil further dynamics at play. Our stand is therefore not to add a “governance study” of institutional structure but to provide a reading of the town through the lens of its lowest level of governance. It does not aim at measuring outcomes but it highlights perceptions and practices as described

¹References to these interviews will be anonymous and referenced by the number assigned to the questionnaires and transcriptions as LCQX_i.

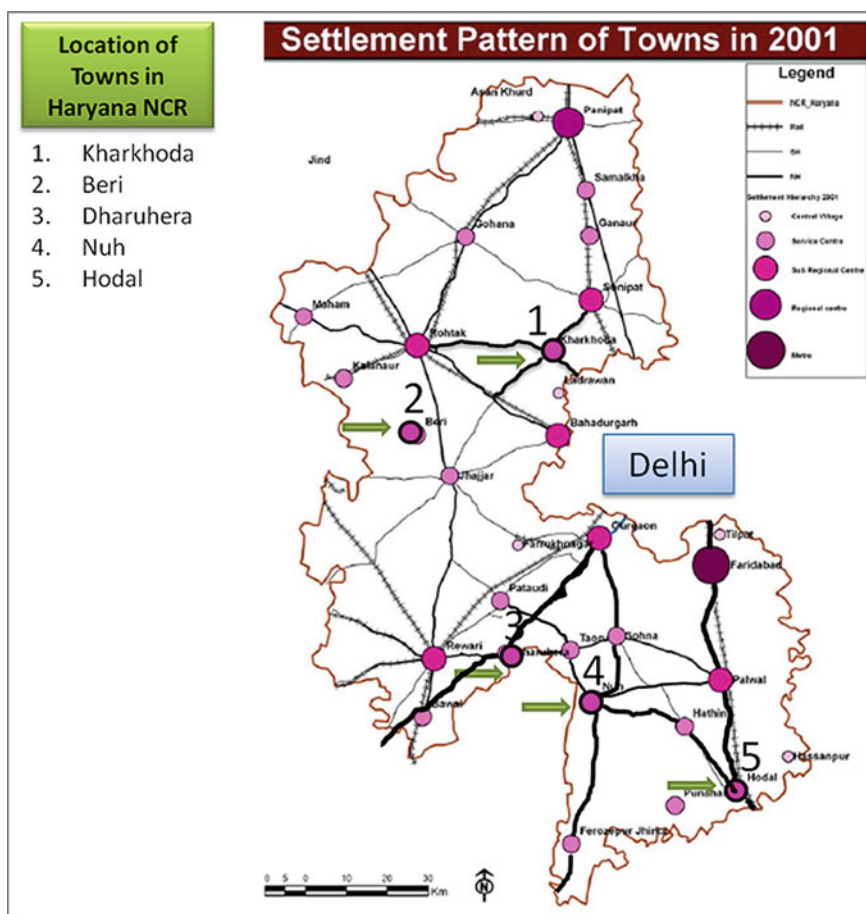


Fig. 14.1 Location of the research sites. *Source* Figure made by Manish Dahyia based on the official map the National Capital Region

by the councillors. It takes into account the themes that emerge from the field, such as the central notion of corruption that we analyse as a reflection of social struggles. Finally, some important elements specific to Haryana are to be remembered to avoid a pan-India generalisation: the centralised power structure around three main political dynasties (Ziegfeld 2011) and loyalty towards local leaders rather than to a political party (Pankaj 2009), its feudal and masculine structure (Chowdhry 1993), the strong role of caste networks and in particular the role of khap panchayat institutions for the dominant Jat community (Yadava 1969) and, because it is a small state, the strong proximity between local actors, regional leaders and bureaucrats.

Table 14.1 Presentation of the five small towns selected

	Population 2001	Population 2011	Population growth (%)	Area (ha.)	Economic characteristics	Social composition	Number of councillors interviewed
Dharuhera	18,892	30,344	61	1149	Very rapid growth, industry + real estate migration	Located in the Ahir belt—domination of the Yadav community + recent migration	11 (out of 14)
Kharkhanda	18,763	25,051	34	163	Rapid growth, mainly shops and small business, located close to an industrial township (land acquisition ongoing)	Strong presence of Punjabis after departure of the Muslim community post partition	10 (out of 13)
Hodal	38,301	50,143	31	609	Rapid growth, diversified economy (agriculture, mandi, brick kilns, rice mills), emerging education corridor between Hodal and Palwal	Domination of Jat community	13 (out of 17)
Beri	16,162	15,934	-10	135	Decline, agriculture and public employment, weak transport connectivity	Domination of Jat community	13 (out of 13)
Nuh	11,039	16,260	47	213	Rapid growth, mining, commuting, recent real estate and education on the highway	Located in Mewat, poor district dominated by the Meo Muslims. The population of the town is split equally between Hindus and Muslims	11 (out of 13)

Source Census of India for population and area

14.3 Under Layers of Control: An Amputated Local Governance

A municipal councillor is powerful enough to reprimand a sweeper and ask him to clean properly. He doesn't have any other power than that. (LCQ44).

14.3.1 *Large Infrastructure and Urban Planning: In the Hands of the Regional State*

I think the government is justified in acquiring land. They should do so all at once, with a development plan in mind. What they do is take it after someone has built on it, whenever they feel like it, and then it gets lost in litigation. They are fighting people! Their job is to develop the area not to get after people. If you give them enough money then they'll bypass your house in their plans. (LCQ4)

Elected representatives have very limited responsibilities in terms of public works and urban management. They describe their role in developmental work as restricted to the provision, or rather the supervision, of basic services (street lighting, garbage collection, water and sanitation services and construction of small roads), the delivery of no objection certificates for building permits and the prevention of encroachment. Additional missions include informing people about existing schemes (pensions for women and the elderly, below poverty line cards etc.), which they see as social work and an extension of their other duties towards the community such as conflict mediation, settling disputes or accompanying people to the police. Councillors/*parshids*² are strongly aware of these limitations and align their priorities accordingly. When asked about the three most important requirements for their town, they mention functional tasks in which they can be involved, starting from sewerage (including toilets and drainage) (31 %), cleanliness (27.6 %), roads 22 % and lighting (19 %). Larger issues, such as setting up institutions (schools, colleges, hospitals, stadiums, parks and even malls) are mentioned by 31 % of the respondents and another 12 % also point to the need for job creation, underlining a shared concern about the lack of employment, but this is secondary. As explicated later, most councillors express a strong sense of disempowerment within a municipal council often dominated by the chairman and the secretary.³ When stating their priorities and making claims, *parshids* factor in the many restrictions that contribute to their containment.

²Elected representatives, councillors and *parshid* (the Hindi term in small towns governed by Nagar Panchayat) are used interchangeably.

³The chairman is the elected head of the municipal body while the secretary (also called the executive officer) is a regional state civil servant deputed to handle the administration of the local body.

Table 14.2 Who can decide on provision of infrastructure as per the knowledge of councillors?

For water and sanitation schemes	Number	%	For road provision	Number	%
The PHED at the district level	40	74.1	The municipal authority and the PWD at the district level	28	52.8
The municipal authority + the PHED at the district level	3	5.6	The municipal authority	10	18.9
The PHED in Beri	3	5.6	The PWD at the district level	4	7.5
The PHED in Hodal	2	3.7	The municipal authority and the PWD at the district level + NHAI	2	3.8
The PHED at Chandigarh	1	1.9	Municipal Authority + PWD at district + Market Committee for Mandi roads	2	3.8
The PHED at the district level + influential person in the town	1	1.9	The municipal authority and the PWD at the district level + Market Committee + NHAI	2	3.8
The PHED and the municipal authority (authorisation)	1	1.9	The municipal authority + the central government	2	3.8
PWD but does not know	1	1.9	NHAI + DP + RICOH	1	1.9
The PWD	1	1.9	Municipal Authority + National Highway	1	1.9
Does not know	1	1.9	Does not know	1	1.9
Total	54	100.0	Total	53	100.0

Source Survey conducted by the author

First of all, decisions concerning the building of infrastructure, such as utility networks and connectivity, are taken by parastatals and/or state authorities (Table 14.2). The Public Health and Engineering Department (PHED) plans the expansion of water and sanitation services without any consultation with the local bodies, except that they prefer to develop the infrastructure in the surrounding villages that do not oppose the sourcing of their water rather than in others where tensions are stronger. A few interviews mention the case of Karkhauda, where a small, privately owned water network has been built for a newly developed neighbourhood via an alliance between a councillor and a landlord-cum-owner of a school, highlighting potential forms of self-provision. In the area of sanitation, local action only entails the cleaning of drains. With regard to roads, overall, councillors are aware of the complex governance structure: local roads are the responsibility of the municipal authority or the mandi⁴ committee, and the National Highway Authority of India and the Public Works Department (PWD) build national and

⁴Mandis are old primary agricultural markets.

state highways. At our sites, the connectivity to Delhi is perceived as key to development: in Beri, a declining town, the lack of connectivity is seen as an obstacle to growth in contrast to the rise of Dharuhera, located on the Delhi-Jaipur-Mumbai national highway. As a result, in their narratives, councillors link development with regional policy but see themselves as recipients of these decisions, locating themselves outside the machinery/functioning of the state.

Second, with regard to the production of space, regional planning endeavours are critical in their aspiration and ability to shape the form and future of these towns and they are understood as such by the councillors.

A town planning intervention starts with the legal process of declaring a town and its surrounding villages a controlled area, which indicates a potential for development for industrial, commercial, institutional or residential usage. Then land use and socio-economic surveys are prepared, prior to the finalisation of the master plan documents and the beginning of the land acquisition. This whole process is controlled by the Department of Town and Country Planning (DTP) although two other parastatals, HUDA (Housing Urban Development Authority) and HSIDC (Haryana State Industrial Development Corporation), intervene for the development of residential and industrial estates, respectively. All the five towns studied were declared a controlled area but Dharuhera is the only town with an approved development plan. The development plans are in various stages of discussion in the other four locations (Dahiya 2013).

In terms of their knowledge of the regional government interventions in urban planning, councillors have a partial, vague, and often erroneous understanding of what impacts the town, and this partly reflects the complex and opaque process of planning (Table 14.3). Two things appear: on the one hand, the overpowering role of the DTP, at various levels of government, in deciding on change of land use (CLU), and on the other hand, the local disenfranchisement embodied in references to the Chief Minister himself or his ministers and to others (district, tehsil or state departments). Additionally, the notion of “Chandigarh” is a non-allegorical reference to the distant state capital where politicians and administrators make real decisions. Yet again, this is an embodiment of the state in contrast to the everyday state (Fuller and Bénéï 2001). Table 14.3 shows that this perception is stronger in Nuh where the sense of being historically marginalised, neglected and discriminated against because of its large Muslim population is prevalent.⁵

Further, councillors’ knowledge of land use varies according to the effective spatial impacts of regional authorities intervention. In Beri many councillors are unaware of the procedures for CLU. In contrast, in Dharuhera the master plan shapes the rapid spatial transformation of a town whose destiny has changed with industrialisation (extension of the automobile industrial corridor) and real estate activities. Consequently, councillors are highly aware of planning rules: to be

⁵It should be noted that both Hindu and Muslim councillors agree on the stigma attached to Nuh and its surrounding.

Table 14.3 Knowledge of councillors on stages of state interventions and decisions regarding land use (percentage and number of answers)

	Dharuhera	Kharkhauda	Hodal	Beri	Nuh	Total
<i>Is there a master plan?</i>						
Yes	80.0 % (8)	50.0 % (5)	46.2 % (6)	23.1 % (3)	63.6 % (7)	50.9 % (29)
No	0.0 % (0)	30.0 % (3)	15.4 % (2)	30.8 % (4)	9.1 % (1)	17.5 % (10)
Does not know	20.0 % (2)	20.0 % (2)	38.5 % (5)	30.8 % (4)	27.3 % (3)	28.1 % (16)
In the process	0.0 % (0)	0.0 % (0)	0.0 % (0)	15.4 % (2)	0.0 % (0)	3.5 % (2)
Total	100.0 % (10)	100.0 % (10)	100.0 % (13)	100.0 % (13)	100.0 % (11)	100.0 % (57)
<i>Is this a controlled area?</i>						
Yes	70.0 % (7)	20.0 % (2)	23.1 % (3)	69.2 % (9)	36.4 % (4)	43.9 % (25)
No	10.0 % (1)	40.0 % (4)	7.7 % (1)	23.1 % (3)	27.3 % (3)	21.1 % (12)
Does not know	20.0 % (2)	40.0 % (4)	69.2 % (9)	0.0 % (0)	36.4 % (4)	33.3 % (19)
Does not exist here	0.0 % (0)	0.0 % (0)	0.0 % (0)	7.7 % (1)	0.0 % (0)	1.8 % (1)
Total	100.0 % (10)	100.0 % (10)	100.0 % (13)	100.0 % (13)	100.0 % (11)	100.0 % (57)
<i>Who can decide on CLU?</i>						
The municipal authority	10.0 % (1)	0.0 % (0)	30.8 % (4)	7.7 % (1)	0.0 % (0)	10.5 % (6)
The DTP at the district level	40.0 % (4)	40.0 % (4)	7.7 % (1)	7.7 % (1)	9.1 % (1)	19.3 % (11)
Other regional DTP offices	0.0 % (0)	0.0 % (0)	7.7 % (1)	7.7 % (1)	0.0 % (0)	3.5 % (2)
The DTP in Chandigarh	30.0 % (3)	30.0 % (3)	7.7 % (1)	0.0 % (0)	18.2 % (2)	15.8 % (9)
Chief Minister or other ministers	0.0 % (0)	20.0 % (2)	15.4 % (2)	7.7 % (1)	18.2 % (2)	12.3 % (7)
Others	10.0 % (1)	10.0 % (1)	15.4 % (2)	69.2 % (9)	18.2 % (2)	26.3 % (15)
Chandigarh	0.0 % (1)	0.0 % (0)	7.7 % (1)	0.0 % (0)	36.4 % (4)	8.8 % (5)
Does not know	10.0 % (1)	0.0 % (0)	7.7 % (1)	0.0 % (0)	0.0 % (0)	3.5 % (2)
Total	100.0 % (10)	100.0 % (10)	100.0 % (13)	100.0 % (13)	100.0 % (11)	100.0 % (57)

Source Survey conducted by the author

precise, two councillors, from a *zamindar* family⁶ entered into tough negotiations with the town planning department and partly managed to influence the designation of certain areas in the master plan, although other councillors in Dharuhera are all involved, directly or indirectly, in the construction industry. In other towns as well, councillors see regional planning intervention as a source and a site of opportunity and hardship. Opportunity, because beyond the *lal dora*⁷ (or the original village), landowners divide and develop their agricultural land for residential purposes, especially when they anticipate the “arrival of the sectors” brought by HUDA.⁸ In Beri, a landowner stated that he was hoping that his zone would be in the controlled area in 3–4 years, as he had made 100 plots on 6 acres of land located in a surrounding village, whose inclusion in the controlled area would increase their resale value. In contrast, for others with no bargaining power, if acquisition targets their land for public purpose designated land use, they find themselves at the mercy of the planning department.

In terms of governance, residential plotted development, outside the master plan, ends up being classified as unauthorised neighbourhoods and legally not entitled to services. Consequently, master planning intervention contributes to reinforcing an already segregated form of urbanisation along community and caste lines by segmenting it further via a binary of “legal” (planned colonies and *lal dora*)/illegal (unauthorised) colonies.⁹ In “legal” colonies, managed by HUDA or real estate companies, the role of the elected representative is thus “limited to welfare work” (LCQ3) but in “illegal” ones he/she has to fight a powerful bureaucracy to obtain basic services. This dual and amputated form of governance is one of the elements that leads to a strong sense of unequal power and bargaining relationships overtly stated by councillors who depict a state that “...fights people” (LCQ4) or “...wakes up too late when all the development is being done” (LCQ6).

However, the opening quote of this section reflects the ambivalence of many of these councillors towards an unfair and ad hoc process, in a regional state where the real estate boom is a major driver of these towns because of the proximity to Delhi. Though not major actors, councillors can be actors of the growing construction

⁶In Dharuhera, which we return to later, one family who was given a honorary title by the British, as they were in charge of tax collection and army recruitment, owns most of the land and is considered the “King (raja) family” of Dharuhera. Two members of this family are part of the municipal council and one of them is the chairman. They have subdivided their land into individual plots, entered joint ventures with large Delhi-based real estate companies and built commercial rental spaces in the town’s market. Other members of their family (some not involved in politics and others involved in politics at the regional level) have developed similar strategies with their share of the land, which means that a large share of the spatial transformations in Dharuhera is led and/or intermediated by this old family.

⁷The *lal dora* (red thread in Hindi) is the inhabited part of the village. This term was derived from the fact that the revenue department used to tie a red thread around the populated side of the village to demarcate it from the agricultural land.

⁸Another important spatial change is the transformation of surrounding villages as sites for migrant housing in situations of rapid industrialisation such as in the town of Dharuhera (Zérah 2013).

⁹For details, see an analysis of the case of Dharuhera in Zérah (2013).

industry. This local intermediation is another additional element in what Gururani calls flexible planning, a process fraught with “the manipulation of urban development acts, the ritual of power of relaxation, and the craft of careful exemption were all exercised through deeply sedimented relations of caste, patronage, and regional and political affiliations” (Gururani 2012).

14.3.2 District Commissioner “*Malik ko hai*” (*He Is the Landlord*)

He has all power in the district. There are times when we have 30-40 small tasks in the Nagar Panchayat that we can sanction ourselves. But we need him to accept even those. We have to send him every agenda. If he gets to hear of a complaint of something being done wrong, he calls the SDM to investigate. Or he sends the tehsildar. He can stop any work we do. (LCQ21)

First, no urban development can be done without the approval of the district commissioner. Unanimously, all the councillors describe him/her as the “landlord” of the urban local body. He/she can intervene in multiple ways by approving or cancelling tenders, making decisions regarding human resources, suspending payments, pushing for a no-confidence motion in the local body among others. He/she also acts as the chairman when there is a problem in the NP, which was the case in Nuh. The district commissioner of Rewari (where Dharuhera is located), an Indian Administrative Service officer from Tamil Nadu, expresses his surprise at this centralised power: “here [in Haryana as compared to Tamil Nadu], even basic things are managed by different agencies... In South India, the municipal council runs schools, hospitals etc... here, they don’t have the capacity and care to do the work” (Table 14.4).

Second, the role of the District Planning Committee (DPC) is very limited. In our sample, three councillors are members of the DPC but they refer to it solely as another arena to discuss schemes where their engagement is negligible and implementation is in the hands of the district administration. A wider study comparing various states shows that in Haryana DPCs are highly centralised

Table 14.4 How would you qualify the powers of the district commissioner?

Answer	Number	Percentage
Lots of power for human resources management	1	1.8
Does not know	2	3.6
Lots of power regarding schemes and human resources management	47	83.9
Lots of power regarding schemes	5	8.9
Lots of power regarding schemes and human resources management but we sort out most problems locally	1	1.8
Total	56	100

Source Survey conducted by the author

administrative institutions, headed by the district commissioner and that local councillors have a low awareness about it (PRIA 2009). Further, the town planning department is represented in the DPC, which provides another instrument for control over small towns. Despite its role of integrating concerns related to urban and rural (for instance water sharing, environment conservation) issues,¹⁰ the DPC mainly focuses on rural schemes.

Third, the district administration-municipal council relationship is fundamental to daily governance and to gaining access to various schemes. This constant interaction is characterised by a strong but unequal proximity which produces a variety of local equations that our comparison of five cities enables us to decipher.

Because of its Muslim population and its backwardness in terms of social indicators (Institute of Human Development 2008), being posted in the Mewat region is, according to local actors, seen as a punishment. Most officials try to be relocated in other parts of Haryana and spend as little time as possible in their offices. In 2005, to improve the situation, the district of Mewat was carved out from Gurgaon and the headquarters were located in Nuh. All our interviews point to the importance of this outreach of public institutions and the impact of this level of proximity (compounded by the presence of a good district commissioner at the time of our survey). After the formation of the district, Nuh witnessed investments in roads, the setting up of an industrial training institute and a medical college. Increase in land rates,¹¹ the anticipation of development, the arrival of HUDA sectors and land acquisition for district buildings led to an influx of money. It encouraged the establishment of small businesses (transport) and the expansion of the illegal mining industry. In other words: “we are no longer a *qasbah* and we are becoming a small town”¹² (LCQ57).

Institutional proximity entails social interactions and Dharuhera is a case of underlying tensions that result in conflict. In the ULB chairman’s words: “Thing is, I can decide a lot of things, but I don’t want to be in controversy. For the last 20 years, before being in this chairman’s position I have had good relations with almost all the DMs [for district commissioner previously called district magistrate]. This present DM is a very rude man, he speaks badly to everyone. That’s why I do not want to enter into relations with him. How can he speak like that? The last DM was my friend. He saw that I know the whole Indian cricket team. Dhoni¹³ is like my brother. He wanted to meet. Within 10 days, Dhoni’s parents came to my house and it was on the front page.” (LCQ7). On another day, he went on about the manner in which the district commissioner behaved with women and hinted that his

¹⁰This has been a recurrent question following the rural–urban relations committee being set up in 1961 (Sivaramakrishnan 2011).

¹¹As high as eightfold according to some interviews.

¹²Historically, the notion of *qasbah* has evolved over time but it is to be differentiated from the rural countryside and from the larger towns (*shahar*). The use of the term *qasbah* was recurrent in our survey, indicating among interviewees this perception of being distinctively a “small town”.

¹³Mahendra Singh Dhoni is the captain of the national cricket team and is consequently famous nationwide.

status of young bachelor was inadequate for this posting.¹⁴ The mobilisation of a repertoire of cultural mores expresses existing differences but also reflects the offense felt by the chairman on behalf of the zamindar family when his power is challenged by an outsider unaware of his status. The old debate of setting up national institutions, in particular the Indian administrative service, as a tool to break the stronghold of local power relationships is played out daily in Dharuhera.¹⁵ Consequently, local daily management is riddled with conflicts (related to contracts, payments of salaries etc.) and there are constant attempts by the chairman to bypass the district commissioner by calling upon his own widespread social and personal network of political leaders, including the Member of the Legislative Assembly (MLA), who is a distant family relative.

Proximity to sources of power at the higher governance level acts as a counterpower to the district commissioner, especially in a small state such as Haryana. In Beri, which was part of the Chief Minister's constituency,¹⁶ constant reference is made to the money that reached the district and Beri after it was made a subdivision. In other cases, some councillors, through their political or social ties, are able to bypass the district administration. If not through contacts, counterpower from below can only be exercised if there is unity in the council: "together they have more power" (LCQ13) or "if the board has agreed to something in unity then the DC has to listen" (LCQ32) but there are only rare instances of such local cohesion. In contrast, small town councils are fraught with group dynamics and interpersonal conflicts around issues of access to resources and social, cultural and caste issues.

14.4 Outcomes of Key Nodal and Interpersonal Relationships: Flexible and Fragile Local Governance

From the councillors' point of view, access to resources provided by the regional government is one of the main reasons to become part of the urban local bodies, despite their strong level of containment. We argue that the manner in which this is negotiated on a daily basis can be characterised as a form of hyper flexible governance, based on a number of key nodes and interpersonal relationships, which the focus on contract attribution illustrates.

Question:... And if these government officers are not working well can you ask for their transfer?

¹⁴In Dharuhera, the *ghunghat* tradition (women covering their heads) is still followed, see following chapter.

¹⁵This demonstrates the continuity of the old debate between Gandhi and Ambedkar on empowerment of village councils, which Ambedkar opposed in favour of a national cadre of bureaucrats whose values would be less entrenched in social hierarchies, in particular caste.

¹⁶At the time of the survey, elections held in 2014 led to a change of government.

Yes we can. If they aren't doing something right. We tell the DC or the MLA or the CM.
We can send our complaint anywhere (LCQ35).

14.4.1 Norms, Skills and Malleability of the State

At one level, the extent of bureaucratic norms and procedures is structural to the functioning of local bodies. However, training through an official institution is very limited and only targets women councillors. Actual skills are acquired through sharing of experience and political party affiliations.¹⁷ Further, municipal acts and administrative correspondence are all in English, which prevents many councillors from accessing these texts and this form of official (and archaic) language. As one councillor stated, only the junior engineer can speak English and they need to wait for him to decipher some of the written exchanges with the district (LCQ38). These asymmetrical educational capital resources reinforce the dependence on the administration. Consequently, to conduct their work and assert some of their power, they have to deploy their actions in other arenas of the political space. The example of transfer is one interesting procedure as it reflects both their ability to trigger action and the tussles that are ongoing between the district administration and the local council. Thirty-seven per cent of the *parshids* mentioned that some administrative personnel were transferred at their behest for different reasons (personality conflict, not attending the job, forging documents etc.). There is no routinised manner to set the transfer request in motion. Among the many answers provided to this question, councillors told us that they write collectively to the district commissioner, or to the MLA or to the directorate of the local urban body or even to the Chief Minister, or they rely on the chairman to convey the group's demand. Interpreting this diversity of answers as evidence of the councillors' lack of knowledge and skills, although partially true, is misleading. On the contrary, I argue that this diversity reflects the non-monolithic nature of the state (Fuller and Bénéï 2001) and characterises local governance as highly flexible. This high flexibility is nourished by the multiplicity of procedures and of sites of power and the skewed access to these resources. Another classic example of this flexibility is the various strategies for bypassing the rules for awarding contracts (Table 14.5), which are highly illegible and usually read as corruption.

The NP is all for making money. This is why people try to get into it. (LCQ13)
I told you the other day as well, this chairman is a corrupt man. (LCQ12)
There were allegations of corruption in buying street lights. (LCQ48)
A government officer has some fear when he is engaging in some corruption or malpractice but these employees on contract don't care. (LCQ44)

¹⁷Of the councillors interviewed, 25 % were trained, all of them women. However, the training consisted essentially of encouraging them to raise their voices, which remains difficult since their access to on-the-job training is nil (see following chapter).

14.4.2 Key Nodes for Accessing Urban Resources

Informing or securing pensions and other social benefits for their constituents consolidates elected representatives in their role as mediators and local intermediaries. Contracts (for constructing roads, small drains, employing municipal sweepers etc.) are instruments to improve the quality of life of neighbourhoods but they also represent the main sources of urban resources (financial as well as symbolic) provided by the government of Haryana.

Despite their small budgets, as compared to large infrastructure projects funded by regional or national authorities, locally they represent a real windfall. Hence, to understand the decision-making process regarding the types, budgets and the beneficiaries of contracts is important. Overall, 23.6 % of councillors mention that contracts are discussed in the municipal committee meeting and another 14.5 % say that discussions are restricted to the chairman and the executive officer or to a small group of councillors (5.5 %). Table 14.5 shows the variations among the five towns. In Kharkhauda, 40 % of the persons interviewed point towards a strong relationship between the chairman and the executive officer. Narratives depict a small town where the capture of funds and panchayat land is facilitated by the chairman to benefit a small group of contractors and land developers. Lack of decision-making power is also highlighted in Beri and Nuh, albeit differently. In Beri, the central role of the municipal engineer in contract decisions deprives councillors of some of their power, and in Nuh the use of emergency powers to approve contracts has been overused by the chairman. In Hodal, the reference to other local approval refers to the manner in which local conflicts are embroiled in turf wars between political parties. In Dharuhera, in contrast, respect for procedures (opening of tenders, contract attribution) seemed to have been respected. This could be either because as a new urban local body there are attempts to respect procedures or because the chairman was more concerned with using the ULB for social status and one-upmanship than accessing regional government funding. In the absence of normative judgments, collusion of interests, use of emergency powers, attribution of contracts to friends or business partners, fudging accounts, grafts and kickbacks are all instruments that serve to capture and distribute resources. To make these instruments effective requires a set of skills that many councillors tune locally, adapting their practices to the diverse incentives provided by schemes and programmes. The real question is therefore to examine whether these practices, along with rent extraction, produce outcomes in terms of public benefits through efficient urban political machines.¹⁸ Our research did not attempt to measure these outcomes objectively but observed the manner in which they are central to governance blockages.

There are always two groups in NP – paksh and vipaksh (LCQ16) (*for and against*)

¹⁸As has been the case for many American cities.

Table 14.5 Response to the questions: are you involved in the decisions taken in the Nagar Panchayat/municipal councils regarding the awarding of contracts?

	Dharuhera	Kharkhanda	Hodal	Beri	Nuh	Total
Also district level approval	0.0 % (0)	10.0 % (1)	30.8 % (4)	41.7 % (5)	27.3 % (3)	23.6 % (13)
Yes, this is discussed in the municipal committee meeting	55.6 % (5)	20.0 % (2)	23.1 % (3)	16.7 % (2)	9.1 % (1)	23.6 % (13)
Other local approval	0.0 % (0)	10.0 % (1)	30.8 % (4)	25.0 % (3)	27.3 % (3)	20.0 % (11)
No, this is only discussed between the chairman and the ex-officer	22.2 % (2)	40.0 % (4)	7.7 % (1)	8.3 % (1)	0.0 % (0)	14.5 % (8)
Never seen tenders opened	0.0 % (0)	10.0 % (1)	0.0 % (0)	8.3 % (1)	18.2 % (2)	7.3 % (4)
No, this is only discussed by a group of local councillors	22.2 % (2)	10.0 % (1)	0.0 % (0)	0.0 % (0)	0.0 % (0)	5.5 % (3)
The councillor has no role in this	0.0 % (0)	0.0 % (0)	7.7 % (1)	0.0 % (0)	0.0 % (0)	1.8 % (1)
Only the secretary	0.0 % (0)	0.0 % (0)	0.0 % (0)	0.0 % (0)	9.1 % (1)	1.8 % (1)
Only emergency powers have been used	0.0 % (0)	0.0 % (0)	0.0 % (0)	0.0 % (0)	9.1 % (1)	1.8 % (1)
	100.0 % (9)	100.0 % (10)	100.0 % (13)	100.0 % (12)	100.0 % (11)	100.0 % (55)

Source Survey conducted by the author

14.4.3 *Deadlocked Urban Local Bodies?*

In all our towns, at a given point in time, local governance tends to be dysfunctional or non-functional for reasons ranging from irregularities, court cases, no confidence motions and election cycles. In Nuh the attribution of contracts by evoking emergency powers, a discretionary power granted to the chairman, to use ULB funds led various councillors to lodge court cases against him. Beyond the burden it imposes on the local courts, these cases contribute to widespread mistrust, detrimental in the long run to daily urban management. In addition, an audit was conducted that confirmed the scale of irregularities and led to the suspension of the municipal council which was then placed under the control of the district commissioner. Consequently, meetings are not held and tenders are suspended as is also the case in Hodal. There, the council is divided into two: those in favour of the chairman and the others, but the balance of power is volatile and regularly upset by allegations of pressure and even of kidnapping.¹⁹ Tenders are not always stopped, as the reading of some audit records shows “the audit was not in position to admit the payment, however, in view of the hardship of the labour and telephonic order of Ld. Deputy Commissioner at 9 A.M. on 16/1/13 as conveyed by the Secretary to the audit for admit the payment, the payment is being admitted in audit to avoid further litigation.”²⁰ Other such documents indicate how procedures are at the same time both followed and circumvented. Disruptions of local councils lead to long periods of non-existent local governance because of the officious process involved. In Beri, the previous elected council had been dismissed because of irregularities, which led to new elections. In Dharuhera, during our survey period, the chairman resigned, denouncing widespread corruption but most likely because he realised that heading the council did not bring him the prestige he longed for. These illustrations, chosen across these diverse sites, exemplify the number of constant disruptions in governance, and the amount of written documents—court cases, no-confidence motions and the back and forth exchanges around audits and procedures²¹—that all contribute to rob governance of its substance.

Finally, the quotes introducing the penultimate paragraph point to the constant allegations of corruption, malpractice and questionable integrity that emerge from the field work and that shape daily local practices and forge “spaces of suspicions” (de Sardan 2004: 145). In terms of governance, it does result in intermittent governing local bodies; nevertheless, this daily small town governance supports Akhil

¹⁹“Kidnapping” also refers to taking one councillor out (on a holiday trip) to avoid her being present during important votes; in this specific case this relates to the attempt to register a no-confidence motion against the chairman.

²⁰Notes from an audit in Nuh (collected in the field) that we saw repeated in other documents as well.

²¹We used these documents when we had access to them, often incidentally, and did not purposely “follow” their trajectories. However, this would be a potential opening to further understand small town governance and the role of documentation following the work of Hull (2012) in urban Pakistan.

Gupta's view that "corruption is an essential lens for understanding the meaning of the state in the Indian context" (Gupta 2012: 78). As seen above, these practices are constitutive and embedded in the administrative system and bind the administrative and political branches of the state (Gupta 2012; de Sardan 2004). But beyond the governance question per se, the corruption narratives appear as a lens to look at the democratisation process, as Witsoe shows in Bihar where "gaining control of the state can level inequalities in the social field"²² (Witsoe 2011: 77–78). It directs us to probe what the study of local governance reveals about small town social transformations.

14.5 Local Governance as a Mirror of Social Transformations

Our interviews with councillors covered a set of questions on the transformation processes in their towns, ranging from social, to economic and spatial shifts. The analysis emphasises each town's idiosyncrasies and commonalities. Consequently, we choose to illustrate what appear to be important social reconfigurations spurred by urbanisation by focusing on one city, which does not imply that these topics do not have a bearing on the other cities.

14.5.1 *Kharkhauda: Corruption as a Discursive Tool for Caste Tussles*

Unearthing talks on generalised corruption reveals two important things: the relationship between contract attribution and caste networks and the alleged links between the breakdown of institutions and the entry of lower castes into the governance structure. The case of Kharkhauda is emblematic. Historically, Kharkhauda was a small town inhabited by three main Hindu castes (Brahmin, Seth and Saini) and a large proportion of Muslims and surrounded by villages dominated by Jats. At the time of independence, after a series of incidents, the Muslim population was totally decimated. The other castes remained²³ and the town saw the arrival of Punjabis²⁴ from Pakistan and the Jat community's shift into the town from the rural areas. Partnerships to capture economic opportunities deriving from state resources

²²In his study, Witsoe, examines the rise of lower castes as brokers and mediators that are roles they could not play previously.

²³Though some of them, in particular the Brahmins, left the town.

²⁴Punjabis is the term used to designate the Hindu population that came from the part of Punjab located in Pakistan. Though it does not designate a caste per se, they constitute a homogenous group with a defined identity.

and land development (through schools, clinics and residential colonies) are partly structured around traditional caste ties but also through new forms of alliances, which are resented by many, particularly when they open up power sources to the lower castes.²⁵ A statement made by a Punjabi councillor reflects these diverse tensions: “I told you the other day as well, this chairman is a corrupt man. He has been blacklisted, he has a 2 lakh penalty imposed on him. But he gives people enough money to keep them voting for him. The DC had blacklisted the chairman because he is a contractor also. He puts the contracts on his brother’s name. Now there is a Saini (councillor) from ward 7 who has also been blacklisted. He has put his brother-in-law’s name in the license but is making money off the Nagar Panchayat. The chairman and him get all the work. If any other contractor comes they don’t let him get the contract... Well...you know the thing with that ward is that there are *Chamars* living in it. The Chamars are accustomed to taking money for votes...”. His words are most spiteful when talking about the chairman’s belonging to the Chamar scheduled caste, and as with many other councillors, he directly links the fact of being a scheduled caste to corruption.²⁶ The introduction of quotas has shaken power relationships, which remained (and still remain) strongly ensconced in cultural norms shaped by caste and community ties. It has created windows of opportunity that some members of historically deprived groups are able to leverage economically, in part because the process of urbanisation creates new avenues of business opportunities [even though these remain limited (Jodhka 2010)].

14.5.2 Hodal and Beri: The Weakening of Territorial and Social Control?

Similar concerns are omnipresent in Hodal and Beri and are associated with the dissolution of the social fabric as perceived by the dominant caste leaders. “There was honesty, unity, and good character earlier and that is missing now. You can see corruption, cheating, dishonesty, low morality and character but my family always followed morality and honesty. Social fabric and unity of the society has undergone change. Now families are divided. People have given up values and people’s character is bad.” (Field notes_Hodal_18022013). In Hodal and Beri the region is dominated by Jats organised into different khaps²⁷ which “form the spatial

²⁵This, for instance, is the case of one of the best new neighbourhoods which, according to many of our interviews, has been developed by a local Jat leader with the support of the chairman of the council, who is from a Scheduled Caste background.

²⁶We will note here that this conflation of caste and corruption is shared by many and not only in small towns. The “dalit corruption remark” made by Ashis Nandy, a major intellectual thinker in 2013, had led to weeks of debate in daily newspapers, social media and academic circles and writings about the resilience of casteism for some and the reality of corruptibility in some disadvantaged groups that need to be understood in sociological terms.

²⁷Each khap traces its origin to a common ancestor.

foundations of social structure” (Sharma 2007: 71). A khap panchayat includes a number of villages and is therefore a territorialised social structure of which small towns are part.²⁸ Hodal is a town located in the Saurot clan territory and all the Hodal councillors from this clan retrace the political involvement of their forefathers in village governance. They used to have total control over the town, but this is now contested because of reservations. In particular, the legislative assembly constituency has been reserved for the last 25 years for a member of the scheduled caste, leading to resentment among Jat leaders of the region. On the ground, despite their supposed focus on ensuring the permanency of traditions and cultural norms (such as marriages in particular), the khap panchayats are competitive structures of governance which intervene and can mobilise large groups of people on a range of issues, including labour and land. In Beri too, the role of the khap panchayat remains very important. There is constant reference to the notion of “izzat” (respect) and “bhaichaara” (brotherhood) as a litany to uphold the pride of the community. However, in the formal sphere of governance, the election process is increasingly costly and politically violent and for some respondents it is no longer an attractive option. A councillor whose family had been in the Nagar Panchayat since 1852 said “it was my dream to carry on my father and grandfather’s legacies and I did that” (LCQ35) but he would not compete again. The considerable increase in election costs prices out many candidates in small towns. To some extent these candidates see local elections more as a question of symbolic status and an instrument to maintain social control and allowing new political entrepreneurs to emerge.

14.5.3 Dharuhera: Breakdown of Traditional Forms of Power and Rapid Economic Transformation

Dharuhera is a site where first time entrants are vying for power against the members of the zamindar family, still interested in local elections. It is located in the heart of the automobile industrial corridor and is the next real estate site of growth after Gurgaon and Manesar. This very rapid growth has brought in large groups of migrants and has provoked a rapid shift from rural to urban activities. It only recently became an urban local body, something that is bitterly disputed. In Dharuhera and its surrounding villages, immigration brings wealth to some, either through the increase of market activities or through the vibrant market for rental housing (ranging from small apartments to workers dormitories). However, for others, the preference industries give to labour from outside is a threat as it leaves many young men unemployed: “At the end of the day, the problem of insiders and outsiders is the basis of all of this. The tehsildar went as far as to say—that if your children have their domicile cards made from here what will happen to my

²⁸See also the importance of the political economic organization in Tiruchengode in Raman (2017).

children?” (LCQ3). For these “outsiders” who often live in unauthorised colonies, deprived of basic amenities, ration cards and other identity documents, the quest for representation is inevitable. A local party has been created by leaders of migrant groups to represent their voice and three of them were elected to the Nagar Panchayat. They form a cohesive group and are building alliances at the local level with a clear objective: “to make sure the chairman isn’t a local man the next time round” (LCQ5). The power of the local elite has not disappeared but their dominance is weakening, despite the fact that many migrants cannot vote in Dharuhera. It is likely that this family exits the local democratic space of Dharuhera²⁹ and tries to strengthen their regional networks of influence to consolidate their ventures in real estate activities, thereby converting their social and spatial dominance into economic gains. Political entrepreneurs, on the other hand, try to anchor themselves locally as shown by the exemplary case of one councillor from Uttar Pradesh working in Hero Honda. He belongs to a trade union, but is also the head of the resident welfare association of his neighbourhood and a real estate broker. Though he is an outstanding case, he nevertheless exemplifies the emergence of new social forces in Dharuhera and the importance of multipositionality to leverage resources.

14.5.4 Nuh: Encapsulating Small Town Struggles to Feature on the Map of Economic Growth

Nuh is located in Mewat, one of the poorest districts in India despite its proximity to Gurgaon and Delhi (20 min and 1 h, respectively). When discussing the town’s transformation, enhancing its abysmal social infrastructure is one of the stakes constantly put forward by councillors. Local actors evoke different reasons for the low literacy and education levels, which reflect the specific nature of Nuh and the region. Some link this to its large Muslim population (mostly constituted of the Meo community) even though there is an acknowledgement of change³⁰ although others see it as a result of the general neglect, if not abandonment, despite Mahatma Gandhi’s words of “equal development and complete protection” pronounced in December 1947 when he came to Ghasera, a nearby village, to prevent Meo Muslims leaving for Pakistan (FieldNotes_Nuh_07082012). The reputation of the Mewat region as a crime hub further stigmatises its population. Arguments to attract the attention of regional leaders are therefore articulated to claim the town’s right to development through education, health and availability of water to maintain agricultural activities. This is different from Beri and Kharkhauda, wherein the demands for better integration within the National Capital Region are a call for better

²⁹Regional circulation of elites would need to be studied further and research extended on this topic.

³⁰In particular, many interviews mentioned the increase girl enrolment and some schools provide free education to girls.

connectivity and better roads. As in other towns, but maybe to a greater extent according to Ziegfeld (2011), few families dominate the political space. However, locally, at the small town level, engagement in caste or community-based associations is a very important tool to connect with regional leaders and to put forward local issues. Indeed, in our five towns, 57 % of the councillors are members of such associations³¹ and this is the case in Nuh as well for 63 % of them. In Nuh these associations are often aligned with political parties and can exert an influence on the tensions between communities.³² However, their concerns are also strongly related to investing in schools to increase social mobility, and in contributing to social movements. In Nuh specifically, the Mewat Cricket Board has been a tool to mobilise the youth of the region, underlining the position of small towns as an important links to the rural in its many dimensions, social, economic and cultural. This is a dominant narrative in Nuh for a number of reasons: lack of water that curtails agriculture, lack of youth employment, stigmatisation attached to its Meo-dominated population among others. Indeed, despite its distinctive features, Nuh is another example of the embeddedness of small towns with rural societies in territories bound together by multiple flows, in India as in other countries (Berdegúe and Proctor 2014) and which “function as a unified cultural and political-economic region” (Raman 2017).

14.6 Conclusion

The study of small town governance, herein anchored in the councillors’ point of view, corroborates previous research that has underlined the level of containment and the scanty skills of local elected representatives. This creates a distance from the regional government that constitutes one of the hurdles that advocates of further decentralisation have pointed out. However, beyond that, and following an analysis of the everyday state, this chapter brings to the fore the councillors’ sentiments of disenfranchisement. They see themselves as recipients of higher levels of government decisions, which are implemented through vague, complex and opaque procedures. Their narratives tell a story of actors that often place themselves outside the state.

Though this precise chapter is not focused on a detailed analysis of the social surface of councillors, it refers to their various social, associational, political and economic positions and the manner in which these positions are either held individually or spread over the family unit. These functions provide them with diverse sites and routes of power, which can be symbolic, statutory or economic. Being a councillor is therefore one of the existing sites that provide opportunities to capture

³¹63 % in Dharuhera, 70 % in Kharkhauda, 61 % in Hodal, 38 % in Beri and 63 % in Nuh.

³²For instance, in 1992, after the Ayodhya events, communities were told not to buy goods in the market from Muslim shops if they were Hindus and vice versa.

urban resources, remain a guardian of customary rules, gain access to the state, enhance one's economic position or build constituencies for furthering one's political career among others. A normative view of governance tends to read these daily practices as emblematic of bad governance, characterised by corruption, graft and clientelism that are, in the case of small towns, rooted in unchanging social structures. Indeed, there are important issues of deadlocked governance and this has negative outcomes on basic amenities and services.

However, in the towns we studied, the volatile group dynamics and interpersonal conflicts that throng the arena of local politics is a highly relevant lens to read existing social struggles and social transformation partly caused by reservation policies, new economic opportunities and the urbanisation process itself. The alignment of political forces often follows community and caste ties, creating resentment and reactionary narratives around the awarding of contracts, for instance when lower castes are able to capture them. However, these ties are also disrupted because of new economic opportunities, such as construction activities and land development, for which alliances are created on the basis of economic gains. In other cases, with the inflow of migrants following industrialisation, traditional forms of power are being displaced by new political entrepreneurs who gain personally but are also able to bring respect and services to those who are still perceived and named as outsiders.

Looking at city changes through the councillor prism also brings forth the multiple relationships between the "qasbah" and its neighbouring villages through movement of people, agglomeration and spatial expansion but also because of economic linkages, social life and informal institutions. As described by councillors, the formal institutional framework is unable to account for the regional dimension of the ongoing transformations. Urban planning is spatially bound and the district planning committee and various district schemes artificially separate rural and urban issues. Further, in a centralised state such as Haryana, decision making from "Chandigarh" does not respond to local needs and public investment in targeted and selected constituencies and this is resented particularly in Dharuhera, Hodal and Nuh, located far away from Rohtak, which was a privileged site of public investment under the Chief Minister in place till 2014. Consequently, the municipal unit is not the right scale to bring regional issues to the fore and the social networks that do exist at a larger territorial scale are the tools that small town leaders can leverage.

Finally, this work leads us to reflect both on the methodology and the relevance of "small town research". This work on local representation, conducted through questionnaires and detailed transcriptions, proves to be an important lens to decipher the social, spatial and economic stakes that characterise small towns, specifically because councillors are centrally placed in the web of power positions, either directly or as mediators. Understanding their practices enables us to go beyond the sole study of governance and reveals the manner in which resources are captured and redistributed. Further, besides providing a decentred view of urban transition, it highlights how small towns are open and complex sites with multiple logics and interdependencies, as are metropolitan cities. As such, and because they are sites

where social power relationships are reconfigured, this chapter also calls for “small town urbanism” to become an important site of research.

Appendix

Table 14.6 Answers to the question: are there decisions you can take without the chairman’s approval?

	Answer	Percentage	Valid percentage
Valid	Yes, regarding the supervision of work in my ward	2	3.4
	Yes, regarding investment in my ward	10	17.2
	No	34	58.6
	No but can ask the MLA for funding	1	1.7
	Yes (supervision and investment)	2	3.4
	Yes, getting someone to the police station/small things	1	1.7
	Even if we mention what to do, the chairman has the final and supreme power	1	1.7
	Yes, but we still need both chairman and board approval	1	1.7
	It has to go through the board	1	1.7
	Yes, if all the councillors agree	1	1.7
	Total	54	93.1
	Missing	4	6.9
Total	58	100.0	

Source Survey conducted by the author

Table 14.7 Answers to the question: are there decisions you can take without the Executive Officer's approval?

	Answer	Percentage	Valid percentage
Valid	Yes, regarding the supervision of work in my ward	3	5.2
	Yes, regarding investment in my ward	7	12.1
	No	33	56.9
	DNK	2	3.4
	The secretary is the owner of the NP but we can work without him	1	1.7
	Yes, getting someone to the police station/small things	1	1.7
	Secretary works under the chairman	2	3.4
	Secretary does not have that kind of power	1	1.7
	It has to go through the board	1	1.7
	Secretary and chairman work together	1	1.7
	Yes, 0 + 1	2	3.4
	Total	54	93.1
	Missing	4	6.9
Total	58	100.0	

Source Survey conducted by the author

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Chapter 15

Purdah and Politics: Women's Participation in Local Governance

Aditi Surie and Marie-Hélène Zérah

15.1 Introduction

Policy imperatives in the late 1980s pushed for the introduction of a more active decentralised democracy into rural and urban areas to bring structures of power down from the central to regional and local, expecting to bring decision making within people's reach. Decentralisation is linked to the idea that releasing decision-making responsibility from the top to the lowest, local level of government increases efficiency and effectiveness, both economically and for inclusivity. This is premised on the idea that those who are most removed from national power have more control over decisions being taken in their close proximity, giving their preferences a chance to be reflected in these. Further, historically, the weaker sections of Indian society have been the lower castes, tribal people and women (often clubbed together as “vulnerable sections” of Indian society) from whom social, cultural and economic resources have been withheld. Women fall in this category as they face, historically and now, systematic discrimination in realising equality and have less access to information and education (Mukhopadhyay 2005). In addition, they face the double burden of domestic and economically productive activity all the time, operating within a matrix of deeply etched patriarchal norms that act as political barriers towards equal citizenship. Quota reservation for women (as well as Scheduled Castes and Scheduled Tribes) were introduced in 1992 in urban areas, and has been seen as an effective step for including under-represented groups into local governance and deepen democratisation.

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The 74th Constitutional Amendment Act (CAA) instituted 33 % reservations for women in elected seats in municipal institutions to serve to represent women and their interests. Twenty-two years after the enactment of the CAA, research and evidence (John 2007; Ghosh and Tawa Lama-Rewal 2005) indicate that women struggle to be more than proxies to the political agendas (and parties) of their male relatives with few examples of reservations as adequately empowering women—see Bhavnani (2009) on Mumbai. It has been reported that first generation women elected representatives (ERs) were limited in their effectiveness by various factors such as elections by proxy,¹ inability to attend meetings for fear of safety etc. but the mere presence of women in this ratio contributed to changing the common perception of power and politics as a male domain (Tawa Lama-Rewal 2011).

Following from this literature, this chapter examines the nature of political participation of women councillors in municipal institutions in five tier-3 towns of Haryana.² Based on a larger project investigating the nature of urban governance of these towns,³ this chapter focuses on assessing whether and how women councillors are limited in their political participation as proxies to their male relatives' political aspiration and how the specificities of the spatial and cultural spaces of small towns, understood as in-between rural and big cities, contribute to reinforce their containment. Taking as a premise that the proxy nature of women's political participation in urban areas is not a static condition (John 2007), we elucidate the factors that enable and disable certain women in reaching beyond proxy political agents in electoral roles to be active political agents in municipal governance.

The previous chapter shows how decentralised institutions come to be captured partly by traditional authorities even though contestations are rife. In the context of the female councillors we find that this holds true and we present the ways in which patriarchal privilege gets extended to consolidate the power of local elites. In conformity with other studies, women's access to formal political spaces has been granted by affirmative action measures but they are excluded from substantive political decision making. We further focus on exploring how one form of this is through access to and use of urban spaces that are accessed by citizens to conduct political work. Haryana's socio-cultural traits (*purdah*, patriarchy, *bhaichaara*) impinge differently on the political potential of men and women of the state. These traits interact with towns which are in the process of urbanising to cause interdictions and rules on the use of urban spaces as different from how they translate onto rural spaces. We therefore argue that the spatial representation and conduct of local politics works to perpetuate the segregation of women from real political

¹With affirmative action policies, male incumbents often found that they were unable to contest seats as they were reserved for female contestants. As a way to capture seats and maintain political hold over certain areas, parties and individual male contestants supported women from their families to stand for elections. Elections were fought to make these women win seats, making them representatives of their male family members' political interests and male incumbents would carry out the duties of the political work.

²Population of tier-3 towns is comprised between 20,000 and 49,999 inhabitants.

³See Zérah (2017).

practice, barring them from utilising spaces of informal political banter, networks and decision-making.

15.2 Women in Local Governance: Doubly Disenfranchised

This chapter, as the previous one, is based on a survey among ERs. Each councillor was surveyed using a structured questionnaire which was delivered as a semi-structured in-depth interview with the aim of capturing the voice of the councillor.⁴ The councillor's position (authority, responsibility etc.) and the person (socio-economic status, political profile, caste strength) were probed to see whether the councillor's social, economic, caste and religious capita could be employed, leveraged and mobilised towards their political work (and urban development). There was then a premise of dynamism, engagement and agency.

Starting fieldwork with these councillors threw up the first form of disenfranchisement for women. Practically accessing women councillors was more challenging than to access their male counterparts. Initially, the Municipal Committee (MC) house was the main site of fieldwork as it provided a way to develop a relationship with the employees and councillors of the town. Frequent visits to the MC indicated that women ERs did not socialise at the MC house as their male counterparts did. Chance meetings with women ERs happened only when field visits overlapped with formal MC house meetings. Many discussions with MC employees (secretary, junior engineer, mechanical engineer, peons etc.) shed light on the fact that women did not visit the MC daily; they conducted their work from their homes and if there was any requirement to approach the MC house their male relatives did so on their behalf.

An Instance of Accessing a Female Chairperson

These field notes describe an interview with the female chairperson of a sample town. The chairperson's husband was the active participant of the municipal committee while the wife, I was told, was not part of the daily activities at all. After gaining the husband-councilor's permission I proceeded to interview his wife.

From field notes:

The chairperson's husband sent a man with me to guide me to his house. This man found me in my car outside the MC and without introducing himself opened the door to the car and got in. This made me uncomfortable and I told him that if he had a bike I would follow him—otherwise I'd be okay finding my own way if he gave me the address.

⁴Questionnaire was conceptualized and designed by Marie-Hélène Zérah.

We reached a large house, which was a set of large rooms around an open courtyard, and a few buffaloes grazing.

I went into a small room with a sofa set and a cot. I was made to wait for the chairperson for about 45 min and all the while I was not left alone. The two men that brought me there sat with me. I was getting the impression that I was going to be under constant surveillance and nor were these men making me feel particularly welcome. A lady (chairperson's sister-in-law) brought me tea and biscuits and was behaving very friendly towards me but left after a few looks from the men.

Eventually the chairperson came to meet me. She was quite young, maybe in her thirties. She sat right next to me, not even an arm's distance away. But sat with her head fully veiled while both of them were there. When one left she lifted the *ghunghat* slightly but would immediately bring it down when he came in. She hardly spoke throughout the interview.

When I started explaining the study to her, the man kept telling me that it was useless speaking to her, that she knew nothing. I emphasized that it was not about right or wrong answers and no one could take away from the fact that on paper, in government records, *she* was the chairman. She spoke so softly that it was hard for me to hear her even though I was seated so close to her. There were questions she tried to answer and often the man butted in with answers. Source: Field notes March 19, 2012 visit by Aditi Surie.

The MC house was the main medium of contact with the town's councillors. The public records of the MC—our initial source of information on the councillor—on every account, next to a woman ER's name, stated the telephone number of the male relative. Some MC lists even stated the woman ER's name followed by her husband's name. To set up an interview or a meeting with the woman MC usually meant having to negotiate with her male relatives, gain their permission and eventually visit her in her home. Although this was a longer route to take than with the male MCs, it was usually unproblematic, aided by the fact that interviews were conducted by a female researcher.

The 74th CAA has been written about as being less than successful (Kennedy 2009; Baud and De Wit 2009). The previous chapter similarly finds that the municipal institutions in five tier-3 towns in Haryana carry a heavy hue of disenfranchisement. This disenfranchisement is caused by many reasons ranging from limited powers allocated to municipal institutions, the skewed power distribution between administrative officers and ERs and the multiplicity of agencies that have jurisdiction to plan, develop, administer and regulate urban spaces. The sense of disenfranchisement, which resonated in the councillors' narratives describing their daily political work, is stronger in the case of women and confirmed by their even weaker knowledge and understanding of their role.

For instance, regarding the manner in which contracts for public works are awarded, of the 21 women ERs⁵ in the sample, only 6 said they were aware of how contracts were given, 5 said plainly that they did not know nor had they ever heard of this during their interactions with the MC, and 7 said their male relatives were aware of these matters. Of 21 women councillors, 12 were unaware of the nature or process of how contracts were awarded for public works, one of the most key aspects of municipal governance. On average, male councillors were aware of whether the town had a master plan or implemented urban byelaws, but the majority of the women councillors required an explanation of what a master plan was and what urban byelaws entailed after which 7 of the 21 could comment on whether these existed for their towns.

There was a lot of conflict around awarding municipal contracts, wherein they became a site of contestation for competing political groups (see previous chapter). There were several councillors that we encountered during the fieldwork who were under investigation for corruption vis-a-vis allotment of contracts, especially chairpersons of councils. In cases where women were councillors on paper, they were often not allowed to be interviewed at all or not alone. One chairwomen's husband explained in so many words that as he was under investigation over municipal contracts he could not afford to have his wife divulge details about their activities to me. He stated that she would be unaware of what was protocol and what was not.

A telling example from Kharkhoda's MC cements this. When interviewing a female councillor in Kharkhoda, her husband explained the structure of the MC, its functions and responsibilities and town development activities. He stated that lighting the streets was a good signifier of failed infrastructural development in the town. The female chairperson of his MC (Case E in the Appendix) was well respected in the town for being educated but shared the MC work with her husband. This man explained that "he [referring to the chairperson's husband] made a committee of three councillors to make decisions on street lights but then [he] does this himself because he is out to make money. *Unke adhikaar chheen liye*. (He took their power away.)" He continued, "There are more street lights to be put up. There were only women on the street light committee to make sure they wouldn't do any work. He's a smart man".

The study explored the councillor's knowledge of his/her own role in town development, his/her own responsibilities etc. Women councillors were able to state the bare basics of the councillor job—signing/attesting documents, basic developmental work. Where the male counterparts gave the *nyaykarta* (arbitrator) role of the municipal councillor, women had to be prompted as to whether this was a role they had to play. Because the male relatives held a higher social standing when it

⁵As will become evident in the next pages, the number of women interviewed varies because at times they could not finish their interviews. Often their male relatives sat in during the interview and answered many questions on their behalf in spite of whether the women knew the relevant answers or not. Because the voice behind the information and knowledge gleaned from interviews with women changed, so does their numeration.

came to adjudicating community matters, women were usually not aware that councillors played this role.

This understanding of women as more disenfranchised than men is consistently openly stated: when speaking to the councillors and other actors in the town's MC, people spoke overwhelmingly of "general" wards/seats in a way that implied women SC candidates were not eligible to contest for these seats. There was an overpowering sense that minorities were not meant to contest for general seats. The women's responses can be seen to be in line with this way of thinking. The women seemed to suggest that the voting public would not find reason to vote for a female candidate when there were male candidates to choose from. It seemed obvious that the male member of the unit would stand for elections if there were nothing forcing the female member to be put forward.

The 21 female councillors encountered in the study were present *because of* the affirmative action policy. The women who had individual political aspirations, opinions, who took on more responsibility in conducting the work of an ER, would not have stood for election if their seats had not been reserved (Case C in the Appendix). What emerges from their statements is that thoughts of re-election, standing for higher posts (chairmanship), depend *on reservation status* of the seat. Of the four politically active councillors, one indicated that it was her husband's interest that brought her to the MC and only if he was still interested would they contest again. Another female councillor and husband said that if their ward was reserved for women again then the wife would contest, else the husband would. The thought of contesting a general seat was not present in her political imagination.

One woman ER said very simply: "Like I said, it has given me confidence in myself and I've learnt politics. I never liked my name. I told my father I didn't know why he named me "...". No one ever had a name like mine! I always stuck out in school and college. And now that same name is so famous. People now know who I am and they know me. I get a lot more respect from people now". Her statements would qualify as being personally transformed by occupying a political post. Yet she too stated that she would only contest for MC elections if her ward were reserved for women.

15.3 Unbundling the Proxy Nature of Women Councillors

Nevertheless, the impact of reservations is positive in ensuring the presence of women on the political map as the above quote also points to. Some women in the sample were able to push their status from being merely present to impacting the MC. As stated in the introduction, women's political participation is not static and they cannot be considered as a single and unidimensional group. It is therefore important to understand how their profiles intersect with their mode of political participation.

Local governance is fraught with local hierarchies, networks of patronage and local social rules that dominate who gets a chance to govern spaces. Power and

authority are often distributed through local social structures, reinforcing their existence and weight. Review of the literature (Beall 2004; Goetz 2004; Mukhopadhyay and Meer 2004) on local governance indicates that it is an established fact that democratic local government increases participation and representation but does not necessarily enhance the empowerment of non-elite groups, in particular women: *"The constrained terms of women's participation despite the existence of affirmative action is a prime example of how decentralised institutions are captured by traditional authorities and how this form of governance can extend patriarchal privilege and consolidate the power of local elites"* (Mukhopadhyay 2005: 33).

Further, assuming that women's representation in local decision making has a direct effect on women's interests being pushed is incorrect. Adding women's voices to municipal decision making has not rendered a women's agenda in these towns. Although much of the literature on rural decentralised governance (through Panchayati Raj Institutions) indicates more examples of success on this front (Jayal 2006), this is not so for urban institutions. Similarly, in our sample no woman councillor indicated pushing for women's agenda, neither in spirit nor in real terms.

Consequently, following the notion of intersectionality (Crenshaw 1991; Dorlin 2012), even though women councillors in the sample of Haryana towns display signs of being doubly disenfranchised because of their gender (through forms of patriarchy and severe restrictions on their mobility that physically and normatively make them invisible in public space and public action, as discussed below), it is necessary to get an understanding of how other dimensions of their identity, here particularly caste and socio-economic characteristics, shape their political participation.

Because our sample provides data on the respondents characteristics we are able to assess whether their educational qualifications either empowered them or held them back, their exposure to politics (their own political ambition, family history of politics) enabled them to be politically articulate but having to adhere to social and cultural values of modesty and being deferential held them back. Indeed, in a study of urban spatial and resource governance it would be simplistic to leave the relationship between women's lack of agency and their heavily regulated social lives as a singular relationship. Rather, it is indicative of much more: the elite capture of the spatial development of small towns in Haryana and the variable accessibility of male and female citizens to urban space. Assessing the intersectionality of layers of social capital—gender, caste, language etc.—is valuable.

The women ERs in the sample were all married, with children and of different age groups (three between 20 and 30 years of age, seven between 20 and 40, six between 40 and 50 and four above 50). Of the 21 women interviewed only 3 lived in a nuclear household (as opposed to a joint-family household) and the others lived in joint-families.

The most vocal women councillors, whose views on municipal politics, the representation of women and town development were the most nuanced were those with graduate and post-graduate degrees. They were able to articulate and communicate the constraints they feel in actualising their political participation. Of the

illiterate women ERs, two were in the age group of 30–40 and one was in her sixties. The latter ER showed greater knowledge of the town and its developments despite a lack of education. She posited her age (and hence life experiences) and many decades of living in the town as reasons for this.

The majority of female councillors, six, interviewed had attained secondary education, that is had studied till class 10. Following this, four women were illiterate. Of the four illiterate councillors only one fell in the 20–30 age group. The two other illiterate female councillors are in the 60+ age group. This indicates that there is an overall betterment of education levels among younger generations and this is also a visible trend among councillors' children (in their family profile). Education is a *de facto* influence on women's ability to participate but the quality and nature of participation should be investigated in the next generation. The most educated councillors (Cases B, E and F in the Appendix for further descriptions of these women councillors)—those with postgraduate degrees—were spread across Hodal and Kharkhoda. All three stated having done either their graduate or postgraduate studies through correspondence courses as a way to balance their household chores and child-rearing responsibilities and because of their curtailed mobility. Education plays a significant role in creating articulate female councillors who can comprehend the urban space around them through the vocabulary of governance and development. The most effective female councillors in the sample were those with the highest education.

An important complaint that male and female councillors had was their difficulty in accessing and comprehending municipal rules, regulations and notices from departments which came to their MC house as they were in English. All MC houses had a copy of the municipal act which detailed their roles, responsibilities and powers but the intricate and legal English vocabulary used were difficult for them to understand. The majority of female councillors speak only Hindi fluently although some of them report understanding English as their third or fourth language. As women lack networks or peer groups in political institutions (as men do), taking advantage of another councillor's language skills and comprehension is not a viable option for them. These factors add to their enhanced disenfranchisement.

A significant factor which affected how women ERs functioned was whether they had any previous exposure to political activity. This was probed on three fronts: (1) familial political engagement—whether their family members were formally members of a political party or had contested for MC elections before or higher elections (Members of the Legislative Assembly, Members of Parliament, Zilla Adhyaksh—members of district committee etc.), (2) whether the woman ER herself was a formal member of a political party before joining the MC and (3) whether she held a formal position in the party (e.g. Mahila Congress Adhyaksh—member of the women's wing of the Congress—for a particular town or district).

In the sample, eight women ERs had family members who were politically active at some level (MC, political party). Only two women ERs themselves held membership of a political party. The same also held positions in a political party—for example Zilla Mahila Congress Committee, Upayaadhyaksh, BJP Zilla Adhyaksh. These women showed personal aspirations in politics which impacted

their political reach, ability to participate in decision-making etc. Although this is an obvious statement to make, their positions are in contrast (and in minority) to other women in the sample who had not been informed of their husband's nominating them for MC elections. One of the women ERs who expressed a desire to carry out the political work independently explained that she was bound to work alongside her husband. Her candidature was a chance incident as a priest informed her husband that it was more auspicious to file election papers under his wife's name than his, and he did so without informing her beforehand.

Entry into politics is difficult and generally done through the patronage of more powerful people. This experience is not limited to women but is equally enabling for men and women political contestants. Limiting research on women's political participation to their proxy nature holds us back from understanding the particular problems women face in gaining political mileage. In attempting to understand this—their physical absence from politics—we looked at where political work takes place and in which positions women are allowed and disallowed.

This evaluation of women councillors is being done through a gendered reading of fieldwork on a larger project of municipal governance which did not contain questions that probe gender-specific areas of inquiry. The intersectionality of these women's political identity with their caste is nonetheless evident. In towns such as Hodal, where the MC was decisively split along caste (and corresponding party) lines, women councillors were more powerful because of their family and caste community's patronage. The elements that go into making Jats more powerful than others in Haryana played out for these women councillors equally. Yet in towns such as Nuh and Dharuhera the differences in identity were more about religion and migration which played on how able women were to be politically active, what customs impinged on them.

What this rapid look at the profile of councillors does is demonstrate their diversity. It reiterates the importance of intersectionality in how a woman is able to capture and use municipal power. A gendered lens on municipal institutions has to go hand in hand with a clear understanding of all factors that go into the capture of power. This translates quite effortlessly onto the severe restrictions placed on their mobility and use of urban space. The repercussions of breaching these restrictions immensely impact the kind of knowledge these women had, whether they had the confidence in their knowledge to negotiate with other councillors, municipal employees etc. and this is a common feature that most women councillors shared and that we present below.

15.4 Social Customs and Politics: Bhaichaara and Patriarchy

The universality of these restrictions is a result of two factors: the strong correlation of caste to politics via "*bhaichaara*" and the purdah as a form of patriarchy.

15.4.1 *Bhaichaara*

The picture that emerges from a study of local politics of the five small towns in Haryana is that of a tight-knit political environment with less than a handful of political parties with leverage. We find that local power rests firmly in the hands of local leaders who have the backing of strong kinship and caste networks. “*Bhaichaara*” or a brotherhood bond is intrinsic to the imagination and vocabulary of Haryana. *Bhaichaara* relates to kinship, caste ties thereby bearing on political matters, and customs of sexuality and marriage norms. Strongly operationalised when it comes to rules of marriage between and amongst castes and sub-castes, it creates equally tight community boundaries for political patronage. Chowdhry writes that there is a difference between *bhaichaara* and a similar, related term *biradri*. *Biradri* strongly refers to a unit of exogamy, that is caste or sub-caste amongst whom marriage is barred. Although both concepts have various meanings according to situation and usage, *bhaichaara* is used more often to refer to an idealised community within which equality, unity and loyalty exist devoid of hierarchy. She writes that *bhaichaara* is an ideology that is used to unite a community by disparaging contest within a group to maintain its honour (Chowdhry 2004).

This sentiment echoes in the usage of the term in our interviews with councillors. Although male councillors often cited *bhaichaara*, equating it to their politics “*rajneeti ka kaam bhaichaara ka kaam hai*” [politics is the work of brotherhood], female councillors interviewed never used the term or commented on their politics being performed in that way. One councillor explained how party affiliations were less effective in winning local elections when compared to *bhaichaara* bonds within wards. The few female councillors that were able to be active political participants in local governance echoed the importance of caste as an identity vote-bank in politics but were unable to relate to *bhaichaara*. Being a space of male power and male relationships, the imagination of *bhaichaara* remains a brotherhood or male bond.

Bhaichaara was also spoken of as a resultant of political work and ties. The peculiar overlap between political work and “social work” (*samaj seva*)⁶ resonates through the use of “*bhaichaara*” in describing what councillors consider to be their political work. Although a few female councillors noted that social work was important to gain the trust of local voters, none spoke about doing the work themselves. One councillor’s husband said he often helped families of the same caste in dire times of need—at the death of a relative, jailing of a relative—and he was supportive of his wife’s political duties, knowing that nobody would want this kind of assistance from a woman. This kind of aid coming from a woman might be considered more as a nuisance than an aid to people in their time of need. Other

⁶Samaj seva literally translates to social work. Samaj implies a specific caste community. Councilors often equated political patronage, political networking to work done for others their own or other caste communities.

councillors noted that certain municipal council projects such as a community centre or *chaupal* were the products of *bhaichaara* endeavours directing spatial practice, developmental work through the vocabulary of governance.

The concept of *bhaichaara* also implies an element of rurality and community sentiment in its usage. One councillor from the town of Hodal described the town as both rural and urban with the amenities of a town but the culture, *mauhaal* (atmosphere) and *bhaichaara* of a village. Emblematic of this *bhaichaara* was a freshly constructed *chaupal* or semi-constructed community gathering area meant for his sub-caste funded by the municipal council. Male councillors often spoke with pride about gathering funds to construct community *chaupals* with some claiming to spend money on these from their own pockets to garner votes of particular castes.

15.4.2 *Purdah*

The *purdah* is a north Indian practice of physically covering a woman's face in distinct circumstances indicating honour, deferential behaviour and physically limiting direct eye to eye contact between men and women. This practice creates a physical and metaphorical separation between the public and private where women are relegated to the latter and men have exclusivity over the former. Chowdhry's (1993) writing on the *ghunghat* or *purdah* neatly describes its purpose and function—as a signifier of honour in front of whom it is observed and a sign of deferential behaviour on the part of the observer.

The *purdah* has implications on marriage practices and exogamy. As women are either daughters of their natal community/*gotra* or daughters-in-law of the community/*gotra*, the *purdah* acts as a vehicle of the incest taboo. Physically the *purdah* works to cover the face of a woman, limiting eye contact between her and village elders conveying the relationship of mutual avoidance between the two parties.

This was directly and indirectly observed in the case of Dharuhera's MC on a few occasions. One woman ER from Dharuhera (councillor D in the Appendix) was able to shed light on the social matrices of the town and Haryana's cultural traits because she was an outsider from the state of Uttar Pradesh. She held Haryana's social values at a distance, being more vocal and mobile than other women ERs. In the in-depth councillor interview she noted that out of four women councillors it was only she who spoke and interacted with others during MC meetings. She explained that the other women did not touch food, tea and water offered to them. She said some observed *purdah* and kept their eyes downcast. She reiterated several times in our encounters that the other women chided her for speaking up during meetings and made fun of her for her behaviour. Her husband said “*Woh kehete hai ke hum yahan ke bahu hain, toh sir dhak ke baethe rehte hain*” [They say they are daughters-in-law of the area, they must sit with their heads covered and be deferential].

She explained further by presenting an example of an MC meeting she attended. In the midst of discussion and chatter this woman councillor spoke up to let people hear her. A fellow woman councillor tugged at her sari, expressing shock and asked her what she thought she was doing, why she was daring to speak over the men in the room. The former reasserted her right to make a point and be heard, only to be told by the other woman that there was never a reason to speak when men were speaking.

Sitting in during an MC meeting I⁷ made similar observations. When I exchanged pleasantries with committee members, the three woman councillors (from the town) asked me to speak to them after the meeting, as they felt uncomfortable speaking in front of the whole council house. For the duration of the meeting they did not look up at the speakers or engage in discussion. When it came time to register the attendance of the meeting they fumbled through the pages, needing assistance in signing, and then left the room where their husbands were waiting for them. It is commonplace for husbands to sit in during the MC meeting though as a rule “no members of the public” are allowed.

Echoing the experiences of the non-Haryanvi councillor from Dharuhera are examples from Kharkhoda. The town of Kharkhoda has traditionally had a significant Punjabi population associated with the market and trade. This was true of Nuh as well. This community presented itself in interviews as distinct from the Haryanvi castes with which they lived in these towns. One particular way in which they differentiated themselves was by the purdah. The town’s chairperson (Case E in the Appendix) was born in Punjab but was married into Kharkhoda and of SC caste status. She explained: “I could not learn how to deal with Haryana when I got here. I didn’t know how to live in a joint family where the whole day was spent cooking hundreds of rotis, I didn’t know what it was like to keep purdah. I asked my mother what she was thinking! I went from a big city like Amritsar to this small town, Kharkhoda. It was a big shock. Punjab is open compared to here. If my jeth walked in the room then I wasn’t supposed to speak loudly. I wasn’t supposed to speak to my father-in-law, I was supposed always to keep my eyes downcast. I had never known these things, I had big adjustment problems. I didn’t like the family either. They are uneducated”.

Another councillor from Kharkhoda explained that she and her husband were Punjabi and her husband’s family had lived in the town for two generations though originated from what was now Pakistan. She said only the Punjabi women spoke up in the council, counting on her fingers and assessing which women did the council work on their own. The other women didn’t speak because “*sharam aati hai*” [they feel shy]. Her husband reiterated “my wife is Punjabi so it (purdah) doesn’t matter to her. She doesn’t have to do any of that. The people of local castes have to do that”. She added: “It’s very difficult to do work when you have a *ghoonghat* on, and it’s very hot. It’s a very village thing to do, it’s quite less in Kharkhoda but it is there”.

⁷This meeting was attended by A. Surie on 29 February 2012.

Dharuhera located on National Highway 8 precedes cities and towns such as Gurgaon, Manesar and Bhiwani on the automotive industrial belt of Haryana and Rajasthan. A village until 2007, Dharuhera is being marketed by large real estate firms as the residential hub for professionals (managers and so on) working in large corporations along this belt. Dharuhera in some ways has been thrust into elements of Sassen's global city vis-a-vis its proximity to the globalised New Delhi-Gurgaon. Although the town does have significant industrial set-ups (Hero Honda, for example) the large part of its redevelopment has picked up on functions the village Dharuhera served traditionally, as a nodal market-place for neighbouring areas, with a large land owning family that lays erstwhile claim to a majority of the district's (Rewari) land. The survey of the municipal council indicated a struggle in governance between this erstwhile ruling family and the new working migrant population which has been filtering into the area for decades. The town thus has people with diverse identities, a circulation of different logics, and a presence of councillors who need not to adhere to the local rules of patronage.

Dharuhera was the best example of a liminal space between the rural and urban imaginations of space and sociability in our sample of towns. The diversity of people and logics set it apart from the other towns. This was reflected in the aspirations of the elites of the town who had been diverting their capital and interest in real estate that would cater to the professional class of the Gurgaon-Bhiwadi auto corridor.

Yet, for the women who belong to the area, social interdictions remain static. One woman ER's son in Dharuhera explained why his mother was unable to conduct most of the work: because it was not socially permitted. He said: "*Aap shehro mein kehe sakte ho ke ladies yeh kaam kar len lekin gaon mein aisa nahi hai. Mentality ka bhi hai par waise bhi nahi kar pa te. Samaj bolega ke yeh aavaara hain.*" [One can say that women are socially permitted to do this kind of work in cities but not in a village. It's about having the right kind of mentality; society would brand her a wayward or stray woman]. He was quick to refer to Dharuhera as a village, and this is explained in detail later in this chapter. This man owned his own real estate company which catered only to large developers; he chose to have his immediate family (wife and children) live in better developed Bhiwadi plush with housing estates, good schools, better roads, with malls and cinema halls.

It is important to note here that Dharuhera is a case of more recent urbanisation acquiring the official urban tag in 2007 and many actors in Dharuhera referred to it as a village in mentality, in space, in social relations. Residents of Dharuhera in their descriptions of different spaces reiterated the urbanity of the newly planned HUDA (Haryana Urban Development Authority) residential colonies with what they associated with "urban" areas—the infrastructure (planned sanitation, wider town and neighbourhood roads) and residents of varied professions (real estate agents, engineers in industry, schoolteachers). The ward of the woman ER in question was described as one of the only remaining agricultural patches of the town where houses were separated by large tracts of farmland except for the traditional *lal dora* settlement which serves them. The association between a high

social standing and an agricultural past in the statement above is telling compared to the account of Councillor D mentioned earlier from the same town.

Further the woman ER's son noted that his mother was unable to do visits around the ward, she was unable to travel to the district headquarters for meetings and she had never attended a meeting at the MC. This woman ER came from an old family of Dharuhera that had a very high social standing. The gravity of being respectable was higher for her than for other councillors although adversely affecting her mobility and ability to do the ER's work. However, when people approached her at her house she was able to take care of their work. In his own words "*Outer kaam mein karta hoon*" [I do the work outside the house], conjuring a literal distinction between political work that can be done within a house and that which needs one to move about in public spaces. Public here is understood as opposed to privately owned land, whose purpose and function vary by time of day and the person using it, but is governed by the rules of the state. Women mention making more use of privately owned areas of public utility such as malls or restaurants (as with Haldiram) which have specific purposes associated with them than of public spaces in their towns (other than market and mandir). The association of anonymity with big cities is missing in these small towns because their size and social customs prevent inconspicuousness. The idea of emancipation and mobility that comes with urban spaces is limited in these small towns as they retain more rurality. In Dharuhera, novelty in terms of markets expanding and new residents coming was mostly out of women's direct experience.

These sentiments were embedded in words such as "*mahaul*" that people use in describing the sentiment, atmosphere and character of the space they live in. Repeatedly, residents of all five towns would describe their towns using the words "*shehar ka mahul nahi hai nah toh gaon ka, yeh kasbah hai*" [this is neither a city atmosphere nor a village, this is a small town].

15.5 Urban Space in Town and the Interaction of Women

Chowdhry argues that although the *purdah* is far more prevalent in rural areas, urban educated women uphold the practice when interacting with their husband's elder relatives and on visits to their natal or marital villages. For women in urban areas, constraints on behaviour, mobility and forms of acceptability take on new forms in accordance with consumerist patterns, access to goods, services and spatial development. In this section we see how their limited spatial access directly relates to their political work.

Women are absent on the roadside, in a *dhaba*, at an *adda*,⁸ spaces that are known to attract conversation, political discussion, *bhaichaara* and networking.

⁸*Dhabas* are roadside restaurants; *adda* refers an area of informal gathering such as on the side of the road or at a corner of the street.

Notions of acceptable use of time and behaviour for women preclude them from engaging in these spaces. Any such engagement would be seen as a trespassing of norms and could lead to danger for their reputations or actual physical danger.

There were negligible spaces for women in the towns studied, that is no *dhar-amshala*, no community centre, no *chaupal* in a ward and none of the respondents (male or female) indicate that these spaces were anything but male. Government offices and even the MC fall under the same "public" and restricted spaces for women. Political and social networks that form in these spaces were again off limits to women.

One female councillor from Hodal mentioned that the only area segregated for women in the town was a polytechnic and *mandirs* at certain hours of the day. Another said "We have to meet in each other's homes or if we cross each other at a market. There is no place for women to stand and talk. It is not like that here. Maybe it's not like that anywhere in the country!" It should be noted here that places of worship are often stratified by and specific to community and by certain deities. The area of the *mandir* is then a possible site for cohesion and community but not necessarily for the emergence of a collective voice for women.

Further, the spatial representation and conduct of local politics works to perpetuate the segregation of women from real political practice, barring them from utilising spaces of informal political banter, networks and decision making. Although formal political spaces are open to people as citizens and voters, the substantive spaces of political decision making which inform the former are less transparent in their membership.

Another female councillor from Dharuhera mentioned that women were hesitant to liaise with government officials even if they came to their homes. In Nuh, women from three generations of a family explained that there was no space in the town that was considered safe for women other than the market during certain hours. All three generations were born and raised in New Delhi and married into families that were based in Nuh. The mother-in-law of the female councillor asked me "Can you imagine how difficult it is for a girl from Delhi like me and like you to come live in this town of all places? There was absolutely nothing here for women when I came. There still isn't anything. There may never be". The female councillor said "I could work if I wanted to, just not in Nuh. If I were in Delhi I'd have a job. This is not the right environment. I have the ability to do a lot but it's a losing battle if you live in a town like this".

Overwhelmingly the women in the sample said that because they lacked the ability to be mobile in the town their male relatives were better suited to make many decisions. As their male relatives spent time outside the house, knew more people and interacted with a host of actors in the town, they were better to judge infrastructure requirements of their own wards vis-a-vis the remainder of the town. As a substantive rule this meant that women ERs were not expected to take hard decisions, as their husbands were doing this. Formally, it was observed that both wife ER and shadow husband councillor were held accountable by law; police cases could be lodged against both or either for wrongful work.

An outspoken female ER from Hodal explained how impossible it was to do the work by herself. She felt confident in only doing so much as wouldn't cause her husband any problems. "The everyday signing work I do—if someone has to get a ration card made or a domicile card... I am able to do this. *Agar tehsil mein koi kaam hai toh puri authority toh unki hi ho gi. Kyunki mein toh har koi ko nahi janti. Mujhe nahi pata agar yeh proper Hodal ke hain, kahan rehte hain... toh inse hi puchna pardega. Toh mujhe pura decision toh apne pati ka hi lena parda hai* [When it comes to work in the offices of the tehsil or at the district then he must take the decision. I don't know everyone in the ward, I can't possibly verify if they are truly residents of the town. I have to depend on my husband for that. So I have no option but to take his decision as my own]". She carried on to explain the other constraints she faced but the fact of her lack of access to spaces in the town and in district is of utmost importance.

One woman ER expressed individual ability at interfacing with state agencies (such as the police and courts). As district representative of the BJP, she was actively engaged in politics and said hers was the only woman's name that was known in the police station.

This same woman indicated that ultimate decision making lay in the hands of her husband. She narrated tales from the MC's chairman elections on what favours were taken and what promises were made. She explained that one contestant for the chairmanship approached her on the street, asking her for her support. He told her not to listen to her fellow councillors, her friends or her husband. He reemphasised that the decision to vote in elections lay only in her hands. She told him "*mera pati mere ghar ka chairman hai*" [my husband is the chairman of my house]. She reinforced this by saying "If he asks me to vote in someone else's favour then that's what I'll do. He will take that decision, not me. It's one thing to say don't listen to a third person but what's this, why is he trying to come between me and my husband".

This woman ER was active in politics, was able to interact with public officials, was outspoken in meetings yet proclaimed that the ultimate decision rested in her husband's hands. Rather than taking this snippet as a wholly negative example of women lacking decision-making power, this is perhaps better considered as an example of the need for familial political patronage, alliances and support—a factor necessary for any candidate, male or female.

15.6 Reflected Urbanity and Rurality in the Imagination of Towns

The development of urban spaces for women (or lack thereof) was spoken about as a factor that placed a small town on the continuum of rural to urban. On all accounts our questions on this were met with a negative response: there were no public places where women could meet. Areas of congregation for women were either at

home or in the *mandir*. Many women respondents added to this by referring to their towns as villages lacking areas for women.

When posed with questions of economic activity in the town, the language of councillors' representation of towns reflected urbanity. A marked feature of the small towns studied is their marketplace with these towns acting as a central market for neighbouring villages. As a marketplace in the flow of commodities and capital, these towns give neighbouring villages access to new forms of consumerism and consumption, variety, quality of products and a concentration of non-agricultural economic activity.

Modernity as related to urbanity, lifestyle shifts, fashion, women's bodies and sexuality became especially clear during a conversation with a woman councillor and her son in Hodal town. The college student son made a distinction between the development of Palwal, the district headquarters, and Hodal. He said "Palwal has become a district. *Population ke mamle mein, mahaul frank hai zyaada. Matlab ladies ke mamle mein bahut kam frank hai yahan. Palwal mein kafi girls jeans mein dekhne ko mil jati hain. Yahan pe itna kuch khaas nahi hai. Mentality low hai*" [There are more people in Palwal, the atmosphere is more modern and professional. Especially when it comes to women. You see many girls in jeans in Palwal, not here. There is a difference in mentality]. The female councillor, his mother, added to this sentiment by saying "There is more in Palwal, *yahan kammi hai*. Palwal has become a district, here everything has remained the same. *Yahan pe toh dihaat jaisa hai. Jaise lardkiyan pehele bichh ke reheti thi aise hi hai. Palwal mein zyaada modern fashion hai yahan kam hai. Hai toh sahi lekin kam*" [There is a village mentality here in Hodal. Just as women used to be treated and regarded in old villages. There is more modern fashion in Palwal]. These two highly descriptive responses indicate that the imagination of Hodal's urbanness changes when related to women. Earlier in their responses they both indicated Hodal's increasing urbanity because of an increase in residential construction and better infrastructure, concretisation of main roads and constant water and electricity supply.

This association of fashion and urbanity resonates in the voices coming from Beri town. When prompted whether people from Beri travel to find malls, restaurants etc. a female councillor told me "There is no great requirement here. If girls have to buy new fashion they go to Delhi for the day to shop. We don't need any of that here. These are the people who work in Delhi, Bahadurgarh so they need these clothes. You don't need those things here". She explained what she meant by adding that "Baniyas⁹ used to live in this town before and their houses still remain. I don't think the population of the town has increased very much after they left us. There are lanes and streets but no colonies etc." This description of Beri's lack of urban housing in the form of colonies, a depleting population did nothing to add to lifestyles associated with urban spaces such as women needing fashion.

⁹Trader castes.

15.7 Conclusion

Through an anthropological positioning of the individual as the central actor in the processes of decentralised governance, we have been able to note the differential abilities of councillors to be effective. These abilities are comparative amongst male councillors. The most distinct comparison is between what men and women are capable of doing and doing effectively in the political realm.

This exercise of mapping the political ability of a councillor has allowed us to reflect on the spatial development of their towns because (1) they are directly associated with its development and (2) this relates to how space and consequently social customs are imagined.

Councillors constantly described their towns, across the five field sites, as having a “village mentality”, thus being restricted or retrograde, adhering to norms and rules of the “past”. In their own words they made a distinction from the emancipation felt in big cities such as Delhi and even district headquarters. As liminal spaces caught between urban and rural imaginations these small towns affect the intersection at which women councillors attempt to be political participants. Women’s characteristics such as levels of education, their caste status, their place of birth and language skills were tempered by how village-like or city-like their towns were.

The distinction between formal and substantive forms of political work coincides with urban development which is taking place in a gender inequitable fashion. Haryana’s cultural traits such as *bhaichaara* and *purdah* which inhibit the full participation of women in politics persist and in parallel take on urban manifestations—barring the entry of women into urban spaces which are key for political networks, patronage and acquisition of information and knowledge required to attain the capital required to be an effective political representative. Nor does the liminality of these small towns allow for emancipatory spaces to be created for women to congregate for network, patronage etc. The strength of other identities (such as caste) over the strength of a gender identity has precluded movement for creating spaces for these. Following from this, the purview of political work still remains in the hands of men—elites—in terms of society’s patriarchal preference.

Councillors in the five field sites varied in their ability to be effective, connected and participative for a variety of reasons. Yet, there were some gender-specific concepts that showed universal relevance for women’s participation. Retrospective analysis of the women councillors shows that several factors affect the nature of their political participation by being enabling when present and disabling when absent. Women’s higher educational status allowed them some agency in negotiating their positions amongst male councillors which was augmented by previous political exposure or experience giving them some conditioning to political work.

Education played a significant role in creating articulate female councillors who can comprehend the urban space around them through the vocabulary of governance and development. The most effective female councillors in the sample were

those with the highest education. Supportive family members who are politically inclined acted as an enabling factor for some women who could leverage other people's political capita for their own work. For others, this acted as a cause of their proxy participation in municipal governance. Women's restricted mobility and ability to engage in "public" matters, for example employment, entrepreneurship and participation in social work or civil society work, disrupted their articulation of space and urban development around them.

Appendix: Some Women

To give a better sense of the intersections of facilitating and restricting factors that are described in the text, below are individual cases of women ERs in this sample. Names have been changed.

Case A: Kiran Rani, Dharuhera

Kiran Rani, a councillor from Dharuhera, was unable to describe what her husband or his brothers did for a living. When asked whom she could refer me to in the town or village for more information, a learned person, an elder, she told me she knew no one other than her mother-in-law and her married sister in the same house. When I asked whether she met with the other councillors in the MC outside of the monthly meetings, she said no, not even the women, because at the end of the day she had nothing to do with them.

Some of my questions seek to record the councillor's description of their town—its economic activities, changes in built-up areas, schools, hospitals, shops, commercial complexes etc. Kiran mentioned how she had never looked at the space around her using this vocabulary. She said she was grateful for gaining membership of the committee for one reason—that she had had the chance to step out of the house and travel to the committee house and to the district headquarters three times over the last 3 years.

I was able to observe her during the course of an MC meeting in Dharuhera. She was escorted to the meeting by her husband who guided her to the meeting room, sat her down and left the room. She was seated on a chair furthest away from the rest of the group. She remained under *purdah* with her head and face covered with the *pallu* of her *sari* for the meeting and spoke only when stumbling and fumbling to sign her name on the attendance register.

Kiran had married into a family from Dharuhera and had been there for the past 15 years. She was educated till class five and represented a ward earmarked for Scheduled Caste with an overlapping earmarking for women.

On the other hand, for the same town, there was a councillor such as Shweta Shakya who had her own political ambitions. She invited me to her home and spent hours describing her councillor duties. She was vocal about being confident about herself and her abilities. Though she too expressed embarrassment at her lack of education—having studied till class 10—she loudly stated that she was the only

woman in Dharuhera whom the policemen and *tehsil* officers knew. She could take her ward members to get problems fixed and she had her own connections to the government departments to get work done. Her husband, she said, aided her in this by giving her knowledge on procedural aspects as he had been involved in politics before. Shweta was part of a larger group of political aspirants and councillor hopefuls in Dharuhera. This group consisted of non-Haryanvis who had migrated to the town to take up jobs in the automobile industry in the area. She said the leader of the group had asked her to stand because they needed women to be part of the group and represent the non-Haryanvi voters' concerns. The inspiration or origin of political engagement wasn't wholly hers but she stood as an example of empowerment.

Case B: Mamta Goyal, Hodal, Palwal

Mamta Goyal was the vice-chairperson of the Hodal MC. She was very vocal about the policy of reservations. When introducing the town of Hodal through its economic activities and changes in the town, the first thing she mentioned was an amelioration of educational standards and educational institutions in the area. Then she stopped herself and said "look at the elections, there is 50 % reservation to help uplift women. There are nine women councillors in this committee and 70 % of the work is done by their husbands. Even with me, I know quite a lot but my husband and brother-in-law go out for the work".

Goyal's case is interesting as the councillor work is decidedly split between three people. She said she liked how this work kept her house open so that there were more things for her to do, dealing with people constantly coming and going from her home. She said even though there were three of them doing the job, it tired them all equally. For example, she broke down some of the tasks; one of them had better ties with government offices and the district commissioner's offices and would take care of that, she was the patient one who would help her ward members fill forms and the third was responsible for supervising construction work in the ward.

She was put up for the post by her husband who, for his own reasons, could not devote his full attention to the seat. She said she had been hearing talk of the MC and its work for many years and didn't need training for it. She was well versed in the everyday tasks, problems and their solutions. Interestingly, she took up a position in her local wing of the Mahila Congress Committee at the same time as gaining entry into the MC. She explained she wanted a future in politics, starting with the chairmanship and then perhaps an MLA ticket if she could raise enough funds. She too, along with her male counterparts, was using the MC as a step up the political ladder.

Her brother-in-law had explained that some member in their family had the MC seat from their ward for the past 10 years, two terms before her. They had time to secure their image and support in the area.

Case C: Usha, Beri, Jhajjar

Usha was the only female councillor I encountered who was employed or, rather, self-employed. When I met her she was sitting at her cloth shop in Beri. Our conversation was interspersed with her measuring, cutting and selling pieces of

cloth to various customers. Her husband is a member of the Congress party and was always found in the committee house when I was there. I asked her whether she too was a member to which he said “*agar mein member toh woh bhi member*” [if I am a member of the party then so is she].

When I asked the couple whether they'd change their votes if their local leader changed political affiliations, he said he would change and she said no. She explained to me how the MLA comes to her and her husband when he needs to gather support for his work. For a change both spoke as “we”—“we” are able to gather crowds for them and to get them the support they require. She was able to show me where the MLAs house was.

Usha was very descriptive about needing to create links with their MLA, saying that she had to provide herself and her husband's strength by showing “*humari kitni janta hai*” [how much public support we have]. She said she needed to be in the MC, without which there is no visibility and no chances for meeting bigger politicians such as MLAs and MPs. When I asked her what her future political plans were, for example, would she contest the MC elections again, her husband answered saying if it was a ladies seat again she would contest, if it was a gents seat then he would. “*Ek hi cheez hai*” [It's the same thing]. She added that if they got the chance she would run for the MLA seat.

Case D: Latika Saurot, Hodal, Palwal

Latika's candidature presents us with another example of complementarity rather than a narrowly focused view on how the women are failing as only proxies. She is a younger councillor, about 22 years old, a new mother and a relatively new wife. She and her husband, 24, both sat with me to answer my questions. They were at ease reclining on their bed and answering questions together. They explained that it was Latika's mother-in-law who was councillor for her seat and died in the middle of her term. The family then put Latika's name on the election roll. At the end of the interview as they were detailing their political affiliations for me they said they are both coming into politics together. They feel as though they are growing up together through this position that the family had given them.

The political agency that got Latika elected was a combined effort of her husband and his brother. Her husband explained how he paid for lanes in the ward to be cemented as a goodwill gesture to garner votes for the election. This was a ward his brother has been contesting for the past 15 years.

Case E: Dimple Rani, Kharkhoda, Sonapat

Dimple was elected to the position of chairperson of the Kharkhoda MC. I came to hear of her first before meeting her. There was widespread criticism of her husband who I was told was the real functionary. I was told about his corrupt ways and there was disdain for his caste position (*chamar*, an SC). However, there were always nice words to say about Dimple. She was well-educated with two masters degrees, much better educated than him. Although he was called the “*superchor*” [super thief], the other councillors thought the MC would have run well with her at the helm. Her husband had been councillor in the town before and so had his brother.

When I finally got the chance to meet her I found her seated at her dining table busily coordinating her home life and her councillor work. She met with me when conducting various duties—signing ration cards and ordering pipes to be fixed through the water supply department. She was fully aware of the duties, responsibilities, guidelines and procedures for doing the work. She stopped mid-way between juggling these things to point to her kitchen and said “*meri rasoī toh dekho, khaali pardi hai*” [look at my kitchen, it’s lying vacant]. She was aware of the trajectory of her work, that is where the proposed MC projects stood in the administrative chain/sequence. She lamented, in great detail, how 180 lane-cementing projects were passed by the MC and how only 23 were approved by the district commissioner.

Dimple Devi can be seen as an enabled woman who was elected to the position of councillor and chairperson of Kharkhoda MC because of her husband’s political ambitions. She has learnt on the job and has been able to forge political and social ties with administrative officers and political persons in the area and in her political party of choice.

The fact of her being elected—what got the votes—stems from the political mileage of her family. Her husband and brother-in-law’s tenures at the committee and her husband’s position in Kharkhoda’s Haryana Pradesh Congress Committee played a foundational role in this. The facts of having fought elections from the same ward and winning three times in a row—her term included—indicate a political relationship between the family and the area for a 20-year period.

She indicated that her strong personality was not welcomed easily in her ward when she went on her pre-election campaign rounds. She said “The other women had photos printed with folded hands in *namaste*. And on mine, I was standing with my arms and hands down by my side. They looked like they were asking for votes and people told me I looked like I thought I was a *maharani* [queen].”

Dimple also falls at the intersections of the caste hierarchy, being a representative of an SC ward. When I asked her whether she feels any disrespect towards her in her work she said there are people who are jealous of her. “They don’t understand how an SC woman could become chairman in a general seat”. She told me “they don’t understand what reservations are”.

On whether she would continue her political career, she said she would think about it as the inspiration was forced and of her husband. She says that after she started mixing with the political persons of her area she too has been accepted as a “member” or supporter of the Congress.

Case F: Rachna Saurot, Hodal, Palwal

The conversation with Rachna Saurot was laden with talk of education. She indicated several times that the chairperson and other female councillors were illiterate women who haven’t been able to do anything other than act as conduits for their husbands. She lamented that “*jo ek aurat man se sudhaaar kar sakti hai us padh par bethne ke baad, unhe uska koi adhikaar nahi mila*” [a woman can do a lot to take her beliefs and values forward when put in a powerful position such as a

councillor...but we are not allowed to do this]. These women are not given the right to function or to learn.

When detailing her educational qualifications—two masters, one completed, one not and an MPhil—she distanced herself from the rest of her natal and marital family saying that none of the women on either side was as well-educated as her. She criticised her brothers-in-law for opening a school, one of the largest in Hodal, and running it as a business.

Through her description of the committee and her seat, I could tell she saw this councillor position as an opportunity. She wasn't sure just why her husband, with whom she was having marital problems, gave her this opportunity even if it was a strategy to hold the ward and the seat in the family's name. She said it was a *pandit* (priest) who advised her husband it was more auspicious to have her run for the election than her brother-in-law. This reason was coupled with the women's reservation on the chairman's seat. Sudha's election was part of a larger political strategy for her family who has politically represented the area of Hodal for years. She told me that her father-in-law had contested for the Vidhan Sabha seat since 1984.

Rachna neatly divided the work she did and what her husband did. She said she was able to do most of the everyday signing work required of a councillor—for caste certificates, domicile cards etc.—but only up to a point. She said she was constantly handicapped as she needed to rely on her husband's knowledge of the ward and its residents. She was afraid that a signature attesting to someone's residence would land not her but her husband in jail if the authorities' verification found otherwise. As she was made to be in *purdah* and hence had not interacted with the residents of her ward, she had to defer to her husband's knowledge and decisions.

She reiterated the fact that her signature on a document verifying and attesting to someone's residency or on a *naksha* would land her husband or the husbands of other female councillors in jail. "*Rajneeti ke kaam barde ulte hote hain*" [Politics is a dirty game]. It is for this reason that I was denied access to certain female councillors in Nuh. The chairperson and vice-chairperson, both female councillors and their husbands, were under investigation for corruption and misappropriation of funds. I met with the chairman's husband who politely indicated his wife would not be able to answer any of my questions because of her lack of knowledge of the work and the town. MC staff indicated that the husbands were worried that the women would leak information that would incriminate their husbands.

Sudha mentioned that she was vocal about keeping the integrity of the MC meetings, where only the elected councillors were to attend. She protested in a meeting that the husbands of female councillors should not sit for the meetings nor any other outsiders. Sudha told me that the chairperson's husband often asked his political followers, or *gundas* [thugs] in her language, to sit during the meetings, making her husband and other husbands even more nervous about sending their women to the meetings. She said she was given a single response—"*pati pradhan hota hai*" [your husband is your master].

Sudha spoke down about the other female councillors, chiding them for their lack of education and voice. She spoke well about one, Hema, who was also a graduate. When I asked whether she met the other female councillors she said they never met to discuss the committee but on occasion they met socially. Their relations with each other were always strained because of the different family political affiliations.

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Chapter 16

New Urban Territories in West Bengal: Transition, Transformation and Governance

Gopa Samanta

16.1 Introduction

There are intense debates around the remarkable increase in the number of new Census towns (CTs) in the 2011 Census. Kundu (2011) suggests that this increase is caused by Census activism, whereas Pradhan (2012) thinks that these new CTs are an acknowledgement of the often unrecognised urbanisation process. Irrespective of the debate, we have to admit that the 780 CTs in West Bengal do not contribute much to the actual level of urbanisation in the state. Of this total of 780 CTs, 537 new CTs were added in the 2011 Census (Guin and Das 2015), but without rigorous research at ground level it is difficult to say whether this new urbanisation is because of Census activism or of the recognition of non-statutory urban territories. The definition of the CT has remained the same in India after 1961 (a population of 5000, 400 persons per km² and 75 % of male workers employed in non-agricultural activities). Although the population size criterion is too low for Indian standards, we cannot deny the fact that these settlements have 75 % of male workers employed in the non-farming sector, which again is a clear indication of urbanisation. Moreover, the growth of CTs indicates a trend towards urbanisation but there is no change in the governance of CTs and they continue to be administered by rural governments, named gram panchayats. Whatever are the specific reasons for the growth and development of CTs in West Bengal, this new urbanisation is linked to a significant increase in small-scale non-farm employment in rural areas (Guin and Das 2015). Most of these new towns are market centres, where the dominant trend is direct investment by the local people involved in the agricultural and non-agricultural sectors, with a few exceptions where industrial development is driven by private, and sometimes international, capital. Moreover, this new urban

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growth is mainly taking place outside the existing urban agglomerations and metropolitan cities.

In West Bengal, around 75 % of the new CTs have come up in districts such as Murshidabad, Nadia, Jalpaiguri and Malda, which are far away from the Kolkata Metropolitan Area and have a dominant agricultural economy (Saha 2012). In their study on regional variations in the urban growth pattern of West Bengal between 1981 and 2001, Chakravorty and Dasgupta (2011) predicted this trend before the results of the 2011 Census were announced. The new urban growth in these districts may be attributed to an agricultural surplus and the consequent movement of investment from the agricultural sector to the commerce-based tertiary sector in the small town category (Chatterjee 2013). Some studies (Banerjee 2012; Roy 2012) have proved this connection through their research on the growth of small and medium-sized towns in West Bengal, such as Malda and other small towns around Siliguri. According to Chaudhuri et al. (2012), although there was a decrease in the growth of the primary and secondary sectors in West Bengal in the last decade, the tertiary sector grew at the fast rate of 9–11 %. This may also have contributed to this higher rate of new urbanisation, through the development of small market and service centres, and the consequent growth of non-recognised urban territories in West Bengal.

Barjora, similar to many other CTs in West Bengal, has undergone tremendous growth in the last decade. This growth is not only limited to the statutory area of Barjora mouza¹ but also visible in the Barjora agglomeration. Barjora is growing because of the expansion of heavy industries and mining, but this is fairly uncommon in other CTs in West Bengal. Barjora's location, close to the Durgapur-Asansol Industrial area, has facilitated the development of metal-based manufacturing in this area, and therefore Barjora is not only representative of small CTs—it can also be treated as the peripheral development of a big industrial cluster.

The population growth rate in Barjora in the last decade has increased remarkably and the female to male ratio is falling because of increased migration of the male labour force to the new industrial and mining sector economies. Both male and female workforce participation rates have increased considerably over the last decade. According to almost all the demographic indicators, there is very little difference between the Barjora CT and the Barjora agglomeration, and this reinforces the argument stating the invisibility of actual urban population size in the CTs.

The present chapter looks into the physical, demographic and economic growth of one CT called Barjora and explores the nature of rural–urban mobility and the levels at which gaps exist in infrastructure and services. The growth dynamics in these places are highly urban in nature, whereas the services and infrastructures provided to these areas are not on a par with those in the statutory towns. Based on both secondary data and in-depth empirical research carried out in Barjora CT, this

¹A mouza is a revenue village and the lowest unit of Census counting in India for rural areas. Although officially it represents one village, very often it covers more than one village.

chapter explores the level of changes in both the landscape and the economy of such settlements and investigates the problems of non-recognition of statutory urban status in the context of West Bengal. The chapter finally argues for the necessity to rethink the policy of refusing to recognise such settlements in spite of their high eligibility to be defined as statutory towns.²

16.2 The Case of Barjora

Until the end of the last century, Barjora was a small village surrounded by deep jungle. It had medium-fertile land and an agricultural economy. A high proportion of the inhabitants (25 % in 2011) hailed from the lower Sunri, Bauri and Bagdi castes. The construction of the Damodar Valley Corporation barrage road on the left bank of River Damodar in 1959 connected Barjora to Durgapur and Asansol located on the left bank of River Damodar on one side and to the District Headquarters, Bankura (31 km away) on the other by means of a single lane state highway (Fig. 16.1). Although it is located only 22 km from Durgapur Industrial City, Barjora attracted no industrial activity, even during the high industrial growth period between 1960 and 1980 and there was no shortage of land in the Durgapur industrial zone. However, in the 1980s and early 1990s the Durgapur industrial region suffered a serious setback with the closure of many big industries located in and around the city. This affected the ancillary industries as well and caused a rapid de-industrialisation of public sector units.

At the end of the twentieth century, the region received an industrial boost but from the private sector. This process was linked to globalisation-led industrialisation, largely driven by private capital and sometimes by multinational companies. For many reasons, this new phase of industrial activity looked beyond the existing industrial area in Durgapur to places such as Barjora across the river. Cheaper land, low production costs, uninterrupted power supply from the newly built Mejia thermal power station situated nearby, and the location, far from the stringent monitoring by the West Bengal Pollution Control Board present in Durgapur industrial region, facilitated the development of highly polluting private sector industries such as sponge iron and ferro alloys in Barjora. In the 1990s, the only manufacturing units in Barjora were a spinning mill and a stone crusher. After 2000, with the development of sponge iron and ferro alloy industries in Barjora, the situation began to change. These industries developed here to avoid the negative

²The criteria for being a Municipality according to the West Bengal Municipal Act (Section-3) is as follows:

- Population size of 30,000 (this figure varies from state to state. For example, the size for Andhra Pradesh is 40,000, for Maharashtra 25,000 and for Karnataka 20,000).
- A density of 750 persons per km².
- Non-agricultural population of 50 % or more of the adult population.

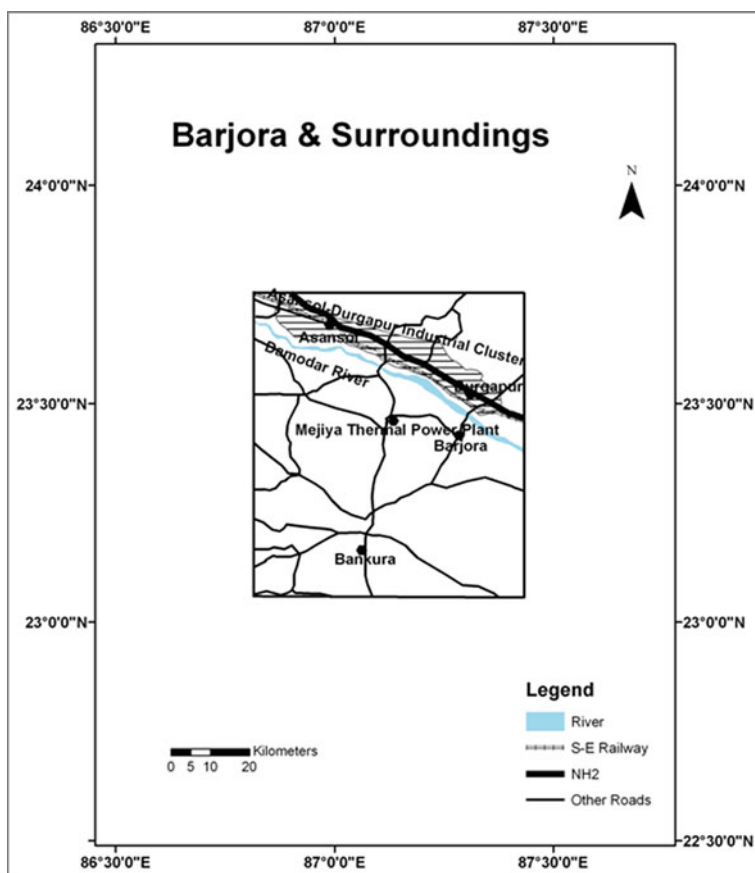


Fig. 16.1 Barjora: location and connectivity. *Source* Map prepared on the basis of Google Earth Image by Malay Ganguli

externalities of the existing Durgapur-Asansol Industrial region and to take advantage of the town's distance from Durgapur, separated by the Damodar River, but within 20 km of the big city and with easy access to National Highway no 2. At present there are 5 sponge iron and 14–15 ferro alloy industries, and 2 coal mining factories under public–private partnership. With the advent of industrial and mining activities in Barjora, the entire landscape dynamics of the region have changed quite rapidly.

Barjora became a CT in 2001 and has retained this status to date. The story of Barjora is not only a case of a non-recognised urban scenario in the state; it is also a case of an under-reported urban situation (Samanta 2012, 2013a, b). In the Census, the CT of Barjora represents the population of a single gram panchayat (GP), Barjora, whereas the actual continuous urban spread covers 12 villages, located in 5 GPs in the area surrounding Barjora. The entire stretch thus resembles a settlement

agglomeration (these are agglomerations of settlements with a continuous built-up area, either around a CT or an overgrown village). The rapid growth of the industrial and mining economy in Barjora since 2000 has changed the physical landscape of the entire region. The urban phenomena have expanded to cover a larger area, including the surrounding villages in every direction. Barjora town now agglomerates with Monohar, Barapukhuria, Baguli, Jaysinghapur, Kadasol, Ghutgarya, Dejuri, Birsinhapur, Ronalejora, Basudebpur (Uttar), Hatasuria and Sahebdihi villages. According to Denis and Marius-Gnanou (2011), such settlement agglomerations with over 10,000 population in each unit can be considered urban areas in India following the universal urban model of the Geopolis definition.³ The development pattern we observe here is of the ribbon type, as most of the new economic activities are being established along the roads leading in three different directions, connecting Barjora with Durgapur, Bankura and Raniganj via Durlavpur (Figs. 16.1 and 16.2). Table 16.1 explains the gap between the actual urban expansion (Barjora agglomeration) and the reported urban area (Barjora CT) in this place. Within this agglomeration, Hatasuria village is also a CT and several others are to be classified as CTs in 2021.

16.3 Migration Patterns

This section deals with the key question of who comprises the major streams of migrants coming to settle in these new urban territories. This section also looks into the nature and purpose of migration, and the level of rural–urban interaction these newly migrant groups of people, living in small CTs, have with their rural property and families. This section is based on fieldwork conducted at the household level. The fieldwork covered 55 households in Barjora and was carried out with the help of a semi-structured questionnaire. Although the validity of the sample, compared to the total number of households in these areas, may be questioned, the fieldwork only targeted the new neighbourhoods to cover the new migrant households who have moved to this place in the last two decades. In that respect, the sample size is satisfactory with a view to providing an overall idea about the existing situation there.

With regard to these new migrants, the fieldwork reveals that around 70 % of them are engaged in service sector jobs, around 22 % in the business sector, and the remaining 8 % is still engaged in the farm sector. The majority of the new migrants (52 %) come from villages close to the towns. The second major group (30 %) comes from different villages located in the same district. Another 10 % comes from other districts of West Bengal, whereas 8 % comes from other states such as

³Geopolis developed a universal definition of the urban worldwide using the following criteria: (1) an “agglomeration”, defined as a morphological body (the continuity of built-up areas must not exceed 200 m between buildings/blocks) and (2) a population threshold of 10,000 inhabitants is applicable to all countries and all time periods, even if the official national definition differs.

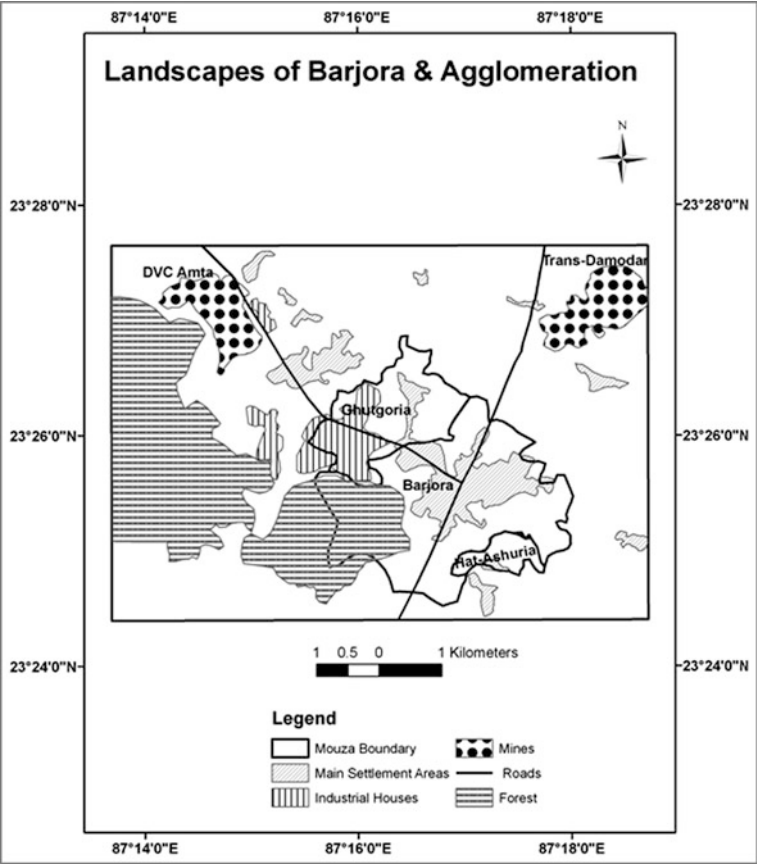


Fig. 16.2 Economic landscape of the Barjora agglomeration. *Source* Map prepared by Malay Ganguli based on Google Earth Image

Table 16.1 Population size, density of population and percentage of non-agricultural workforce in Barjora CT (*B. CT*) and Barjora agglomeration (*B. AG*), 1981–2001

Year	Population		Population density		Percentage of non-agricultural workers	
	B. CT	B. AG	B. CT	B. AG	B. CT	B. AG
1991	9554	24,002	1318	748	74.01	55.54
2001	11,512	27,814	1588	867	87.10	70.37
2011	14,012	32,535	1933	943	93.00	73.00

Source Show (2012)

Bihar, Odisha and Jharkhand. Informal, qualitative discussions revealed that the people from villages close to Barjora are from relatively well-off farming households, who do not themselves engage in farming and opt to leave their villages to settle in a place nearby with relatively better facilities. In most cases, these nuclear households are still a part of their joint families who have remained in the villages.

If we look at the rate of migration found in the household survey, most of these households settled here after 2005, so Barjora has received the largest stream of migrants (around 92 % of the total surveyed households) in the last decade. The period showing the highest rate of migration is directly linked to the development of several industries and two mines, which have boosted the service and business sectors and hence the consequent rate of migration from the surrounding villages.

Around 62 % of the households cite service sector work in and around Barjora as their main reason for migration to this place. About 28 % of households cite business and better infrastructure as their reasons for migration and 78 % cite children's education as a reason for migration. Because of its locational advantage, commuting facilities in Barjora have become one of the significant drivers of in-migration, even for the people who work elsewhere, as it is well connected to these places.

Although an average of 38 % of the surveyed households in Barjora cited commuting facilities for work as the main reason for migration to this place, the questionnaire survey shows that in 66 % of households at least one person per household commutes for some reason. This commuting occurs essentially for work (75 % on average) in nearby towns. The major destinations commuters travel to are cities in the Durgapur industrial belt. About 78 % of commuters in Barjora are young commuters who commute to colleges, universities and other educational institutions in other bigger towns for further education. Higher levels of connectivity and facilities for better education hence appear to be the major reasons for migrating to this type of new urban place. Around 40 % of the surveyed households continue to maintain close relations with their village homes, as their landed property is often still held under the joint property system. Around 66 % of households in Barjora mentioned that they still own landed property (agricultural land and a house) in their village as they are still attached to the joint families there.

16.4 The Economy and Its Growth

One of the main criteria for a settlement to be classified as a statutory urban settlement in India is the higher percentage (three-quarters or more) of non-agricultural workers. If we look at the percentages of main workers in the non-agricultural sector of Barjora CT and Barjora agglomeration, they were 93 and 73 %, respectively, in 2011. Therefore, the economy of this CT as well as of its agglomeration cannot be defined as rural in nature. Barjora CT is characterised by a flourishing urban economy driven by the industrial and mining sectors.

Barjora's economy is connected to the global urban-industrial economy with the development of industries set up by multinational companies, as well as to mining activities that function under public-private partnerships. Until 2000, there were only five industries in this area, and then between 2000 and 2005, about nine industries emerged in the region. The development of industry has not been limited to Barjora CT but it has expanded to include the surrounding villages in every direction along the main roads connecting Barjora to Durgapur, Bankura and Mejia (Fig. 16.1). The entire stretch where urban-industrial development is visible consists of 12 villages including Barjora CT. The highest density of industries is located in Ghutgoria and Hatasuria villages, adjacent to Barjora village (Fig. 16.2).

At present, Barjora has 16 large-scale and 7 small-scale industries. Two big private coal mining companies (Trans-Damodar and DVC-Emta) operate in the region under a public-private partnership involving public companies such as West Bengal Mineral Development and Trading Corporation and the Damodar Valley Corporation. This mining activity, which occurs on a huge scale, is associated with displacement and rehabilitation programmes under which two or three villages have been already relocated to rehabilitation colonies in Barjora. The land value has increased 20–50 times within a period of 5 or 6 years. Speculation and the concentration of land ownership in the hands of few people have become common practices in the region. Industrial activities are creating extremely high levels of air pollution and a severe water crisis, thus posing serious problems to the agricultural economy and to the household water supply in the region. At present there are five banks operating in the region. The average amounts of deposit and credit at these branches are around 200 and 30 million INR, respectively. From an overall reading of these different elements, it is easier to understand the level of development taking place in these small places called CTs. The following sections give us an idea of the nature of the changes that have taken place in the economic landscape of the Barjora agglomeration.

16.4.1 Drivers of Industrial Growth Leading to Urbanisation

The industrial activities in Barjora may be seen as a spill-over effect from the nearby Durgapur industrial area, located across the River Damodar. We therefore need to understand the development of Barjora as the peri-urban development of an industrial cluster, which goes beyond the case of a small town. The types of industries that have developed in this place are similar to those in the Durgapur area, that is to say they are metal-based in nature. However, the nature of industrial capital (public in Durgapur and private in Barjora) and the size of the factories (much smaller in Barjora) are different. A variety of factors have facilitated the development of metal-based industries in this region.

The availability of coal is one of the determining factors in the new industrial activity in Barjora. Although it is not far from the existing Raniganj coalfield region, the development of two collieries in Barjora itself has played a dominant role in bringing metal-based industries into this area. Of these two collieries, one is already functioning and the other is in the development phase. There is high concentration of sponge iron and ferro alloy factories in the region as a consequence of the availability of coal, which these factories consume in large quantities. In addition to the coal, Barjora has benefited from the Mejhia Thermal Power Station, which is just 18 km away. This power plant ensures an uninterrupted power supply, helping these newly built industries to develop.

The availability of cheap land was another predominant factor that facilitated the initial growth of industries in the region. The average area of land occupied by individual enterprises varies widely, starting from less than 5 acres and reaching over 50 acres. Barjora was a single-crop, rice-growing region and in most cases it was not even supported by irrigation. Such agricultural lands were not very costly in the initial stages. The offer from industrial companies was far higher than the actual returns from agriculture, and this motivated farmers to sell off their lands. In some areas the lands were lying fallow and were non-cultivable because of the hard rock structure, unproductive soils and lack of water. Among the 15 industries surveyed in the region, 11 have developed on land that was fallow earlier under private ownership.

However, looking at the sources of raw materials used by the industries we surveyed (Table 16.2), we found that the industries do not just use raw materials from local sources. They actually use raw materials from different source regions, ranging from Raniganj to Kolkata and Haldia Ports to Bihar, Jharkhand, Odisha, Gujarat, Mumbai and even Sri Lanka. The diversified source regions of the raw materials prove that industrial development here is not only dependent on local factors. Rather, it has global connections.

Table 16.2 Sources of raw materials used in industries

Raw materials used	Source region
Polypropyln	Jamnagar
News print, ink, plate	Kolkata, Gujarat, Balasore
Scrap iron, ingot blade	Kolkata, Gujarat, Haldia, Mumbai, Sri Lanka
Steel, round bar	Bangalore
Aluminium sheet, zinc, lead, industrial oil, cronic acid, alkaline, HCL, CRF oil	Haldia, Kolkata
Coal, pig iron, iron, sponge, ingot, scrap	Raniganj, Bihar, Jharkhand
Iron, coal, dolomite, manganese	Bihar, Jharkhand, Mumbai, Kolkata

Source Field survey

16.4.2 *National and International Industrial Connections*

To understand these global connections we examined the nature of industrial enterprises (international, national or local), the nature of ownership (public, private), location of the owners of industries, the market location for finished goods and the source region of the workers. The field study shows that out of the total 15 industries surveyed, 48 % are part of international enterprises, whereas the remaining 52 % are either state level or national level enterprises. Only 20 % of these industries are under public sector undertakings and the rest belong to the private sector (Table 16.3). In the private sector industries, some are under multiple ownership and others under single ownership. The owners of single private companies are mainly from Kolkata, whereas the multiple-owner private companies are owned by organisations from Mumbai and Bihar, as well as others, also from Kolkata.

The industries located in this area do not depend on the local market. Rather, they are dependent on the global market for selling their finished products, except for two newspaper print houses that target the local market. The finished industrial products include a variety of metal-based products, such as TMT (thermo mechanically treated) bars, railway spring metal, sponge iron, blades, ingots, corrugated sheets, polypoplyn sheets, and so on. Markets for these commodities are scattered across India and in other countries such as Ghana, Nigeria and Sri Lanka. In India, the finished products are marketed in Delhi, Mumbai, Gujarat, Bihar and Jharkhand, as well as Kolkata. None of the metal-based companies sell their products on the local market.

The field study shows that the highest proportion of labourers employed in these factories, 32 %, comes from outside the state. The chief sources of labour are Bihar, Jharkhand, Uttar Pradesh, and Gujarat. Another 28 % comes from different districts within the state, and only 17 % of the workers employed are from local areas (Table 16.4). The nature of the employment is more permanent, and as many as 66 % of workers fall within the category of permanent labourers. However there are also 26 % of contractual and 8 % of casual labourers employed in these industries.

Table 16.3 Type of ownership and location of owners

Ownership	Number	Percentage	Source location of owners	Number	Percentage
Public	3	20	Kolkata	9	60
Multiple/private	10	67	Kolkata and Mumbai	2	13
Single/private	2	13	Kolkata and Bihar	4	27

Source Field survey

Table 16.4 Types and sources of labour in the industries

Types of labourers	Number	Percentage	Sources of labourers	Number	Percentage
Permanent	1460	66	Local	378	17
Contractual	585	26	Within the district	520	23
Casual	176	8	Other district	614	28
Total	2221	100.00	Out of state	709	32

Source Field survey

16.4.3 Retail Market and the Banking Sector

Barjora's retail market is not comparable to many other CTs such as Singur, either in terms of magnitude of turnover or the geographical area the market caters for (Samanta 2014). The market area is relatively small and is located near the bus stop. Barjora has 154 shops in total and most of these cater to the daily needs of the local people. There are few shops in this market that sell higher order goods or provide services such as restaurants, chain outlets for different branded companies, motor cycles etc., as people use the big markets in the vicinity, such as Durgapur town for the purchase of these goods and services. The local market is used mainly by the people of Barjora and other villages of the agglomeration and therefore, this town cannot be categorised as a market centre as it does not serve a wider catchment area. The majority of shops belong to the categories of grocery, medicine, shoes, rice, construction materials, photocopy, jewellery, clothes, sweets, hotels, mobile shops and so on.

The majority of the shop owners (89 %) are from Barjora itself and the remaining 11 % are from villages in the Barjora agglomeration. The initial business investment cost, in the year 2001/2002, varied from less than 10,000 INR to more than 500,000 INR, depending on the type of shop. The present cost of the same type of shop has increased dramatically and now ranges from 100,000 to 1,000,000 INR, which indicates an increase of 10–20 times over the last 10 years, depending on the location, whether it is on the main road or away from the main roads.

Around 72 % of the shop owners have invested their own money, whereas the remaining 28 % have taken loans from other sources. There are many cases where people have sold their land to industrial companies and invested that capital in the retail market. Around 40 % of shop owners told us that their sales had increased in the last 5–6 years. All the business people are hopeful about the future prospects of Barjora as a market centre, as more and more people are coming to work in industries in Barjora. This means they can settle here and become their customers in the future.

To understand the local economy, especially the nature of deposits in and credit from the banks, we surveyed four banks in Barjora. A few new banks have opened their branches in Barjora to accompany the industrialisation and urbanisation of the

area. The major banks in Barjora are United Bank of India, Co-operative Bank of India, State Bank of India and Central Bank of India. Out of four types of bank deposits (savings account, current account, fixed deposit and recurring deposit), the highest amount is in savings accounts and fixed deposits, which indicates that local people prefer to save their money rather than invest in other activities or enterprises.

As compared to the total deposit of 192.4 million INR (73.8 million in savings accounts, 80.9 million in fixed accounts and the rest in current and recurring accounts), the level of total credit is very low, an amount of 36.6 million INR. The credit:deposit ratio is highly favourable to deposit, which indicates that local capital accumulation is quite high. The same is true for other rural market centres in West Bengal (Samanta 2014). However, the level of monetary transaction indicates the volume of financial activities taking place in Barjora.

16.4.4 Coal Mining

Barjora has two coal mines, both of which developed under the public–private partnership model. One is called the Trans Damodar WBMDTC mine. Trans Damodar is the private partner and West Bengal Mineral Development and Trading Corporation (WBMDTC) is the public sector partner of this colliery. The colliery started its market activity, that is to say, auction and sales, in May 2012. The entire production process, from the acquisition of land and rehabilitation of villages to the cutting of coal and transportation to the stockyard, is managed by Trans Damodar, the private partner. The auction and sale of coal is handled by the public partner, WBMDTC. Trans Damodar has obtained the lease of the land from WBMDTC for a period of 35 years. After the realisation of sale, the profit is shared between the two partners, but the proportion of sharing remains unknown, even to the managers of Trans Damodar and WBMDTC at the mine site. According to them, they have nothing to do with the company sharing and these decisions are taken among the state level officials of both the companies. The state government is expected to earn revenues of approximately 560 million INR annually in the form of cess⁴ and royalties from the production of coal from the opencast portion of the Trans Damodar Sector Coal Block.

Coal production and sales are highly mechanised, employing a small number of labourers in the entire process. The total number of working staff at the mine site, including the manager, is 108, but the total payroll includes 294 employees, as the company also pays a salary to all those who lost their land. Besides the permanent staff, there are five casual labourers at the mine site who work as day labourers. All the employees are from different parts of the state of West Bengal, with a majority from south Bengal. The total number of people who lost their land is 208, but only 22 of them are working in the mines. The rest have not yet been incorporated

⁴Cess refers to tax taken for a particular purpose.

because of some kind of problem between the company and the land-loser syndicate, related to the deal regarding the level of employment to which they would be appointed. At present 186 land-losers who are not yet employed in the mine are being paid 6900 INR per month. The 22 who are employed were paid 4000 INR per month during the training period of 9 months and then 6900 INR per month when they started regular work. The present manager believes the arrangement with the land-losers is a bad one, but the situation was created by his company. He thinks that because they began to pay the land-losers a salary before they were formally employed, they are unwilling to start working in their jobs and they prefer to receive a salary for doing nothing. Initially, payments to the employees were made in cash through the manager, but now there is a formal arrangement with Axis Bank, which has been operating here since September 2012.

Sales are carried out entirely through proper electronic recording, starting from the auction to the dispatch of coal from the site. The distribution allotment for each company is given as per date, and the use of scratch cards (three in number at three phases) is mandatory for each and every vehicle carrying coal from the site and passing through the main gate. According to the manager, not a single block goes out of the place without being recorded. Therefore, the concept of a coal mafia does not exist in this mine. When the mine was inaugurated the Chief Minister said that “the coal will be utilised for the benefit of the state” and therefore is to be used by the public sector companies, but until now no coal has been sold to the public sector as they do not turn up at the auctions. All the buyers are from the private sector and from small and marginal companies.

Coal mining activities developed in Barjora at the cost of displacing people from a number of villages. We tried to look into the issues of displacement and rehabilitation, but not in great detail. What we found from the field survey is that the DVC-Emta mine, which pre-dates the Trans Damodar, did not face real issues of coercion and conflict with regard to land acquisition and rehabilitation. On the other hand, Trans Damodar (which arrived later) is facing a lot of problems in this regard, probably because of the nature of the land it acquired, which is more suitable for agriculture. DVC-Emta developed on relatively drier lands occupied mainly by SC and ST populations and also expanded into parts of the forest lands. The Trans Damodar mine is spread over 282 acres. Three whole villages (Jamadar Gram, Salgara and Krishnanagar) and part of one village (Chunpara) have already been displaced for the expansion of mining in this area. In the next phase, the NH 9 (connecting Durgapur and Bankura through Barjora) is to be shifted to another location, which was identified with the help of the West Bengal Government. The Barjora GP has earned about 4,700,000 INR as a compensation package from the Trans Damodar Company for their acquisition of land located along different roads in the area. Although the GP is very pleased about their income from the mining companies, the local people are extremely unhappy about the displacement packages. However, these displacements have transformed the livelihoods of people of different villages from agriculture to mining and the service sector, which further enhanced urbanisation in the Barjora agglomeration area.

16.5 Dynamics of Land Transformation

Significant changes in land dynamics have been observed in Barjora. The land is slowly being transformed from agricultural use to industrial use but this has not provoked any major conflict as was the case in other places such as Singur and Nandigram in West Bengal. Agriculture was not very profitable here, as was the case in Singur and Nandigram. Out of the 22 villages in Barjora GP, only 7 or 8 villages have irrigation facilities, the rest of the villages depending on monsoon rainfall. Rain-fed cultivation is always risky, but the production (yield rate) is better and this motivated farmers to risk sowing rice, hoping to get enough rain for the crop. Because of the huge amount of ash left behind by the production of sponge iron and other metal-based industries in the region, the agricultural economy is now facing a severe crisis. Production has decreased drastically, making agriculture a totally non-profitable economy. Before industries came to the region the production of rice per acre was 1800 kg but this has now fallen to 600–750 kg. The crop height has decreased, thus reducing returns from the straw itself. The destruction of the agricultural economy is forcing small and marginal farmers to sell their land to the commercial, real estate and industrial sector players. The big farmers, on the other hand, are either continuing to produce crops or holding on to their fallow land as an asset, with expectations of very high returns in the future. In the last few years, land prices have gone up beyond the capacity of the lower middle class to purchase and build a house in Barjora. The present land value in this area is 200,000–300,000 INR per *katha* (5,000,000–6,000,000 INR per *bigha*⁵) and the value varies depending on the location. In roadside areas, the value of commercial land has risen as high as 1,000,000–1,500,000 INR per *katha*. In 2000, the land value in this area was 20,000–30,000 INR per *bigha* (20 *katha*). A few rich people have started to purchase land as an investment. Now there are 50–60 people (households) who own at least 6–10 acres of land individually.

16.6 Burdens of Industrial Growth

The major share of industrial development has taken place on the basis of investments provided by large non-local enterprises, employing labour from both local and more distant areas. The profit generated by this industrial development is not being invested locally to facilitate local infrastructural development. Development here is not closely connected to the local economy.

Looking into the nature of the industries in this area, it is clear that most are ferro-alloy industries with a major share of sponge iron. These industries are highly polluting in nature. The level of air pollution is such that it affects the health of the

⁵*Bigha* and *katha* are local units of land. About 20 *kathas* of land make a *bigha* and 3 *bighas* make an acre.

local people, as well as having a severe adverse impact on agricultural production. The falling crop productivity caused by air pollution has affected the livelihoods of local farmers. The people we interviewed mentioned that the flying dust and ash are adversely affecting their quality of life. Every household we interviewed stated that they have to keep their windows closed all the time to avoid flying pollutants and the situation becomes unbearable during the hot summer months.

Water scarcity has become a major threat in Barjora. Located in a fairly dry area, which is now the site of a large number of water-intensive sponge iron industries, Barjora is facing a severe water crisis. The water table is falling rapidly, thus affecting the availability of water in both surface wells and deep tube wells.

16.7 Private Assets and Amenities

Table 16.5 gives us an idea of the average asset levels of the households in Barjora. In almost all cases, the percentage of households that has assets is higher in comparison to the average levels for all CTs taken together in West Bengal. This observation indicates that the level of urbanisation in Barjora is much higher when compared to other CTs in West Bengal.

Besides the Census data, we have data on the levels of household assets from the field survey. This survey covered new built-up areas and households who have migrated to these places over the last 10–15 years. This survey did not cover poorer households, as the new migrants are not poor; rather, they are essentially middle

Table 16.5 Levels of household assets, 2011 Census

Types of assets	Percentage of households	
	Barjora (CT)	Average of all CTs in W.B.
Total number of households availing banking services	68.84	51.51
Radio/transistor	19.00	19.61
Television	67.18	47.08
Computer/laptop with Internet	2.18	1.57
Computer/laptop without Internet	6.21	5.96
Telephone landline	3.45	2.54
Mobile phone	51.01	52.23
Phone booth	13.11	3.63
Bicycle	72.09	57.46
Scooter/motorcycle/moped	24.40	11.25
Car/jeep/van	2.73	2.18
Households with TV, computer/laptop, telephone/mobile phone and scooter/car	4.26	6.19
None of the assets specified above	12.69	20.58

Source Census 2011

class people who come from the surrounding villages. The primary data show satisfactory levels of amenities and assets in Barjora, especially in the case of private ownership of houses, which indicate the residents' urban lifestyle. The level of urbanisation in Barjora is also visible in the availability of certain additional amenities and assets such as water connection, LPG gas and refrigerators.

16.8 Basic Services

16.8.1 Education and Health

The situation of education is relatively better in Barjora in comparison to other CTs in West Bengal (Samanta 2014). There are 17 primary schools, 3 high schools and 1 degree college. The high schools in Barjora CT are Barjora high school, Barjora girls' high school and Barjora CBSE (Central Board of Secondary Education) school. There are also two other high schools in the Barjora agglomeration: Ghutgoria high school and Hatasuria high school.

According to the perception of basic services in the Barjora survey, people are not satisfied with the health facilities available (Table 16.6). There is only one Government

Table 16.6 Condition of basic services as perceived by the households

Services	Condition	Number of households	Percentage of households
Water	Very good	3	6.00
	Good	2	4.00
	Bad	45	90.00
	Very bad	0	0.00
Drainage	Very good	6	12.00
	Good	3	6.00
	Bad	41	82.00
	Worst	0	0.00
Solid waste	Very good	9	18.00
	Good	1	2.00
	Bad	40	80.00
	Very bad	0	0.00
Health	Very good	4	8.00
	Good	46	92.00
	Bad	0	0.00
	Very bad	0	0.00
Education	Very good	19	38.00
	Good	31	62.00
	Bad	0	0.00
	Very bad	0	0.00

Source Field survey 2012

Primary Health Centre in each place and factories and mines do not provide health facilities for their employees. Barjora has no other health facilities such as private nursing homes. Some doctors are available in private practices on specific days of the week in different medical shops in the market, but the number is very low. Purchasing over-the-counter medicines from shops is a common practice. For serious health issues, the people of Barjora usually go to the government hospitals located in the nearby big town of Durgapur.

16.8.2 Water, Drainage and Solid Waste

The public water supply is only available in Barjora village and it does not cover all the villages in the Barjora agglomeration. Water comes from various sources including government services and personal arrangements. In Barjora, the water supplied by the panchayat (twice daily) is insufficient so every household has a personal well or a deep tube well. Those who are relatively better off have installed their own pumps which allow them to store water in overhead tanks to ensure that water is available to them throughout the day. Barjora belongs to the dry and drought-prone district of Bankura that faces an inherent water crisis. The main source of water is a well in the courtyard of each household. Here, agricultural activities are mainly dependent on rainfall during the monsoon, with a small proportion of land having irrigation facilities through canals. However, the situation is getting worse day by day with the steep increase in water used by the industries located in the region. Although local industries are meant to use water from the River Damodar, all of them are actually using groundwater, thus creating a water crisis for the residents, especially during the summer months. The water level in the wells descends to 40 feet during the summer and sometimes the wells are empty. However, 10 years ago the water level in the wells, measured from the surface, was 25 ft in the post-monsoon period and 30 ft in the pre-monsoon period. During our household survey, we also noted that 90 % of households (Table 16.6) stated that the condition of the water supply is bad and it is deteriorating day by day.

The panchayat draws the water it supplies from deep tube wells, which either dry up or decrease in yield during the summer. This water supply is basically untreated, but the residents do not complain about the quality of the water. To deal with the worst of the crisis, the Barjora GP has to supply water in tankers for household use for a period of 3 months in the summer. In 2012, they supplied 40 tankers of water (which were parked in different parts of the area) every day, besides managing 10 additional tankers from the existing industrial sources. Each tanker carries 5000 litre of water and costs 500 INR per tanker, the cost thus amounting to about 20,000 INR each day and a total of 1,800,000 INR for 3 months. The panchayat pays for this supply as there is no provision for water tax at the panchayat level in West Bengal.

The concept of covered drains does not exist in Barjora and drains are non-existent in most parts of this CT. According to the household survey, about 85 % of households mentioned that both the rainwater drainage and sewerage

conditions were inadequate (Table 16.6). Most of the households have their own drainage systems, but in some cases these drainage systems are not connected to the main drain. The problem arises especially during the rainy season, as most of the drain water mixes with the rainwater and overflows onto the roads in places where drains do not exist, water flowing all over the roads during heavy rains. Construction of a drainage network is essential, as mentioned by the households during the field survey.

Solid waste management is still inefficient as the rural panchayats get far less funding than urban local bodies for these services. However, rapid urbanisation is taking place, leading to the generation of increasing quantities of solid waste, the management of which is beyond the capacity of the panchayats. Overflowing roadside vats are a common sight in Barjora. On an average, around 80 % of the households surveyed mentioned that the solid waste management is bad in these areas (Table 16.6).

16.9 Conclusion

Barjora is representative of many CTs in India, where development under both local and global capital is taking place simultaneously, transforming the territories beyond the rural or urban limits. As it is located near the Asansol-Durgapur Industrial Cluster, which is administered by the Asansol-Durgapur Development Authority (ADDA), Barjora became an important place for the development of metal-based industries in the neo-liberal era. Although industrial development in the Asansol-Durgapur Industrial Cluster took place through public sector investment, industrialisation in Barjora is driven by private capital. The availability of coal in the area has added a new dimension to the territorial transformation, with two new coal mining companies operating there under a PPP model.

Besides mining and industrial development, locational advantages and good transport facilities have acted as significant drivers of in-migration in the Barjora agglomeration. People's mobility has increased to a considerable extent in the region and this has a significant impact on the local economy as well as on the socio-cultural environment of the settlement. As it is well connected to many places, the ease of commuting has helped Barjora flourish through rural urban migration from the surrounding villages. Even people who work elsewhere prefer to settle in Barjora because of its good commuting facilities and hence good commuting networks have clearly been a significant driver for the growth of CTs in West Bengal (Samanta 2014).

Barjora is part of the Barjora Gangajalghati Planning Area, which is located in the northern part of the Bankura District; it consists of 44 mouzas under the Barjora Panchayat Samity and 38 mouzas under the Gangajalghati Panchayat Samity.⁶ This

⁶See Land Use & Development Control Plan (2005) http://www.wburbandev.gov.in/pdfs/LUDCP_Borgora.pdf.

planning area could be developed as the counterpart to the ADDA, on the other side of the River Damodar. Rural urban integration is possible under this kind of planning, accompanied by a vision for more efficient policies based on the existing dynamics on the ground.

Because of the lack of an efficient regulatory system under the existing governance structure, Barjora faces high levels of pollution and the consequent degradation of the local economy and environment. The new mining industries find it much easier to handle land acquisition and displacement issues in this area. The local citizens suffer from numerous problems, starting from pollution and land speculation, compounded by the negligence of basic services and infrastructures such as roads, water, sanitation, health and education. The GP is incapable of governing these territories which are sites of diverse growth and there is no coordination platform for different panchayats located in one agglomeration to come together to control the situation. In West Bengal, CTs are governed by the GPs under the Ministry of Panchayats and Rural Development. Statutory towns, on the other hand are administered by the Ministries of Urban Development, and Municipal Affairs. These two departments have no coordination with each other and run specific programmes, either for rural or urban development.

On the basis of the data collected in the field in Barjora, this chapter argues that there are three options at the policy level to handle the governance crisis around CTs. First, these towns need to be recognised as urban and to be brought under the Department of Urban Development for better provision of infrastructures (roads, markets, electricity) and basic services (such as water, sanitation, health and education) especially in the CTs which have reached a considerable size and are experiencing faster growth. Currently, in the West Bengal Municipal Act, there is no provision for considering settlements smaller than 30,000 population as urban, and this needs to be reconsidered. However, in cases such as Barjora, a mere change of status from rural to urban would not really help to overcome the emerging crisis of governance.

The second option lies in the creation of a new urban status in the West Bengal Municipal Act with the recognition of something called a “Town Panchayat” for the CTs exceeding size categories of 10,000 population, and the provision for a separate category for small towns following the urban policies adopted by many other states. These Town Panchayats are not governed by rural local bodies (panchayats) and develop as urban authorities having a status below that of a municipality (statutory urban status as “town”). This allows these urban centres to develop more urban amenities and services. Usually these Town Panchayats provide basic services such as road maintenance, street lighting, water supply and sanitation. The finance required to run such towns comes both from local bodies and from the state governments. Provisions are also made for taxes to be shared between Town Panchayats and the state government to facilitate the development of such small towns. For example, in Tamil Nadu, Town Panchayats get a proportional share of 50 % of land registration revenue from the state, on property transactions within their territory. Moreover, these Town Panchayats also levy different taxes such as

property tax, professional tax, trade tax, water tax and so on to enable them to provide better services in comparison to the rural local bodies.

The third option is to review the issue of urban planning. Cases such as Barjora prove that development does not always take place following the territorial limits of either rural (panchayat) or urban (ULB) entities. However, urban and rural are completely disparate categories of territories and are managed by completely different sets of norms and ministries in India. These two departments, which are managed by different ministries, have very little coordination, which creates complications when it comes to managing territories where development crosses the physical boundaries of rural and urban. In the neo-liberal economy, characterised by the fluidity of capital invested through private initiative, India needs to arrive at a more integrated approach to development planning, rather than continuing to see urban planning and rural planning as two separate processes with different agendas and initiatives for development. It is only through an integrated approach that new urban territories, such as Barjora, can be better managed, taking into consideration many localities of the same physical agglomeration and working beyond physical and administrative boundaries.

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Chapter 17

Does Administrative Status Matter for Small Towns in India?

Partha Mukhopadhyay

17.1 Introduction

The urban population in Indian small towns, of populations less than 100,000, comprise a large and indeed growing share of urban population. As of 2011, the Census reported that 41.1 % of the urban population are in such small towns, up from 40.3 % in 2001. However, much of this growth has happened in small towns that do not have administrative urban status¹—the Census towns’ (see Pradhan 2017 for a full discussion) share of urban population almost doubled from 7.4 to 14.6 %, whereas the share of small towns with urban administrative status dropped from 32.9 to 26.5 %.

This is because urban transformation in India is not as much about moving people, that is rural urban migration, but more about morphing places or change in the economic structure of existing settlements, many of which continue to be governed as rural areas. From 2001 to 2011, of the 90.9 million people newly classified as part of the urban population, approximately 40 million were added through natural growth, 19.1 million by migration and the remaining 31.8 million came from this phenomenon of morphing places. This morphing of places is based on two distinct conceptions of “urban”. There is the administrative concept, in terms of urban local government, when a state government decides to declare a settlement as urban. There is also the functional concept, as defined by the Census

¹In India, the local body governance structure is separated into rural and urban classifications, each with its own potential functional domain as defined by the 73rd and 74th amendments to the Constitution of India. The decision to declare a particular settlement (or group of settlements) as urban is taken by the respective state governments, based on state-specific legislation. See Joshi et al. (2016) for details.

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of India. According to the latter, functional urban areas without urban administrative status are called Census towns (CTs). These are defined as those settlements having a population of 5000 or greater, a density of at least 400 per km² and, in terms of economic activity, having at least 75 % of male main workers in non-farming activities. The number of CTs has increased from 1362 to 3892 between 2001 and 2011. This is in contrast to the 242 new administratively recognised towns. It is also worth noting that the CTs are distributed across India without specific concentration. There is growth of CTs in the periphery of large metropolitan cities, but it is not limited to such areas. Only 37 % (39% of the population) of new CTs are “proximate” to a town with a population of more than 100,000 (Pradhan 2013, 2017).

This chapter asks whether administrative status matters in these small towns, in terms of access to basic services such as water and sanitation. Is it the case that a small town which is governed by an urban local body (ULB) has better access to services as compared to small towns which are not classified as urban and thus continue to be governed as rural areas, as (or as part of) a panchayat (rural local body)? It also looks at the rural neighbourhood (defined in a precise manner later) of these small towns and asks the same question.

This question has not been explored in the literature, in part because the relevant data sets have not been assembled earlier. The literature, however, suggests that there is only a limited push from state governments to be urban. This is attributed to high administrative barriers (Samanta 2014) and high level of federal government support for rural areas (Government of Tamil Nadu 2006). In addition, some authors suggest that there is also a low demand for recognition from the communities in the settlement because of the high regulatory burden in terms of taxes and planning (Bhagat 2005).

17.2 Data and Methodology

This chapter is based on two data sets assembled as part of the SUBURBIN project. Both these data sets are unique, being assembled for the first time. As such, they offer the possibility of quantitatively understanding service provision at a level of detail not possible before.

Each of these sets of data is used to address one research question. The first of these focuses on the question whether the administrative status matters for the settlement itself. To enable this a data set is created of *matched* urban areas across the 2001 and 2011 Censuses of India. This includes both CTs and statutory towns. The Census of India provides data for various indicators at the level of the town in separate data sets. These data sets have to be combined for a particular year and then matched to the population data set of the Census for that year, which provides information on population and workforce character. These data sets then have to be matched across Census years to enable the comparison in the change in the indicators in an urban area over a time period. One of the issues with this is the change

in the administrative status of a settlement. For the purposes of this chapter, the towns whose administrative status changed between 2001 and 2011 were excluded from the data set. Similarly, towns which do not exist in both periods, in particular new towns in 2011 are also not part of the matched data set. As the focus is on small towns, we consider only towns with a population less than 100,000, which retained the same administrative status in both periods. Furthermore, for particular estimation exercises, some of these towns had to be dropped and the eventual sample that remained was 3919 towns. For these urban areas, in the first data set four indicators were included that focused on water and sanitation, namely:

1. Share of households with access to tap water, which is a basic access indicator
2. Share of households with access to in-house tap water (i.e. within the premises), which is an indicator of the quality of access
3. Share of households with access to in-house latrines (i.e. toilets within the premises), which is a basic access indicator
4. Share of households with access to either a piped sewer or a septic tank type latrine, which is an indicator of the quality of access.

Table 17.1a, b provide the summary statistics for these four indicators in the towns in 2001 and 2011, grouped by different size classes. Figure 17.1a–d plots these indicators with respect to the population of towns (restricted to less than one million to enable variations in smaller towns to be observed more clearly). The CTs and statutory towns are also distinguished by colour in the figures, which also shows that the red dots (CTs) are usually smaller in population than the blue dots (statutory towns). The towns which are less than 100,000 in population are clustered to the left of the indicated line. It is clear from these four plots that there is considerable variation in these indicators in the smaller towns, although in the larger towns the indicators are better, but not consistently so. In many large towns, the indicators are worse than some small towns. There is also considerable difference in the level of access across the four chosen indicators, which indicates that they would measure different aspects of service provision.

The second data set was assembled to answer the question as to whether the neighbourhood of CTs differ from the neighbourhood of statutory towns. The goal is to explore the level of certain amenities and services in the rural areas around the towns and to determine whether there is a difference in being proximate to a statutory town vis-à-vis a CT. However, unlike the analysis with towns, we can do this only for 2011, where for the first time, the Census of India has provided information on amenities at village level in terms of share of households with access to particular services. This data is utilised, defining the “neighbourhood” as the five closest villages to the urban areas, restricting ourselves to the towns with a population of less than 100,000. On the urban side, this consists of 7297 towns and 32 million urban households, of which 3495 are CTs and 3802 statutory towns. This includes about 40 % of the urban households in India. On the neighbourhood, the data consists of 36,485 villages (of these 30,489 were usable in the analysis) and 29 million rural households. This includes 17 % of the rural households in India.

Table 17.1 Summary statistics for towns in 2001 and 2011

Size class	Statistics	Households with tap water in 2001 (%)	Households with in-house tap water in 2001 (%)	Households with in-house latrines in 2001 (%)	Households with water closet (WC) in 2001 (%)
<i>a) Summary statistics for towns in 2001</i>					
1 (100,000–1,000,000)	Min	2.47	1.70	25.17	2.05
	Max	98.97	94.19	99.38	86.90
	Mean	65.11	46.90	78.53	46.81
	Q1	48.88	31.43	71.05	35.35
	Median	71.65	47.72	80.72	47.08
	Q3	84.65	63.27	88.42	58.73
	SD	24.76	21.60	13.25	16.90
2 (50,000–100,000)	Min	0.69	0.49	15.83	2.10
	Max	99.64	91.22	98.95	92.43
	Mean	62.23	42.99	72.26	42.00
	Q1	40.63	26.67	62.49	29.20
	Median	69.38	42.44	74.17	41.05
	Q3	84.35	60.05	83.92	53.82
	SD	26.72	22.27	15.19	17.80
3 (20,000–50,000)	Min	0.05	0.00	9.48	0.02
	Max	99.64	97.62	99.93	96.63
	Mean	56.78	37.28	63.77	32.87
	Q1	33.02	16.68	49.59	16.94
	Median	62.43	35.83	63.80	30.26
	Q3	81.79	56.28	79.62	43.92
	SD	29.09	24.08	20.14	20.32
4 (10,000–20,000)	Min	0.06	0.00	4.46	0.00
	Max	100.00	99.89	100.00	99.79
	Mean	54.38	32.57	57.58	27.45
	Q1	29.01	10.67	41.76	11.66
	Median	58.56	28.68	57.76	23.59
	Q3	81.11	50.88	74.85	38.11
	SD	29.95	25.03	22.93	19.92
5 (less than 10,000)	Min	0.00	0.00	0.43	0.00
	Max	100.00	100.00	100.00	100.00
	Mean	53.46	30.53	56.91	25.59
	Q1	22.10	6.05	36.81	8.40
	Median	56.84	23.61	57.06	19.58
	Q3	84.34	49.97	78.08	36.29
	SD	33.24	26.70	25.65	22.16

(continued)

Table 17.1 (continued)

Size class	Statistics	Households with tap water in 2001 (%)	Households with in-house tap water in 2001 (%)	Households with in-house latrines in 2001 (%)	Households with water closet (WC) in 2001 (%)
<i>b) Summary statistics for towns in 2011</i>					
1 (100,000–1,000,000)	Min	5.70	3.37	31.62	23.66
	Max	99.26	93.67	99.89	97.02
	Mean	66.62	50.50	83.98	73.73
	Q1	45.95	32.96	77.45	66.69
	Median	76.06	52.62	86.04	75.93
	Q3	89.11	70.01	93.71	83.88
	SD	26.68	23.80	11.64	13.61
2 (50,000–100,000)	Min	2.55	1.97	21.31	12.28
	Max	99.95	97.42	99.84	97.57
	Mean	65.38	46.61	78.79	66.87
	Q1	43.99	27.08	69.07	57.10
	Median	73.13	46.03	80.67	68.91
	Q3	88.01	66.76	90.31	79.41
	SD	27.41	24.31	14.43	16.49
3 (20,000–50,000)	Min	0.49	0.10	16.73	4.26
	Max	99.88	99.63	100.00	99.95
	Mean	61.28	41.75	71.05	58.22
	Q1	38.65	19.35	57.66	45.20
	Median	67.64	40.52	72.14	58.63
	Q3	88.33	62.36	88.20	73.22
	SD	29.76	25.94	19.39	19.50
4 (10,000–20,000)	Min	0.45	0.14	5.53	0.42
	Max	99.93	98.45	100.00	100.00
	Mean	60.57	36.85	65.40	51.08
	Q1	34.76	14.84	48.19	35.61
	Median	66.74	33.31	66.31	50.65
	Q3	89.50	55.35	84.38	66.52
	SD	30.40	25.46	22.43	21.16
5 (less than 10,000)	Min	0.07	0.00	0.99	0.61
	Max	100.00	100.00	100.00	100.00
	Mean	61.06	37.86	65.93	50.20
	Q1	31.21	11.20	46.38	29.44
	Median	70.68	30.26	67.34	48.37
	Q3	91.94	63.37	89.23	70.38
	SD	32.94	29.79	24.66	25.37

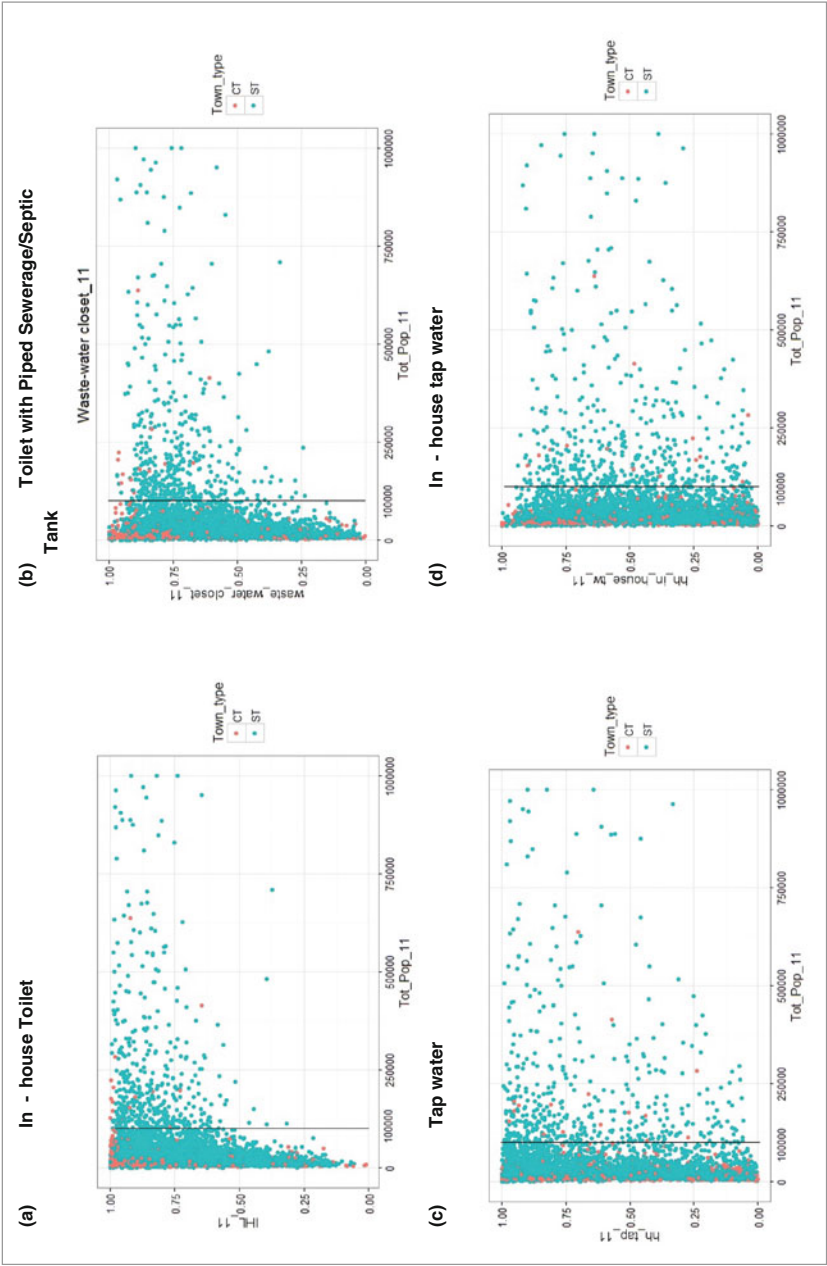


Fig. 17.1 Indicators for towns in 2011. **a** In-house toilet. **b** Toilet with piped sewerage/septic tank. **c** Tap water. **d** In-house tap water

17.2.1 Spatial Character of the Data

A special feature of both data sets, particular of the SUBURBIN project, is the inclusion of spatial characteristics using the centroids of the settlements. This allows distinguishing between two types of CTs. Proximate CTs, which are CTs near a large town of more than 100,000, were identified separately from non-proximate CTs, wherein the proximity buffer was scaled by the size of a town, from 10-km radius for a town of 100,000 to 25-km radius for a city of more than four million.

For the second data set, the neighbourhood itself was defined in spatial terms, using the data on centroids of settlements. The five villages identified as the neighbourhood of a town are the closest five villages in terms of distance between the village centroid and the town centroid, restricting all the settlements to be in the same district (an administrative unit in the state) as the town. Therefore, villages that are closer to the town, but in a different district, are not in the neighbourhood, whereas a village which is relatively further but in the same district is included in the neighbourhood. This affects towns that are close to the district borders. This restriction is used because the district is the administrative unit on the basis of which various service provision initiatives are undertaken by the government and the nature of administration would vary by district, which would then complicate the analysis.

17.3 Results

In keeping with the two major questions in the chapter, the results are grouped into two separate sections. First, the differences with urban areas, which compares the level of amenities in the CTs vis-à-vis the statutory towns and the second, the differences between the neighbourhoods of the CTs and the statutory towns.

17.3.1 Differences Within Urban Areas

Table 17.2 shows the first comparison between CTs and all statutory towns for the matched set of 3919 urban areas. It is seen that even at this level there is a distinct pattern between the two services, water and toilets. In the first case, the statutory towns seem to be better served, whereas in the second the position is reversed. The status with the change in level between 2001 and 2011 is different. There is no significant difference between the statutory towns and CTs. In part, this can be because the increase in the statutory towns is lower than CTs, given their already higher level, but they are still quite far away from full coverage and therefore the validity of this explanation is questionable.

Table 17.2 Comparison of statutory towns and CTs

Amenity	Level of amenities in 2001				Change in level of amenities 2001–2011			
	Tap water (%)	In-house tap water (%)	In-house latrine (%)	Water closet (%)	Tap water (%)	In-house tap water (%)	In-house latrine (%)	Water closet (%)
Mean value in statutory towns	57.9	35.9	59.0	28.2	5.7	5.4	8.0	28.4
Mean value in CTs	48.6	30.5	65.5	35.3	6.4	5.9	10.3	26.1

The next point of comparison is to use the density plots of the three groups of urban areas, proximate CTs, non-proximate CTs and statutory towns. Density plots are part of exploratory data analysis and are most conveniently thought of as continuous histograms which describe the frequency of occurrence of each of the levels of the indicator at different levels of the indicator. For example, if many towns have a high share of households with in-house toilets, the density curve is skewed to the right and vice versa. Thus, the density plots allow us a quick visual comparison across distributions for different groups of data.

Kernel density estimation does not impose parametric restrictions (i.e. specify a particular shape for the density function) but uses the data to estimate the underlying probability density function. This involves some assumptions about the manner in which the underlying data are smoothed using fitting various functions locally (within a small group of observations called the bandwidth), similar to a moving average, which is a simple example of a smoothing technique. These density plots were generated using the `geom_density` estimate in the `ggplot2` package of R. There are two essential parameters of each kernel density estimate. The first is the kernel window or probability distribution function, where the Gaussian or normal distribution is used. The second is the “bandwidth” parameter, the width of the neighbourhood of values to which probability is assigned. A bigger bandwidth results in a shorter and wider bump that spreads out further from the centre and assigns more probability to the neighbouring values, but if the sample size is large, small bandwidths are used which restricts the spread of the bumps but allows the height to be higher. In this case, the default bandwidth of the Gaussian kernel is based on Silverman’s “rule of thumb” (Silverman 1986: 48).²

Figure 17.2a–d shows the comparison between all CTs and statutory towns. A distinct pattern is seen. First, in the top two panels (Fig. 17.2a, b), which refer to sanitation indicators, the CT distribution appears more skewed to the right, as shown by the clear appearance of the pink shade at higher levels of the indicator

²The Silverman’s rule of thumb is 0.9 times the minimum of the standard deviation and the interquartile range divided by 1.34 times the sample size to the negative one-fifth power. The present kernel density estimation is unweighted, that is there are no observation weights.

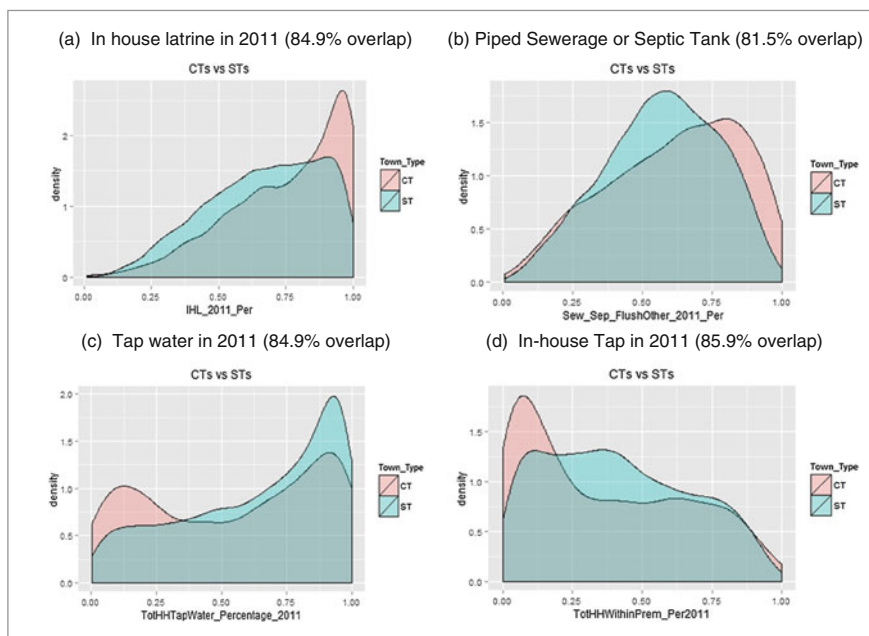


Fig. 17.2 Density plots for various indicators in 2011 (CTs vis-à-vis statutory town)

and conversely, the clear appearance of the blue shade at lower levels, which indicates a higher frequency of high-access values for CTs as compared to statutory towns.³ This pattern is reversed in the lower two panels (Fig. 17.2c, d), which refer to water supply. However, the extent of overlap between the two distributions, which is the area in a darker shade of blue-black, is also quite high—more than 80 % in all four cases. It is evident that the statutory status does not confer a distinctly separate advantage compared to other urban areas of similar size. Second, there is a difference in pattern between toilets (both the extensive and intensive, i.e. quality margins) and water supply. In the first case, it is essentially a private investment⁴ although tap water usually has to be provided publicly. It should be mentioned that as the distribution of statutory towns is skewed towards larger

³If the distributions cross at only one point, one of them stochastically dominates the other, that is there are proportionately more observations below all levels in one distribution as compared to another. In this case, while it is broadly true, it is not exactly so, as a closer inspection of the density plots indicates.

⁴There is a caveat to this. In rural areas, there has been a considerable investment subsidy for building toilets, earlier as part of the total sanitation campaign and now as part of the Swachh Bharat Mission. To some extent, the CTs could have benefited from this investment, and this characterization is misleading to that extent.

Table 17.3 Comparison of proximate and non-proximate CTs

Amenity	Level of amenities in 2001				Change in level of amenities 2001–2011 (%)			
	Tap water (%)	In-house tap water (%)	In-house latrine (%)	Water closet (%)	Tap water (%)	In-house tap water (%)	In-house latrine (%)	Water closet (%)
Mean value in proximate CTs	47.87	27.96	66.34	32.46	8.15	7.77	11.96	29.38
Mean value in other CTs	49.20	32.64	64.69	37.72	4.85	4.34	8.84	23.18

populations (as is clear in the plots in Fig. 17.1a–d), the distributions are not controlled for size. This is addressed later.

Table 17.3 compares proximate and non-proximate CTs. Comparing the levels in 2001, we find that non-proximate CTs are usually better served, with a slight reversal in the case of in-house toilets. However, in terms of the change in amenities, the proximate CTs seem to perform much better.

Figure 17.3a–d compares the density plots proximate and non-proximate CTs. Here, one notes that the extent of overlap is much higher—more than 90 % in three of the four cases. However, the picture is not as clear as the comparison between statutory towns and all CTs. Given the multiple crossings of the density plots, it is clear that no distribution (first order) stochastically dominates the other. Proximity to larger towns thus does not appear to generate observable benefits. This can be because of limited spillover effects or because these larger urban areas themselves are not particularly well served.

Figure 17.4a–d show the change in level over 2001–2011 versus the initial level of the indicators in 2001 for CTs vis-à-vis statutory towns for the four indicators.⁵ It is visually evident that there is no clearly discernible pattern, as the red CTs are quite mixed in with the blue statutory towns. However, although there is high variance at all initial levels of the indicators, there is a general tendency towards convergence—catching-up among the urban areas with low levels of particular services.

To study this issue in a more statistically robust manner, we model the change in the level of the amenity as being influenced by the initial population size of the settlement as an indicator of capacity, and the growth of the population as an indicator of vitality of the settlement. We then investigate whether the administrative status of the urban areas has any influence on the extent of change in indicator levels. Notationally, we have:

⁵In 2001, there is no separate identification of piped sewer and septic tank. We therefore use the indicator of households with access to ‘water closet (WC)’ as the corresponding indicator for 2001, compared to the sum of households with piped sewer and septic tank in 2011. According to the Census 2001 definition, “*sanitary water flush latrines are those latrines that have water closets fitted with flushing cisterns. Such latrines that may be connected to a septic tank or an underground sewerage system are also recorded as water closet latrines*”. This makes the sum of piped water septic tank latrines in 2011 comparable to water closets in 2001.

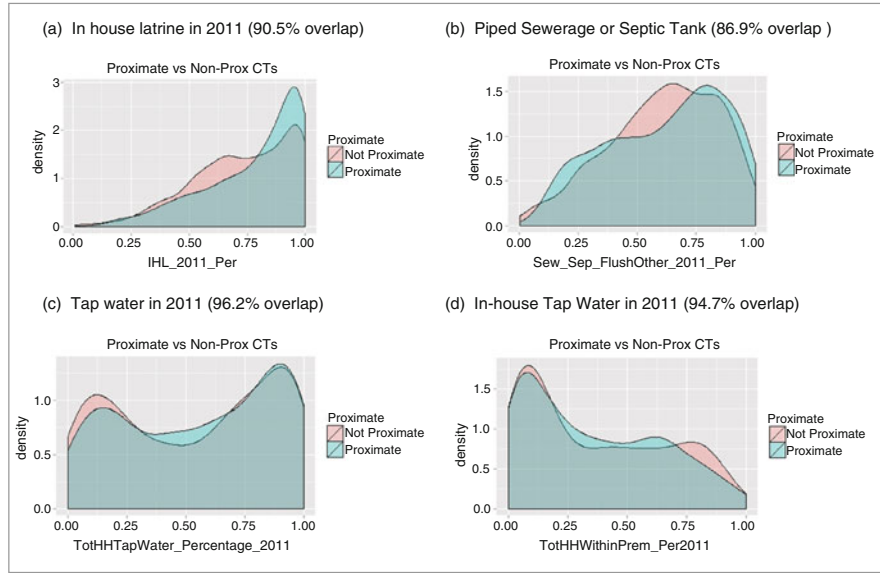


Fig. 17.3 Density plots for various indicators in 2011 (proximate vis-à-vis non-proximate CTs)

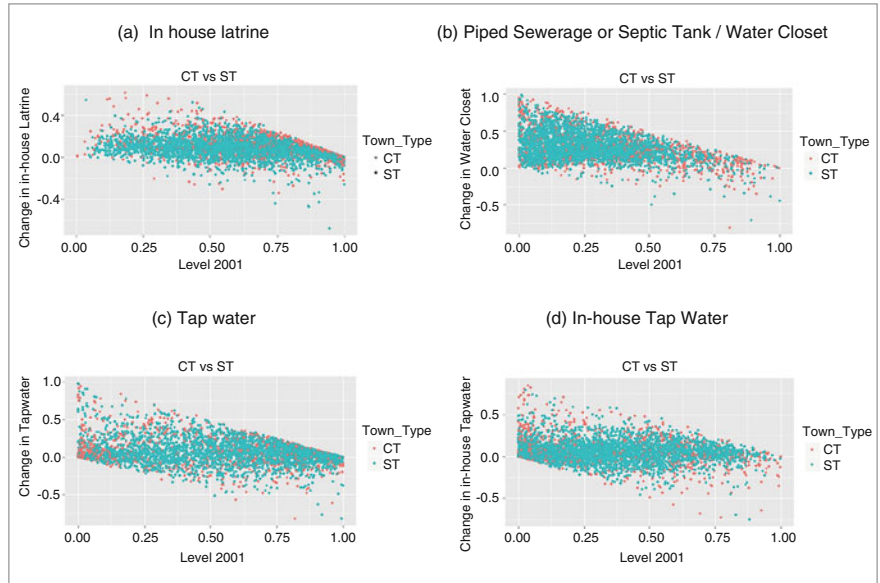


Fig. 17.4 Change in Amenities 2001–2011 (CTs vis-à-vis statutory towns)

$$(Y_1 - Y_0) = a - bY_0 + c_1X_1 + c_2X_2 + c_3S_{CT} + c_3S_S + c_4(X_1 \times S_{CT}) \\ + c_5(S_{CT} \times S_S)$$

which is equivalent to the following formulation:

$$\equiv Y_1 = a + (1 - b)Y_0 + c_1X_1 + c_2X_2 + c_3S_{CT} + c_3S_S + c_4(X_1 \times S_{CT}) \\ + c_5(S_{CT} \times S_S)$$

where Y_1 is the value of the indicator in 2011, Y_0 is the value of the indicator in 2001, X_1 and X_2 are the size and growth in the population of the settlement respectively, S_{CT} is a set of dummies indicating the status of the settlement (there are two separate dummies for proximate CTs and non-proximate CTs) and S_S is a set of dummies for each state, which are included to take into account the differences across states. This dummy would also pick up the effect of possible explanatory variables that are not included in the regression but vary across states, such as the income level. The formulation also accounts for differing effects of the status of settlement, depending on the population (measured by the interaction term $X_1 \times S_{CT}$) and also for the possibility that the effect of the CT may vary across states (measured by the interaction term $S_{CT} \times S_S$). Recognising that the dependent variable Y is bounded above by 1 (being a share of the households with access to a particular amenity) and that the change would decrease at higher initial levels, we also use an alternative formulation that uses a log form for the same relationship, namely:

$$\equiv aY_1 = a + (1 - b)Y_0 + c_1\ln X_1 + c_2\ln X_2 + c_3S_{CT} + c_3S_S + c_4(X_1 \times S_{CT}) \\ + c_5(S_{CT} \times S_S).$$

In these formulations, a significantly negative value for either of the c_3 coefficients (there are two, one for the dummy for proximate CTs and the other for non-proximate CTs) would indicate that there is a measurable benefit to being a statutory urban area relative to either the proximate or non-proximate CT or both, as the case may be. To the extent that the explanatory variables and the state dummies control for effects unrelated to status, the effect of status as determined by the significance of c_3 is a “purer” effect. However, in many states, population is a determinant of the statutory status and the status itself may lead to population growth. Furthermore, different states vary in the thresholds of declaring a settlement as a statutory urban areas. It can therefore be argued that the inclusion of these variables would weaken the effect of a statutory status. To some extent, this is the effect of statutory status that is additional to the effect of population size, which is captured by the interaction term c_4 .

Table 17.4 present the results for the linear formulation. Only dummies with significant coefficients are reported. Most of the state dummies (not reported) are highly significant. It should be noted that the relatively sparse and economical

Table 17.4 Linear specification with population and proximity interaction

Independent variable	Households with tap water in 2011	Households with in-house tap water in 2011	Households with in-house latrines in 2011	Households with water closet (WC) in 2011
Level of dependent variable in 2001	0.705***	0.794***	0.847**	0.664***
Population in 2001	-3.15e-07**	1.98e-08	3.50e-07***	1.84e-06*
Population growth 2001–11	0.002	0.011**	0.002	0.0183
Dummy for proximate CTs	-0.0335	0.00718	0.0900	0.213***
Dummy for Non proximate CTs	0.0364	-0.114	0.0914	0.110**
Dummy for proximate CTs × Pop_01	9.74e-07	1.19e-06	-3.91e-07	-1.17e-06*
Dummy for other CTs × Pop_01	9.38e-07	2.68e-08	1.20e-06**	-1.31e-06
Constant	0.255***	0.246***	0.116***	0.384***
Adjusted R^2	0.79	0.79	0.87	0.62
N	3919	3919	3919	3919

Note All the coefficients marked ***, ** and * reported above are significant at the 1 %, 5% and 10% level of significance respectively (i.e. the probability that the hypothesis would be accepted, even if false, is 1 %, 5% and 10% respectively). Detailed results with coefficients on interaction dummies are available from the author on request.

model provides a reasonably high level of explanation, with an adjusted R^2 varying between 0.62 and 0.87. It is noted that $(1 - \mathbf{b})$ is consistently significant, positive and below 1, as would be expected from a value of \mathbf{b} that is negative but less than one. This would indicate that the higher the initial level of the indicator, the lower the change over time.

Furthermore, confirming our earlier findings from exploratory data analysis, in the case of toilets, for both the access and quality measures, CTs actually have a significantly higher level of amenity, with proximate CTs performing somewhat better, this distinction being a clearer result than earlier. However, there is a measureable somewhat significant benefit for statutory urban status in the case of access to tap water, vis-à-vis non-proximate CTs but there is no such difference for in-house tap water.

The state-wise picture is more complicated. For tap water, proximate CTs in Rajasthan fare worse than statutory towns (but not non-proximate CTs). In Tripura and Odisha, both types of CTs are about equally worse than statutory towns, whereas in Karnataka and West Bengal, non-proximate CTs are more so. In Bihar, Gujarat, Kerala and Madhya Pradesh, only non-proximate CTs are worse off. Similarly, for piped sewerage and septic tanks, proximate CTs in Delhi, Odisha and Uttarakhand are worse off, and non-proximate CTs in Punjab and Madhya Pradesh and both in Tripura (with proximate being more so).

Table 17.5 reports the results for the log formulation, along with the significant state cross dummies. In the case of toilets, the previous results are reinforced. However, in the case of access to tap water, there is now no measurable difference from statutory urban areas and both proximate and non-proximate CTs. In the case of toilets, it is curious that the interaction with population is negative, that is for larger CTs, the effect is weaker and in fact, at the median population level of the proximate CTs, which is 10,756, the effect drops from 0.48 (without the interaction effect of population) to 0.15. For the non-proximate CTs, when evaluated at their

Table 17.5 Nonlinear specification with population and proximity interaction

Independent variable	Households with tap water in 2011	Households with in-house tap water in 2011	Households with in-house latrines in 2011	Households with piped sewer/septic tank, in 2011
Level of dependent variable in 2001	0.702***	0.795***	0.840***	0.642***
log_Population in 2001	-0.006	0.000	0.000	0.000
log_Growth of Population 2001–11	-0.007*	0.006*	0.008***	0.022***
Dummy for proximate CTs	-0.085	-0.174	0.183	0.480***
Dummy for other CTs	-0.128	-0.105	0.319**	0.471***
Dummy for proximate CTs \times log_Pop_01	0.009	0.021	-0.012	-0.036**
Dummy for other CTs \times log_Pop_01	0.019	-0.001	-0.026***	-0.0445**
Constant	0.305***	0.260***	0.0250	-0.00294
Adjusted R^2	0.79	0.79	0.87	0.63
N	3919	3919	3919	3919

Note All the coefficients marked ***, ** and * reported above are significant at the 1 %, 5% and 10% level of significance respectively (i.e. the probability that the hypothesis would be accepted, even if false, is 1 %, 5% and 10% respectively). Detailed results with coefficients on interaction dummies are available from the author on request

median population of 9833, the effect is even stronger, dropping from 0.47 to 0.06. Any advantage over statutory urban areas seems to be lower as the size of the CTs increases. This would need further work to understand the reasons. Nevertheless, it would seem that, *on average*, urban administrative status does not confer a significant benefit in terms of change in the level of the amenity over time.

However, again, when one considers specific states, the situation may be different. In Tripura, for instance, for households with access to either piped sewerage or septic tanks, once the interaction effect for the state is accounted for, both types of CTs have lower levels of access as compared to statutory towns. In the case of tap water, in Tripura, West Bengal, Odisha and Karnataka both types of CTs are worse off vis-à-vis statutory urban areas, whereas in Bihar, Madhya Pradesh, Gujarat and Kerala only non-proximate CTs are worse off. Surprisingly, in Rajasthan it is proximate CTs that are worse off, but not non-proximate CTs. Interestingly, for access to piped sewerage and septic tanks too, proximate CTs in Bihar, Delhi, Jharkhand, Kerala, Tripura and West Bengal are worse off than statutory urban towns, but not non-proximate CTs. Thus, in particular states and for particular services there may be an advantage to being administratively urban.

17.3.2 *Effect on the Neighbourhood*

It is now useful to consider the second question, about the effect on the neighbourhood of the towns. Table 17.6 provides a quick description of the share of urban and proximate rural households by the CTs and statutory towns. As is evident, the share of CTs decreases considerably as the size of the urban area increases. For smaller urban areas of less than 20,000 people, the share of CTs is 60 % in urban areas and 73 % of neighbourhood rural areas which drops sharply to 9 and 16 %, respectively, for towns of more than 50,000, as CTs are usually much smaller than statutory towns.

In this exercise, we use five indicators, namely access to in-house toilets and two-wheelers (which are private goods), in-house water (which is mixed in that it could be both publicly and privately provided) and piped sewerage and banking (which are exclusively publicly provided). As seen in Table 17.7, the CTs have

Table 17.6 Share of proximate rural neighbourhood and town population by size class

Share of CTs	Size class of towns		
	Less than 20,000 (%)	20,000–50,000 (%)	50,000–100,000 (%)
Proximate rural neighbourhood population	73	63	16
Town population	60	31	9

Table 17.7 Access to services in CTs and statutory towns by size class

	In-house toilet (%)	In-house water (%)	Banking (%)	Piped sewer (%)	Two-wheeler (%)
Less than 20,000	71.7	55.9	62.1	9.7	26.8
20,000–50,000	84.6	66.5	65.7	13.8	29.8
50,000–100,000	85.5	66.3	62.7	18.6	32.1
All CTs	77.1	60.3	63.4	11.7	28.2
Less than 20,000	58.7	51.4	58.8	7.2	25.7
20,000–50,000	68.5	61.7	60.9	10.9	28.2
50,000–100,000	76.5	65.1	60.8	15.8	31.1
All statutory towns	69.6	60.9	60.5	12.0	28.8
<i>Difference between statutory towns and CTs</i>					
Less than 20,000	–3.3	–1.1	–13.0	–2.4	–4.5
20,000–50,000	–4.8	–1.7	–16.1	–2.9	–4.8
50,000–100,000	–1.9	–1.0	–9.0	–2.9	–1.2
All towns	–3.0	0.6	–7.6	0.3	0.6

better access than statutory towns on average for each of the three size classes, though the overall average for the statutory towns are better because a larger share of statutory towns are in the higher size class.⁶

In Table 17.8 the difference between the neighbourhoods of statutory towns and CTs is even more striking, with much larger differences between the individual size classes. From the data, access to both private and public amenities in villages in the neighbourhood of the CT (which, one must reiterate, remains an administrative village) appears to be higher than in villages in the neighbourhood of the statutory town, indicating relatively limited spillovers from the statutory town. In this context, the difference between the share of non-farm workers in the two groups is especially remarkable. The last column of Table 17.8 presents the non-farm share of neighbourhood rural area by status of associated town. The neighbourhood around the CTs is clearly much more engaged in non-farm work than the neighbourhood around the statutory towns, to the extent of 25–30 % higher, indicating that these villages may well have higher standards of living. Later (in Table 17.11),

⁶This is because these are population weighted averages. A higher proportion of the population of statutory towns is in the larger towns and this leads to an overall higher average.

Table 17.8 Service in rural areas proximate to CTs and statutory towns by size class

	In-house toilet (%)	In house water (%)	Banking (%)	Piped sewer (%)	Two-wheeler (%)	Non-farm workforce (%)
Less than 20,000	66.3	52.9	60.0	6.3	22.3	68.6
20,000–50,000	87.4	71.5	67.7	10.0	21.9	79.5
50,000–100,000	84.0	68.3	64.0	12.1	27.4	80.2
All CTs	74.3	60.0	62.9	7.8	22.2	72.5
Less than 20,000	40.0	32.0	54.3	3.6	22.7	39.9
20,000–50,000	50.9	45.5	57.6	5.2	22.8	49.1
50,000–100,000	55.1	50.3	56.2	5.7	23.1	52.9
All statutory towns	47.2	40.9	55.9	4.6	22.8	47.9
<i>Difference between villages proximate to CTs and those near statutory towns</i>						
Less than 20,000	–26.3	–20.9	–5.8	–2.7	0.5	–28.7
20,000–50,000	–36.5	–26.0	–10.1	–4.8	0.9	–30.5
50,000–100,000	–28.9	–18.0	–7.8	–6.4	–4.2	–27.3
All towns	–7.0	0.6	–27.1	–3.2	0.6	–24.6

it is seen that the difference between neighbourhoods is not statistically significant once the share of non-farm workers is taken into account

There are also a number of instances where even the rural neighbourhood is on average better than its associated CT or statutory town. Table 17.9 presents the share of towns in each size class where this is the case for the five indicators. In most cases this is true in a higher proportion of CTs than statutory towns, which can be explained by the relatively larger population size of the statutory town.

To look at this effect in more detail, we constructed a measure of difference between urban area, and proximate rural area:

$$M^i = (I_t^i - I_v^i) / I_t^i$$

where M is the measure of difference, I_t is the level of the indicator of access in the town, I_v is the average of the level of the indicator of access in neighbouring villages, weighted by the number of households in the each of the five villages and

Table 17.9 Share of villages which have better level of amenities than associated town

Town type	Town size	In-house toilet (%)	In-house water (%)	Banking (%)	Piped sewer (%)	Two-wheeler (%)	Total towns
CT	Less than 20,000	14	26	36	35	34	3164
	20,000–50,000	9	23	34	31	23	584
	50,000–100,000	7	26	44	24	48	54
Statutory town	Less than 20,000	12	14	40	23	29	1638
	20,000–50,000	5	8	37	14	20	1316
	50,000–3100,000	3	8	30	10	14	541

i denotes the five indicators—banking services, in-house water, in-house toilets, piped sewerage and ownership of two-wheelers. Note that if the neighbouring villages have zero access, the value of M equals one, which is the maximum value, whereas if the town has zero access, the value of M is minus infinity. If both have similar access, the value of M is zero. If the neighbourhood village indicator is twice the level of the town indicator, then the value of M is minus one.

Figure 17.5a–e plot the measure of difference above vis-à-vis the population of the town. It is visually evident that the negative values of M are concentrated in the towns with smaller populations, many of which are also CTs (red dots). With increase in population, the share of towns with a lower level of amenities than the surrounding rural neighbourhood falls sharply, especially after the population crosses 50,000.

Figure 17.6a–e presents the distributions of M by size class of town and Fig. 17.7a–e presents the distributions of M for the statutory and CTs separately. Although there are differences across size, with access improving by rise in population, there is considerable overlap in the distributions. Similarly, there is considerable overlap in the distributions of CT and statutory town. However, there are some patterns that appear to emerge. In banking, there is little difference in the distribution across size classes or across urban status. For in-house water, the distribution of statutory towns appears better than that of CTs and larger towns do better. For two-wheelers, there is limited difference across size and status, whereas in the case of in-house toilets, there appears to be increasing access with size and status, though the distributions overlap considerably. Finally, for piped sewerage, it is noted that the distribution of M is closer to one than for other indicators—indicating a strong difference with the local neighbourhood.

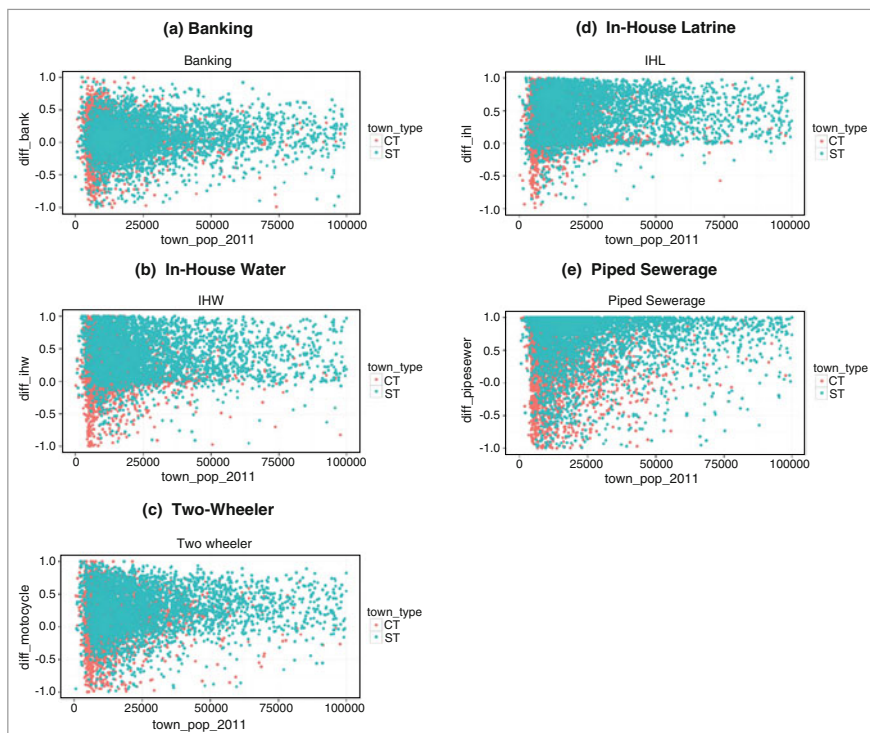


Fig. 17.5 Difference measure M by population of urban area

However, in all indicators, including piped sewerage, there are outliers in terms of negative M , indicating that a number of village neighbourhoods have better amenities as compared to their urban areas.

To investigate this further, we model the level of the amenity (note that we cannot model the change in amenity as the Census of 2001 does not provide information on amenities at village level) and investigate whether the administrative status of the urban areas has any influence on the extent of change in indicator levels. Notationally, we have

$$I_v = a + bX + c_3S_{SA} + c_3S_{CT} + c_3S_S + c_4(X_1 \times S_{CT}) + c_5(S_{CT} \times S_S)$$

where I_v is the value of the indicator in a village 2011, X is a set of explanatory variables, namely the share of non-agricultural workers in the male workforce of the village (a measure of the economic development of the village), the population size of the settlement and the population of the associated urban area. In addition, we use the SUBURBIN project's identification of contiguous physical agglomerations

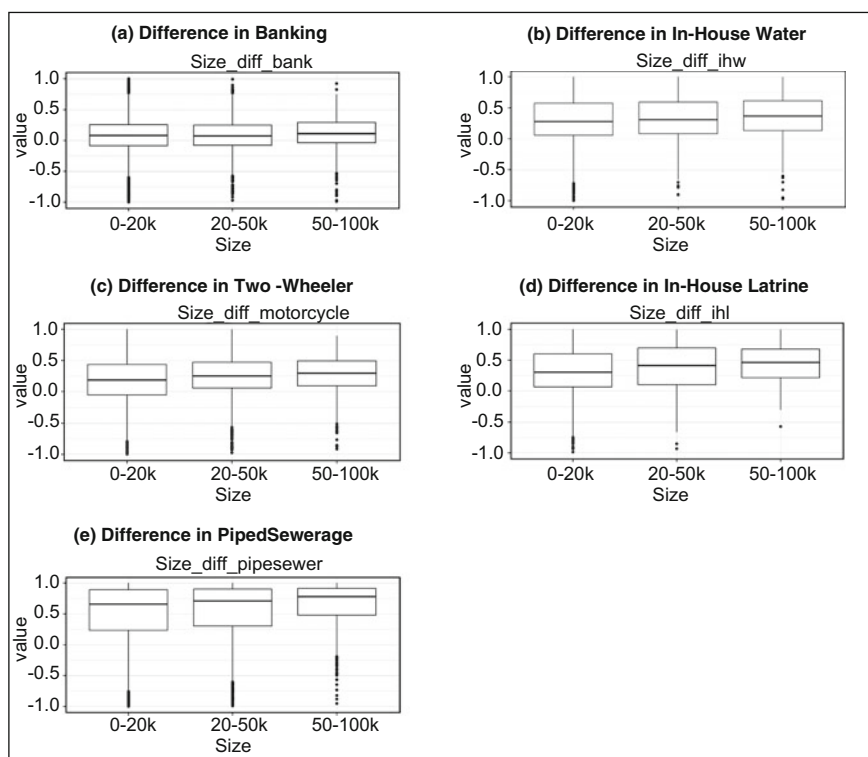


Fig. 17.6 Differences in urban and proximate rural area, by size of urban area

of villages across India. S_{SA} is a dummy variable that takes this into account, as to whether a village is part of such an agglomeration, with the hypothesis that such an agglomeration may have different levels of amenities. The other dummies are similar to that in the previous section for proximate and non-proximate CTs and cross-effects with the population. In addition, we include dummies for individual states as well as interaction dummies between the status and the state so that we can control for different levels of development in each state and provide for the possibility that the effect of administrative status may be confined to some states only.

Table 17.10 presents the summary statistics and Table 17.11 the results for the five indicator variables. First, it is useful to note that the variables used as explanatory variables are significant across the five indicators. The economic structure of a village matters, in that increasing non-farm activity does increase access to services. This could be possible in part because of increased self-provision and it is interesting to note that this effect is the weakest (though still positive) when one considers the most public of services—piped sewerage. Despite the sparse specification, the explanatory power, given the large number of observations, is quite satisfactory, except for access to piped sewerage and, to some extent, banking.

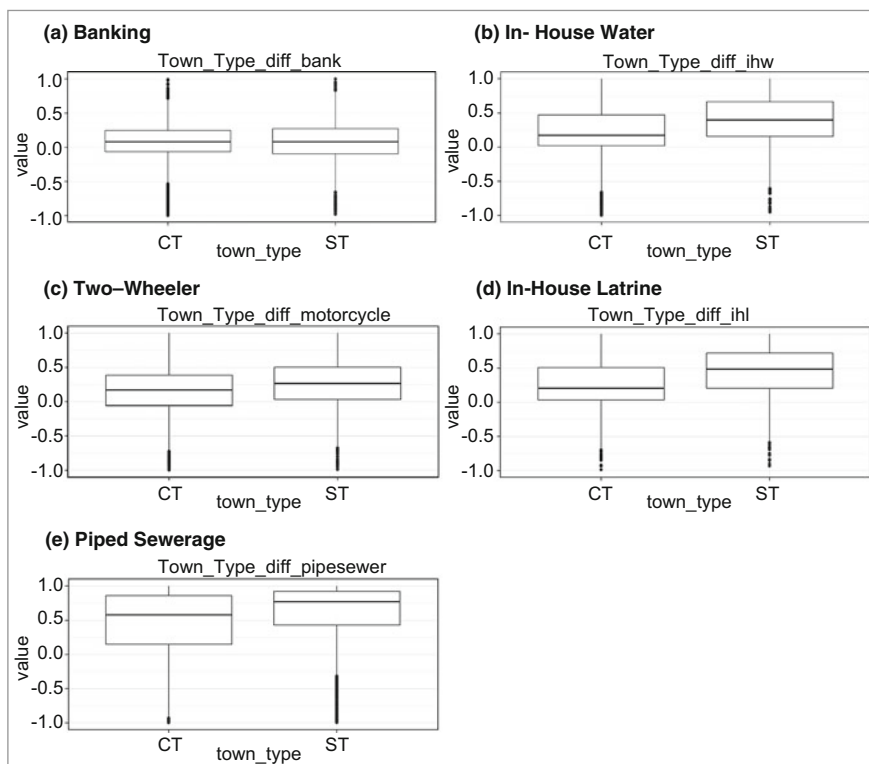


Fig. 17.7 Differences in urban and proximate rural area, by status of urban area

In some cases, the lack of an “urban advantage” may also reflect successful public policy. The expansion of rural banking has been seen as one of the successes of India’s anti-poverty strategy (Burgess and Pande 2005). The lack of difference in access to banking between the rural neighbourhood and the urban area may reflect this policy. The effect of belonging to a settlement agglomeration is unambiguously positive. About 12–15 % of settlements in rural neighbourhoods belong to a settlement agglomeration. The effect is strongest for access to in-house latrines, where it increases access by over 8 % and weakest for piped sewerage and two-wheelers, where it increases access by less than 1 %.

The effects of administrative status is complicated. At the direct level, the effect on the neighbourhood is either positive (as compared to a statutory town) as for in-house water or two-wheelers, or insignificant for the other indicators if the associated town is a proximate CT. For non-proximate CTs it appears that there is a negative effect, compared to statutory urban areas, with significant negative coefficients in all but in-house latrines. Although some of this is mitigated by population

Table 17.10 Summary statistics of amenities in the rural neighbourhood of small towns

Size class	Statistics	In-house latrine	In-house drinking water	Banking	Piped sewerage	Two-wheeler	Non-farm workforce	Village pop.	Town pop.
1 (100,000–1,000,000)	Min	0	0	0	0	0	0	1	100,000
	Max	1	1	1	0.8	1	1	32,374	500,000
	Mean	0.41	0.42	0.54	0.03	0.22	0.52	2512	190,000
	Q1	0.13	0.12	0.38	0	0.1	0.29	813	120,000
	Median	0.35	0.4	0.55	0	0.19	0.52	1666	150,000
	Q3	0.68	0.7	0.73	0.02	0.31	0.75	3235	220,000
	S.D.	0.31	0.31	0.24	0.07	0.16	0.28	2836	88,406
	N	1530	1530	1530	1530	1530	1527	1530	1530
	Min	0	0	0	0	0	0	1	50,087
2 (50,000–100,000)	Max	1	1	1	1	1	1	40,593	99,979
	Mean	0.38	0.4	0.53	0.03	0.21	0.46	2717	67,847
	Q1	0.13	0.1	0.34	0	0.09	0.24	808	55,653
	Median	0.32	0.36	0.53	0.01	0.17	0.42	1678	63,652
	Q3	0.6	0.67	0.72	0.02	0.3	0.7	3156	78,395
	S.D.	0.29	0.31	0.25	0.09	0.16	0.28	3623	14,287
	N	2383	2383	2383	2383	2383	2381	2383	2383
	Min	0	0	0	0	0	0	1	20,004
	Max	1	1	1	1	1	1	60,573	49,985
3 (20,000–50,000)	Mean	0.36	0.39	0.56	0.03	0.2	0.41	3009	30,503
	Q1	0.09	0.09	0.37	0	0.08	0.16	735	23,596
	Median	0.26	0.33	0.58	0	0.16	0.35	1528	28,572
	Q3	0.59	0.66	0.76	0.02	0.28	0.65	3150	36,433
	S.D.	0.31	0.31	0.26	0.08	0.16	0.29	4875	8097
	N	7314	7314	7314	7314	7314	7299	7314	7314

(continued)

Table 17.10 (continued)

Size class	Statistics	In-house latrine	In-house drinking water	Banking	Piped sewerage	Two-wheeler	Non-farm workforce	Village pop.	Town pop.
4 (10,000–20,000)	Min	0	0	0	0	0	0	2	10,001
	Max	1	1	1	1	1	1	46,915	20,000
	Mean	0.37	0.36	0.56	0.03	0.21	0.44	2600	14,235
	Q1	0.09	0.07	0.37	0	0.08	0.19	750	11,723
	Median	0.28	0.28	0.58	0	0.17	0.4	1545	13,850
	Q3	0.61	0.63	0.78	0.02	0.3	0.68	3114	16,487
	S.D.	0.31	0.31	0.26	0.08	0.16	0.29	3424	2844
	N	8483	8483	8483	8483	8483	8468	8483	8483
5 (less than 10,000)	Min	0	0	0	0	0	0	1	5
	Max	1	1	1	1	1	1	42,392	9995
	Mean	0.4	0.34	0.55	0.03	0.19	0.52	2089	6691
	Q1	0.1	0.06	0.35	0	0.06	0.25	659	5335
	Median	0.33	0.25	0.57	0	0.51	0.52	1397	6625
	Q3	0.67	0.59	0.77	0.02	0.27	0.79	2741	8132
	S.D.	0.32	0.31	0.27	0.09	0.16	0.3	2402	1821
	N	10,539	10,539	10,539	10,539	10,539	10,511	10,539	10,539

(as seen in the positive cross-dummy coefficients), it is not large. In access to in-house water, there is an 18 % penalty if the associated town is a non-proximate CT vis-à-vis a statutory town, and only 3 % of this effect is mitigated at the median population of town between 20,000 and 50,000.

However, it is when one looks at the state-status dummy interaction effects that the true effect of status becomes evident, that is the effect of statutory status varies widely across services and states. Table 17.11 indicates all the significant state dummies and in two variables, access to in-house water and to ownership of two-wheelers, this is true in a number of states. Overall, the dummy for when the associated town is a proximate CT is significant in 26 states in one or the other indicator and it is significant in 24 states when the associated town is a non-proximate CT. However, the nature of the effect varies, positive in some and negative in others, when one takes the combined impact of the overall and state-specific effects.

Table 17.11 Relationship of statutory status to access indicators

	In-house latrine	In-house water	Banking	Piped sewerage	Two-wheeler
Share of non-agricultural male workforce	0.249***	0.128***	0.099***	0.037***	0.098***
Population of village 2011	6.14e -06***	6.46e -06***	-3.83e -06***	8.70e -07***	-1.43e -06***
Population of proximate town 2011	4.34e -08***	2.47e -08***	-2.27e -08***	1.52e -08***	4.87e -08***
Settlement agglomeration	0.081***	0.037***	0.011***	0.007***	0.008***
Proximate CT	-0.005	0.148***	0.024	0.027	0.113***
Non-proximate CT	-0.027	-0.181***	-0.070*	-0.031***	-0.042***
Proximate CT × pop. of proximate town 2011	1.98e -07	6.64e -07**	-7.41e -07***	1.20e-08	1.54e-07
Non-prox. CT town × pop. of prox. town 2011	-7.62e -07**	1.05e -06***	5.28e -10	-1.55e -07*	1.09e -06***
Constant	0.267***	0.322***	0.632***	0.36***	0.028***
N	30,489	30,489	30,489	30,489	30,489
Adjusted R ²	0.44	0.35	0.24	0.08	0.39

Note All the coefficients marked ***, ** and * reported above are significant at the 1 %, 5% and 10% level of significance respectively (i.e. the probability that the hypothesis would be accepted, even if false, is 1 %, 5% and 10% respectively). Detailed results with coefficients on interaction dummies are available from the author on request

Among the major states, for access to in-house toilets it is negative only for non-proximate CTs in Himachal Pradesh. For access to in-house water, it is negative in 10 states/UTs for proximate CTs and for 11 states/UTs for non-proximate CTs, with large effects in Punjab, Assam and Bihar, West Bengal, Jharkhand and Maharashtra respectively. For access to banking, apart from Delhi, it is negative only in Chhattisgarh. For access to piped sewers, it is negative in Uttarakhand, Nagaland and Tripura for proximate CTs and in Andhra Pradesh, Gujarat and Tamil Nadu for non-proximate CTs, whose neighbourhoods suffer a penalty of about 4 %, compared to neighbourhoods of statutory towns. The variation in piped sewerage across neighbourhoods is quite high, reflected in relatively low explanatory power of the regression. Finally, in terms of ownership of two-wheelers, although there are significant effects for proximate and non-proximate CTs in 19 and 15 states respectively, it is not large and negative in any of these states, with the most negative effect seen in Bihar (−1.5 %) and Andhra Pradesh (−1.7 %). Thus, although there are state-specific effects, they are often positive, as in 21 of 34 cases (for both dummies) in ownership of two-wheelers and 17 of 38 in the case of access to in-house water. Even when negative, they are often small, rarely exceeding 3 %. In this, the effect on the neighbourhood is similar to the effect in CTs themselves.

In addition to state-specific effects, the analysis also accounted for interaction with status and population, which was not significant when distinguishing between towns but was statistically significant, albeit small, between neighbourhoods proximate to CTs and statutory towns. For in-house toilets, it was negative for non-proximate CTs, positive for in-house water for both types of CTs, negative for proximate CTs, negative for non-proximate CTs for piped sewerage and positive for non-proximate CTs for two-wheelers.

17.4 Analysis

To summarise the results so far, it is found that although, as national groups, towns with urban administrative status are not statistically distinguishable from CTs, that is functional urban settlements without urban administrative status, there is a more complicated relationship when one examines the differences at the level of the state. As noted earlier, the state dummies, which are usually quite statistically significant, would also pick up the effect of possible explanatory variables that are not included in the regression but vary across states such as the income level. The interaction dummies could, in principle, pick up interaction effects with some such excluded variables that vary across states. At state level there is a difference between these two types of settlements for specific services, but it is not the case that towns with urban administrative status have better access to services than CTs; often the reverse is true. This is also the case when one examines the differences between urban areas, that is the towns themselves as well as the neighbourhood of the towns (in terms of villages that are close to the towns).

The first part of the inquiry indicated that, subject to state level caveats, there may not be a major distinction between non-proximate CTs and towns with urban

administrative status in India. This broad similarity between statutory towns and CTs holds for their neighbourhood too. Though it appears that there is a difference between proximate and non-proximate CTs in the second case, these differences become minimal when one includes the state-specific effects. This variation across indicators is also true for effects relating to the interaction of size and status.

Thus, there is little to distinguish villages that are proximate to CTs from those that are proximate to statutory towns. What may be the reasons for this? At one level, it could be argued that this is what should be expected. Across different states, with the possible exception of Maharashtra and Gujarat,⁷ there is very limited devolution of urban governance functions to the ULB in India. This is all the more true for small statutory towns in India (De Bercegol 2016). Different states govern these areas through different institutional structures, on occasion separating municipal administration from urban development, affecting the manner in which these towns can reach out to decision making structures at state level. Thus, the statutory town does not have much agency to improve its own condition, leave aside that of its neighbourhood. Indeed, CTs, being part of the gram panchayat structure, may possess more effective autonomy. This is also true for some villages (Raghunandan 2012), which may explain why the indicators in some villages are better than nearby urban areas. Furthermore, there is also the possibility of self-provision for amenities such as in-house toilets and two-wheelers, but it is less so for more network amenities such as in-house water and piped sewerage, which show slightly more (but often statistically insignificant) influence of administrative status.

This lack of agency is not compensated for by increase in support from higher levels of government such as the state. Khan (2017) shows that the smaller urban areas have received relatively limited support from national urban initiatives such as the JNNURM. Nor, given their relatively limited political weight in states with low urban populations, do they receive funding from state level schemes. As a result, although there may be schemes to support investments in rural areas, small urban areas remain deprived of investment in services. Indeed, at one stage, Tamil Nadu switched the classification of more than 500 urban areas to rural in a bid to obtain more funds from the union government (see Denis et al. 2012).

17.5 Conclusion

This chapter asked whether administrative status mattered in the access to services in small towns and their neighbourhood. As with many questions, the answer is: it depends. However, this in itself indicates the fuzzy nature of benefits from administrative urban status in India, emanating from the variations across states in the manner in which they approach urban governance and provide funds towards their services as well as the overall lack of attention to these small towns in general. This is particularly

⁷The state dummies and state-statutory status interaction dummy for Maharashtra and Gujarat were not significant, except in the one case mentioned in the text.

worrisome as these classes of settlements are home to a growing portion of the urban population, as evidenced by population growth from 2001 to 2011. It also points to the need for much more granular work, investigating state specificities, some of which are seen in other chapters in this volume and are the rationale for the SUBURBIN project.

There are also a number of areas for further work. For example, in interpreting the results for the neighbourhood of the CTs, it is possible that in some cases the neighbourhood village may belong to the same administrative governance unit (panchayat) as the CT. This may result in a certain similarity in outcomes, to the extent that panchayat-wide schemes are implemented successfully. Similarly, one could see whether the level of services in the neighbourhood was related to the level of services in the associated town, rather than just the status of the town, as in the present analysis. The channels through which the differences in amenities arise is a matter of independent interest, in particular the much higher share of non-farm work in the neighbourhood of the CT. It is also important to investigate the state specificities in these channels of transmission, such as income. These await future work.

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Part IV
Producing and Innovating in
Non-metropolitan Contexts

Chapter 18

Development on the Urban Fringe: The Prosperity of Kartarpur, a Small Town-Cluster in Punjab

Rémi de Bercegol and Shankare Gowda

18.1 Introduction

In his striking and recently renovated family home, Ravinder Singh, a rich Punjabi farmer, is pleased with his new purchase: a huge solid wood table with ornately carved legs made of a skilful blend of Sheesham (Indian rosewood) and teak and with a thick and brilliantly polished finish. And there are many others in a similar position; crowds of visitors come to browse the hundreds of furniture shops in Kartarpur, a small town of 25,662 inhabitants (in 2011), looking for the ideal piece of furniture to go in their bedroom, living room or dining room. Over the course of the last century the town has witnessed a major manufacturing boom, specifically in the furniture industry. As a result, its reputation has gradually spread from neighbouring towns to beyond the Punjab and even outside India with the development of an export market. Ravinder Singh's beautiful solid wood table is thus a reflection not only of the ostentatious wealth of its owner but also of a prosperous local industry.

Kartarpur is unique in that it constitutes a cluster, namely “a geographical concentration of interrelated companies, specialist suppliers and service providers operating in similar sectors” (Porter 1998: 197). Work is socially divided among small-sized enterprises that carry out complementary activities and each completes a stage in the production process through informal outsourcing agreements, similar to the system observed by Sylvie Fanchette and Nicholas Stedman in craft villages in Vietnam (2009).

The economic vitality of the sector, its size and recent entrance into the international market has led to an examination of how knowledge and practices circulate

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among these local craftsmen and of the craftsmen's capacity to adapt to modern economic developments. The success of this manufacturing activity in Kartarpur reflects the vitality of a largely unreported urban India, namely that of small towns, the significant drivers of contemporary change in India. In focusing on the development of non-metropolitan urbanisation, the findings of the latest Census in India look at the very nature of the momentum seen in small towns such as Kartarpur: how can this urbanisation be defined? Does it stem from exogenous factors and imported models introduced by a metropolitan economy, or from more endogenous processes linked to the scale of localised economic development and specific historical legacies? And, if this is the case, what planning policies and urban governance is required to support development in Kartarpur?

There is no doubt that Kartarpur benefits from its prime location, situated as it is in the fertile region of Doaba in the centre of the Punjab, about 20 km from Jalandhar, the capital city of the region. It particularly benefits from being strategically located along the age-old Grand Truck Road, an extremely busy route of over 2500 km long that links Kabul in Afghanistan in the west with Chittagong in Bangladesh in the east. However, there are also other successive historical factors that have influenced Kartarpur's development over the last century. The emergence of the town's industrial cluster is not solely because of its geographical location; there are other location factors that have facilitated this development. Other, broader reasons for the development of this cluster also need to be sought, notably by examining social and historical factors and the way in which economic and lineage-based networks are embedded in the spatial and social strata of the current town. Linking the development of economic activities to these mostly informal aspects helps shed light on how small town clusters in India, such as Kartarpur, develop.

Analysis of this rapidly changing model, which is halfway between small traditional industry and modern craft industries and localised yet linked to the global economy, reveals a distinct resource that, although imperfect, serves as a reminder that alternatives to the dominant developmental approaches do exist. This, in turn, enables more profound examination of the current governance process and the development model supported by the government authorities.

One of the aims of this chapter is thus to analyse this production method and assess its viability given the current context of growing urbanisation, urban governance reforms and economic openness.

18.2 Kartarpur: A Prosperous Small Town in the Punjab

18.2.1 Kartarpur's Position in the Region

First and foremost, Kartarpur is located in a very particular region, the Punjab (which literally means "the land of five rivers"), a state in the north west of India, the current territorial structure of which has been formed by the political, technical and economic changes that have taken place over the course of the last century (Fig. 18.1).

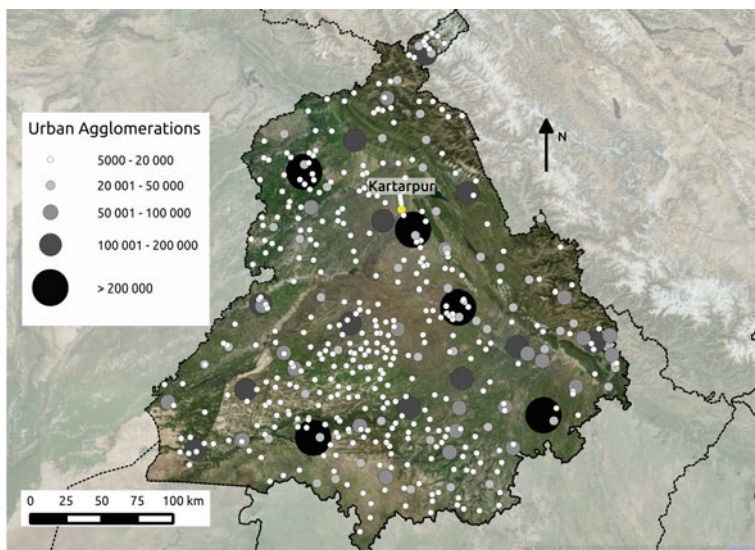


Fig. 18.1 Location of Kartarpur. Source e-geopolis data (<http://e-geopolis.eu/>)

18.2.1.1 An Eventful Regional History

During British colonial rule the British governed the province by enabling some of the native rulers of certain “princely” states to preserve their autonomy and by creating several military posts that formed the outline of the administrative structure upon which future urbanisation would be built. Following independence, the political upheaval caused by the partition of Punjab province (which led to a huge exchange of populations with Muslims being moved to West Punjab, now Pakistan, and nearly four million refugees migrating in the opposite direction) redefined the residential function of many towns in the region. During the post-independence period, technological changes occurred in the agricultural sector that led to an increase in irrigated land area and established these towns as major business and trade hubs. At the same time, in 1966, the creation of the states of Haryana and Himachal Pradesh for Hindi speakers and of the current Punjab for the Punjabi-speaking population concluded the cultural standardisation of the region, rendering the Sikh communities demographically dominant.

18.2.1.2 An Important Urban and Industrial Corridor

In 2011, 143 of the 217 cities in the Punjab had fewer than 100,000 inhabitants (nearly 3.5 million inhabitants in total) and, in 2011, the population of 117 of these small towns was between 5000 and 50,000 inhabitants. The state’s urban structure ultimately appears to be relatively balanced: the average minimal distance between

any two towns is decreasing; this stood at 6.82 km in 1991, 5.89 km in 2001 and 5.59 km in 2011 (according to e-geopolis data—cf. <http://e-geopolis.eu/>). Observers regularly point to the linkages between the region's agrarian economy and development of a service economy to explain this dispersed urbanisation, which has been built around a vibrant agricultural sector boosted by the Green Revolution and the prosperity this has created (Bhalla and Kundu 1982).

The importance of small towns in the Punjab is also related to industry and, particularly, to their location along the Grand Trunk Road, the backbone of the Punjab economy, which stretches all the way to Delhi. Over 70 % of the officially identified small and medium-sized enterprises are located in the districts of Amritsar, Jalandhar and Ludhiana (Government of Punjab 2012a), by far the most urbanised areas in the Punjab.

This industrial corridor, made up of a continuous sequence of small towns, emerged during Indian independence, between 1950 and 1970, with the development of raw material (steel, cotton and wood) processing activities and agricultural production, which was expanding rapidly at the time. In the 1970s, the government's industrial policy (which notably included freight subsidies to facilitate the delivery of raw materials) helped make this economy highly competitive at national level (Krishnan 1998). However, the acts of violence carried out by Sikh separatist militant groups during the 1980s and the assassination of Indira Gandhi in 1984 curbed this industrial momentum.

18.2.1.3 The Furniture Industry in the Punjab

Although difficult to quantify, it would appear that the furniture sector is heavily dominated by small-sized enterprises, up to 85 % of which are not registered, according to the authorities.¹ In 2006, the central government created a Micro, Small and Medium Enterprises department (MSME), which was devolved to the state level. However, this has had little impact on formalising the sector mainly because of a lack of financial and human resources (interview with the district MSME in June 2013). The government estimated that the wood manufacturing sector would account for 0.44 % of total industrial production and generate around 90,000 jobs in 2009/2010 (or 0.85 % of the jobs included in their calculations) (Government of Punjab 2012b). Although a minority sector at state level, in the district of Jalandhar, in the centre of the Punjab, this is a major industry. The tax department estimates that 35 % of the companies registered for tax in 2012 work in the furniture industry. According to the District Industrial Centre (DIC), these enterprises officially employ over 16,000 people, accounting for 12 % of all industrial activity and 5.2 % of the wealth generated in the district. This small, localised manufacturing industry benefits not only from a favourable climate that has fostered development of the agricultural and forestry sector (there are 6000 ha

¹Interview with the Jalandhar Tax Department in June 2013.

of forest in Jalandhar District, covering 23 % of its territory) but also from the district's good quality infrastructure, not least the Grand Trunk Road. 270, or nearly half, of the 601 businesses officially listed as working in the wood manufacturing industry in Jalandhar District in 2012 being located in the small town of Kartarpur (District Industrial Centre 2013).

18.2.2 A Vibrant Small Town

18.2.2.1 High Employment in the Manufacturing Sector

Analysis of the workforce in Kartarpur reveals that, when compared to the averages seen in Jalandhar and in the Punjab as a whole, the manufacturing sector has traditionally been the dominant employer.

Thus, as early as 1971, 43 % of workers in Kartarpur were employed in the manufacturing sector,² compared to only 30 % in Jalandhar and an average of 11 % in the Punjab as a whole, where the majority of the labour force (62 %) worked in the agricultural sector. Thirty years later, nearly half of these workers (48 %) continue to be employed in the manufacturing sector in Kartarpur, whereas this figure stands at only 28 % for Jalandhar and 26 % for the entire state of Punjab (where the proportion employed by the agricultural sector has fallen to 11 % following the expansion of farmland and mechanisation). Whilst the structure of Kartarpur's workforce has remained virtually unchanged over this period, the number of workers has doubled, rising from 3748 in 1971 to 7491 in 2001 and 8371 in 2011.

The only notable change is the rapid rise in the number of manufacturing jobs listed as being carried out inside the home, which increased from 204 in 1971 to 1399 in 2001 (+85 %), whereas the number listed as being off-site grew a lot slower, rising from 1418 in 1971 to 2217 in 2001 (+36 %). This corresponds to changes in the furniture production process whereby, through a greater division of labour in the production chain, work has been outsourced to small workshops mostly run by the Dalit population, the proportion of which has increased significantly in Kartarpur, growing from 39 % in 1971 to 46 % in 2001 as a result of large-scale migration, before stabilising to its initial 39 % in 2011.

18.2.2.2 Slow but Continuous Population Growth

Following the Green Revolution, the town has regularly attracted a migrant workforce from Uttar Pradesh and Bihar. Low-skilled migrants are employed as

²Given the sector's production structure, two Census categories, which generally differentiate between *inside* and *outside* the home, have been included here.

seasonal agricultural workers, whereas the more highly skilled are hired to work in Kartarpur's furniture manufacturing cluster. The first Muslim craftsmen came to Kartarpur from Saharanpur, a town in Uttar Pradesh also well known for its wood-carving, to work in the furniture industry at the end of the 1970s.

Because of the gendered and selective nature of these activities, the subsequent decline in the female-to-male ratio means that Kartarpur is still bearing the impact of this migration of mainly male workers, despite the fact that many of these have now moved their families to the town. In 2011, the gender ratio in Kartarpur stood at only 920 women to 1000 men (which is much better than 866 women to 1000 men in 2001). In addition, as the majority of the native and migrant population are involved in manual work, literacy rates remained poor with 31 % of illiterate (in 2001 but seems to have recently improved with only 17 % of illiterate in 2011).

After having fallen following the partitioning of India, the population of Kartarpur has been increasing slowly but steadily ever since the 1960s, having increased twofold to reach 25,157 inhabitants in 2001 and then stabilising to 25,662 inhabitants in 2011.

Similar to other towns in the Doaba region, Kartarpur also has relatively high levels of emigration with many NRI (Non-Resident Indians) living in Europe, North America and the Gulf countries. The crisis of the 1980s led to the political exile of many Sikh activists and their families. Over and above this political upheaval, however, Kartarpur's population has remained low notably because of its proximity to Jalandhar, towards which people tend to migrate as it has more diversified economic activities. Since the 1960s, Kartarpur's economic success has, however, attracted people from the surrounding villages, who have chosen to settle in the town as the price of land in Kartarpur is somewhat cheaper than in neighbouring Jalandhar. The town continues to expand today.

18.2.2.3 Assured Urban Development

Spatial analysis of Kartarpur shows that in 2008 the surface area of the town was 1.6 km², whereas it stood at only 1 km² in 1989, and the town's boundaries have been extended over time to absorb the developing outlying areas (Figs. 18.2, 18.3, 18.4).

The town's urban development is essentially unplanned; as the centre has become more densely built up, development has gradually moved to outlying areas in the south. Many inhabitants are now unable to afford building land in the town centre as prices have increased as the town has become more popular. The (non-municipal) Punjab water and sanitation agency's construction of a sewer system in the south of the town has, to some extent, helped channel this urban development "in situ" along planned routes. However, this has not helped reduce competition for the tracts of land between workshops or in residential areas. Houses belonging to wealthy homeowners have sprung up outside the town's boundaries, thus enabling their residents to avoid paying local taxes yet to benefit from illegal connections to the water distribution and sewer systems.

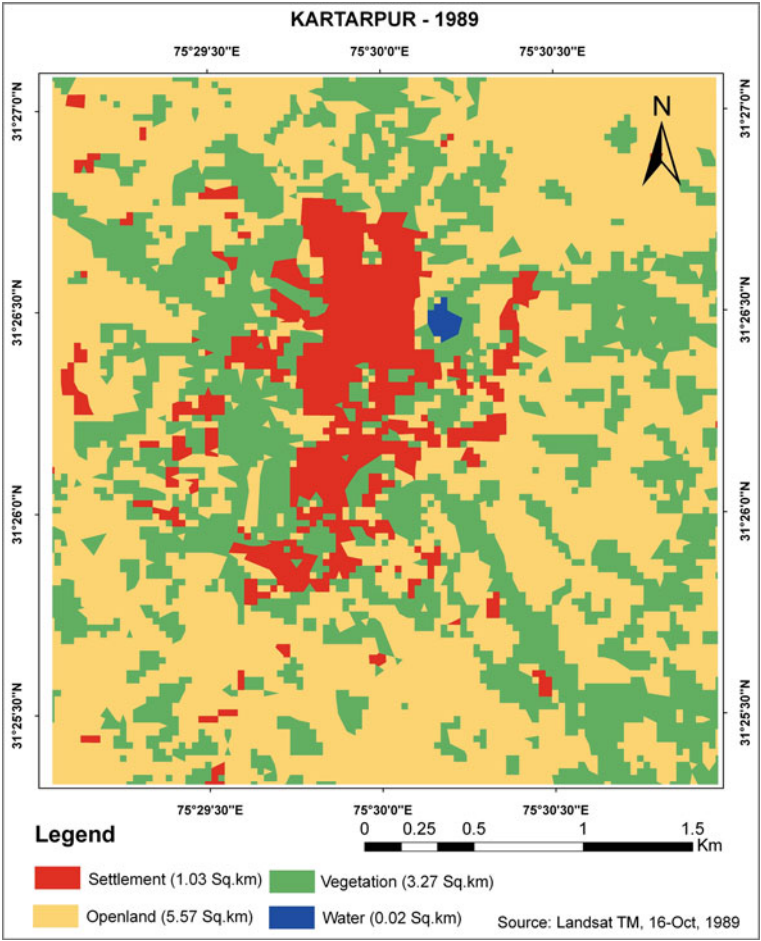


Fig. 18.2 Spatial expansion of Kartarpur in 1989. Map production: Krishna Kumar (IFP)

People are also attracted to the town by the good overall level of services, which is considerably better than the district and state average. With regard to water and sanitation coverage in 2011, 83 % of households in Kartarpur have access to the treated water distribution system, meaning coverage in Kartarpur is even higher than in Jalandhar (81 %), whereas average coverage for towns in the Punjab is 76 %. In Kartarpur, 92 % of inhabitants are connected to the underground sewer system, whereas for towns in the Punjab this average stands at 52 and 67 % of inhabitants in Jalandhar are covered by the sewer system. Similarly, according to the municipality, 99 % of Kartarpur’s population receive electricity from the Punjab State Electricity Board. Furthermore, Kartarpur has good transport links to neighbouring towns and villages; the presence of the Grand Trunk Road and the railway means the town acts as a hub for surrounding communities and as a

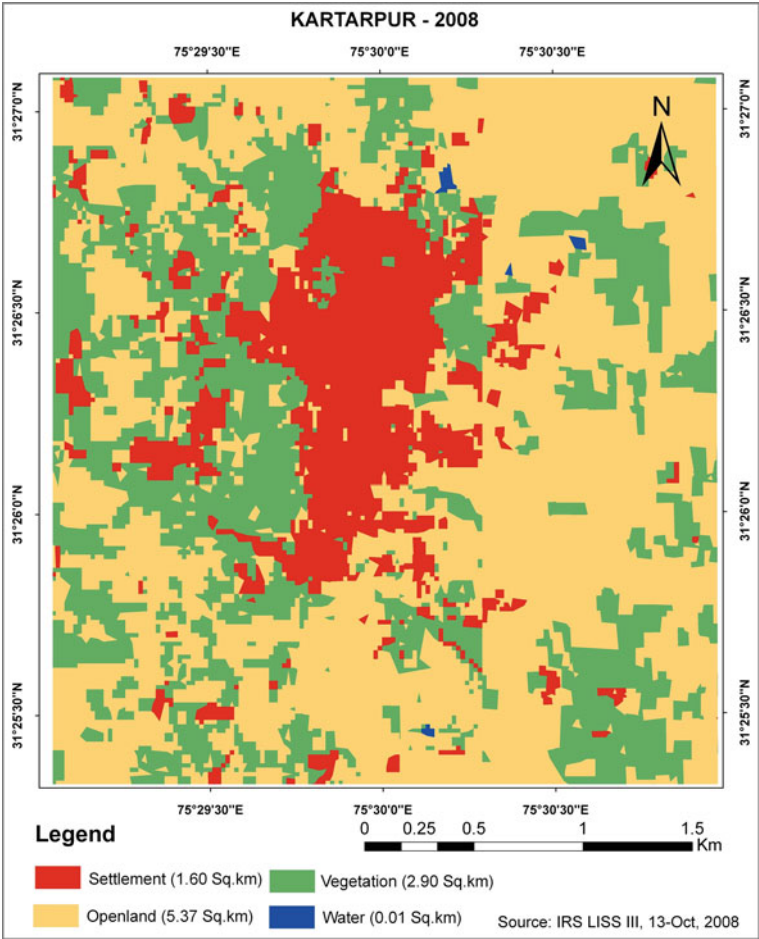


Fig. 18.3 Spatial expansion of Kartarpur in 2008. Map production: Krishna Kumar (IFP)

gateway between rural areas and the nearby district capital. Finally, with a total of 22 schools in 2013, Kartarpur is considerably above the district average with regard to educational facilities.

To the visitor the town appears relatively prosperous, with many banks to be found along the Grand Trunk Road (where there were only 3 banks in 1960, there is now a total of 14; this is in stark contrast to small towns in other, poorer states where there is rarely more than 1), as well as several well-tended parks and long shopping streets, numerous community centres, 3 hotels, several restaurants, a cinema and a hospital, etc. In general, Kartarpur’s economic prosperity has helped increase the wealth of the population. In 2011, two-thirds of the town’s inhabitants held a bank account; 90 % of households owned a television, whereas 73 % owned a mobile phone and nearly half had some type of motorcycle.

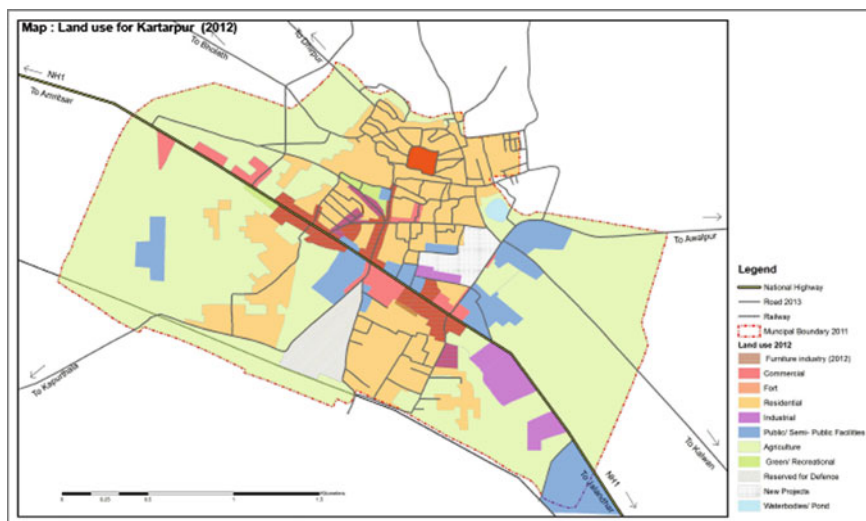


Fig. 18.4 Detailed landuse map in 2012. Map production: Shubinder Kaur

However, there appears to be little diversity in the activities carried out, with the vast majority of the population being employed in the furniture industry. There are so many people working as joiners and furniture makers that certain parts of the town resemble an open air factory.

18.3 Town that Specialises in Furniture

18.3.1 Development of the Furniture Industry in Kartarpur

18.3.1.1 Religious Myth

The furniture-making cottage industry found in Kartarpur stems from an extremely ancient production system rooted in village society. The influence exercised by both the community and religion over the area's initial manufacturing activities helped shape Kartarpur's identity and the knowledge-sharing methods that have culminated in the current production process (Fig. 18.5).

Prior to gaining recognition for its manufacturing industry, Kartarpur was initially a site of major religious importance for Sikhism, the main religion in the Punjab. The town was founded in 1593 by the fifth Sikh Guru, Guru Arjun Dev Ji, on land donated by Nazam Azeem Khan during the reign of Akbar, and the Guru's descendants retain de jure ownership to this day. The Guru's followers, devout members of the Ramgarhia community, thus became the first inhabitants of the settlement, which was given the name Kartarpur (which literally means the place



Fig. 18.5 The furniture industry in Kartarpur. *Source* Rémi de Bercegol

—“pur”—of the Divine Creation—“Kartar”). Even today the town remains centred around an ancient Gurudwara built in 1656, in which the *Adi Granth*, the sacred collection of hymns of the first five Gurus, is still displayed on the anniversary of Guru Arjun Dev Ji’s birth. According to his descendants, the community would have carved flutes and other musical instruments out of Sheesham, which grew in abundance around Kartarpur at the time, to accompany the singing during religious ceremonies, thus laying the foundations of the town’s current industry. Without necessarily subscribing to this mythologised version, it is nonetheless clear that the ritual practices surrounding veneration of the Guru and its inherent rules of

community cooperation have helped shape the foundations of Kartarpur's identity upon which current production methods are based.

18.3.1.2 Historical Fact

A more practical explanation is that the region was a major producer of wheat at that time and, between harvests, there would little for the numerous field labourers to do. Thus, the farmers and labourers turned to non-farming activities during this period, gradually coming to specialise in woodwork.

Trade networks subsequently developed, leading to a geographical clustering of small cottage industries, a clustering that facilitated economies of scale, the sharing of *savoir-faire* and marketing of the finished articles.

The system has remained stable and sustainable because of Kartarpur's strong interdependent links with the surrounding rural and urban areas. During the eighteenth century, in addition to its religious function, Kartarpur emerged as a major cereal market and became an integral part of political and trade networks because of its proximity to the neighbouring city of Jalandhar. Jalandhar itself played a vital role in marketing the town's agricultural and craft products. In 1869, the British colonial authorities, who had been in Jalandhar since 1846, constructed a railway station south of Kartarpur on the line connecting Lahore and Jalandhar. By making it easier to export goods, this station helped cement Kartarpur's role as a key economic force for the region. The town's location on the very busy Sher Shah road, the future Grand Truck Road, less than a day's journey from Jalandhar, meant that it soon became a transit stop for vehicles transporting goods from Lahore in the west to Delhi in the east. The local Ramgarhia community thus became skilled at repairing cart wheels using Sheesham, a dense, strong wood that was ideal for this purpose, whilst at the same time expanding their activities to include more complex woodworking tasks. It is said that Kartarpur's craftsmen really cemented their reputation when renovating furniture belonging to a colonial administrator living in Lahore in the 1930s. In any event, it was during this period that the first furniture market, the Vishvakarma Market, opened, bringing together all of the town's woodworkers and carpenters. The incomes earned by these craftsmen far exceeded those of the farmers and attracted new communities, the Banias, who were trained in the art of furniture making by the Ramgarhia.

18.3.1.3 The Impact of Regional Transformations

Thus, at the start of the 1940s, prior to Indian independence, Kartarpur was a small, prosperous town, this prosperity being a result of not only its agrarian and farming activities and religious site but also its production of wooden furniture. The population increased rapidly, by over 30 % in 20 years, to stand at 12,150 inhabitants

in 1941. This population growth was then halted by the partition, and by 1951, the year it officially became a municipality, the town's population had fallen to 11,220 inhabitants, where it stagnated until 1961 when it increased to 12,202. The many Muslims who left the town for Pakistan were not replaced as the refugees arriving from the opposite direction tended towards the neighbouring city of Jalandhar, which was then capital of the new state of Punjab (until Chandigarh was built in 1953) and so was considered more attractive.

Following this upheaval, activity in the manufacturing sector was stimulated by the redefinition of Punjab's current borders in 1966 and the introduction of an initial industrial policy. The development of Jalandhar, now the administrative capital of the eponymous district, continued to provide Kartarpur with a major local market. The number of orders increased and the Ramgarhia communities began to outsource production to Bania craftsmen, who had set up their own businesses. However, in the 1970s there was a shortage of manual workers and, in 1973, the increased workload within the sector in Kartarpur prompted the workers to walk out on strike, thus paralysing the industry for 2 months. It was around this time that an increasing number of woodcarvers and carpenters began emigrating to the Gulf countries and to the United Arab Emirates in particular, where wages were much higher. However, this emigration was offset by the arrival of new workers from Bihar and Uttar Pradesh. Among these new arrivals was the Muslim community of Saharanmpur, renowned for their woodcarving skills and much sought after by the Ramgarhia communities, who began to outsource carving work to them. Consequently, the majority of the woodcarving work undertaken in Kartarpur is still carried out by the Saharanmpur community today.

The economic openness of the 1980s and 1990s led to consolidation of the sector. The support provided by the government to facilitate the transportation of raw materials helped open up the timber market to other states producing different types of wood than Sheesham (such as teak from Madhya Pradesh and Maharashtra), whilst stimulating the export of finished goods. The sector continued to develop with an increase in production and a greater number of jobs available. The 1990s saw the opening of the first showrooms, in which finished articles intended solely for direct sale are displayed. A second market, consisting mainly of shops, grew up on the appropriately-named Furniture Street, near the previously established Vishvakarma Market where the manufacturing facilities are based. Businesses thus began to break into new markets, not only outside the district but also in other Indian states, such as Jammu and Kashmir, Himachal Pradesh and Haryana. During the 1990s, the larger manufacturers completed their consolidation of the industry by creating another market, the "GT Market", on the Grand Truck Road itself. Essentially consisting of vast warehouses several hundred square metres in size, these showrooms aim, above all, to attract the high-end customer segment which has now emerged with the development of both the middle class in India and the export market in Doaba, a region for which NRI are particularly economically important.

18.3.2 Specific Features of the Furniture Industry in Kartarpur

18.3.2.1 An Informal Cluster

With its social and historical origins, the Kartarpur cluster is significantly different from the planned clusters of the district's industrial parks (termed "industrial focal points" by planners). Industrial development has been endogenous, with the more proactive Ramgarhia family businesses initially developing furniture-making activities, which they then extended throughout their local neighbourhood. These powerful families receive orders from customers and outsource the work to other businesses, who, in turn, distribute tasks among a variety of small workshops. The work is thus spread between complementary and interrelated businesses each of which completes a stage in the production process, with each workshop specialising in a particular task to manufacture the final article.

The majority of these businesses are not registered. The association of furniture makers in Kartarpur estimates that in 2013 the sector consisted of a total of 350 shops and 700 manufacturers, which vary in size from individual craftsmen to businesses with up to around 30 workers, and employs over 7000 people in total. Although they play an essential role in the production chain, the vast majority of these businesses, which are small-sized enterprises requiring no major initial investment, have no real legal status. There are only 270 businesses officially registered with the district authorities. Development of the furniture-making industry has long benefited from laxity on the part of the administration. With the municipality having no real master plan in place for Kartarpur and with relatively low local taxation, there has been little to force businesses to register. Although tax inspection has improved since 2005/2006, the year VAT (Value-Added Tax) was introduced, the removal of government subsidies for business creation means there has been no increase in the number of entrepreneurs contacting the Jalandhar DIC for help with registration. In contrast, however, inspections carried out by the Pollution Board (which, since 2008, controls the granting of electricity supply to polluting industries) have led to the registration of 25 sawmills.

18.3.2.2 A Community-Based Industry

In 2013, business activity in the cluster was dominated by around three hundred Ramgarhia enterprises. These are family businesses with a strong community identity in that their *savoir-faire* has been passed down from generation to generation and their ongoing relationships are based on family ties and mutual aid. These families own around half the businesses in Vishvakarma Market, as well as most of the shops on Furniture Street, and are considered furniture industry aristocracy in Kartarpur. Nevertheless, there has been a shift over the last 30 years with a steady progression in the number of businesses being run by other communities,

particularly the Baniyas (around 50 families) and, to a much lesser extent, a few entrepreneurs from Uttar Pradesh. One-quarter of the production factories are now managed by the Baniyas communities, who have also opened large showrooms, most notably in the GT Market. The common denominator of these economic elite is that most of them have one or more family members living abroad. The children of these business owners often go abroad to study, for instance to Canada, Australia, Singapore, the United States or the United Kingdom. Some of these then return to take over the company with their fathers. Others merely pay short visits to Kartarpur to buy a stake in the local economy or in land as investments.

The other, much smaller, workshops, mainly found in Vishvakarma Market and difficult to quantify, are run by craftsmen from other communities who rent their workspace from local families, mainly Ramgarhia. These workers are either from “Valmiki” and “Chamar” Dalit groups in the Punjab or migrants from Bihar, Madhya Pradesh and Uttar Pradesh, such as the many Muslims from Saharanpur (over 100 families). With regard to the non-local workforce, the main difference between the furniture industry and farm work or the construction sector is that these migrants are not hired as part of a “tekedar” (contractor) system. Instead, migration to Kartarpur is driven by family and community networks which spread the town’s manufacturing reputation beyond the Punjab’s borders. Furthermore, although some stay for a short time only, the vast majority of these migrant workers have settled permanently in the town, renting a house for their family and enrolling their children in schools, and only return to their home town once or twice a year for festivals.

18.4 An Expanding Locally-Based Production System

18.4.1 Capitalistic Structure of the Production Chain

18.4.1.1 Traditional Division of Labour

The different stages of production are socially and technically divided between various specialised enterprises. This system is ultimately an organised production chain of interrelated small businesses, neighbourhoods and shops.

The bulk of production is currently based around about 100 entrepreneurs who own the large shops on Furniture Street and in the GT Market, as well as the showrooms, which are essentially large warehouses displaying finished articles destined for the regional market and for export. Rather than hiring their own workers, these sector elite prefer to outsource production to different families of craftsmen. This system is cheaper, more flexible and requires less space. Unlike formalised industries, there is no foreman overseeing the production process between workshops. Working relationships are essentially based on trust and the complementary nature of the craftsmen’s savoir-faire and are forged through networks of empirically established professional ties and mutual acquaintances.

As the work involved is mainly manual (only a small part of the production process is mechanised, with machines only really used to cut the wood), furniture making requires a large workforce with a wide range of skills. Each workshop specialises in a specific stage of the production process, from cutting the timber through to carpentry, woodturning, wood carving, wood cutting, inserting the pearl inlay and assembling the article through to sanding, and varnishing or inserting wadding or glass, as required.

18.4.1.2 Numerous Specialised Small Businesses

Most of these workshops are very small outfits of between one and five workers on average and work on orders from another workshop, which undertakes the next stage in the production process and so forth. Unskilled workers are taken on as apprentices and trained up, many of them when still teenagers, before sometimes setting up in business for themselves. The companies placing the orders regularly hire a small number of workers who they train in their own workshops behind their showroom to assemble and add the finishing touches to the outsourced articles or handle the smallest orders. The majority of these workers entered the profession when work in the woodworking sector started to take off during the 1970s. They either rent a workshop in Vishvakarma Market or work from home. Some are also now starting to set up business in adjacent villages where rents are lower. They undertake the simplest furniture manufacturing tasks (such as making the legs, armrests, chair backs etc.) and in turn outsource production of the more complex, finely wrought and carved pieces to other, more specialist craftsmen. Although they have highly valued *savoir-faire*, they do not have the social or business relationships required to open their own showrooms.

In both cases, orders are fulfilled through bonds of trust (there are no formal contracts) and the business placing the order sometimes provides a financial advance (to purchase materials) or an advance in kind (the wood required for the order). Given the arduous and technical nature of some of the tasks, there is a noticeable division of labour among the various communities of craftsmen based on their level of skill and expertise. The number of local workers has thus steadily declined as the number of migrants from Bihar and Uttar Pradesh has risen. Today, technical carving work is mostly carried out by the Muslim population originally from Saharanpur, whereas polishing and varnishing tasks are mainly undertaken by the local Dalit communities.

18.4.1.3 A Flexible Economic System

As a result of the way in which the sector is organised, and despite the large workforce involved, production costs remain low. At the end of the chain,

outsourcing production to different workshops enables the rich showroom owners to make a substantial profit. Fixed expenditure, such as the cost of renting the showroom warehouse if they do not own it themselves or of purchasing materials, is largely offset by the income received from the sale of the finished articles. Furthermore, should these businessmen require additional funding (to construct new retail space, for example), their collusion with local politicians furnishes them with easy access to bank loans. In contrast, other craftsmen without the same network of influential contacts find making a healthy profit more difficult. To cover emergency cash flow issues (to replace a broken-down machine or buy the wood required to fulfil a large order), craftsmen can approach moneylenders for a loan (at interest rates of 10–15 %, considerably higher than those charged by the banks). However, for the most part, the system of using advances based on mutual trust between partners enables the workshops to work interdependently with each other without the need for private loans.

18.4.2 Inequalities in the Protection of Workers' and Employers' Rights

18.4.2.1 Lack of Protection for the Craftsmen

Only a very small proportion of the workforce is hired on formal contracts. Formal contracts remain the exception and are used only by the largest businesses legally registered with the tax office. The majority of businesses operate informally and so are not liable for production taxes and are not governed by the labour laws. This type of informal set-up provides businesses with increased flexibility to adapt better to the market as orders demand (Sunday working, overtime), as well as to production conditions, which can be affected by unforeseen events (such as power cuts). Most of the craftsmen are thus paid by the piece on a sliding scale based on the quantity, time required and, particularly, on the quality of the piece produced. Some are able to negotiate a higher rate than others because of their level of specialisation and expertise. For instance, the rate paid for assembling a chair ranges from between 250 and 500 INR (3, 5–7 dollars) up to 800 INR (11 dollars) depending on the time required and the sophistication of the piece.

Given the hazardous nature of some of the more difficult precision tasks, such as carving, the lack of legal and social protection is a cause for concern to workers. Accidents that result in the loss of one or more limbs are not unusual. In such cases, there is an unwritten, traditional rule that the business owner covers part of the cost of any post-operative care or provides financial compensation in the event of a worker's death. During the research visits, it was noted that there was also a number of adolescents in the workshops (although the exact figure is not known), rendering

the issue of protection for workers all the more pressing. Current official labour laws, by which the business owners fail to abide and the compliance of which government agencies never check, appear completely disconnected from reality on the ground.

These workers, scattered between different small-sized workshops, have no unions to protect their rights. In any event, because of the deeply interrelated nature of their work, it is not in their interests to stir up conflict with the business owners as this could lead to problems in the future by impairing their network of mutual acquaintances (and thus potential employers). For this reason, there is usually a relationship of trust forged between the employers and employees of the different workshops. This mutually beneficial relationship provides the latter with work and the former with workers. However, at the bottom of the production chain, particularly in the sawmills, the most unskilled workers are forced to accept harsh working conditions; thus, during the busiest period between September and May, these sawmills sometimes suffer from a shortage of labour.

18.4.2.2 Employer Lobbying

In contrast, a number of business owners have come together under the umbrella of the Kartarpur Furniture Industry Association to protect their interests. Established in 2003, this association was expanded in 2005/2006, following the introduction of VAT, to include the whole of the Punjab and renamed the Punjab Furniture Industry Association. The main role of these associations is to put pressure on the Punjab government to obtain tax exemptions. Currently set at 14.5 %, business owners consider that VAT is too high and is causing a fall in consumption; thus, they want to see it reduced to 4 %. They have also been calling for a halt to abusive police checks of freight transport. Consequently, the craftsmen who have affiliated with this association do not directly benefit from any of the action it undertakes, as the association is mainly concerned with defending the interests of the most powerful business owners. Following their creation, these associations have been presided over by Manjit Singh, a local businessman with ties to Shiromani Akali Dal (the regionalist political party currently in power) and who has recently been named ex-officio director of Information Technology for the Government of Punjab. Composed of a board of 44 members, mostly from the Ramgarhia community, the association collects a nominal registration fee of 100–200 INR a year (1.5–3 dollars), depending on the size of the workshop. It represents over 600 workshops from Vishvakarma Market and Furniture Street. It includes the local Scheduled Cast workers but, for reasons of identity, excludes workshops with workers from Bihar and Uttar Pradesh. The association also excludes the largest showrooms in GT Market as it considers that these deprive the “original” craftsmen of a sizeable chunk of the market and thus create unfair competition.

18.4.3 *Scope of the System*

18.4.3.1 Supply of Raw Materials

Kartarpur lies at the heart of a large trade network. One that has gained a foothold outside the local area and which, as a result of economic openness, has seen the range of raw materials it now has available and the marketing of its products on local and international markets considerably expand.

The entire industry is reliant on there being a good and steady supply of wood, which Kartarpur has had for many years. Despite the increase in farmland and (the less extensive) urban development, there is still 6000 ha of forest in the region. However, government forestry resources regulations stipulate that, under the terms of the official 5-year licence, the holder has the right to cut down only 5–7 % of the available trees and this is not enough to cover demand. The industry has thus turned to other major sources of supply outside the Punjab. As a result, the different types of wood used now also come from Madhya Pradesh (Sal, Rosewood), and Maharashtra (teak, Sheesham) and not only from the Punjab (Sheesham, Deodar, Mulberry) as was the case until the 1980s. The most common types of wood are still Sheesham (2400–2600 INR per m³—approximately 38 dollars) and teak (1200–1400 INR per m³—approximately 18 dollars), which together account for nearly two-thirds of the wood used.

It is difficult to estimate the total amount of wood used (local and imported) as, although the Forestry Department holds a monthly sale, the administration collects no figures on this. Unlike with agricultural markets, there is no physical market building and various sales points are instead to be found throughout the surrounding villages and along the Grand Truck Road just outside Kartarpur. There are around 70 suppliers providing wood to the town. Three main agents hold private sales every morning between 5 and 7 o'clock and these agents take a 2–5 % cut of each auctioned lot. To avoid paying this commission and the passed on transport costs for imported wood, some business owners source their wood directly from other markets, either in the district's villages or even outside the Punjab, in Delhi, where prices are lower, or directly from producers in other states, arranging transport themselves through private transport companies.

18.4.3.2 Local Marketing of the Finished Articles

At the other end of the production chain, the marketing scope of the finished goods reflects the changes currently underway in the sector. The domestic market can no longer absorb all the furniture produced, meaning that many businesses are now starting to focus on breaking into markets further afield. This expanding marketing scope is indicative of the economic openness that has been achieved in India since the 1990s and consolidation of a domestic market in full growth.

The emergence of a still small yet constantly expanding middle class in India is triggering new trends in consumption (Jaffrelot 2008) and is no doubt a factor in the furniture industry's success. A report by the India Brand Equity Foundation (IBEF, a public-private organisation jointly created by the Ministry of Commerce and Industry and the Confederation of Indian Industry) on the furniture industry in India highlighted the emergence of a powerful domestic market being driven by the growing purchasing power of the middle class and by the real estate and housing boom (IBEF 2007: 7–8). Notwithstanding this, Doaba itself is a prosperous agricultural region and the large landowners of villages in the region are also all wealthy consumers who are helping consolidate what is first and foremost a local market. In addition, small towns such as Phagwara and Begowal have a large NRI population; these NRI also have considerable spending power and a need to furnish the homes in which they have invested. Lastly, whereas in the 1980s the market was almost exclusively dominated by domestic consumers, there is now a growing segment of commercial customers (hotels, restaurants and private companies) and public institutions (office furniture, furniture for schools and universities), particularly in the neighbouring city of Jalandhar, the district capital.

18.4.3.3 Consolidation of the Export Market

The majority of Kartarpur's showroom owners now export their wares outside the region, not only to large cities in other districts where they supply other wholesalers, usually family members, but also outside the Punjab, mainly to neighbouring states in Uttaranchal, Jammu-and-Kashmir, Haryana and Delhi. The presence of the Grand Trunk Road is a real advantage here, greatly facilitating the transport of goods (with freight costs covered by the buyer), the flow of which has improved after subsidies were abolished in 2005. At the end of Furniture Street, there are usually around ten lorries responsible for transporting goods throughout the whole of India and this without having to pay additional taxes (the subsidy has been abolished in the majority of states). However, the most significant recent development is the consolidation of the export market outside India, exporting to NRI clients in the many countries with a Punjabi diaspora. India's policy of openness to international trade as set out in the EXIM Policy (Export-Import Policy), launched 1985 and revised in 1997 to include new tax exemptions, has played a key role in shaping non-local buyers' purchasing decisions. It is impossible to determine exact trade patterns for the furniture market in Kartarpur. However, according to members of the Kartarpur Furniture Industry Association, it is estimated that, in 2013, 50 % of goods were sold to regional customers, 35–40 % to customers in adjacent states and 10–15 % of sales were exports, whereas, in 1980, these figures stood at 75, 25 and 0 %, respectively. These sales are partly generated through the activation of a network of sales people, who help the businesses set up and consolidate these transactions, although customers, retailers and wholesalers also mainly source goods themselves by activating their own networks of community and/or family relationships. The fact that social networks are embedded into economic relationships has consolidated and helped develop trade in Kartarpur.

18.5 Discussion: Conflicts of Scale—What Are Kartarpur’s Integration Strategy Options?

18.5.1 At Global Level, Greater Economic Openness Could Jeopardise Kartarpur’s Production System

The expansion of Kartarpur’s trade networks is relatively recent and a reflection of some of the changes that have been taking place in the way the sector operates. Originally, this cluster was noted for the extreme flexibility of its production system, in which specific tasks are allocated to different small workshops. Following the increase in economic openness of the 1990s, the sector’s entrance into the international market and the increased competition that this creates, new types of relationships are beginning to emerge to complicate this system. The arrival of Chinese exports on the iconic Furniture Street appears highly illustrative of the liberal changes currently taking place and the threat these pose to the interrelated nature of the existing businesses. Directly challenging Kartarpur’s localised production method is a young, local Punjabi entrepreneur with a recent MBA from Jalandhar, who opened a showroom in 2011 selling imported Chinese furniture. Delivered flat-packed, the furniture is assembled by a team of four employees. This ambitious entrepreneur has succeeded in developing his business very quickly, adding another floor to his showroom.

Local craftsmen have become disconcerted by this new competition and have been forced to adapt. Business owners regularly point to the difference in quality between not only the furniture from China but also that made by other local workshops. Competition between businesses of the same size and targeting the same market is intensifying and is particularly fierce between the entrepreneurs from the GT and Vishvakarma Markets. The need to standardise production to fill orders promptly whilst also lowering production costs is forcing some businesses to become highly specialised. All this is starting to affect the interdependent outsourcing system. With these changes in business strategy and the complexities of entering into the international market, there is a danger that the cluster’s development model may eventually implode. This fragility calls into question the current governance of Kartarpur and the extent to which sector challenges are being institutionalised to support the industry’s development.

18.5.2 At Regional Level, a Metropolitan Vision of Urban Development Only Undermines the Economic Vitality of the Town

The town’s economic development, its location near Jalandhar on the Grand Trunk Road and the gradual demographic pressure this creates have exacerbated the need for space. On the one hand, entrepreneurs need to continue to expand their

businesses yet, on the other, all available land is being targeted by developers and the regional public authorities. This results in intense competition between these opposing interests when it comes to spatial planning and also raises the issue of land tenure control.

The Government of Punjab's vision for the future of the region centres on the Ludhiana-Jalandhar-Amritsar axis along the Grand Trunk Road. The aim is to make the region more competitive at national level by placing Amritsar, Jalandhar and Ludhiana on the same footing as other major Indian cities. The state of Punjab wants to develop large cities such as Jalandhar by creating urban areas that maximise the use of space, improving the level of public services in these areas and constructing a motorway network to link these large cities together. To this end, the government is increasing its territorial control over Kartarpur by imposing a development model that aims to integrate the town into the Jalandhar Master Plan. This essentially involves building housing developments in Kartarpur for non-local workers who, it is planned, can commute to the district capital on a daily basis.

By reducing Kartarpur to a mere "commuter town" for the neighbouring city, this new regional integration strategy constitutes an authoritarian urban project that ignores the town's intrinsic value, a value which could easily be enhanced were a different type of development model to be considered.

18.5.3 At Municipal Level, Weaknesses in Local Governance Facilitate Property Speculation Rather Than Industry

Overall, Kartarpur's economic vitality is in spite of, rather than because of, local governance, which is weak and struggles to build on the town's economic momentum.

Although, following decentralisation, the municipality is now responsible for land tenure, this paradoxically appears to fall outside the municipality's direct technical, legal and financial control. As it is reliant on the government for the majority of its public services and part of its funding, the local administration has few resources with which to control its own area properly and develop a planning strategy. As in many other municipalities, Kartarpur's administrative resources are poor, including both technical (very few of the local administration's services are computerised) and human resources (there has been no recruitment of devolved civil servants in the Punjab after 1999). Moreover, from a legal perspective, all the land still belongs, de jure, to the princely descendants of Kartarpur, even though, in reality, the usufruct goes to the town's inhabitants. In contrast, whereas the municipal authority is weak, the state has legal powers of exemption and sufficient financial resources to purchase land titles from their sovereign owners.

Alongside the unregulated (by the municipality) "in situ" urbanisation that is taking place, several hectares of land in the very centre of Kartarpur, between the

Grand Trunk Road and the town hall, have just been purchased by an external government agency, the Kartarpur Improvement Trust, as part of the new Jalandhar Master Plan and are being managed by the district authorities. The resale of this land to developers by the Trust is leading to heightened land speculation. As a result, land has become a commodity to be sold. Now it is the target of speculation, land is no longer accessible either to local craftsmen or to the town's inhabitants. This project appears to be totally devoid of a strategy for supporting local industry, opting instead to focus exclusively on developing Jalandhar, which is regarded as the only economic centre in the region.

Given the financial scope of such a project, the town's inhabitants and craftsmen have very little political room for manoeuvre and their demands, such as the development of a specific area dedicated to the "Timber Market", for example, are not being met. For the town's residents that do not own their own home, such as the contract workers who generally rent their accommodation from local landlords (paying on average between 1000 and 500 INR a month—15–7 dollars—depending on the size of the property and its location), buying a property remains financially out of reach. Apartments are primarily being developed for Jalandhar's middle classes. As a result of the property speculation triggered by the Kartarpur Improvement Trust's project, some of the poorer members of the population are now living in the surrounding villages whilst continuing to work in Kartarpur.

Lastly, speculation is so intense that it is only benefiting a tiny minority of the local inhabitants, notably the few members of the local political elite who have managed to capture some of the profit from the project.

18.6 Conclusion: Kartarpur, a Fragile Symbol of a Development Model Outside of the Urban Paradigm

The solid wood table belonging to Ravinder Singh, the rich farmer mentioned at the beginning of this chapter, is thus a material representation of Kartarpur's own vitality, which has developed outside of the liberal urban development schemes currently being promoted by the government. The prosperity of the furniture industry, which not only is bolstered by the town's strategic location and embedded in increasingly complex lineage networks but also attracts workers from the surrounding regions and now exports outside the Punjab, contributes, to the overall development of Kartarpur. However, although in many ways imperfect, this industry could be much better supported by the public authorities. This is a highly inequitable sector that principally benefits the dominant communities, sometimes leading to revolts by the exploited workforce, now made up of mostly migrant workers. Being essentially community-based, this system is poorly adapted to international competition and standardised production methods.

To ensure the sustainability of the sector, not only does the regulation of this system need to be enhanced, but improvements are also required in other areas, such as workers rights and access to land, to ensure cost-effective shared development. However, local governance is so poor that it struggles to exercise control over the local entrepreneurs, who instead have to organise themselves and circumvent the municipal administration. As things stand, by promoting the powerful neighbouring city of Jalandhar over Kartarpur, there is a risk that the latest regional planning strategies disrupt the existing system. Should an external development model be imposed on the town, there is a real danger that the cluster could implode.

It thus appears crucial to highlight the vitality of these small towns to ensure they are properly taken into consideration in policy decisions. In any event, it is hoped that Ravinder Singh can continue to browse the streets of Kartarpur looking for other pieces of not-yet-standardised, hand-crafted furniture manufactured using a system that, over and above its specific cultural features, is proof that development models other than urban planning strategies can and do exist.

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Chapter 19

From Ox-Carts to Borewell Rigs: Maintenance, Manufacture and Innovation in Tiruchengode

Yann Philippe Tastevin

19.1 Introduction

Tiruchengode, located in the Salem district on the Carnatic Plateau in Tamil Nadu in south India, is mentioned in numerous studies on the relationship between urbanisation and industrialisation (Cadène 1991; Cadène and Mark 1998; Kundu 1994; Roda 1994; Raman 2013).¹ Within this small town, a number of small companies have developed productive and intensive commercial activities within the textiles sector and also, more surprisingly, within the transport and water well drilling sectors. Today, these two activities are helping this town of 95,000 inhabitants (2011) to thrive and their networks extend nationwide and even globally. The aim of this chapter is to document this diversification of the local manufacturing industry. By updating the account of how this urban specialisation in lorry maintenance and then body building and mobile drilling rig assembly has developed, this chapter highlights the changes taking place within this industry.

This chapter focuses on the rig industry, which is the most recent and thus least studied sector. Pneumatic and then hydraulic drilling technologies were introduced through bilateral trade between independent India and the United States. The first assembly workshops sprang up at the end of the 1960s in Hyderabad, which, along with Bangalore, remains one of the main rig production centres to this day. The geography of innovation is too often intertwined with urbanisation, innovation

¹This previous research enables us to take a diachronic approach to the development of a cluster that specialises in the assembly and maintenance of large vehicles. More than a visit, this is a means of revisiting (Burawoy 2003), some 20 years later, an area favoured by researchers from the *Institut Français* in Pondicherry, who have analysed the set-up of economic activities in small towns.

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being a quality, if not a characteristic, commonly linked to major urban hubs. By looking beyond the literature that focuses exclusively on large urban centres, we can see there is a wide variety of places involved in this globalisation of the flow of technologies. This flow strongly and innovatively helps to structure areas at different levels and to forge relationships between diverse ranges of stakeholders. The purpose of this ethnography is to analyse the assimilation of mobile drilling technologies and gain an understanding of how these have been incorporated and developed into an outlying industrial district. Our aim is thus to analyse the role of technology in the economic development of a small town; in other words, to examine this technical “culture” or “tradition”, to which Kundu (1994) makes a brief reference, and which, among other factors, helps to explain the expansion of a nationally important industrial district² in Tiruchengode.

Whilst the history of twentieth century techniques is full of examples of companies that started life maintaining a technology before moving on to manufacturing the part or complete article and then, finally, on to innovation (Edgerton 2006),³ our contribution to this history of a *subaltern motorisation* demonstrates how artisans that specialised in repairing vehicles progressively began to manufacture and then reinvent them. Thus, we describe the circumstances leading to the emergence, from the bottom up, of these new entrepreneurs by recounting the story of a family of artisans. We show how a blacksmith who arrived in Tiruchengode in 1949 became the first in a line of “self-made engineers”, his family firm now being the leading manufacturer of mobile drilling rigs and exporting to the whole of Africa.⁴ This chapter tells the life story of a small firm in a small town. This account, which begins at the end of the 1940s and continues up to the present day, covers three generations of the entrepreneurs behind the development of the main rig assembly company in the Tiruchengode cluster: PRD Group (www.prdrigs.com). From manufacturing ox-carts to repairing lorries (Sect. 19.2), then from lorry body building to assembling mobile rigs (Sect. 19.3), we see how generational change and technological advances have intertwined to develop this company on the fringes. Lastly, being at the crossroads of the world of production and transnational

²In the sense of Schmitz and Nadvi (1999). Cf. the work undertaken by Loraine Kennedy (2004).

³Cf. the Japanese bicycle industry (Edgerton 2006: 142).

⁴With Anthony (the IFP translator-interpreter), we recorded around 20 h of interviews covering accounts of business start-ups, which particularly focused on the development of the family firm Paranthaman Rock Drills (PRD). We visited all of the group’s sites, notably the new plant manufacturing rigs for export, which, in 2010, relocated to the Special Economic Zone in Perundurai Paran, about fifty kilometres from Tiruchengode. The son (40 years old), who manages exports and the Perundurai plant, acted as our guide, opening doors and giving us access to the family archives, particularly photos. We heard the life story of his father, Thaman, the head of the family-owned company and who notably first diversified the business, starting to assemble mobile drilling rigs. We also met Ponusamy, the patriarch, a former blacksmith who moved to Tiruchengode at the end of the 1940s. Lastly, we interviewed the father’s younger brother, P. Vellinigri (President of the Tamil Nadu Lorry Body Builder Federation), who recounted how the family established a body building industry in Tiruchengode.

trade areas, Sect. 19.4 focuses on Paranthaman, analysing the reorganisation that has taken place following the international expansion of local entrepreneurs' business and the development of local areas specifically geared towards growing their sales abroad.⁵ This involves building an understanding of how these niche markets from the urban fringes in India are becoming more global.

19.2 First Generation (since 1944): Ponusamy the Blacksmith: At the Source of Tiruchengode's Industrial Development

All the revolution was started by my grandfather. We are from a community of blacksmiths, we work with steel: *Vishakarma*.^{6,7}

The rudimentary beginnings of this industry could be seen in Namakkal as early as 1940, and thereafter in Tiruchengode and Sangagiri. Ranganathan noted in 1992 that the pioneers who first established a lorry body building industry in Namakkal in 1940 were Mariappa Asari, Raju Asari and Ponusamy Asari. Ponusamy was born in the 1920s in Gobi (Gobichettipalayam) in the Erode District. In 1944 he left his native village with his family and moved to Tiruchengode.⁸ Descended from a long line of blacksmiths, he opened his own forge, which was one of the first, if not the first, blacksmith's forge in the town.

⁵Initially, the point of entry for this study was the future of a material. Given the importance of wood in the development of the town and local manufacturing of bodywork, this study has been carried out during a turning point and time of transition for the body building companies. New international regulations (Euro IV) prohibiting the use of wood in lorry manufacturing come into force in 2015. As such, the focus of the ethnography shifted to observe how the sector, its clients and multitude of sub-contracts were able to adapt to these new rules. How have the workshops, wood industry and practical know-how changed? Finally, how has the whole chain, some of the history of which we examine here, reorganised itself to stay in business and manufacture lorries for the domestic market that meet the new international standards? Just like this reorganisation, this research is ongoing.

⁶*Vishakarma* caste is actually a craftsman caste, as is Asaris—who work with different materials: iron (blacksmith), wood (carpenter), gold (goldsmith). The subcastes are based on the material they use.

⁷Interview with Paranthaman (alias Paran), in the initial “Export” unit premises opened in 2002 in the industrial district in Tiruchengode, 12 July 2013.

⁸Salem District and its environs consist of an arid atmosphere with barren land. Moreover, agricultural activities in this area are limited to only a few months in a year. Geographically, these places are in a hilly area and record very low annual rainfall. Hence, agriculture becomes unprofitable and does not provide employment throughout the year. This has been one of the most important factors compelling people to seek employment in alternative occupations. In addition, many villages in and around the area are home to a large number of people from the Vishakarma Community (carpenters). These carpenters came to Namakkal, Tiruchengode and Sangagiri in search of employment (Ranganathan 1992).

19.2.1 *Weavers and Blacksmiths: Wood and Ox-Carts*

In the history of post-independence modernisation, Tiruchengode is best known for its handloom weaver's cooperative movement. Located between Salem, an industrial and commercial centre, and Erode, a major textile market, in a cotton-growing region,⁹ the first weaver's cooperatives were founded in Salem, then in Tiruchengode, as of 1938. Tiruchengode was not only a town of weavers, but also of blacksmiths, where the manufacture of looms and ox-carts had thrived following independence and established the town's reputation. Transport logistics between the town, which was the trade centre, and the various piece workers who manufactured the products developed over short distances. Wagons were used to transport the cotton from Erode and the textiles to Salem. With no cotton there would have been no weaving and with no wood there would have been no ox-carts. Tiruchengode itself had neither wood nor sawmills. However, there were small-scale entrepreneurs trading in the raw materials and energy required to support this fledgling industry, with brokers and transporters supplying charcoal not only to the multitude of weaving, warping and spinning workshops,¹⁰ but also to the small forges and carpentry workshops (wooden structures, small joinery works, carts).¹¹ As the cotton growing and processing sector developed, wheelwrights, carpenters and sawyers all gravitated towards the town. The market attracted potential buyers from across the district, who came in search of the wood that was in plentiful supply in Tiruchengode market. However, for Ponusamy and the fledgling ox-cart industry, the locally available wood provided only part of the raw materials required to make a cart. Ponusamy forged the iron parts for the axles and suspensions himself and also made the rim-welded iron wheels. However, he needed a better quality wood to build the central part of the chassis, with the preferred choice of local wheelwrights and carpenters being a wood called Malai Vembu (*Melia azedarah* or *Melia dubia*), which was not available in Tamil Nadu. From experience, the carpenter was aware that this part was too big to be sawn by hand. Thus, it had to be supplied from elsewhere, forging a link between the major sawmills of Kerala and the Tiruchengode cart-making industry right from the very outset.

On site, the first traders paid their suppliers in cash using the cash advances they had received from their buyers. With the money left over and their contacts in Kerala, these pioneers bought, second-hand, the sawing equipment required by the workshops in Tiruchengode, leading to the creation of the first sawmills in the town

⁹“A small textile town in the Salem–Coimbatore cotton-weaving belt” (Cadène and Mark 1998).

¹⁰The town benefited from the reorganisation or closure of the large public spinning factories, particularly in Bombay, as well as from devolved production. As handloom weaving became less common, the automation of looms led to increased production of a grey fabric that was sold on the Indian market and also abroad (although carried out by other parties, this represents a first foray into trade). In the mid-1990s, there were over 200,000 automated workshops in the *taluk* (district administrative subdivision).

¹¹Cf. the work (in French) of Jean-Marc Roda who has analysed the importance of wood (local processing and regional distribution) in Tiruchengode's development.

at the beginning of the 1950s. These initial sawmills still operate in Tiruchengode to this day. Indeed, woodworking activities did not die out with the carts and progressive mechanisation of cotton spinning. The know-how and commercial supply networks have been taken up and expanded by new entrepreneurs. Vehicle body builders have set up shop on the outskirts of the town, creating an outlet for high quality wood from the forests of the Western Ghats from Kerala or Karnataka.¹² This superior quality timber is used to manufacture the entire body of the lorry and even the cab and platform.

Tiruchengode benefits from its proximity to Namakkal, where the fast-growing road transport sector led to the development of a small-scale industry that specialises in body building on Leyland lorry chassis (discussed in more detail below). In Namakkal, people have had to depend on non-agricultural occupations to make a living, with the trucking sector being one such area to be developed¹³ because of the need to transport agricultural products from/to the neighbouring districts: “During the early 1940s a few enterprising persons operated a steam engine driven Chevrolet 3-ton truck to begin the transport operations. One thing led to another, such as mechanics were needed for the maintenance, workers for handling coal, and when the diesel operated trucks made their market appearance during the early 1950s the sector really took off to a higher plane. The workers became cleaners and drivers over a period of time; two or three drivers joined together and became the owners of a small fleet of trucks. Their numbers as well as the fleet strength grew steadily over a period of time”.¹⁴

19.2.2 Motorisation of Transport: Advent of the Lorry or the Birth of a Local Lorry Body Building Industry

In the 1950s, the road linking Namakkal, Tiruchengode and Sangagiri was paved, and the neighbouring town’s business and industry thus spilled out along the new

¹²The wood materials account for more than 40 % of the total cost of lorry body-building. It has been estimated that more than 80 % of the wood materials required for lorry body-building construction is purchased from Kerala and the remaining 20 % is procured from Yercaud and other places within the state. Despite the fact that wood materials are purchased from Kerala, Salem District has become popular throughout India because of the momentum built up over the years.

¹³Agricultural operations can be carried out for only a few months a year and this does not include commercial crops. Hence, people working in farming are forced to seek alternative employment to ensure their livelihoods. Although there are many kinds of industry, such as the sago industry, dairy and poultry farming, the largest are lorry body building and poultry farming, ranked first and second, respectively.

¹⁴Interview with Mr. K. Nallathambi, President State Lorry Owners Federation—Tamil Nadu, President NTLOA and Vice President South India Motor Transport Association, published in *Motorindia*, 18 September 2014, <http://www.motorindiaonline.in/commercial-vehicles/namakkal-taluk-lorry-owners-association/>.

road coming out of Tiruchengode towards Sangagiri.¹⁵ The servicing of lorries mostly took place in an open space and very little capital investment was required to set up a unit, attracting craftsmen (blacksmiths and carpenters) from the surrounding villages (Raman 2013). In the early 1960s, the lorry came from Namakkal¹⁶ to Tiruchengode, and Ponusamy switched from making ox-carts to lorry body building:

It was his dad who chose to come and work in this town, because he had committed a crime in another town. They had to escape. With his experience of making bullock carts, his experience with carpentry and as a blacksmith, he started making wooden cabins for lorries. It was because of his skill that he started this kind of job. He was the first to make bullock carts and then go into lorry body building.

From what he earned making bullock carts, he built a workshop for lorry body building. Nobody helped him (bank, relatives...). When he started the lorry body building there were not any painters, so he used to go to Salem to bring the painters, to bring the electricians, it is how everything started.¹⁷

At the beginning of this industrial period, neither craftsmen such as Ponusamy nor small manufacturers had the technical knowledge or skills required to undertake repairs or manufacturing activities. Where and how did they learn these? In Tiruchengode, knowledge and skills came from two sources: from the workshops that repaired and serviced weaving machines and from traditional metal-working crafts. The mechanisation of weaving led to workers learning “on the job”. Thus, some workers began to specialise in machine operation. Technicians started to service and repair the new looms. Machine maintenance helped create a local technical culture (Kundu 1994), which then facilitated further skills and knowledge transfer. As the textiles sector became saturated, the arrival of lorries meant that the local manufacturing workshops had an opportunity to diversify into the mechanics sector and, thus, the necessary skills were developed and activities overlapped. “The lorry body builders are often found to be experienced drivers and motor mechanics. Most of them have started their careers as cleaners and labourers, so that they are familiar with all the aspects of lorry transport. They know by experience what a lorry driver and cleaner need to know about their vehicle. At the same time, they are also equally aware of the demands of the customers and lorry users. The combination of expertise and intimate knowledge with all the aspects of the lorry body building is extremely useful for the development of the industry in this region. Consequently, by using this knowledge along proper lines, the entrepreneurs reap economics wherever possible” (Ranganathan 1992).

¹⁵A key infrastructural investment was a roughly 48 km long transport corridor connecting Tiruchengode with both Namakkal (today the district headquarters, less than 40 km away) and the train station of another neighbouring town, Sangagiri (Raman 2013).

¹⁶“The growth of trucks population concomitant to industrial growth led to development of body building companies, manufacturers of trailers, LPG tanks, etc., and the same along with the impressive growth in the fleet strength of several operators has propelled Namakkal to become the nerve centre for trucking business in India”, says Mr. Nallathambi (*ibid*).

¹⁷Interview with Paran (*ibid*).

As well as making ox-carts, the versatile blacksmith forges began to specialise in car repairs (as the road network was expanding rapidly). Some traders (from the *Mudaliar* caste) became transporters, and following the appearance of the first cars, an area of small-scale master craftsmen and mechanics sprang up among the stalls and workshops that repaired bicycles, cars and lorries. Locally, the craftsmen started to become familiar with new techniques imported from elsewhere, although they rarely had the means to use them.

Ponusamy, the blacksmith, who had been making carts in Tiruchengode for 5 years, now began repairing all types of vehicle. At the initiative of pioneers in India, the arrival of the first fleets of lorries (Leyland) and buses (Bedford SB) expanded the use of motorised vehicles within the region:

At that time, the TVS Company was already there. The TVS Company only made the body for the lorry in India.¹⁸ And Ashok Motors only started to assemble chassis. As India does not have its own automobile industry, the country is fully dependent on the import of new and second-hand cars, trucks, lorries and buses from abroad.¹⁹

In 1955, Ponusamy was one of the few people in Tiruchengode to own a motorised vehicle:

He bought a van because every week there is a market, people used to go to the market to buy all the stuff they need for the family. There was a need for transportation; his father bought the vehicle for that. At that time, there were only old vehicles coming from abroad through the Chennai port.²⁰

He thus invested in an old van which he transformed into a minibus using recovered spare parts. The van used to turn heads on market day, the vehicle being a testament to the know-how being cultivated in Ponusamy's workshop. The craftsmen made his name within the local repairs market and his vehicle generated ideas for new ventures. As a result of the Green Revolution, the region's agricultural landowners were earning extra income that they wanted to reinvest into new business sectors. Some of these wealthy landowners (mainly from the *Vellalar*

¹⁸TVS was established by Thirukkurungudi Vengaram Sundaram Iyengar. He laid the foundation for the motor transport industry in south India when he started a bus service in the city of Madurai in 1911. He established T.V. Sundram Iyengar and Sons Limited in 1911, a company that consolidated its presence in the transportation business and which, by the time of his death in 1955, operated a large fleet of buses and lorries under the name Southern Roadways Limited. Sundaram Clayton, then the flagship company, was founded in 1962 in collaboration with Clayton Dewandre Holdings, United Kingdom. It manufactured brakes, exhausts, compressors and various other automotive parts. In the heavy goods vehicle (HGV) sector, there is a lot of money to be made from the Dewandre power-assisted steering and braking systems, particularly on British vehicles, thanks to its successful Clayton-Dewandre subsidiary.

¹⁹Interview conducted in the "Hydraulics" unit premises opened in 1982 with Mr. T.P. Thangaraj (alias Thaman), Ponusamy's son, Chairman and founder of the group, 13 July 2013.

²⁰Interview with P. Vellinigri, President of the Tamil Nadu Lorry Body Builder Federation, Tiruchengode; 13 July 2013. He is one of Ponusamy's sons, Thaman's younger brother, so Paran's paternal uncle.

Gounders caste) opted to invest in transport.²¹ These backers precipitated the blacksmith's change of career. Not only were these clients interested in buying a van—they also advanced the funds required for its conversion (van re-engineering). Thus, Ponusamy returned to Madras, sometimes accompanied by the future owner, to visit scrapyards from which he would buy used chassis from the first Ford Transits (1953–) or Bedford²² vans fitted with Perkins four-cylinder engines. Once back in his workshop, Ponusamy rebuilt and fitted the passenger compartment (installing bench seats and windows) onto the bare chassis.

In 1959, in Tiruchengode, Ponusamy thus moved on from making ox-carts to building bodies, first for small vans then for larger vans, before finally beginning to work on the lorries that were becoming an increasingly common sight on the region's roads. In 1951, the manufacturer Leyland joined forces with Ashok Motors to install the first lorry chassis assembly lines in Ennore, north of Madras. The first fleet to be produced was the *Comet 350*, one of the lightest vehicles in the road transport range. Ponusamy began by repairing these, providing a service to the town's first haulage companies. As a blacksmith, he had extensive metalwork experience and was familiar with assembling wooden bodywork. In his workshop, he repaired the wooden sections and metal parts of the lorry cabins and rear platforms and, whilst repairing them, he learned more about how the lorries' bodywork was made and designed.²³ The frame of a lorry is much bigger and its parts weigh a lot more, but assembling a lorry is no more complicated than making an ox-cart.

My father started to repair them, to observe how the truck bodies were made. He knew the technique for making the wooden body for the bullock cart, so why not to do the same for a lorry. What is a lorry if not a bullock cart?²⁴

In 1963 he began making the bodywork. In Chennai, thanks to his good relationship with scrapyard merchants, he was able to obtain a Comet chassis, which he completely fitted out for a client. He built a cabin and flatbed platform on which to transport goods. Now the father of six children, five boys and a girl, over the course

²¹There are other local cases of career changes, such as the traders who became transporters (cf. Cadène 1991).

²²Bedford buses, lorries and vans, assembled in Luton (UK), were widely exported to former colonies of the British Empire. Thus, the Bedford CA (1952–1969) model van could be found on the roads and in the accounts told by mechanics and transport pioneers in India, Egypt and Ghana. Old or new, they were imported either ready-assembled or in parts to be assembled on arrival (such as in Tema in Ghana, where *trotros* and *Mammy* lorries were assembled until 1966). It is interesting to note that the craftsmen in the British colonies learned to become mechanics by working on the first generations of identical models.

²³“The choice of wood is very important. If teak or other types of woods are used, it will increase the weight of the lorry. Therefore, the body builders at Salem District use a soft wood known as *silver oak* which is available in plenty in the nearby hills of Yercaud. The unladen weight becomes less therefore leaving greater freedom to carry a maximum load of cargo. The use of this particular wood, namely silver oak, in Tiruchengode confers many advantages. Depreciation of tyres is much less, gives a sleek appearance and it is also durable and strong. It also provides more mileage and has a higher resale value. (Ranganathan 1992: 105).

²⁴Interview with Mr. T.P. Thangaraj (*ibid*).

of a decade he developed the craft production of wooden cabins and platforms. A pioneer of the local lorry body building industry, in the 1960s, Ponusamy ran the largest workshop in the town. He employed all his sons and there were around 30 people in total working in the small, open-air, family company.

The on-site reconstruction of imported vehicles heralded the development of a body building industry. The reputation of mechanics' workshops in Namakkal, then Tiruchengode, was built on their maintenance skills. For major repairs and annual fleet servicing, haulage companies preferred to use the know-how and equipment of the mechanics in Salem District. Adapted to hold large lorry chassis, the town's garages specialised in renovating (and sometimes reconstructing) high tonnage motor vehicles designed to transport goods (lorries) and people (buses). The body builders became well-known and highly renowned throughout the country. As such, the sector attracted and retained a highly qualified workforce, repairing all types of vehicle, transforming vans and then building on Ashok Leyland chassis. As there were no existing networks, this has led to the creation of a type of shared manufacturing process, which supplements that of the centralised factories as it is more flexible and able to fulfil smaller orders. Thus, the emergence of a small-scale mechanics and body building industry in Tiruchengode has taken place "without the existence of a network of connected services. The lorry chassis are manufactured by Ashok Leyland, the Madras Company supplying nearly all long-distance type transport entrepreneur in south India" (Cadène 1997: 150).

1948—The birth of Ashok Motors

Founded by Raghunandan Saran, Ashok Motors was set up in collaboration with Austin Motor Company, England. Production began in September at the factory at Ennore, north of Madras, and soon the first indigenously assembled A40 Austin car was rolled out.

1950—Ashok Motors and Leyland UK

An agreement was reached between the two companies and Ashok Motors got sole rights to import, assemble and progressively manufacture Leyland trucks for 7 years.

1951—Assembly of Leyland chassis commences

The first Leyland chassis assembled by Ashok Motors at Ennore were four Comet 350-engine tippers sold to the Mangalore Tile Factory.

1980—Hosur plant starts operations

As mentioned by Raman (2013), the Namakkal–Tiruchengode–Sangagiri road catalysed the evolution of small re-engineering services, attracting Kollar Asari migrants, who set up makeshift repair workshops along the main route. The first lorry body building unit opened in Namakkal in 1940, in Tiruchengode in 1963, in Sangagiri 1968, in Vellore in 1970, in Kolathur in 1972, in Mettupalayam in 1975,

in Madurai in 1982, in Karur in 1983 and in Tirunelveli in 1984. The second generation of these families benefitted from the nationwide expansion of the lorry transport business.

19.3 Second Generation (since 1972): Thaman the Lathe Man: From Maintenance and Repairs to Rig Assembly

My grandfather has five sons and one girl. My dad (Thaman) is the second. My uncle (P. Vellinigri) joined my grandfather; all the boys were working with their father. My father asked him to make a small workshop with a lathe, so my grandfather bought a lathe (and only that one). It was a second-hand lathe (less than US\$100), which was inside the lorry body building workshop. Initially, he started with a small lathe, whatever small repair jobs used to come into the lorry body building workshop. (see Footnote 17)

Thaman was born in 1954. Unlike his father, he attended primary school (“up to sixth standard”). He was not interested in bodywork; Thaman was instead fascinated by machines and by mechanics. At the age of twelve he began work as an apprentice in one of the town’s first lathe workshops.²⁵ At the end of the 1960s, Tiruchengode was still without electricity. Therefore, the lathe had to be turned manually, which required two pairs of hands. Thaman spent two years (1966–1968) working the lathe handle and learning to become a turner and toolmaker, during which time he earned 20 INR a month. At the end of his apprenticeship, Ponusamy bought him a second-hand machine tool (6000 INR) in Tiruchengode. This paternal investment enabled him to set up shop on a plot of family-owned land on the northern edge of the town, on the road to Sangagiri. This is the same road on which Tiruchengode’s first spinning mill was built in 1935, around which other workshops, garages and stalls selling equipment and parts for large vehicle maintenance and body building gradually sprang up.

Thaman began by making straightforward parts and carrying out minor repairs. Rather than assembling the “basic” beams, boards, wooden panels and steel uprights that make up a lorry’s outer shell, the young craftsman preferred machining the increasingly complex components of the mechanical parts found inside the vehicle. His skill at making spare parts whilst, at the same time, enhancing the know-how of the family company set him apart from his paternal heritage. He used the money earned from this customised work to buy more machine tools, as tools such as the drill press, grinding machine and milling machine were being introduced into workshops as electricity was installed in the

²⁵A lathe is a machine tool which rotates the workpiece on its axis to perform various operations such as cutting, sanding, knurling, drilling, or deformation, facing and turning. Tools are applied to the workpiece to create an object that has symmetry around an axis of rotation.

town. Thus, in Coimbatore,²⁶ Thaman bought himself a second-hand electric metal lathe; a machine that, in expert hands, is able to transform blocks of metal or aluminium into high-precision mechanical parts. By cutting, drilling and filing, he was able to work on these blocks of cast iron or steel to create a piston and piston rod, bearings and valves. From a lump of metal, he could make a high-precision machine. Thaman was a one-man factory, capable of making all sorts of mechanical parts.

19.3.1 A Mechanical Fix—Paranthaman Engineering Works (Founded in 1972, Capital 6000 INR)

In 1972, the municipality built a bus terminal and it was also the year in which Paranthaman was born, 1 year after his father got married. With the combined development of the road network and goods transport sector, business in Thaman's workshop was booming.²⁷ He specialised in repairing the drive axles on Ashok Leyland lorries²⁸; he specifically repaired the rear axles, which would often break under the weight of the loads carried by the new hauliers traversing the region's freshly paved roads.

In England, Leyland was manufacturing 6 ton capacity trucks. When they came to India, they assembled the same model. But the Indian transporters overloaded the lorry, which is why it breaks. (see Footnote 24)

The loads placed on the axle in India led the mechanics carrying out the repairs to modify the rear suspension system.²⁹ As the drive axle has a simple and rigid layout, it was possible to reinforce it. By systematically dismantling the parts held

²⁶Coimbatore, the second largest city and urban agglomeration in Tamil Nadu after Chennai, is a major textile, industrial, commercial, and manufacturing hub. Often referred to as the Manchester of south India, the town was one of the first places to import machine tools and has become a machine tool manufacturing centre.

²⁷Although the industry was established in 1940 in the Salem District of Tamil Nadu, it became very popular after 1968. The reason for this boom in lorry body building activity was the introduction of the five states' permit system. Lorry owners from different parts of India came to the Salem District of Tamil Nadu to have their lorries built. During Chief Minister Shri Kamaraj's tenure, permits for transport all over the state were issued and this fueled the further growth of transport operators. The permits were also later provided for states neighbouring the five states and, in 1975, during Prime Minister Indira Gandhi's time in office, national permits were introduced for free movement all over India. This national permit system gave greater fillip to the lorry body-building industry in Tamil Nadu.

²⁸A drive axle is a rigid axle vehicle suspension system whereby the driveshaft that transmits engine power to the wheels is also laterally connected to the wheels, enabling them to turn on the same axis.

²⁹Mechanical engineering vs civil engineering: the greater the axle load, the quicker road surfaces become worn and damaged. Thus, a lorry with a load of 10 tonnes per axle wears out the road 10,000 times faster than a car with a 1 tonne axle load.

by leaf springs, namely an axle differential encased within a single housing that contained the driveshaft connecting the differential to the wheels, Thaman endeavoured to trace the chain of events that was causing the breakdown and was able to find a way of strengthening the system by modifying the small part that kept breaking. Thus, he not only developed a new part, but also corrected a design fault by adding a small weld. This technical improvement and mechanical fix was so effective that it cemented his reputation: “*by fixing the axle of the Ashok Leyland truck, my name became famous in all Tamil Nadu*”. Locally, the heads of small workshops, craftsmen and haulage companies all recognised the skill of the workshop that would become the district’s main manufacturer.

Although it was not possible to purchase a chassis under guarantee from the manufacturer, the “lathe man” in Tiruchengode decided to promote his mechanical fix by guaranteeing the repair for 2 years. The region’s transport companies soon got wind of this and Ashok Leyland’s main clients alerted its authorised distributors. However, even though promoting this repair and, in particular, the guarantee led to a dispute with the manufacturer, this warranty of craftsmanship helped the mechanics of Tiruchengode gain the transport companies’ customer loyalty and made the manufacturer aware of the importance of the discreet maintenance hub that lay between Tiruchengode and its twin town of Namakkal.³⁰

Locally, the craftsmen were becoming more organised. Former drivers settled in the town, workers set up their own businesses, qualified craftsmen moved from workshop to workshop, skills and new discoveries were shared and transmitted and money was made. The first associations were created to protect jointly the interests of an expanding corporation.³¹ Collective experience provided social and technical capital, which was put to use servicing and repairing all types of vehicle. Haulage companies preferred to use the Tiruchengode mechanics’ services and equipment for major repairs and the annual servicing of their growing fleets of vehicles. Specifically sized to hold large lorry chassis, the area’s garages (Motor Workshops) specialised in repairing, renovating (and sometimes reconstructing) the increasing number of high tonnage motor vehicles designed to transport goods (lorries) and people (buses) (Table 19.1).

The lorry body building industry led to the development of a local market providing equipment, spare parts and tools. The shopkeepers in the industrial zone have strong links with the workshops and, through their distribution of materials to the various craftsmen, they help ensure this extremely flexible productive system runs smoothly. The manufacturers buy the raw materials or semi-finished products

³⁰“It has also become the focal point for *Original Equipment Manufacturer* (OEMs) and varied other vendors to routinely launch their products and services with the conviction that if they can position the same successfully in Namakkal, replication becomes easier in other markets, pan India. We have Asia’s second largest driving school started by Ashok Leyland and over 54,000 trucks currently in Namakkal and all within an area of just 12 km², the highest in India”, sums up Mr. Nallathambi (*ibid*).

³¹For more information on the Tamil Nadu Lorry Body Builders Federation see the work conducted by Raman (2013).

Table 19.1 Growth of lorry body building units in Salem district from 1982 to 1991

1981– 1982	1982– 1983	1983– 1984	1984– 1985	1985– 1986	1986– 1987	1987– 1988	1988– 1989	1989– 1990	1990– 1991
74	80	91	100	115	124	150	181	230	270

Source Ranganathan (1992)

In 1991, there were about 560 sheds in Namakkal, Tiruchengode and Sangagiri, including tinkering and painting sheds. This is considered to be a large number given the limited nature of the demand. Because of the stiff competition among lorry body builders, lorry owners have a wide choice and, consequently, the lorry body builders' profit margin is reduced. On the other hand, however, the service remains cheap so there is always high and continuous demand.

from the local market traders. The town's wholesale and retail traders supply parts and materials on a just-in-time basis to the district's workshops, which keep nothing in stock but instead purchase wood, steel, aluminium, mica and screws specifically for each order. Entrepreneurs often stick with the same trader for long periods. There is a well-developed marketing institution in Tiruchengode, which is also partly based on family connections. Building the bodywork onto a lorry chassis requires, in total, 26 qualified workers (welding, joinery, electricity, painting, cushion makers etc.). The various craftsmen and teams work on the chassis either in turn or at the same time (Cadène 1998), meaning that the craftsmen, entrepreneurs and traders in Tiruchengode form a community of practice in which there is a regular flow of business information and know-how.

Through its momentum and networks of suppliers and buyers, this outlying industrial district became attached to the logistical supply chains of industrial hubs in neighbouring states. Thus, the area started to attract the attention of owners of all types of vehicle liable to break down. The craftsmen of Tiruchengode cannot forget the period at the end of the 1970s which heralded the appearance of the first lorries loaded with pneumatic drilling machines. Thaman remembers that:

The government was sending the machine into the villages to drill borewells. At that time, I only saw one machine, which was brought by the government into a village near Tiruchengode. It was a huge machine. After that, I saw it three more times. Each time, I went to the drilling area to see the machine working. (see Footnote 24)

Others also remember the arrival of the imposing mobile platforms. M. Arthana, who became the owner of a workshop that specialised in pipe rebuilding³² and is today Executive Secretary of the Engineering Association,³³ remembers when he first saw a rig. When he was younger, he worked with his uncles repairing irrigation water pumps. He then left the small family workshop to join a larger workshop in Tiruchengode, which worked on lorry body building. He was only 14 years old when he saw his first rig. The vehicle travelled back and forth across the

³²Sri Arthanareswara Engineering Works since 1985.

³³In 2012, there were 120 rig engineering workshops registered in the industrial area, 75 of which were specialised pipe work or drilling part workshops (Source: Engineering Association of Tiruchengode 2012).

neighbouring countryside, where they were just starting to use exploratory vertical drilling to explore the sub-soil and look for water.³⁴ The pneumatic well drilling and construction machines, along with the air compressors and their electricity generators, came from the United States (Chicago Pneumatic), Sweden (Atlas Corpo) and Germany (Urac). Irrigation, road construction, mining operations and the planned modernisation of India meant that new machines were required and so Nehru increased his visits to factories abroad and entered into agreements with machine tool manufacturers.³⁵ The first rig assembly workshops were thus established in Hyderabad, but how did this technology get as far as the Tiruchengode industrial district?

Thus, the rigs found within the district had been assembled in Hyderabad; as mentioned by Arthana³⁶: *“The rigs were not a local mechanical engineering invention, but were brought into the area; an imitation of know-how developed in a neighbouring state”*. Although Tiruchengode’s craftsmen were as yet unable to assemble these rigs, their reputation led local drilling pioneers to request them to service and repair their mobile drilling platforms. Not only were they able to make the specific parts they needed, but the most enterprising repairmen also started to invest in the technology themselves. Ponusamy, the blacksmith and lorry body builder, was the first to purchase a mobile drilling rig from Hyderabad to try out in the surrounding area. In this mostly arid region there is no large-scale agriculture because of a lack of abundant water supply, as the area is solely dependent on the Cauvery River that flows near Pallipalayam in Erode, as well as on occasional rain. This is thus a dry environment receptive to mechanical exploration of the sub-soil using this machine brought in from outside.

However, this new machine immediately created a whole host of problems for Thaman, who had the difficult job of trying to get it to work. Paran, the grandson, recounts that:

Some people came to him to do the repairs for the first drilling rig. They purchased it from Hyderabad and one guy came from Coimbatore. He started repairing those rigs. One of my grandfather’s friends advised him to purchase a rig himself. So my grandfather purchased the rig from Hyderabad and that rig used to give a lot of problems. It was a new one, but it used to give a lot of problems. My dad always used to repair the machine. He was in charge of keeping the machine working. So, since the early 1970s, he has been used to repairing the rigs. The motor used to fail, so he used to fix it; doing smalls repairs, he was taking care of the rigs.

Thaman wanted to do something different. He had already been working in the truck servicing and repairs business for around 10 years. So he decided to make his

³⁴<http://www.atlascopco.com/history/documentation/videos/welldrilling.aspx>.

³⁵“During that time, the American government gave three borewell machines to the Indian government”, Thaman explained. In Europe, Nehru met the main industry stakeholders: cf. this promotional film showing a visit to a Swedish pneumatic tool-making factory, Atlas Corpo (1957): <http://www.atlascopco.com/history/documentation/videos/nehru.aspx>.

³⁶Interview with M. Arthana in his workshop, 11 October 2012.

own machine. As the American model was considered to be huge, he designed one that was smaller.

19.3.2 Redesigning the Rig—Paranthaman Rock Drill (Founded in 1982, Capital 300,000 INR)

Repairing rigs led to making rigs. By repairing machines brought in from elsewhere, those involved in the craft industry in Tiruchengode collectively developed the mindset and skills required to make these machines themselves. In this instance, it was a mobile pneumatic drilling rig.

Someone came and asked him, could you make a rig. Just like that. As a kind of reverse engineer, he started to do his first rig. He was happy to make his first machine [...] At that time, he just made one machine; it wasn't perfect but it worked. The government was importing the U.S. drilling technology, and a private company from Hyderabad started to import, then assemble, the rigs locally. In Tiruchengode, business as usual started with the maintenance and repair of the new technology: the genuine American one and the duplicated one. It took 2 months of intensive and obsessive work to learn and develop the skills required by working on the first imperfect rig made in Tiruchengode. (see Footnote 17)

To design his prototype and redesign the rig, he went to visit the open-air factories in Hyderabad to observe the construction method used, which involved assembly rather than a manufacturing process. The major work was, however, very different. It was above all a question of metal work, particularly for the construction of the heavy drills and solid platforms capable of supporting the compressors. The platforms were purchased from large companies and the work involved merely mounting them onto the chassis. As in Tiruchengode, there was no real assembly line, but rather large garages in which the platforms were prepared and then assembled. Here, Thaman also found the main foreign parts manufacturers that supplied the specific components, such as the core and most expensive piece of drilling equipment, the compressor. Thus, to purchase not only this but also the supply, mechanical transmission and rotary systems, as well as rods and bits, Thaman needed money. And to assemble the rig, he also needed space. Major investment and capital was required to transform his mechanics workshop into an area where he could assemble a rig. For the first time, he had to borrow money from his friends and relatives. In 1982 he founded his second company, Paranthaman Rock Drill (*"the workshop became a company: PRD"*). Consequently, Thaman stopped repairing and servicing lorries to start manufacturing borewell rigs:

He faced a lot of difficulties. For example, he got a lot of money from his friends that he invested in the new workshop to assemble the first rig unit and after that there was no work, no orders. First, he had to pay the interest back on the loan. He lost his own property; he sold his land to pay back the interest. It took 3 years to repay this loan. From 1982 to 1985 he assembled only a few rigs; during that time there was no demand for rigs. He didn't know how to market the new machine. All the factories were located in Hyderabad. In Tiruchengode, all his business relied on the previous lathe shop.... (see Footnote 40)

Table 19.2 Population size of Tiruchengode in Tamil Nadu in the district of Namakkal at the town and sub-district level

Year	1931	1941	1951	1961	1971	1981	1991	2001	2011
Town	12,322	15,516	19,228	21,386	36,990	53,941	63,200	80,177	95,335

Source Census of India

During a period of low urban growth in Tamil Nadu (1971–1991), population growth in Tiruchengode was particularly high as the economic development of the town and its craft industries continued to attract increasing numbers of workers (Table 19.2).

In the sub-district of Tiruchengode, in situ urban development led to an increased need for water. Although local inhabitants were familiar with digging household and agricultural wells, they knew nothing about “the new drilling machine”, which could dig much quicker and deeper. There were still only a small number of rigs being used in the region and the majority of the rig operators came from the neighbouring state of Andhra Pradesh. Within this locally developing water extraction market, Thaman saw an opportunity to sell rig machines that were made in Tiruchengode:

Hyderabad is a long way away and, for the Tamil inhabitant, it is complicated to go over there because of language issues: how do you find the manufacturer, how do you get the machine back here. So I decided to introduce the new drilling technology in the villages surrounding our hometown. No need for the customer to go to Hyderabad, we can make the machine in Tiruchengode. So you can buy it easily. (see Footnote 24)

A market finally developed in 1985, 4 years after Thaman’s first attempts at building rigs, during which time he had been able to familiarise himself with the pneumatic drilling systems, assess the quality of each component, test and improve the assembly process, find and establish relationships of trust with new partners and develop a logistical supply chain between Coimbatore (drilling tools, compressors) and Chennai (steel, materials), which meant suppliers were no longer reliant on Hyderabad. He moved his premises away from the road and onto a larger plot of land given to him by his father, who had been gradually buying up smaller plots along the road to Sangagiri. However, he again needed to raise funds to build and kit out his new workshop. So he approached the banks for a loan. However, his application was refused as, at this time, the banks had no faith in either the entrepreneur or his business plans. He thus again had to obtain the start-up capital from his friends and peers.³⁷ A combination of organic solidarity and caste ties enabled him to procure the machine tools, materials and labour required to start his new business. Whilst community or caste-based funding was the traditional means used by Tiruchengode’s craftsmen to raise venture capital, Thaman also obtained

³⁷Equal to 300,000 INR in 1982.

funding from his future customers. He revived the advance payment system used by the lorry body builders and analysed by Cadène (1997). The on-demand preparation of bodywork began once the customer had paid a deposit and set a date for completion. By transforming these sales into pre-sales, Thaman was able to raise capital when he needed it without having to pay any interest: *“On his side, the customer provides the truck chassis (Ashok Leyland) and the compressor (Elgi³⁸), the main component of the rigs”*.³⁹ Thaman particularly focused on attracting those customers who were leading the spread of the new technology, thus increasing his chances of success once his product was made available for purchase on the local market. By paying for the rigs upfront and agreeing to receive them at a later date, the entrepreneurs (transporters, drillers, etc.) jointly overcame one of the main obstacles to innovation in small-scale, versatile workshops, namely raising the initial capital.

Within just a few years, orders were flowing into the workshop and Thaman became the owner of the largest workshop in the district. At the beginning, Thaman worked with only one welder. In time, he recruited two other craftsmen and within about 10 years, he had around 50 employees working for him, assembling up to 100 rigs a year on a number of different sites in Tiruchengode. Thus, since the creation of PRD, 700 lorry chassis were reinforced to support an air compressor mounted on a platform, an assembly with a unit cost of between 400,000 and 500,000 INR.

19.4 Third Generation (since 1992): Paran the Mechanical Engineer or How to Improve on Existing Technology

Drilling technologies were constantly evolving, with new machines coming onto the Indian market via the major industrial hubs of Hyderabad and Bangalore. Thus, Tiruchengode had to adapt its output to meet demand. PRD had become the district's largest rig assembly contractor. It was the only firm with the facilities to coordinate and then integrate all the adjustment and assembly operations. They had an enormous shed in which several rigs could be assembled at the same time and no other company was able to match the firm's output.⁴⁰

³⁸Elgi Equipments was established in Coimbatore as an air compressor and garage equipment manufacturing company. In 1962, Elgi entered into a technical collaboration with “Pumpenfabrik Uraca” from Germany to manufacture air compressors. Between 1983 and 1988, Elgi indigenised the manufacture of rotary screw compressors.

³⁹Interview with Thaman (*ibid*).

⁴⁰Today, within the district, PRD is in competition with two local rival companies.

19.4.1 Drilling Is the Only Option—Paranthaman Hydraulics and Equipment (Founded in 1992, Capital 700,000 INR)

The year 1992 saw two changes take place within the family firm, a generation shift and the introduction of upgraded technology:

But after a while, the guy wants to drill faster, to do a day's work in half a day. The demand for hydraulic power rigs was growing. We started to upgrade the technology to give them faster drilling. By providing the best technology, you remain the market leader. To build the new hydraulic rigs, we invested in a new workshop and founded a new branch⁴¹ of the PRD Group [...] At that time, I was in college, in engineering college, studying mechanical engineering. It was my second year of college. My father asked me to look after this technology. When I was studying, I used to source the technology and the materials and then come here to the town. (see Footnote 17)

Paran was the third generation to enter the family business. He split his time between his college studies in Bangalore and working in his father's workshop in Tiruchengode. During the main annual holidays he began working with his father, building their first hydraulic rig. Although they never finished, let alone tested, this prototype, orders for the rig came flooding in. There was so much work that Paran no longer had time to study and so never returned to college, preferring instead to stay and help his father reverse-engineer more efficient machines, including on fuel:

The pneumatic machines, they consume a lot of diesel when they are drilling, but the hydraulic rigs can do the same using almost half the diesel consumption. (see Footnote 17)

This was a major issue for the local drilling operators and so Paran and his father quickly set out to provide them with a technology that was not yet locally available. Paran sought out engineers he knew in Bangalore who were able to help him. He also contacted his college's network of former students and his teachers. He approached suppliers and parts manufacturers:

We had to develop the technology by stealth, sometimes renewing it, or making it different to the competitor's. I collected all the information we needed from the market, looking around, looking at the competitors' machines, how they work, what components they use, seeing where I can buy the components, how I can make the components [...] It took us 6 months to make the first machine. (see Footnote 17)

To collect the information he needed, he returned to the industrial area of Hyderabad and met with sub-contractors, the Indian representatives of foreign manufacturers making the main components and borewell drilling site operators. They discussed the advantages of and problems encountered with these new machines. Being a small-batch assembly firm, PRD was able to create customised solutions. The aim was not to make exact copies of existing models but to improve them:

⁴¹To be understood as a new company.

We made the shape of the platform different, the hydraulics different and we put in additional features. Even today that structure is the strongest. It was a mix of what my dad was doing and what I learned from the market. It was very good, which is why we immediately had 10 orders from the local market in Tiruchengode in the first year.

Just as lorry body work differs from one region to the next, with “Tamil” lorries looking very different from those made in Maharashtra, the rig platforms “made in Tiruchengode” also developed their own distinctive form. This local identity has been extremely important for business, as all of the country’s drilling contractors either come from or are based in the small town. As Paran explained as we were on the road to Sangagiri: *“each town is renowned for something and has its own speciality. This town is renowned for its drilling know-how. All the drilling contractors are based in this town. You know, I have travelled a lot and I have never seen such a high concentration of rigs in such a small place. When the rig crews come back to Tiruchengode during the monsoons, there can be as many as 3000 rigs”*. Tiruchengode’s rig manufacturers have no need to market their rig units as there is an outlet for them right on their doorstep and this local market, along with that of the industrial district, attracts customers from across the sector. Drilling machine buyers and sellers meet each other on a daily basis:

The client comes, places the order, you make the machine. We know the guy well, he knows us well. There is trust there. We have a kind of monopoly, but we provide quality and at a good price. (see Footnote 17)

“Wherever you find vehicles, you find workers”. The open air assembly of mobile drilling rigs has created a job market in which rig crews are now recruited to work across the whole country. A drill site requires a large workforce. The mobile rig platforms are systematically accompanied by a second “support” or logistics lorry that transports the required drilling materials and workers. Thus, the lorry body building and rig unit assembly industries converge. This second lorry usually consists of a double axle (eight wheels) so that it can be driven over all types of ground. Unlike ordinary lorries, two-thirds of the length of the platform is laid with top covering steel. There is also a tank on the roof, which contains three separate compartments: one for diesel, one for water and another for oil. These special tanks are also made in Tiruchengode. On each side of the tank, there are around 60 18–20-foot tubes required for drilling. The lorry is also used to transport the crew, which can include up to around 20 people: a manager, 2 drillers, 2 assistants, 2 drivers, a cook and 12 manual labourers. The workers bring another pan-Indian dimension within Tiruchengode’s reach. Although most of the drillers and drivers come from the local region and are renowned for their experience, the assistants and workers are mostly from Bihar, Orissa, Jharkhand and Chhattisgarh. The rig operators of Tamil Nadu have agents and brokers in every state. These middlemen are not necessarily established businesses but instead recruit remotely. Thus, most people are hired over the ‘phone. The standard pay for a driller or driver is 600 INR per day whereas workers earn 200 INR plus three meals a day for work that can last many months. As a result, the entire drilling supply chain, including equipment and human resources, congregates around Tiruchengode.

The borewell drilling market in India is huge.⁴² Wells are drilled for both domestic consumption and for agriculture: “Each house you can see has its own water source. If you have the money, you can pay someone to come and drill the well for you. In the cities, and even in small towns such as mine, each house has its own borehole and there are no restrictions or regulations governing depth or the distance between each borehole”, Paran explained. The rigs assembled in his workshops can dig several domestic boreholes a day. The quality of the hydraulic equipment makes it possible to “drill quickly, down to 400–600 m a day, depending on the soil” according to Paran.⁴³ By reducing the cost of drilling, the machines manufactured in Tiruchengode have made pumping water easier and have led to an increase in the number of water extraction sites. Borehole drilling is a heavy duty operation which can involve moving large volumes of earth, requires considerable amounts of fuel and sometimes other products, such as acids, and needs to be overseen by a number of different workers. It can also have long-term impacts. Depending on their size, boreholes used to extract water can cause water levels in the groundwater table to drop or dry up. Large-scale pumping can release and transfer pollutants through the horizontal displacement of groundwater. As with other forms of natural resource exploitation, borehole drilling is generally regulated; however, only a small portion of domestic, agricultural and industrial wells are registered and the intensive drilling being carried out by the mobile drilling rigs made in Tiruchengode are now creating public water supply management issues.

19.4.2 From Local to International—Paranthaman Exporters (Founded in 2002, Capital 5,000,000 INR)

The district is now competing with the sector’s other main manufacturing hubs. The skill of the local rig assembly workshops is recognised among drilling operators nationwide and the market in Tiruchengode is attracting the main Indian and foreign parts manufacturers, who are opening up new sites in the town. Imposing warehouse stores owned by compressor manufacturers, such as Chicago Pneumatic, have joined the local tools, materials and spare parts supply market. As an industrial

⁴²In India, 53 % of irrigation water is supplied from groundwater. Groundwater also accounts for over four-fifths of drinking water in India: Cf. <http://www.indiaenvironmentportal.org.in/files/file/Groundwater%20Year%20Book%202012-13.pdf> or http://www.nih.ernet.in/rbis/india_information/groundwater.htm.

⁴³To give an indication of the profit that can be made from a drill site, please find below an interview with a rig operator that appeared in the press: “It’s hard work, and the rate varies according to how tough the job is. In some of the harder surfaces of Andhra, you can’t go beyond 80 feet in an hour. That fetches 75 INR per foot. So drilling a 1000 feet a day brings in 75,000 INR. In the “loose formation” soil where Vaiyapuri says you can go as low as 120 feet in an hour, the rate drops to 56 INR a foot. But you can reach 1300 feet, or almost 73,000 INR a day. Even if you’re on the job for just 200 days (it’s often much more), this would total close to 15 million INR” (“The deep water crisis”, *The Hindu*, Sunday, July 28, 2013).

district, supply chain market and drilling sector logistics hub, Tiruchengode, along with the PRD group, is expanding by developing machines that meet the needs of a high-growth sector; as Paran says: “*We learned our trade on the local market*”. PRD has been making a name for itself for around 20 years now and has been investing and expanding. The “bank of friends and family” has been replaced by a one-to-one relationship with the branch manager of a commercial bank, which initially provided the firm with working capital: “*You need capital to keep stock. When you don’t have orders, you build a stock of ten units and hold onto them. So when the first customer comes, you can deliver quickly*”. PRD then invested in new facilities and land: large workshops, warehouses and plots of land. On the road to Sangagiri, PRD began diversifying its assembly operations (see below) whilst, at the same time, increasing the amount of land the family owned and thereby their ability to raise capital. This practice, which is common among Tiruchengode’s entrepreneurs, helped them develop the business and their rigs gradually started to make their way onto the international market.⁴⁴

The first foreign market with whom Tiruchengode’s entrepreneurs came into contact was Africa: “*The Kenyans came to see us. That was in 1999*”. Paran still remembers this:

We had a breakthrough with exports. We got a customer from Kenya, referred to us by our friends in Bangalore. He had already bought a rig from Hyderabad and he was not happy with the quality and the delivery. Our friends from Bangalore asked him, why don’t you go to this gentleman...? That guy came here to purchase a rig. He tested our machine. The same year, we got another order from Kenya.

Herein lies the paradox of Tiruchengode’s export market. Rather than Indian companies seeking an outlet for their rigs outside the sub-continent, customers from other countries looking for suppliers discovered this outlying manufacturing district and approached them instead.⁴⁵ PRD, which had never done business outside India, pioneered exports in Tiruchengode as a result of this surprise order from a Kenyan firm. For his first delivery abroad, Paran travelled with the rig to Mumbai—“*I wanted to know the process, the people*”—to learn more about international trade requirements: regulations, duties and taxes, the brokers, delivery times and payment methods.

Foreign sales grew slowly. Between 1999 and 2002, PRD exported only six vehicles to three countries: two to Kenya, one to Oman (2001) and three to Ghana (2002). The export of the PRD rig to Oman was set up by an Indian businessman

⁴⁴“A common practice among the entrepreneurs of Tiruchengode is to maintain a diverse portfolio of investments in various types of enterprises and land both as a way of hedging risks and mobilizing investments” (Raman 2013).

⁴⁵In the same way as the auto rickshaw from Bajaj was ultimately exported for the first time to Africa, to small towns in the Nile Delta, having been introduced by Egyptian entrepreneurs.

who was familiar with the family firm. Meanwhile, the connection with Ghana and the industrial district of Kumasi was developed through African trade networks.⁴⁶ The Kenyan owner of the first Indian rig recommended the machine to his Ghanaian colleague. These signalled the beginnings of PRD's expansion into foreign exports. To accommodate these new customers better and gain an understanding of their expectations, Paran approached African students' networks, particularly those from Kenya, who were based at the University of Erode not far from Tiruchengode. He would hire these young, highly computer literate yet poor, intermediaries, whom he would pay on a task basis to carry out all sorts of small jobs (interpreter, secretary, guide, etc.) that helped facilitate his business dealings.

Between 2002 and 2004, there was a sixfold increase in PRD's volume of exports: between twenty-five and thirty mobile drilling rigs were sent out, mostly to Africa as, according to Paran, "*for water drilling, the technology is same for Africa or India*". PRD was interested in expanding into all markets outside the European Union and United States. Specialising in short production runs, PRD successfully entered fringe and niche drilling markets where the demand for rigs was high:

We haven't entered a market that was very competitive. If we had entered the EU, US or Australian market, where there are already manufacturers and where price is also an issue, where the level of technology is very high, I would have had stiff competition. But the market I entered is Africa, where people are looking for low prices, good quality, simple technology [...] For example, European technology is of a very high level, but is very difficult to maintain in Africa. That is why the African guys prefer to buy from India. And from India, we are providing them with the best products. Better than the Chinese product. They know the Chinese stuff. That gives us an advantage, even without marketing. Because you know, it is mostly done by word-of-mouth. Somebody going to fair has told them, "oh this machine is good and you should buy it". [...] With exports, we started to do some marketing. It was useless in Tiruchengode but essential in Africa. So I have done marketing, but it is not going to give results. I have done the basics, I go and meet the client, I go and stand in the hotel. But then it is the product itself [...] (see Footnote 17)

PRD assembles and delivers robust machines that are adapted to handle difficult conditions and, in particular, are easy to maintain and keep in working order. The distribution of *made in Tiruchengode* technology builds on the most basic types of technical expertise. There are countless small workshops around the world able to service and repair these rigs, which are also often serviced by the users themselves, thus highlighting the importance of sharing and disseminating technical skills. In Africa, local PRD workshops carry on the traditions of the family firm, following a "do-it-yourself" maintenance culture. To promote these new machines best, an after-sales customer service is provided. For each platform sold, a technician travels with the rig unit and remains on-site for as long as it takes (1–2 years) to train his local colleagues. In Ghana, PRD has opened a branch, with a maintenance workshop attached, within the cluster of Kumasi. This came about as a result of a partnership that PRD developed with a Ghanaian entrepreneur: "*but the partnership*

⁴⁶The industrial area of Kumasi in Ghana will be the focus of the next part of this multi-site ethnography.

broke up, we worked together less than 1 year. It was not healthy. We met him at an exhibition". Now, there is an engineer in charge of mobile rig unit sales and a mechanic, trained in Tiruchengode, who carries out servicing and repairs on-site. Between 2004 and 2012, PRD exported nearly 300 machines to Africa, including 100 to Kenya, 100 to Ghana, around 50 to Nigeria, 20 to Ethiopia and 2 to Mali etc. With two more of the district's rig assembly companies now working on exports, Paran is planning to open a branch in Juba in south Sudan to strengthen PRD's foothold in the African market⁴⁷:

It took us like 5 years to set up an overseas office (from 2004 to 2009). To set up something, we need a customer base, like after 50 customers, we have our base. We opened our company in 2009. Until 2009, we used to visit, come back, visit, come back. Now we know everybody in the market [...] Because now, we have a good network of agencies and dealerships and with these we are able to manage. We meet them at exhibitions; you know, there are people who approach us, because they know the product, they see the advertising. The agreement is on a sale commission. If they get the order, they get the commission.⁴⁸

19.4.3 The International Supply Value Chain— Paranthaman Exporters at SEZ Perundurai (Founded in 2012, Capital 3 Crores INR)

Jordan, Oman, Australia, Sri Lanka, Malaysia, Brazil, Mexico, ...PRD makes niche products for a specific customer base whose needs are overlooked by large-scale manufacturers. These are customers who do not have much money and are looking for simple and robust machines that use open-source and flexible technologies, namely machines that are intrinsically adaptable and easy to maintain. This small specialist firm now exports its tailor-made products around the world from Tiruchengode and has developed global logistical supply chains to obtain the necessary parts and materials. To achieve this, in 2010, PRD relocated its export rig manufacturing activity to the Special Economic Zone (SEZ) of Perundurai, around 40 km from Tiruchengode. International demand meant the group had to up-scale and PRD had to increase the size of its rig assembly infrastructure. However, a shortage of land in its home district had been hampering PRD's medium-term development, a situation that continued until the public authorities introduced an initiative to open local free-trade zones, the 2005 Special Economic Zone Act. This

⁴⁷Today, it is not only the district's market leaders that are interested in exports. Small operators and rig owners are also attempting to enter the African market. They have started sending vehicles and crews to Kenya to drill boreholes for water. Although spare parts are easily available in Kenya, there is still close contact with Tiruchengode, or "base camp", as the entrepreneurs like to call it. During our study, the head of a gearbox repair workshop received a call on his mobile from a friend working as a rig driver in Kenya on a contract. His lorry had a transmission problem and had broken down, so he was phoning to ask for advice.

⁴⁸Interview with Paran (*ibid*).

was a boon to a number of the region's small and medium-sized export companies and there were strong incentives for relocating: land availability and prices, building permits, infrastructure, tax exemption, equipment:

In SEZ, we can import anything duty free and we can export directly, there is not that much formality. We have some tax benefits. The only condition is that you have to do exports only, you cannot do local business. The main advantage, if you want to import anything, MAN Chassis or Mercedes Trucks from Germany, is that it is very easy. So I am able to give international market what they want, whereas my competitor can only give them what is available on the local market. They can only give them Leyland or this kind of brand. But for me, if they ask me for a Mercedes, I can import a Mercedes and it's duty free. For import and export, we have a green channel. (see Footnote 17)

In Perundurai, the logistics chain has been opened up to small companies. In India, industry has been influenced by Japanese manufacturers, meaning that the old monolithic factories have been replaced by an ecosystem of suppliers delivering parts on a just-in-time basis. More and more foreign parts manufacturers have opened plants in the country. The small rig assembly firms may not be able to procure parts at the same price and within the same timescales as the largest companies, but the international motor vehicle logistics chain is virtually open to all. It can provide batches of several million or single units and is thus a "freely scalable" network serving both small companies and multinational firms.

As a result, the rig assembly chain now uses both local and international logistics providers. The basic materials and low-tech components (such as the mast) come from Tiruchengode, whereas the hydraulics and more hi-tech parts are now sourced directly from European (Italy, Germany) or United States' manufacturers:

They supply the crucial component, such as the control valve. The low-tech items we can source from everywhere in the country. It is only for sophisticated items that we have to use the international market. I have to tell the buyer that my components are from Europe. If I say the components are made in India, they doubt me, and doubt the quality. There is a big difference between the components made in India and those made in Europe. But in the last 5 years all the major companies have set up manufacturing facilities in India, in Maharashtra, because of the cost. So they make components in India, and take them to Europe to sell them. That is very good for us, as we are not buying in the EU anymore, we are getting the same products at a very cheap price in India, but it is still a European brand. Now it's easier for us. (see Footnote 17)

However, in addition to the commercial advantage enjoyed by PRD as a result of now having the logistical means to meet the expectations of non-Indian clients, father and son were also finally able to build their long-awaited factory:

Always, we had a dream. We had ideas of what we wanted our factory to be. Because of the experience, in the past years, we have seen other facilities, other places, all of which gave us an idea of how our factory should be. To set up the factory, my father helped me make the shed, to organise the space. As he was making the shed and concentrating on the construction of the factory, which took 1 year, I was looking after the plans, making the machines here (in Tiruchengode). It was only after the construction was complete that I moved over there to make the machines. (see Footnote 17)

In Perundurai, PRD had the type of space and infrastructure (there are very few electricity outages) that they had been unable to find in Tiruchengode. Therefore, it has been here that the family firm has completed the integration of all its facilities, workshops, warehouses, offices and tasks that it has been able to outsource over the last 30 years. Paran and his father upgraded all their equipment (crane, articulated lift arm, digital die-cutting system) and established stocks of spare parts. Lastly, preserving the Tiruchengode manufacturing and assembly tradition, they created a miniature district inside the vast warehouse space. Instead of an integrated assembly line, they set up a series of multi-purpose workshops, whose skill and versatility enables them to produce all types of bespoke machines whilst obtaining parts from around the world.

The local market has a tender model of rigs. In Tiruchengode, we had been manufacturing the same product since 1992. But with exportation, we have had to diversify our production, to develop new products which are for mining, for blasting. (see Footnote 17)

Italian suppliers of hydraulic components on a visit to Perundurai were highly impressed by the versatility of the PRD assembly workshops,⁴⁹ and by their product range: mining exploration machinery, large-scale drilling units etc. As with the rigs that they have now been making for over 30 years, these increasingly complex technologies have been introduced from elsewhere and dismantled and re-engineered on-site. Whilst customers from Kenya and Ghana come to Tiruchengode looking for cheap, robust, reliable machines which are easy to service and repair, other foreign buyers are more interested in the Indian craftsmen's ability to reproduce foreign machines at a low cost and for a reasonable price.

PRD reproduces niche machines for markets that are traditionally overlooked, and not only in Africa:

The "Multi Star" is mining equipment used for exploration. We had a client from Australia, who was looking for a guy who could provide an Indian copy of that mining technology. The Australian client wanted an Indian manufacturer because this kind of machine was not made in Europe but only in the United States. Europe has their own market and until recently, they did not care about Australia. And when the Australians are going to the United States, they had to wait. Because the American manufacturers supply the world's markets, their order books are full. Delivery takes almost 1 year. (see Footnote 17)

These Australian clients discovered the district of Tiruchengode in 2004 through their local contacts. They were looking for Indian rig manufacturers who also exported their products. As far as they were concerned, if a company exported then the local assembly method used must be of good quality. The Australians did not

⁴⁹Italian hydraulics component manufacturers, small family companies from the Perugia region, have had representatives working in India for around 20 years now. The original agents, most often from Bombay, would canvas the local market on behalf of their foreign clients. On this particular day, the son of one of the Italian company bosses and his Indian sales rep were visiting the PRD facilities, as PRD were highlighting the capacities of their new factory to renegotiate directly the procurement of components.

come to Tiruchengode for an existing machine, but were instead seeking technical rig assembly expertise:

Then he comes and tells us that he wants this kind of machine. We said:

- “This machine is too big!” He said:
- “Don’t worry; I can help you to make it”.

He gave us some ideas. If that guy had not pushed to make this big machine, we would not be making this kind of machine today. It was a good opportunity for us. And now we are marketing it everywhere. (see Footnote 17)

PRD does not design a machine without having a buyer for it. The client placing the order is closely involved in PRD’s work to replicate a machine. By giving the client the option to buy the first model made, PRD funds the development of a “full-scale” prototype for which the client provides all the technical information required to reproduce the machine, including the plans, guidelines, inputs and bills of materials. Since 2008, PRD has assembled and sold 25 “Multi Star” machines, each with a cost price of around US\$400,000. Each time PRD expands its commercial network, the group gathers the information it requires from these new markets to duplicate the latest technologies.

19.5 Conclusion

Around 20 years ago, Kundu (1994) sought to explain the factors that had led to the industrial development of an ordinary small town. He questioned whether such an outlying cluster would be able to survive in a national economy that was in the midst of transition. However, spinning mills and lorry body building firms continue to operate out of Tiruchengode. In 2011, according to figures obtained by the state of Tamil Nadu, there were nearly 1500 local lorry body building workshops. Today, over half of these are to be found in the area around Namakkal, Tiruchengode and Sangagiri.

This contribution, similar to the activity it describes, derives from the local vehicle maintenance industry. The growth of the rig assembly and drilling industries set Tiruchengode’s economy apart from that of other towns and cities in India: *“No other town can boast as deep a connection with the rest of the country as this little one in Tamil Nadu. Tiruchengode is the nation’s borewell rig capital and thousands of machines and operators from here go down as much as 1400 feet on any day, most months of the year”*.⁵⁰ By expanding on other research, this study involved a long period of investigation, which has helped to fill gaps and ultimately helped build an understanding of the factors underlying the emergence of a drilling sector in India and of how this market and those working within it (not only rig

⁵⁰*The Hindu*, 28 July 2013.

assembly firms, but also mechanics and crews) have become more international. From the spread of capital and human resources, materials and techniques to the concentration and integration of factors of production, the formation of a rig assembly cluster has produced a market leader where it was least expected. This family firm is unique in Tiruchengode, because of both its longevity and now its size. PRD stands out not only because of its propensity over the last 10 years to explore foreign markets (Kenya, Ghana etc.) but also and especially because of its ability to reproduce all types of machine.

It was David Edgerton who demonstrated the far-reaching change in approach that results from taking into account not only the way in which a technology is “invented” or initially spreads, but also how all types of technology are used and re-used, adapted and re-designed over time in very different social and cultural environments (Edgerton 2006). The description of alternative assembly chains which differ from the leading models led to the study of “manufacturing centres” in which there is a considerable range of different forms. These production models question both the industrial development of the global South, as well as how innovation is created in the global South. By tracing the development of these “DIY improvements”, which often bear little resemblance to the assembly lines formally established by assembly “ideologists” (Ford, Taylor etc.), we can determine the extent to which a new geography of innovations can be detected.

In the case of Tiruchengode, the analysis of how an industrial district has developed from first repairing objects, machines and vehicles brought in from outside the area to then reassembling drilling technologies invented in the United States or Europe has involved documenting an innovation process triggered by craftsmen replicating exogenous technology. The ethnography of Tiruchengode’s assorted assembly chains describes a process of modifications through reverse engineering. Thus, innovation systematically draws on what has been done before. This “design by copying” is central to the industrial flexibility of the PRD group’s versatile workshops,⁵¹ in which the traditional product development cycle (need, design, implementation, verification and maintenance) is subverted. It is by performing maintenance on existing machines that needs are defined, prototypes (or rather counter-types) are designed, implementation takes place through experimentation and trial and error and customised products are ultimately produced. The firm creates nothing out of nothing, but innovates through its manufacturing process. By simplifying the models that it reproduces, the firm has increased its productivity; by combining high-tech components (from Italy, for example) with low-tech parts made within the local cluster, it is able to make small-scale cost savings. In practice, this semi-traditional, semi-industrial form of production relies

⁵¹This is also the case elsewhere, such as in China, for example, in the electronics industry near Shenzhen, in the Pearl River delta, where an ecosystem of counterfeit product manufacturers has developed, known as Shan Zhai: <http://www.paristechreview.com/2014/12/24/shanzhai-innovation-china/>.

on the type of agile design methods⁵² used by the DIY movement and which are inherent in new forms of production. These “self-made engineers”, sons of former Indian blacksmiths who now assemble mobile drilling rigs, mainly export open-source, modifiable machines, which themselves can be adapted or *poached* by their users.

On-going experimentation and adaptation have helped free the company from the constraints of long-established rules and have enabled it to compete with sector leaders. In Africa, PRD is capturing new markets whose needs are similar to those of their original market at home. This Indian company is looking for outlets in borehole drilling markets deemed unprofitable, and which have therefore not been explored by the major industrial players (USA, EU and Australia). PRD is not merely a manufacturer of counterfeit products; the group has a genuine innovative spirit with the potential for development in line with international standards. In a globalised world, there are numerous assembly chains that, rather than following a simple production method, instead use assembly and re-assembly processes that bridge radically different and multiple contexts. The aim is therefore to develop an empirical analysis and topology of the types of technical innovation observed that, ideally, is based not on criteria relating to the operating chains’ or manufacturing processes’ level of sophistication or “traditionalism”, but rather on *their capacity to re-work model designs to meet the wide variety of needs and challenges they encounter*.

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⁵²For the last 15 years, the majority of computer applications have been designed using so-called “agile” software development methods. This includes iterative and incremental development methods in which solutions to problems met are sought through peer-to-peer collaboration. It encourages rapid and flexible responses and promotes adaptive planning and tasks and early delivery, enabling a high level of reactivity. The main aim is to find the best ways of developing software. This range of methods has been successfully used to develop open source software and, according to certain proponents, can also be used to improve manufacturing and production processes.

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Chapter 20

Globalisation, Productive Spaces and Small Town Transformation: The Case of Machlipatnam and Pedana in Coastal Andra Pradesh

N. Sridharan

20.1 Introduction

A small town can expand independently irrespective of its proximity to a bigger metropolis. There are situations where historical factors of production and the emergence of creative clusters enable the process of urbanisation in a small town independently of its neighbouring metropolis. Our study shows how the small urban agglomeration of Machlipatnam-Pedana, which consisted of a series of historical and creative productive clusters in the past, is growing independently of any influence on or from the large neighbouring metropolis of Vijayawada Metropolitan Region (referred to as Vijayawada-Guntur-Tenali-Mangalagiri (VGTM) Region). The analysis of three major productive clusters involved in the activities of marine fishing, imitation jewellery and vegetable block printing, famously known as “kalamkari”¹ printing, shows that these vertical creative clusters belong to a national and international network of productive and supply chain systems. This departs from the traditional belief (hypothesis) that small towns near a metropolis are either swallowed by the bigger city, or dependent on the metropolis for its production and consumption chain, in terms of raw material, labour and marketing.

This chapter also deviates from the traditional thinking that, spatially, agglomerations come into existence because of the presence of a metropolis or a big city (Garretsen and Martin 2010). Neither the “iceberg” factor (Fujita and Krugman 2004) nor the NEG’s agglomeration and dispersal model explicitly explain the variations that we observe in the case study. However, “creative clusters” (partially explained by NEG) that exist in a small town may grow because of exogenous factors of global connectivity and thus bypass the presence of a metropolis.

¹The literal meaning is drawing with a pen.

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Using the case study of a historical town, the Machlipatnam-Pedana planning agglomeration area in Andhra Pradesh, this chapter highlights how exogenous-endogenous forces penetrate the urbanisation process and spaces within it (Woods and Dover 1999) in a sustained manner. It aims to highlight the resilience of economic activities in small towns (David and Mark 2009). It also shows how a small town is integrated into national and even international economies through knowledge (Wolfe and Gertler 2004; Power and Lundmark 2004) and skill circulation, without necessarily evolving in the shadow of the neighbouring big town or metro in the region. This chapter looks in detail at the structuring of the economic activities (their location in space and the functioning of the labour markets), which show the vibrancy of different vertical productive clusters (spaces), despite poor working conditions, particularly for women. It analyses the impact of these vertical productive clusters on physical space as, finally, the growth dynamic is reflected in the physical growth and dynamism of a city (Harrison 2014). The chapter is structured as follows. Section 20.2 presents a theoretical discussion on clusters, innovation and agglomerations. Section 20.3 analyses the place of small towns in the state of Andhra Pradesh where our case study is situated, Sect. 20.4 presents a detailed description of three small industries in these two small towns and describes their growth and spatial impact on the area.

20.2 Clusters, Innovation and Agglomerations

Portes (1997) challenged the idea of traditional capital flows occurring only in situations of globalisation, extending it to labour flows as well. Using Portes' idea of "globalisation from below" in terms of "grassroots level enterprises and its informal activities", we explain how the comparative cost advantages of "traditional creative clusters" can serve to establish globally connected supply chains. Second, using Porter's (2000) "local clusters in a global economy", we analyse the microeconomics of competitive clustering and their global connectedness (Goyal 2009). We extend Porters' (2000: 16) argument that "the health of the cluster is important to the health of the company" to the town's health. In other words, we hypothesise that "the cluster's health is important to the city's economic health and growth". Porter (2000: 16) describes a cluster in the following manner: "A cluster is a geographically proximate group of interconnected companies and associated institutions in a particular field, linked by commonalities and complementarities".

Although we partially agree with his definition of a cluster, our empirical evidence shows that there can be "vertical clusters" in the same area that are not associated with any complementarities or commonalities. Vertical connectedness is an exogenous factor that has a greater influence than endogenous factors (except labour supply) on allowing a firm to achieve prosperity (Gordon and McCann 2010). Porter's locational competitive advantage theory does explain the three industrial clusters that exist in our case study area. However, our study deviates from Porter's diamond metaphor in the explanation of the conditions of demand and in factors (input). Although in our case the demand is not internal but

inter-regional and international, the locally available factor (input) is not conducive to global competition, as we see later. Because of their global connectedness, local demands are minimal and there is no related and concurrent industry within a 250-km radius of two of the three industries studied.

Hence, history and geography play a pivotal role in shaping the agglomeration and cannot be separated when one analyses the historical growth of a small town such as the one we have taken up in this chapter, to show how history shaped the course of this small town's economic geography. This was reiterated by Kundu and Bhatia (2002) through their study of a steel town. We take the approach of "Evolutionary Urbanism" propounded by Marshall (2009) to analyse the historical growth of the town with the three clusters that influenced its growth.

Agreeing with Krugman's (2004) views that it is "mobility that influences production and access to markets", this study shows that it is not only labour and transportation but also the mobility of factors and products as well as the related connectedness which drives the market for each of the three vertical industrial clusters. Contrary to Ron and Peter (2003) observations of a core-periphery driven by the metropolis, we accept the "spatial fragmentation" of production as proposed by Fujita and Moria (2005: 11), wherein decrease in communication costs enables fragmentation of the production chain to take comparative cost advantages and increases the competitive advantage. Similarly, as argued by Mori and Turrini (2005), there is heterogeneity in the skill levels of workers, which differentiates the products horizontally and vertically. Innate skill levels dictate the mobility of the labour within and across the firms in the industry. This innate heterogeneous skill concentration leads to "creative cities" (Richard and Katie 2008). Here, we apply the concept of the "econo-centric orientation" (Richard and Katie 2008) of the small town, where the artistic value of production is considered of secondary importance as compared to economic development and growth.

Even if we take the assumption of the "small town as a sub-pole" in the rural-urban linkages (Courtney et al. 2007), it is difficult to generalise that all small towns follow the same logic of functioning as intermediaries between rural and urban areas. Indeed, despite the neglect of small towns, evidence shows that wherever industrial activity thrived in a smaller town, it brought great economic benefits and spurred the growth of that town by providing employment and checking out-migration to the bigger cities. Kundu and Bhatia's study (2002) on Punjab illustrates this, but also shows that this economic development was accompanied by greater exploitation of labour and unsafe working conditions, a phenomenon also highlighted by Harriss-White's (2003) work on how women and lower castes are more vulnerable to exploitation. We should, however recall that many specialised small towns collapsed when their specialisation declined. Another direction that research on small towns has taken is to look at the relationship with their hinterland, as Wandschneider (2004) has done in the case of small market towns of Madhya Pradesh and Odisha. This dimension is also present in the international literature (for instance, in Europe, Courtney et al. 2007). Others have highlighted the potential local economic development for small towns that can be linked to tourism for coastal towns (Prideaux 2000; Razin 1990), as for instance in

Kerala (Adarsh 2007) or to religious tourism (Trouillet, 2017). Small towns, as observed by Raman et al. (2015: 32, 2017) in the case of Tamil Nadu, can be clusters that are inter-regionally and internationally linked. This is especially true of our case study as we see below, which follows the cluster, dispersion and spaces in between (Phelps 2004).

20.3 Situating Small and Medium Towns in Andhra Pradesh

In India, historically, rulers and the state have always played an important role in the establishment and development of cities and towns. In the post-independence period, the Five-Year Plans paved the way for urbanisation through urban investment, even though there was no explicit urban development strategy or policy.

The first Five-Year Plan, which focused mainly on rural areas, paid little attention to cities, except Delhi. The second Five-Year Plan tried to decentralise the urbanisation process by creating new industrial towns in the resource rich eastern part of the country in the form of steel and coal towns. However, these new towns failed to create ripples around their locations and have remained secluded new towns to date. From the third Five-Year Plan period (1961–1966)² till the beginning of the 1980s, despite existing schemes and an industrial policy aiming at the dissemination of activities across the national territory, small and medium towns did not manage to attract large industrial activity and public investment (Shaw 1999). In the late 1970s and early 1980s, concerned that the carrying capacity of bigger cities would fast be reached, policy-makers saw a need for a policy focus on the development of small and medium towns.

The Integrated Development of Small and Medium Towns (IDSMT) Scheme was then introduced in the sixth Five-Year Plan with the aim of slowing down migration and enhancing employment and economic growth in small and medium towns: (IDSMT Guidelines, Government of India 1995: 1).³ Despite its implementation following the sixth Five-Year Plan, the IDSMT program had a limited impact and did not benefit all the small and medium towns (Alam 2014) (Fig. 20.1). The programme had mixed impacts because of bureaucratic and financial problems (RCUES 2006) and placed a heavy financial burden on municipalities in the long run. Large cities continued to expand spatially, to attract migrants and to capture investments, a process reinforced by the policy of the 1990s that focused increasingly on metropolitan cities.⁴ Even though the programme was

²The first two five-year plans make minimal reference to urban issues.

³*IDSMT revised guidelines*, Ministry of Urban Affairs and Employment (1995) <http://jnnurmwstbengal.gov.in/JNNURM%20web%20UD/revisedguidelines%20IDSMT.pdf>.

⁴See Kennedy and Zerah (2007) for a summary and Khan (2017) for a detailed analysis of the unbalanced funding pattern under the JNNURM programme.

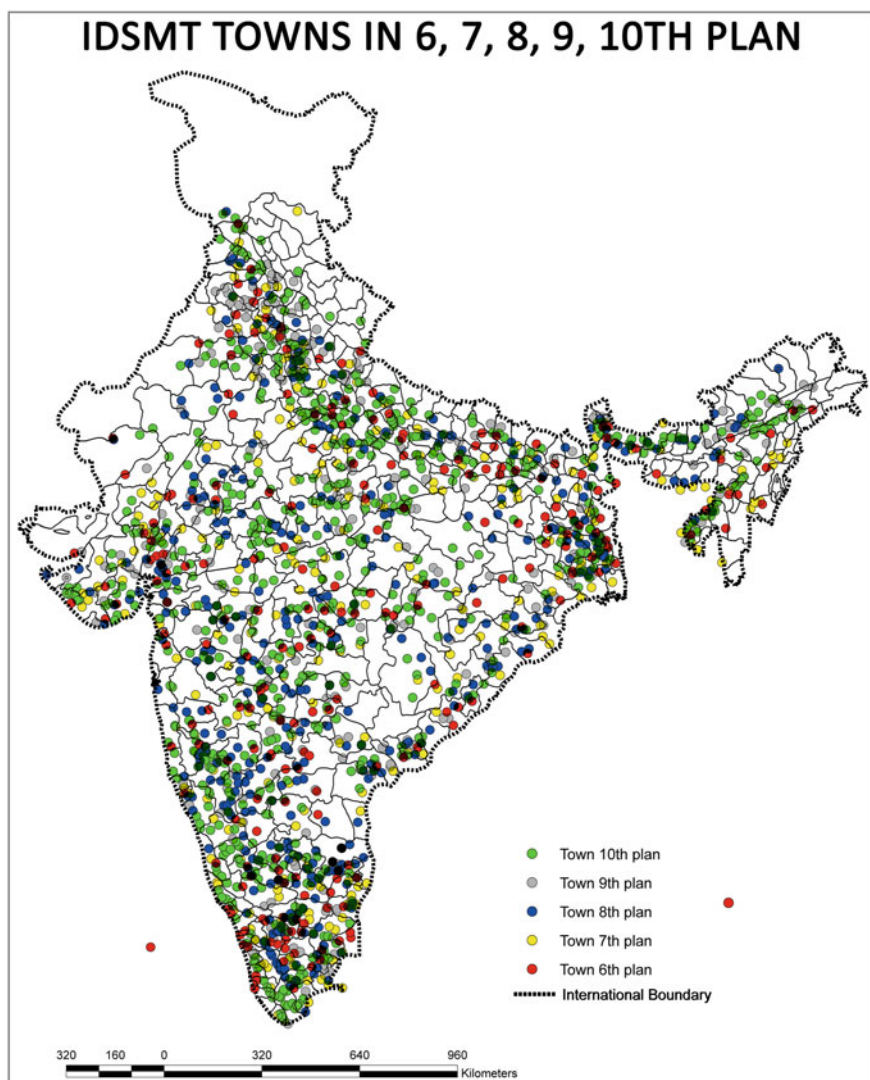


Fig. 20.1 Coverage under IDSMT under various five-year plans. *Source* Prepared by the author based on the information from five-year plans, TCPO, GOI

transformed into the UDISSMT under the JNNURM programme, these problems continued with limited funds, a focus on infrastructure and a limited coverage compounded with lack of governing capacity (see Khan 2017).

The situation in Andhra Pradesh reflects the overall conditions of neglected small towns in the country as well as the specific characteristics of a state with relatively low urbanisation and a high concentration of urban population in large

towns. An analysis of the small and medium towns vis-à-vis the agro-climatic regions within Andhra Pradesh reveals that in the southern plateau and hill regions, the average urban population per settlement (all size classes included) increased between 2001 and 2011 from 504,000 to 515,000 people. In terms of the population growth rate among various population size classes, it is evident that the southern plateau and hill region showed a negative growth rate of -2.67 per decade in class 6 towns, whereas class 4 and 5 size towns showed an increase of 16.72 and 11.24 %, respectively. In the case of the east coast plains and hill regions, the average population per settlement increased from 0.563 million in 2001 to 0.568 million in 2011. If one analyses the disaggregated data for each city size class, especially for class 4–6 towns in these two agro-climatic zones, it is obvious that class 6 towns in the southern plateau and hill region showed a decline in population (-2.67 % per decade), whereas class 4 and 5 towns, which also fall under the small and medium towns category, showed an increase of 16.72 and 11.24 %, respectively, between 2001 and 2011. Compared to this, in the coastal belt of the east coast and hilly region, class 6 towns showed an increase in population of 3.66 % between 2001 and 2011. However, the increase in population was higher in class 4 and 5 towns, 12.74 and 10.36 %, respectively, during the period from 2001 to 2011.⁵

The approach paper prepared by the Centre for Economic and Social Studies for the 12th Plan of the state (CESS 2013: 148) explains that urban population growth in the state is not because of the emergence of new towns but is a result of growth in class 1 and class 2 towns. Meanwhile, the population has declined in towns below 5000 population size. The CESS report explains this decline by lack of employment opportunities and by the little attention paid to their economic base (NABARD 2005). In terms of the emergence of Census towns, in Andhra Pradesh their contribution to the overall population growth is 30 %, close to the Indian average of 31.2 % (Pradhan 2013). In his more recent work, Pradhan (2017) estimates that in the next Census, 87 new Census towns are to be declared in Andhra Pradesh. However, although this number is below the projections made for other states, it still points to the resilient role small towns (old and new) play in the urbanisation process. Moreover, it is interesting to note that most of the small and medium towns are located along the coastal region of Andhra Pradesh, with each of them specialising in a particular activity.

All these elements are an important starting point for the analysis of our case study, the Machlipatnam-Pedana urban agglomeration in Andhra Pradesh on the eastern coast of India. Further, Machlipatnam, as we show, is the story of the transformation of a declining port into a manufacturing hub, pervaded by many external influences and diverse in its regional, national and international linkages. This chapter therefore tries to discuss the drivers of socio-economic change in the

⁵The classification of towns is as follows: class 1 towns have a population above 100,000 inhabitants, class 2 have a population between 50,000 and 99,999 people, class 3—population between 20,000 and 49,999 class 4—population between 10,000 and 19,999, class 5—population between 5000 and 9999 and class 6—population below 5000.

Machlipatnam-Pedana urban agglomeration. The rationale for the choice of this agglomeration is as follows. First, there are few studies that deal with small historical port towns. Machlipatnam has a long history going back to the post Ashoka Period (304–232 BC), when it had trade links with the Roman Empire (Rao 1960—Reprint 2012: 70). During the late eighteenth and mid-nineteenth centuries, it attracted many foreigners (Mackenzie 1938 reprint 1992). Second, Machlipatnam (a Municipality as per the Census of India in 2011) and Pedana (a Town Panchayat as per the 2011 Census) are situated within a distance of 15 km of each other and constitute a contiguous development but the Census of India does not identify them as urban agglomerations. Third, although both these small towns are located within the shadow region of Vijayawada (municipality + outgrowth) that had a population of 1,143,232 in 2011, their economic activities are little influenced by this proximity and there is little economic dependency between these two areas.

Currently Machlipatnam functions as the district headquarters of the Krishna district, it is a delta in the new state of Andhra Pradesh and one of the most fertile agricultural belts in the state; it is also one of the richest districts in India in terms of GDP. Fourth, apart from this administrative function, over a period of time external influence through the circulation of knowledge and people led to the emergence of new productive activities (artificial jewellery) and a reinforcement of the resilience of traditional sectors (marine fishing and kalamkari textiles). In addition, Pedana, which grew from a village adjoining the historic port town to a small town, has its own traditional kalamkari textile work (hand block printing on textile), which is famous across the country and caters for an export-oriented market. Both Machlipatnam and Pedana are thus dependent on export-oriented markets.

20.4 Three Productive Spaces in the Machlipatnam-Pedana Urban Agglomeration

This section discusses the supply chain of each of the three industries studied and the manner in which they are interlinked in space as well as their impact on local development and the role of history in their evolution.

20.4.1 *Historic Productive Spaces*

Masula or Maesolia or Masulipatnam was a flourishing port town which had trade links with Europe and the Far East during the pre- and post-Moghul periods. From the fourteenth century onwards, until independence, the site attracted a number of settlers of Portuguese, French, British and Iranian origin, and the Dutch East India Company built their first factory here at the beginning of the seventeenth century

(Silar 2015). During the Moghul period, the Persians arrived in Machlipatnam and the surrounding areas, influencing its economic base (Mackenzie 1938. Reprinted in 1992). The British exploited this region for cotton, which was in abundant supply at that time because of the fertile black cotton soil. They connected this site to Chennai by rail through Vijayawada (known as Bezawada at that time) and by a canal system for easy transportation (ibid 2015). The year 1864 was a landmark year for Machlipatnam, when a cyclone caused irreparable damage to the port and 30,000 people, half the town's population, died (Naidu 2015; Silar 2015). The Nawabs of Golconda revived the port, allowing it to continue its large export trade and develop other activities in the area (Silar 2015).

Kalamkari block printing was concentrated in Machlipatnam and associated with it. However, the entire region was known as a textile district with many villages practicing textile weaving and kalamkari block printing. Even to date, Machlipatnam, Polavaram, Kappala doddi, Ghantasala, Kaza, Malavolu and Salem Palem are reputed weaving centres and Kosuru is known for its weaving and kalamkari work and Pedana for its weaving and block printing. However, kalamkari became a major activity in Pedana through a major shift that occurred in 1973. Most of the kalamkari artisans had earlier shifted their activity from Machlipatnam to Polavaram village and formed an association there. Mr Subbaiah, a renowned kalamkari artist, who established Aruna textiles in Polavaram, was one of the first to shift to Pedana after a falling out with the textile association.⁶ The existing textile weaving tradition enabled the establishing of kalamkari in this village. Now, Pedana accommodates more than 80 kalamkari artisans who are nationally and internationally linked.

The Nawabs of Machlipatnam, who were originally Persian traders (Mackenzie 1938 Reprinted in 1992), introduced the style of textile block printing in the kalamkari style in Machlipatnam. The designs here were based on flowers, animals and subjects other than the human form, unlike the kalamkari practiced in other parts of Andhra Pradesh such as Srikalahasti, where images of gods and goddesses are widely used even today. The kalamkari activity in Pedana and Srikalahasti has always remained completely unrelated and they even use different techniques now. Although Pedana has moved on to block printing, artisans in Srikalahasti still execute their work with a pen (kalam).

Machlipatnam became a centre for making artificial jewellery in the 1960s, when gold control was introduced in India. Taking advantage of the high demand at the time, one of the enterprising jewellery makers started Uma Gold and established the main office in Madras (currently Chennai). Later on, Machlipatnam became the main production centre because of the availability of cheap labour and local skill, especially amongst the Muslim workers. As we see later, the supply chain now extends not only to Chennai but also to various other parts of India.

Concerning the export of marine products, the demand for shrimps for export from this region allowed the local fishermen make this a large scale activity in the

⁶Interviews with his sons in 2015.

NO.	INDICATOR	VARIABLES
1	Demography	1. Population growth rate 2. Population density (persons/sq.km – built up area) 3. % of floating population
2	Economic	Occupational structure 1. % of workers involved in export oriented activities 2. Activity pattern 3. Production process & supply chain 4. Revenue generated 5. Land values in Rupees (Rs. In Lakhs/Ha) – Market Rates
3	Spatial	1. % of Non-residential land use (Built up space) 2. Change in commercial establishments (% of land use) 3. Built up area growth of the town 4. Land conversions

Fig. 20.2 Indicators and sub-indicators. *Source* Modified from Chalamalasetti (2014)

1970s and 1980s, as they could benefit from the existing port activity for fishing. As is the case of kalamkari, this industry has direct global links, but marine product processing is seasonal in this region because of the vagaries of the monsoon. The frequency and impact of cyclones has had an adverse effect on this industry, forcing the fishermen and their families to engage seasonally in agricultural activities.

Of the three industries, kalamkari and imitation jewellery are skill and innovation driven and traditionally passed on to workers within the family. Entry and exit to the craft are restricted in an oligopolistic way, and the leader sets the design standards in both these industries. All three small-scale industries are spatially spread out within the town and not at all interrelated but they have all provoked spatial changes.

To analyse each of these clusters, we consider their demographic, social, economic and spatial dimensions using infrastructure, governance and micro-sector level indicators (Fig. 20.2). However, because of the lack of statistics, we use descriptive statements gathered from various stakeholders and a primary survey for many variables.

20.4.2 Demographic Transformation

According to the 2011 Census the population of Machlipatnam was 169,892 and that of Pedana 30,721. This means that the former was a class 1 town, and Pedana was a class 3 town, although together they form an urban agglomeration. Machlipatnam was the third municipality to be established in India as far back as 1866. Machlipatnam had an area of 27 km² in 2011. Pedana became a municipality only in 1985 and it covers an area of 21 km². Both the towns have experienced a steady growth in population over the past decades except that Machlipatnam's population declined by 10,000 people between 2001 and 2011. The decline in

population is partly attributed to the location of new residential neighbourhoods in the outskirts of the city beyond the municipal boundary, which reiterates our earlier point of irrelevance of physical boundaries in economic spillovers in space. On the other hand, the population of Pedana has increased by 3.74 % during the same period. Whereas Machlipatnam town occupies 7 % of its total Mandal area, Pedana town occupies 16 % of the total Mandal area. Probably the built up area increase/decrease analysis on the lines of India Geopolis can provide us with a better spatial spread of these two towns.

The population density also declined from 6717 to 6363 persons per km² (see Figs. 20.3 and 20.4) over the same period. Figure 20.3 shows the increase in population but at a very slow pace, both in Machlipatnam and Pedana. Though Machlipatnam had its own history dating back to the sixth century, it was surpassed by Vijayawada in terms of population in the 1921/1931 Census. This was mainly because of the emergence of Vijayawada as a node and the decline of the port activities as well as the regular natural disasters that occurred in Machlipatnam. Pedana, on the other hand, was a village that evolved into a town in the late 1980s but it retains its rural character. Fieldwork interviews indicated that many of the youth prefer to move out of Pedana for job purposes. Hence, Pedana's population shows very slow growth. Figure 20.4 shows the decline in density in the case of Machlipatnam during the decade 2001–2011 because of the spread of the population towards the outskirts of the town. In contrast, Pedana showed a slow but steady increase in terms of population density as seen in Fig. 20.4 and an increase in built-up spaces. Despite the existence of creative clusters and export activities in

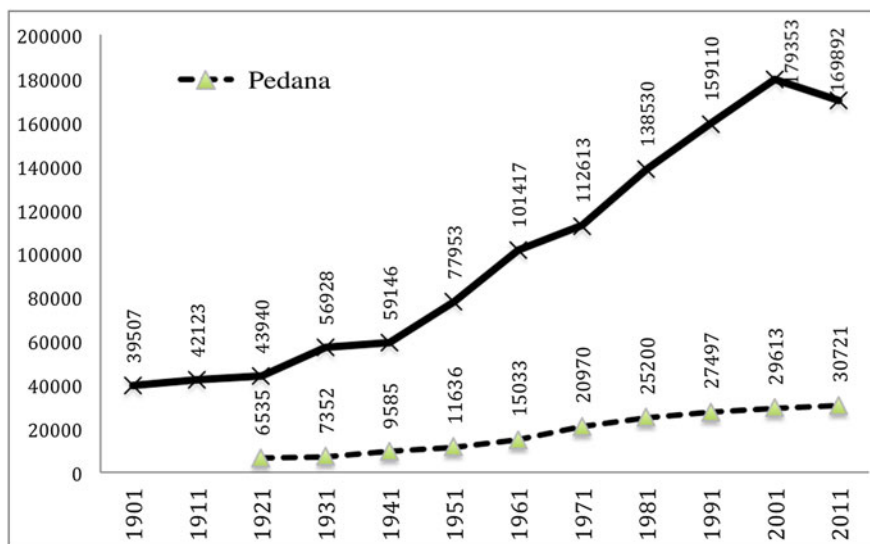


Fig. 20.3 Population of Machlipatnam and Pedana (1901–2011). *Source* Census of India, 1991, 2001 and 2011

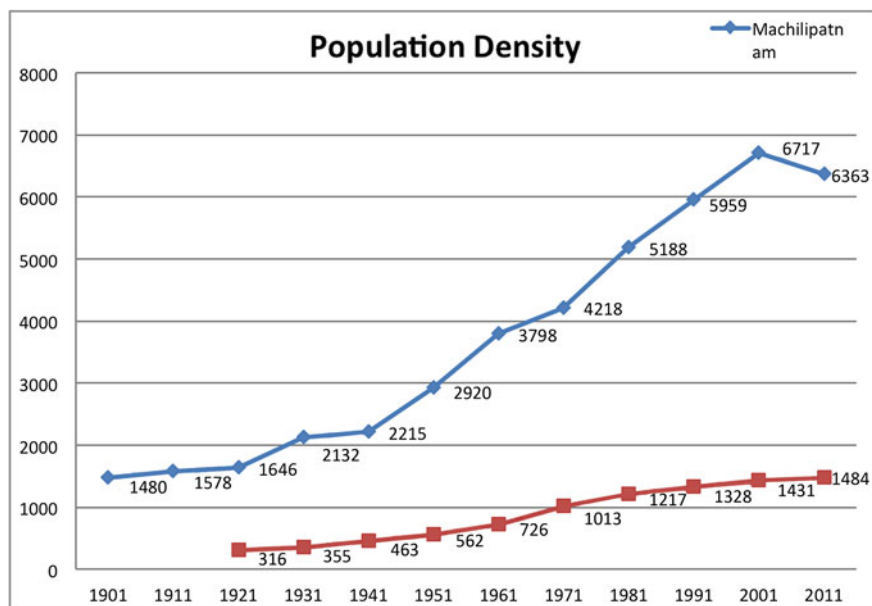


Fig. 20.4 Population density in Machilipatnam and Pedana. *Source* Census of India 2001 and 2011

both these places, they have made no significant progress in terms of economic growth because of the lack of political will and limited support for these household handicraft and small scale industrial activities.

Though the Census of India 2011 has not termed this area an urban agglomeration, considering the proximity and economic interaction between these two towns, and the fact they come under a single master plan drawn up by the Town Planning Department of Andhra Pradesh, we decided to consider them as a single agglomeration for the purposes of this study. They are 6 km apart, but looking at the spatial growth trend over the past few years, they may not be spatially separated in the future because they are extending towards each other. This spatial conjunction also proves the point that municipal or Town Panchayat boundaries are mere statutory boundaries and have nothing to do with the economic and social interaction between settlements.

Machilipatnam and Pedana are well-connected by rail and road networks, in particular with Vijayawada. The distance between Machilipatnam and Vijayawada is around 75 km. There is a regular train service every hour from Vijayawada to Machilipatnam via Pedana and vice versa. According to the stationmaster at Machilipatnam, more than 1200 monthly passes are issued to inhabitants of Machilipatnam for commuting between these two urban centres. Around 6000–8000 people commute every day between Machilipatnam and Vijayawada, mainly for college education and for jobs. Similarly, many workers from areas surrounding Vijayawada travel to Machilipatnam for work, although the numbers are not known.

Interestingly, both Machlipatnam and Pedana railway stations are very old and date back to the British period. In 1962, Pedana and Machlipatnam were brought under the broad gauge line network. However, the railway line is not used for transporting goods/commodities.

In addition to this, buses ply regularly between Vijayawada and Machlipatnam. According to Andhra Pradesh State Road Transport Corporation officials, on an average 700–800 people commute every day in each direction. Similarly, based on the survey of the petrol pumps there are around 250 private vehicles that ply between these two destinations, providing an average of 100 services in each direction per day.

Every week 30–40 trucks bring cotton cloth to Pedana from Coimbatore and Tiruppur in Tamil Nadu for kalamkari work. During the festival seasons, the number doubles according to the local kalamkari association president. Most of the kalamkari artisans own a vehicle, either a four-wheeler or a two-wheeler. Interestingly, some of the artisans go to Vijayawada to send their bulk order exports by courier services as this service does not exist in Pedana, but the dependency on Vijayawada is limited to sending the finished product.

20.4.3 Economic Transformation of the Area

Following independence, and despite the decline of the port,⁷ the products manufactured in Pedana and Machlipatnam, kalamkari, marine products and imitation jewellery have found their place in national and international markets because of their special benefit. The statistics for these activities are provided in comparison to agricultural and non-agricultural activities.

20.4.3.1 Occupational Structure

Table 20.1 gives the occupational structure of both Pedana and Machlipatnam in a comparative perspective. It shows that in Machlipatnam as well as in Pedana the total number of workers increased during the 2001–2011 Census period. However, the percentage of workers to total population has grown more than 5 % between 2001 and 2011 in the case of Machlipatnam as compared to a meagre 1.8 % during the decade 2001–2011. This higher percentage is not reflected in the declining percentage of workers, both in agriculture and non-agriculture sectors, in Machlipatnam. In the case of Pedana, whereas the agriculture sector showed a decline, the non-agriculture sector showed an increase during the decade 2001–2011. This may be attributed to the increasing tertiarisation in Machlipatnam, which

⁷This port was a very important port for export and international trade that rose to importance towards the end of the sixteenth century (see Subrahmanyam 1988).

Table 20.1 Occupational structure of Machlipatnam and Pedana 2001 and 2011

Activity	Machlipatnam		Pedana	
	2001	2011	2001	2011
Total workers	60,527	64,814	14,829	15,920
% Workers total population	33.73	38.15	50.07	51.82
Agriculture ^a	8689 (14.36)	7120 (13.14)	3565 (24)	3565 (22.4)
Non-agriculture ^a	51,838 (85.64)	46,279 (85.42)	11,264 (76)	12,355 (77.6)

Source Census of India

^aTotal percentage may not tally. Percentage is calculated on main workers and not on main and marginal workers

is exposed to the vagaries of national and global fluctuations. On the other hand, traditional artisan-based activities such as kalamkari survived in Pedana because of an increase in the number of artisans resulting from growing international demand.

20.4.3.2 Export Oriented Employment Activity

Of the total number of non-agricultural workers in Pedana, 7 % were involved in handloom weaving, 23 % were kalamkari artisans and 46 %, were involved in other activities in 2001. The number of non-agricultural workers increased marginally in 2011, with 47 % workers in other activities, 24 % in kalamkari and 7 % in handloom weaving, showing a 2 % shift from agriculture to non-agriculture.

Of the total number of non-agricultural workers in Machlipatnam in 2001, 28 % were involved in imitation jewellery, 13 % were in marine fish processing, and 44 % were involved in other activities (based on interviews with the respective associations in 2015). The employment scene changed in 2011, when 31 % of workers were involved in imitation jewellery, 14 % in marine fish processing and 39 % in other activities. The number of imitation jewellery workers increased by 3 %, and there was a drastic reduction in other activities from 44 to 39 %, the reasons for which are unknown. As the gold prices went up during the decade 2001–2011, the demand for imitation jewellery grew rapidly, resulting in more employment (ISED 2012). The primary survey also supported this argument, with some of the manufacturers revealing that they bring in designers and labourers from outside the state. They also revealed that sometimes, to meet local demand, they also import finished goods from Jaipur. In the case of marine fish processing, much depends on the monsoon and weather conditions. When the weather is good, the labour is deployed and in demand; hence the demand for labour fluctuates enormously in this sector. During the off-season, the marine fish processing workers find employment as agricultural labourers or construction workers (based on interviews with marine fish processing workers). This shift in labour from marine fish processing (especially in the case of women labourers) also occurs during a one-month

period in June/July every year, when the Government imposes a fishing ban in order to sustain the fish population (statement based on field interviews with fish processing women labourers).

Details of each of the creative clusters are presented in terms of vertical and horizontal linkages.

Kalamkari in Pedana: As stated earlier, kalamkari moved from Machlipatnam to Pedana in the mid-1970s via Polavaram. Presently, Machlipatnam has no kalamkari artisans and even the two major workshops in Machlipatnam were shut down in the early 1990s. It is interesting to analyse the supply chain mechanism for Pedana’s kalamkari’s textile block printing depicted in Fig. 20.5.

Figure 20.5 shows that the cloth comes from Tirupur and Coimbatore in Tamil Nadu. According to the Kalamkari Association President, Mr Nageshwar Rao (interviewed in October 2014), in the festival season around 90–120 trucks from Tirupur and/or Coimbatore deliver raw unprinted cotton textile to Pedana every week. The fabric is not bought on a cooperative basis as the individual users buy as per their end demand. Labour, both men and women, comes from nearby villages, which are considered textile villages. There are three different categories of workers for various jobs within the production of kalamkari. Most of the men travel by their own vehicle (two wheelers) as the distance between Pedana and the surrounding villages is limited (maximum 10 km). There are buses and auto services for women employees. The wood to make the blocks comes from Vuyuru another nearby

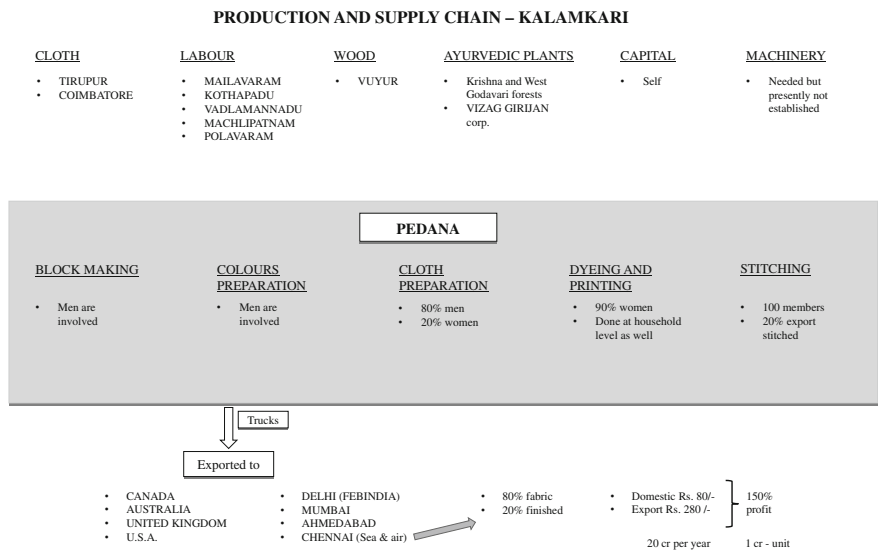


Fig. 20.5 Kalamkari production and supply chain. *Source* Chalamalasetti (2014)

village. At times, according to Mr Gangadhar,⁸ the only block maker in Pedana, he buys wood from other places such as the east and west Godavari districts. For natural colours, Pedana depends on Krishna district, and east and west Godavari. This is the only important element in the production chain for which Pedana depends on local forest materials and not on other states. However, many artisans pointed out during the interview that a large number of small-scale kalamkari operators/artisans use screen-printing techniques, which require chemical dyes imported from Mumbai and Surat.

The artisans deployed in the kalamkari industry are trained traditionally and horizontal job shifting is rare but does exist. Wages are paid on a piecemeal basis and according to the type of work performed (block making, cloth cutting, treatment etc.).

Wooden block making requires highly skilled labour which is concentrated in a single street of Pedana town. At present, there is only one person, Mr Gangadhar, along with his brother and a team of apprentices, working to create the series of blocks required for the entire kalamkari industry in Pedana. Mr. Gangadhar has difficulty finding artisans to do the block making nowadays as not many young artisans are interested in this profession. There are three types of blocks made for each of the designs that are associated with different labour skills. Women specialise in one type of printing and earn much lower wages than men. Moreover, male artisans are engaged in other aspects of the kalamkari process, which are different to those carried out by the female artisans. Male artisans handle tough jobs such as boiling, starch application, alum treatment, river/canal washing and colour making, whereas women concentrate on printing only. Neither men nor women artisans are formally educated and most of the women artisans are either single women or widows.

The finished kalamkari cloth is exported to various parts of the country and abroad by courier and trucks. Apart from this indispensable link with Vijayawada, this makes Pedana an independent creative cluster with artisans historically dependent on traditional designs. Competition from other places such as Sankaner in Rajasthan and Surat in Gujarat compels the local artisans to adopt large-scale screen printing to reduce the time and shorten the process. According to some of the artisans and owners of the kalamkari factories, this has led to unhealthy competition and environmental pollution as screen printing uses chemicals that are washed off into the river, affecting the river/canal's pH value. The State Environment Pollution Control Board takes little interest in this affair and, when contacted, they were silent on this issue. However, there are active journalists (Naidu 2015) who report about this environmental pollution in the public domain.

Marine Fish Processing: As mentioned earlier, the marine fish industry is vulnerable to monsoon cyclones, but began exporting in the 1970s and continued to

⁸Interview conducted in 2015.

expand rapidly during the 2000s. This industry is considered a cottage industry because the units here are engaged in primary fish processing (chilling and freezing, as opposed to secondary processing which involves cutting, frying, freezing and chilling, or tertiary processing that involves the preparation of ready-to-eat products). The added value of this industry is hence less than that of imitation jewellery or kalamkari. The fish products are exported from Machlipatnam to the United States, Europe, Japan, Dubai, Sri Lanka, Australia and Russia via Chennai, Kakinada and Kochi, as the only major port in the vicinity of Machlipatnam is Visakhapatnam, which is already working to full capacity. The basic processing and ice packing are done at Machlipatnam and Pamaru, which is 15 km from Machlipatnam. Refrigerated trucks send the ice-packed products to Vizag, Kakinada, Nellore etc. in the state for further processing. The fleet increased from a mere 10 trucks in the 1990s to over 400 currently. The leading fish industries in Machlipatnam own more than 40 refrigerated trucks. Communication technology serves to decide the type of fish to be caught, pricing and even the location of the fish in a particular zone at a particular time. Before the fish reaches the shore, the auctions are held and the mediators are there with their vehicles to receive the fish at the harbour and take it to processing units themselves. More than 90 % of the auctioned products are exported through Kochi and hence there is a strong connectivity between Kerala and Machlipatnam in terms of trade links. There are 5 ice factories, 118 fishing boats and 3 export companies located in Machlipatnam. More than 100 small businesses support the fish processing industries, providing all the raw material the industry requires. These small businesses procure their products from the western coast, especially from Kerala and Tamil Nadu. The 5 leading industries employ 50–60 workers for ice packing, supervised by a minimum of 15 persons and there are 2 persons in each truck. Truck agents and fishermen function on the basis of informal links so as to obtain the maximum profit. Most of the workers engaged in packing are women (mostly single and widowed) who come from the surrounding villages. The basic amenities provided to them are meagre and wages are paid according to the quantity of fish processed (mostly shrimp). They earn about 80–100 INR per day and work from 6 am till 3 to 3.30 pm. The working conditions are unhygienic and the surrounding areas are saturated with stagnant water from the melting ice and salt.

Figure 20.6 illustrates the entire marine products process and its supply chain.

Imitation Jewellery: The imitation jewellery or artificial jewellery industry developed in Machlipatnam only during the 1960s, later than the kalamkari or marine products industry. The industry captured a niche market share in the national and Middle Eastern market (Srinivasarao 2013). A Hindu entrepreneur owned Uma Gold, the first company, but the industry is now spreading among Muslim and Hindu companies. The strong interest groups involved in the sector obtained MSME status through lobbying, unlike the other creative industry in the area, kalamkari, which is a handicraft industry or marine fish processing, which is considered a cottage industry.

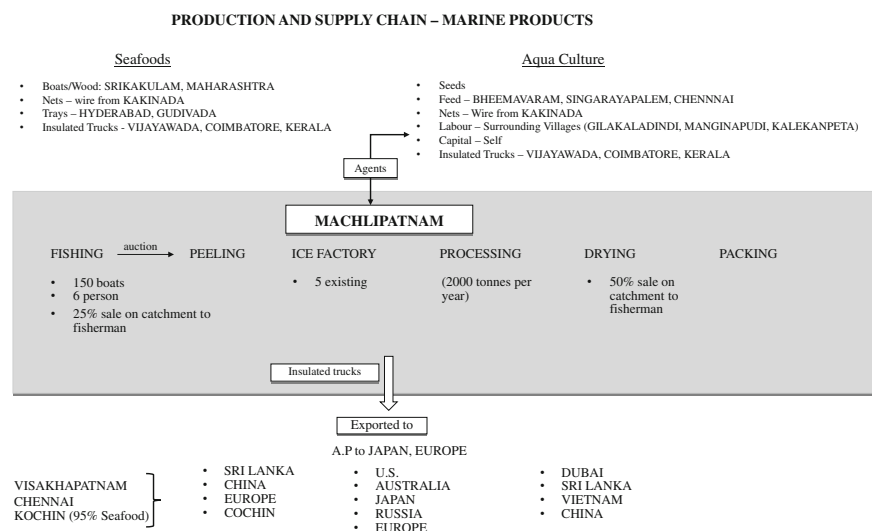


Fig. 20.6 Marine products: supply chain. *Source* Chalamalasetti (2014: 66)

Once imitation jewellery units had obtained MSME⁹ status they were entitled to direct assistance from the state and the central MSME body. This helped the industry to expand spatially to the outskirts of Machilipatnam, taking the growth of the city in that direction. A jewellery park in the adjoining village of Pothepalli was set up and a special purpose vehicle was established to carry out the activities of the park. This industry is better organised than the two others in the area, with over 425 units and 25,000 workers employed in the cluster; the annual turnover is more than 300 million INR per annum (Compendium of Cluster Resources 2015). Moreover, the workers are also better organised, under the Rolled Gold Workers Association, the Gold Covering and Plating Manufacturers Association, etc., giving them better bargaining power as compared to the marine fish processing or the kalamkari industries, where there are no workers' associations. The state also supported this sector because of its added value in terms of exports and the implementation of workers welfare measure. As an MSME cluster, the jewellery park enjoys the benefits of bar code, infrastructure development, a design clinic, and even display

⁹Micro, Small and Medium Enterprises. Compared to the imitation jewellery sector, neither Kalamkari nor Marine Fish processing were considered as MSME units. Kalamkari is considered a handicraft sector and marine fish processing is considered a cottage industry. The imitation jewellery sector is also better organised and employs more workers. Further, this sector received funding in other states such as Rajasthan, Maharashtra and Tamil Nadu, which led to pressure to start a special purpose vehicle to set up the jewellery park.

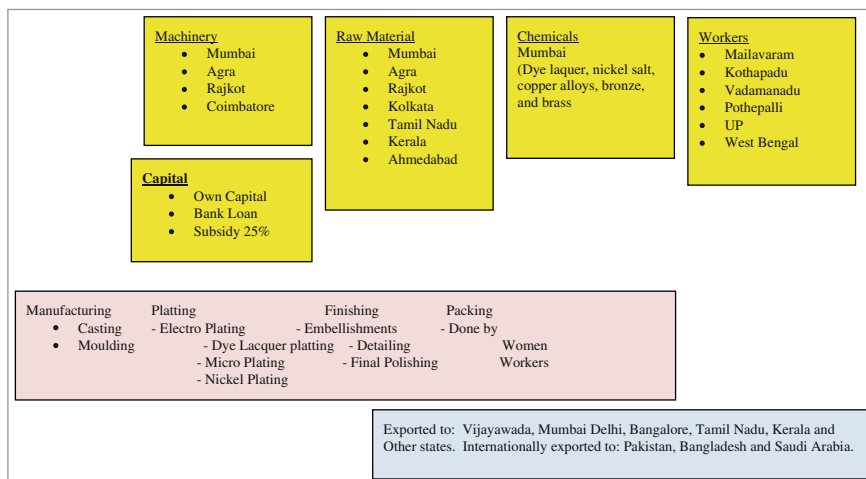


Fig. 20.7 Imitation/artificial jewellery: production and supply chain. *Source* Chalamalasetti (2014: 66)

spaces in leading exhibitions in the country. The entire production and supply chain is illustrated in Fig. 20.7.

This is the only industry in Machlipatnam that attracts labour from outside the state. The workers come from Mailavaram, Kothapadu, Pothipalli, Vadamanadu, Uttar Pradesh, West Bengal and Hyderabad. Raw material for the industry comes from distant places such as Mumbai (50 %), Rajkot (10 %), Agra (20 %), Kolkata (5 %) and Tamil Nadu, Kerala (15 %). It is a polluting industry as it uses copper, lead, iron and brass along with gold. The migrant workers from UP and West Bengal stay in Machlipatnam but local workers from the surrounding villages commute every day. Again, although the wages respect the Minimum Wages Act, workers are paid on a piece basis, especially those involved in packaging. Women workers are engaged in packaging and men in transporting the packaged goods to the trucks. Only men are allowed in the designing, plating and finishing areas of the jewellery making industry. However, in some of the units, researchers noted that women were also involved in stone setting. Wage differentials exist between male and female workers but they are associated with the skill levels and the job carried out within the industry. Compared to the kalamkari and marine products industries, the working conditions in the artificial jewellery making industry are better (ISED 2012) and some MSMEs have provided an air-conditioned environment for their workers.

20.5 Spatial Outcomes

This section is concerned with the social, economic but mainly spatial impacts of these clusters. Figures 20.8 and 20.9 use a diagram to measure these impacts using a set of indicators. In Fig. 20.8, the first triangle shows that, in the case of

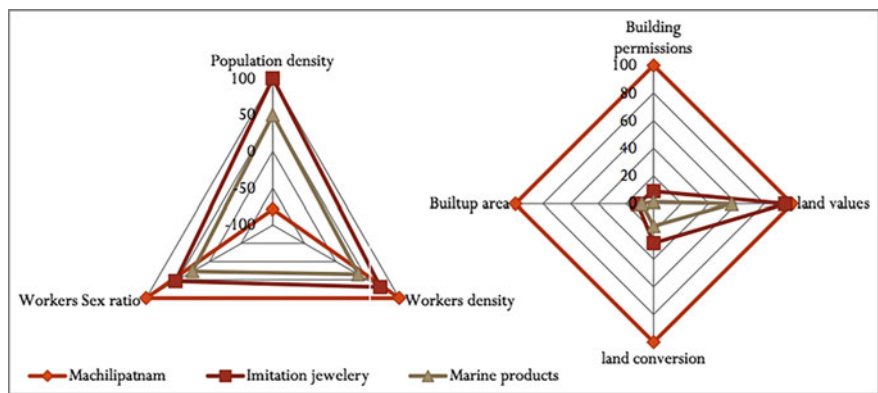


Fig. 20.8 Impact of imitation jewellery and marine products on the Machlipatnam city parameters. *Source* Chalamalasetti (2014: 68)

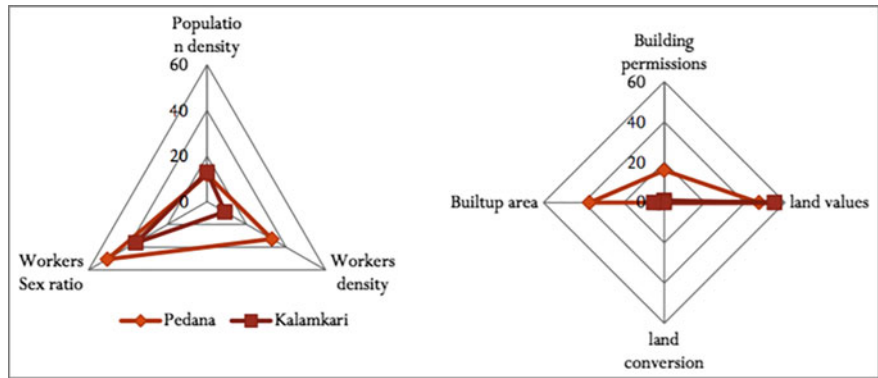


Fig. 20.9 Impact of the kalamkari industry on the city—a comparative picture. *Source* Chalamalasetti (2014: 68)

Machlipatnam, a higher amount of female workers are there in imitation jewellery followed by marine products. Similarly, the number of workers per square metre are higher in the case of imitation jewellery than in marine products. In the second square of Fig. 20.8 it appears that land values are higher in imitation jewellery areas than in marine fisheries processing areas.

Though the population density of Machlipatnam declined between 2001 and 2011, dependency on the export-oriented industries, marine products and imitation jewellery, increased. Land expansion, except in the case of imitation jewellery, has not been of any significance in Machlipatnam as a whole or in the marine product industry. However, land value, especially in the expanded area, has increased enormously as seen in Fig. 20.8.

In the case of Pedana, as seen in Fig. 20.9, the density changes in Pedana town and in the population density dependency on kalamkari are similar. This is also the

case with land values, kalamkari areas and other areas displaying the same land value levels.

The spatial transformation that occurred both in Pedana and Machlipatnam was not driven in a significant manner by the existence of creative clusters. Figure 20.10 captures the unit level transformations and city level transformation is captured in Fig. 20.11. Land scarcity does not exist in Machlipatnam or in Pedana as is the case in other urban areas. However, the land value is rising because of the general increase in the government valuation of land. This has forced the imitation jewellery industry to expand vertically and, even in the expanded area, owners prefer flatted factories to monitor the work properly. In the case of marine products, the expansion is horizontal with parking areas for new refrigerated trucks and space for processing or packing, which uses an enormous quantity of water.

In the case of Pedana, because of the nature of the production process that involves drying, bleaching, boiling etc., horizontal space is required. The expansion of the industry because of the increased volume of trade has had an impact in terms of a horizontal expansion of the built-up space. This has affected the town's development, which also expanded horizontally because the practice of living in flats has not emerged as in the case of Machlipatnam.

The spatial impact at the city level has occurred because of the multiplier effect of these industries. Each of these clusters had its own demand for various activities that occurred within Machlipatnam and Pedana, resulting in spatial transformation. All three industries, marine products, imitation jewellery and kalamkari need space for direct expansion as well as that of its dependent industries. Kalamkari requires block-making units, drying space, boiling space, colouring space etc., activities which take place within a particular factory. Unit level changes have occurred and over the course of the research, we noted expansion within a unit. In the case of marine products, horizontal expansion occurred outside the unit, and in imitation jewellery, both unit level and citywide changes occurred. This citywide expansion has been captured spatially both for Pedana and Machlipatnam.

This shows that both towns are moving towards each other, although the creative clusters in these towns do not have anything in common. In other words, they are not dependent on each other for the creation of the same cluster. Nonetheless, because of peoples' mobility and the type of facilities on offer, in particular education, Machlipatnam, which has better facilities, attracts more people from the surrounding areas.

Pedana's expansion towards the south (that is towards Machlipatnam) is entirely because of the resource base. Kalamkari requires flowing water, and the area south of Pedana offers flowing canal water for washing. Being a low-lying area, it is also low value land as compared to the northern part of the town. Hence, Pedana is expanding horizontally towards Machlipatnam to take advantage of water sources for its industry. In the case of Machlipatnam, growth is taking place towards the north in the direction of Pedana. The industries located in Machlipatnam, such as marine product processing, need water, but although there is usually an adequate quantity of water available near the sea bed, low land values in the north and north eastern part of Machlipatnam are causing the city to expand towards Pedana. This is also the case in the imitation jewellery industry although it would in fact be better

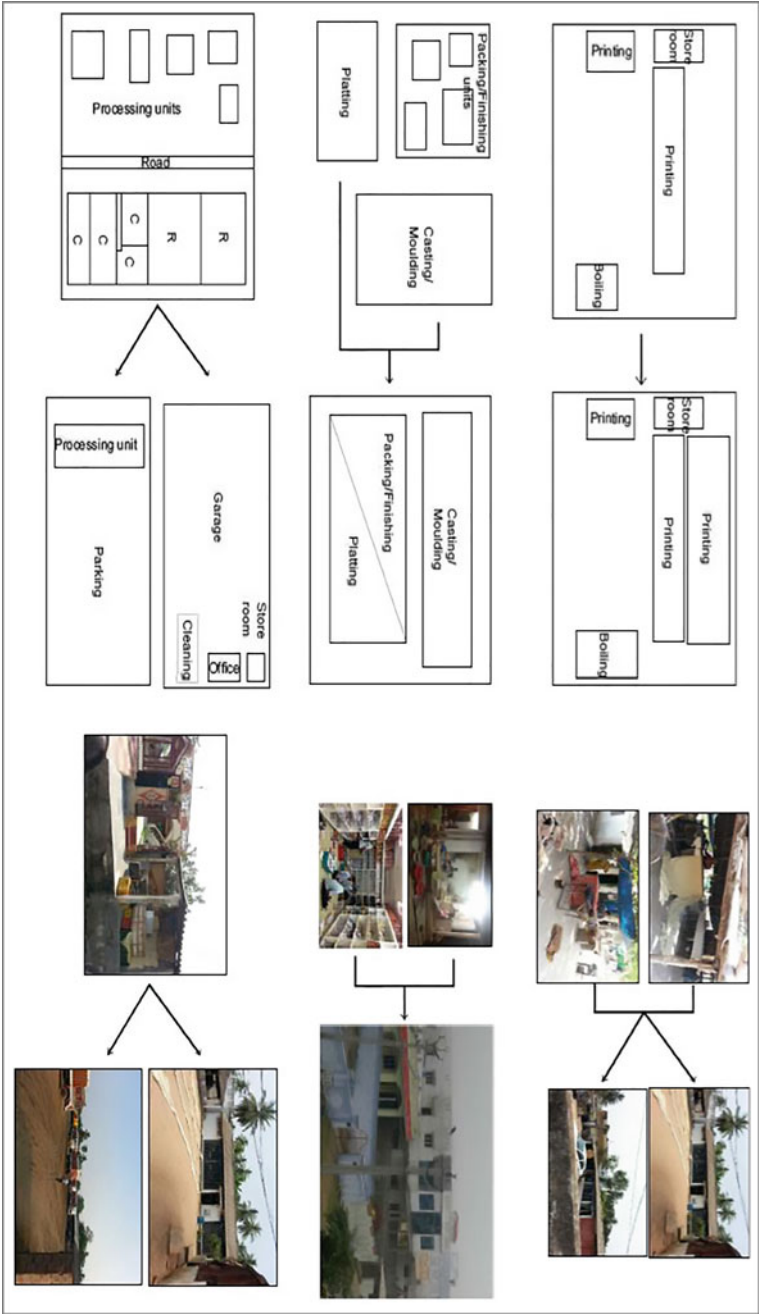


Fig. 20.10 Unit level spatial transformation in three creative industries 2000–2014

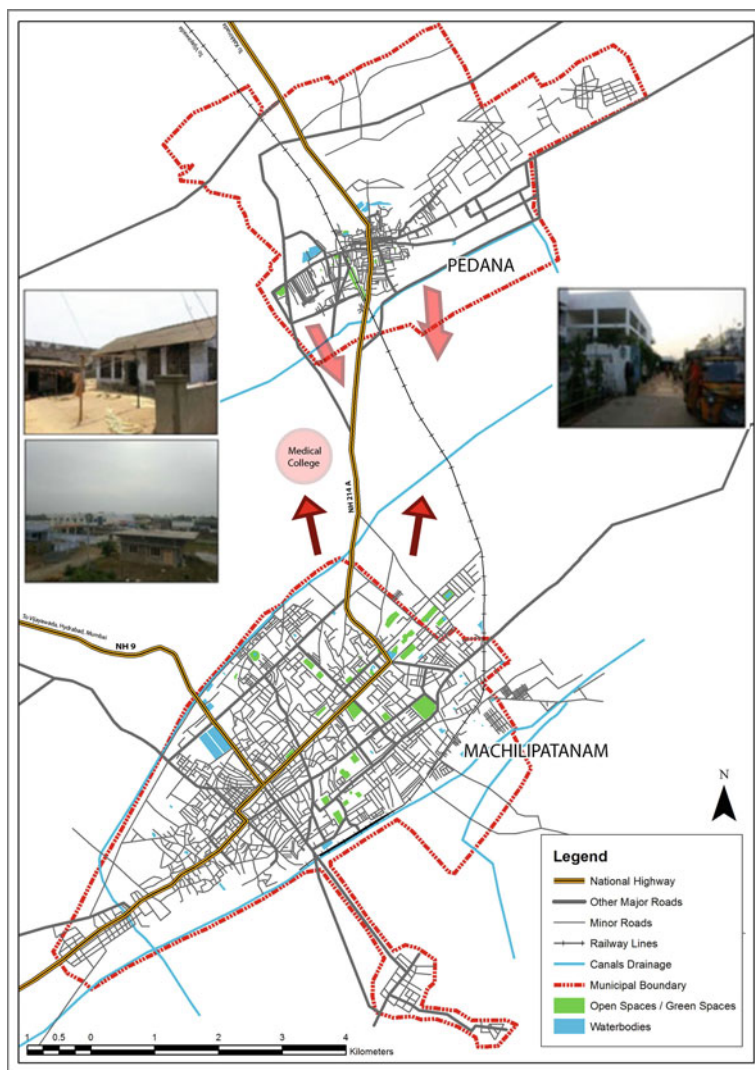


Fig. 20.11 Spatial expansion of Machilipatnam and Pedana. *Source* Chalamalasetti (2014: 72)

located on land far from water sources. This industry requires the use of chemicals such as nickel, cadmium and toxic acids. Workers complained that continuous use of these chemicals provokes respiratory problems. This is confirmed by IAMR report No. 8/2013 (page 43) which states that many workers have to leave their jobs because of health issues caused by environmental pollution in this industry. As the town does not have proper drainage facilities, all the industrial waste flows into the open drain system and mixes with the town's general drainage system, causing foul smells and other types of pollution. Several attempts to gather information from the AP pollution control board on this matter were unsuccessful as the officials refuse to reveal information on the level of pollution caused by imitation jewellery.

In addition to this natural movement driven by land availability and low prices, both Machlipatnam and Pedana are moving towards the NH 214 that runs towards Pedana to benefit from better connectivity to other centres, thereby turning the two cities into one large agglomeration.

20.6 Conclusions

Both Machlipatnam and Pedana are nationally and globally connected towns as the study of their supply chain values demonstrated. They rely on various networks to source materials and export widely. As such, they are not autonomous towns, appearing to be highly connected but without the mediation of the nearby metropolis of Vijayawada. In all three cases we can argue that global connectivity allows them to jump the traditional geographical scaling and hierarchical law. The study of the activities here contributes to making more complex the reading of the dynamics of small towns (Jan and Milan 2002) in India which are embedded in specific historical contexts and provide livelihood economics. Nevertheless, despite the ability of these economic activities to rely on large networks and to adapt to the demand of urban and foreign markets, this chapter does not deny that these economies are also based on low cost that involves difficult labour conditions, especially for women. In all the three industries, women workers are dominant and their working conditions can be improved substantially. If given suitable incentives (John and Hubert 1996), these industries can provide better economic opportunities to the local population, especially women. As the labour supply for these industries is from the surrounding village clusters, it is important to provide cheap and efficient transport connectivity between these village clusters and the town. Thus, this chapter highlighted the ambivalence of these ordinary economies.

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Chapter 21

Mapping Small Towns' Productive and Employment Configurations

Elfie Swerts and Eric Denis

21.1 Introduction

India's current process of urbanisation, which is largely driven by a sectorial economic shift, is in a state of mutation. This urban transition is characterised by the growth of large cities¹ (Kundu 1983; Véron 1987; Bhagat 2005; Sivaramakrishnan et al. 2009), in particular of “near million” cities (Mukhopadhyay and Maringanti 2014), with the superimposition of a dual process of deceleration of the migrations towards large cities and a proliferation of the number of small towns (Denis et al. 2012). Thus, a significant proportion of the increase in the Indian urban population over the last few decades is generated by the multiplication of small towns and their population growth. These observations, based on the Census data (Mukhopadhyay and Maringanti 2014; Pradhan 2017) are also confirmed by harmonised data (Denis et al. 2012; Swerts 2017). The multiplication and the expansion of small towns with their heterogeneous demographic trajectories (Swerts 2013) and multifaceted local economies (Mukhopadhyay and Maringanti 2014) invite us to question the process of urbanisation beyond the phenomenon of metropolitanisation (Denis et al. 2012; Raman 2014).

¹The threshold for designating “large cities” in these analyses is highly variable, from 100,000 to 1,000,000 inhabitants.

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To approach the urbanisation process, taking into account the development of small towns in India, some authors have proposed the concept of *subaltern urbanisation*, which refers to “*growth of settlement agglomerations (which may or may not be denoted urban by the Census of India) that are autonomous and independent from the metropolis and interact with other settlements, whether local or global*” (Denis et al. 2012: 1). The aim of such a concept is to gain greater insight into small towns as a specific theme for analysing urbanisation. In this perspective, small towns are then considered as singular objects, which have their own dynamics and sources of growth, “*beyond that (1) driven by the economics of agglomeration, as advanced by the new economic geography, summarised by Venables (2005) or (2) directly orchestrated by the state or private corporate enterprise*” (Denis et al. 2012: 1). Field-based studies confirm, for instance, that some export-oriented manufacturers could scale up their business in small towns and that urban changes can be predominantly driven by internal processes, eventually associated with global linkages (Raman 2014, 2017; Tastevin 2017; Sridharan 2017; Denis and Ahmad 2017).

Indian urbanisation should not be conceived as a binary model, either modern vs traditional, urban vs rural or metropolitan cities vs small towns (Denis and Marius-Gnanou 2011), but it has to be characterised, both by the consolidation of “extra” large metropolitan cities and the establishment of a complex system of cities incorporating urban localities of different sizes as well as sub-systems at the regional and subregional levels (Swerts and Pumain 2013).

The aim of this chapter is to highlight the linkages between economic dynamism and the diversity of small towns. The main challenge is to assess how far the substantial role small towns play in the Indian process of urbanisation (Swerts 2017) is accompanied by their economic expansion and diversification, as well as job creation. We question, for instance, the share of small towns that constitute only places of relegation and coping strategies, where the urban demographic growth is not accompanied by a correlated contribution to the economic growth. On the other hand, we characterise and localise the districts where small towns are motors of growth.

The analysis linking the small towns’ dynamics to the spatial distribution of economic growth within the Indian system of cities is supported by two databases: the first describes the distribution of male employees over three sectors of activities in 2011: (1) agricultural activities, (2) household industries and (3) secondary and tertiary activities. This economic database of Indian cities has been constructed based on the same methodology and the same delineation used for the construction of the *IndiaCities* database. The information related to the population employed in the various sectors of activity in Indian cities, towns and villages that appears in the Census has been aggregated within the morphological urban areas delimited in the *Indiapolis* database (Swerts 2017). The second database describes India’s annual

Gross Domestic Product (GDP) for the whole country, distributed by district² and categorised as 16 sectors of activities³ from 2000 to 2005.

In the first part of this chapter, we examine the correlation between the sectorial GDP allocation by district and the distribution of small towns. It provides a first glimpse of the economic specificity of small towns in comparison to the larger ones, above 100,000 inhabitants, in their relations to sectorial economic characteristics and shows the weight of the district's GDP. The analysis demonstrates that a large bulk of small towns is, at first sight, still dependent on the dynamism of the farm sector. It opens up a wide spectrum of regional nuances associated with the geographical differentials involved in the economic transition and the expansion of non-farming activities.

In the second part, we explore how those small towns are characterised by differentiated employment structures. This approach validates the enduring importance of agricultural employment as a discriminatory factor between small and larger towns. It also emphasises that small towns are often characterised by the most precarious job situations and notably by their bulk of marginal workers when compared to larger cities. Again, these general trends should be nuanced by multiple regional and subregional differentiations which are highlighted through the mapping of the diversity of employment profiles.

Finally, the analysis offers an original entry point into the substantial disparities in the landscape of small towns across the subcontinent in terms of intensity of employment—the number of inhabitants supported by the male workers is used here as a proxy. These disparities help us to understand how far small towns are often, notably in the backward regions, places of unemployment, coping strategies and poverty, in a context of agricultural transition marked by massive job destruction associated with jobless economic growth (Chandrasekhar 2017). In other regions, some towns emerge as the core of job-intensive industrial redeployments and successful creative clusters often linked to a national and global chain of values and markets.

²The data for Gujarat, Tripura and Nagaland are not available.

³Agriculture, Forestry and Logging, Fishing; Mining and Quarrying; Manufacturing (divided into Registered Manufacturing and Unregistered Manufacturing); Electricity, Gas and Water supply; Construction; Trade; Hotels and Restaurants; Railways; Transport by other means; Storage; Communication; Banking and Insurance; Real Estate, Ownership of Dwelling and Legal services; Public Administration; Other services.

21.2 Spatial Distribution of GDP: Economic Metropolitanisation and the Contribution of Small Towns

The Indian statistical administration (notably the late Planning Commission) did not provide GDP distribution at the scale of cities, in contrast to China for instance. Nevertheless, detailed GDP figures are available at the district level and they can be correlated to the distribution of the urban population by city size class.

We examine here how the spatial distribution of GDP in general and by key sectors is related to the urban share of population by district and the proportion of the overall population represented by small towns (less than 100,000 inhabitants) and larger cities. The relationship observed for the fiscal years 1999/2000 and 2004/2005 allows us to decipher the concentration and redistribution processes over time and their linkages with urbanisation. Recent studies, using detailed GDP distribution per district, have already demonstrated that it constitutes a heuristic geo-data set to assess the inequalities of wealth distribution at the subregional level and evaluate degrees of concentration and convergence in the context of fast economic growth (Banerjee et al. 2015; Das et al. 2015; Chaudhuri et al. 2017).

The period 1999–2005 constitutes the core of the decade 2000–2010, characterised by solid economic growth. From 2000 to 2005, the annual growth rate was established at 4.4 % (constant 1999/2000), three times higher than the demographic growth. Wealth generation was structurally moving upwards, supported by the expansion of tertiary activities, despite the stagnation of the manufacturing share at 15 % of the total GDP and a steady decline of agriculture, which fell steadily from 23 to 17 %.

We analyse a correlation matrix associating the absolute values (Table 21.1) related, on the one hand, to the population per district and their rural and urban sectors (the latter divided between small towns and large cities) and, on the other, those related to the district GDP subdivided into economic sectors.

The examination of the total GDP shows that large cities are closely associated with the creation of wealth (correlated at 0.8 in 2005) whereas small towns are correlated only at 0.26, not far from the rural sector link (0.22).

Small towns exhibit a solid association with the agricultural GDP in the first instance: the correlation between the agricultural GDP distribution per district and the population living in small towns is the highest (0.63 in 2005). Small towns stand at almost the same high level of correlation as the rural population in terms of links with agricultural GDP (0.71 in 2005). Of course, the relationship is very much higher than for the larger cities above 100,000 (1 lakh) inhabitants (0.2 in 2005). This strong and stable relationship has to be related to the fact that a majority of districts show a link between their rural and urban density in 2011 (Durand-Dastès 2015). The primordial function of urban localities, in particular small towns, is still to serve their rural hinterland: the larger their rural population, the more numerous they are and the higher the wealth extracted from farming; moreover, they have the potential to grow and diversify. As many field studies emphasise, this strong

Table 21.1 Correlation matrix of urban and rural population and sectorial GDP in 2000 and 2005

	Census urban pop 2000	Census rural pop 2000	Indian city pop 2000	Indian city pop 2005	>100,000 in 2000	>100,000 in 2005	<100,000 in 2000	<100,000 in 2005
Census urban pop 2000	1.00							
Census rural pop 2000	0.16	1.00						
Indian city pop 2000	0.80	0.12	1.00					
Indian city pop 2005	0.82	0.12	1.00	1.00				
+100,000 in 2000	0.80	0.12	1.00	1.00	1.00			
+100,000 in 2005	0.83	0.12	0.99	1.00	0.99	1.00		
<100,000 in 2000	0.22	0.54	0.14	0.14	0.14	0.14	1.00	
<100,000 in 2005	0.22	0.56	0.14	0.14	0.14	0.14	0.92	1.00
Total GDP in 2000	0.80	0.26	0.79	0.80	0.79	0.80	0.29	0.28
Total GDP in 2005	0.81	0.22	0.79	0.80	0.79	0.80	0.27	0.26
GDP non-agri. 2000	0.81	0.16	0.80	0.81	0.80	0.81	0.21	0.20
GDP non-agri. 2005	0.81	0.14	0.80	0.81	0.80	0.81	0.20	0.19

(continued)

Table 21.1 (continued)

	Census urban pop 2000	Census rural pop 2000	Indian city pop 2000	Indian city pop 2005	>100,000 in 2000	>100,000 in 2005	<100,000 in 2000	<100,000 in 2005
GDP agriculture 2000	0.26	0.71	0.21	0.21	0.21	0.21	0.62	0.63
GDP agriculture 2005	0.26	0.66	0.20	0.20	0.20	0.20	0.63	0.63
GDP manufacture 2000	0.86	0.35	0.78	0.80	0.78	0.81	0.35	0.34
GDP manufacture 2005	0.87	0.30	0.77	0.79	0.77	0.80	0.33	0.32
GDP construction 2000	0.81	0.22	0.77	0.78	0.77	0.79	0.30	0.30
GDP construction 2005	0.80	0.18	0.76	0.77	0.76	0.78	0.26	0.26
GDP banking 2000	0.75	0.04	0.75	0.77	0.75	0.77	0.05	0.04
GDP banking 2005	0.75	0.03	0.75	0.76	0.75	0.77	0.04	0.04
GDP real estate 2000	0.58	0.20	0.61	0.60	0.61	0.59	0.25	0.24
GDP real estate 2005	0.56	0.11	0.61	0.60	0.61	0.59	0.17	0.16

(continued)

Table 21.1 (continued)

	Census urban pop 2000	Census rural pop 2000	Indian city pop 2000	Indian city pop 2005	>100,000 in 2000	>100,000 in 2005	<100,000 in 2000	<100,000 in 2005
GDP transport 2000	0.51	0.08	0.69	0.67	0.69	0.64	0.16	0.15
GDP transport 2005	0.51	0.11	0.67	0.64	0.67	0.62	0.19	0.18
GDP public services 2000	0.80	0.08	0.81	0.82	0.81	0.83	0.07	0.07
GDP public services 2005	0.79	0.08	0.80	0.81	0.80	0.82	0.06	0.06
GDP trade 2000	0.78	0.23	0.74	0.75	0.74	0.75	0.25	0.24
GDP trade 2005	0.75	0.19	0.71	0.72	0.71	0.73	0.23	0.22
GDP per capita 2000	0.28	-0.24	0.26	0.26	0.26	0.26	0.09	0.07
GDP per capita 2005	0.26	-0.23	0.26	0.26	0.26	0.25	0.09	0.07

The correlation matrix indicates the Pearson product-moment correlation coefficient. It measures the linear correlation between two variables X and Y by providing a value between +1 and -1: 1 is total positive correlation, 0 is no correlation, and -1 is total negative correlation. Pearson's correlation coefficient is the covariance of the two variables divided by the product of their standard deviations. Here are correlated the weight in absolute value between the population distribution at the district level and by sector (urban and rural, in LC and ST) and the GDP distribution by district and for each economic sector, as well as productivity (constant value 2000)

linkage confirms how small towns' growth is dependent on land and agriculture capital.

In all the other economic sectors, Larger Cities (LC) are always more closely correlated to the GDP distribution. For the overall GDP, the relation with LC ranks at 0.79 in 2005, when it stands at only 2.9 in the case of Small Towns (ST).

This consistent and unsurprising association of the growth machine with metropolitanisation is reflected in the Gini index⁴ level of the total GDP distribution per district and its trend. It is already very high in 2000 at 0.49 and it increases slightly further, up to 0.51 in 2005. The GDP distribution tends to be more unequally distributed across Indian districts and is subsequently captured by the major metropolitan areas and districts dominated by the larger cities.

This tendency is more or less similar regarding the different non-agricultural sectors' association with LC. Their interdependence with LC is steadily high and their Gini index is increasing slightly.⁵ For instance, the industrial GDP is highly correlated to LC at 0.80 in 2005, when its Gini coefficient moved up from 0.46 to 0.49. In contrast, the correlation index of industrial GDP and ST appears steadily low at 0.32 in 2005. All the other correlations are lower in the case of ST.

The economic trajectories of ST and LC diverge at the scale of India captured through its district subdivisions. In fact, the ST distribution reveals a clear and constant independence vis-a-vis the larger cities; their level of correlation remains stable and low at 0.14. The growth of ST between 2000 and 2005 is also generally independent of the growth of LC (0.19). This means simply that ST in districts dominated by LC are not growing faster. It would be necessary to conduct further geo-statistical tests to appreciate better the influence of LC on the urban and economic growth of the adjacent districts.

Globally, we observed that the relationship between the urban level in 2000 and economic growth between 2000 and 2005, regardless of the sector, is limited and often null at the level of the subcontinent, subdivided into districts: 0.06 for ST and 0.12 for LC. The demographic growth of ST and LC between 2000 and 2005 is even negatively linked to the sectorial growth of GDP: -0.02 for ST and -0.03 for LC. The absence of a linear relation between urban demographic change and economic growth invites us not to dismiss the slight correlation changes observed between 2000 and 2005, in the relation between ST or LC and sectorial GDP distribution by district, as they are not significant.

⁴The Gini index measures the inequality of a distribution. It is defined as a ratio with values between 0 and 1: the numerator is the area between the Lorenz curve of the distribution and the uniform distribution line; the denominator is the area under the uniform distribution line equal to the diagonal. In the case of a harmonized distribution the curve tends to be close to the diagonal and the Gini index is near 0. The more the distribution is unequal, the more the Lorenz curve is distant of the diagonal and the index increase. If the distribution is very unequal the index tends to 1.

⁵Standard-deviation values also increase between 2000 and 2005, twice as fast as the median for most of the economic sectors, indicating that a process of divergence is the dominant trend at the district level, with the distance between extreme values, low and high, widening.

We should also note that, whatever the concentration process suggested by the rise in the level of the correlation between LC and non-agricultural GDP distribution by district, the productivity of LC approached through the proxy of GDP per capita (per district) correlation to LC is not high (0.25 in 2005) and null in the case of ST, at 0.07. The very limited link between LC weight in district population and the productivity differential highlighted here confirm the findings of Lall et al. (2004)⁶ and Noe (2015)⁷ regarding the patent limitations of the advantages of an agglomeration economy in India today. The return to scale is not significant outside of the banking, advanced and innovative tertiary sectors.

Nevertheless, the inequalities of distribution remain high and strongly associated with the LC weight for almost all sectors, including industry. This invites us to reappraise and ponder the findings of Ghani et al. (2012) regarding the spread of industry towards the countryside. The industrial dispersal seems contained, mainly in the intra-district rural sector, and was not a factor of convergence neither at the national level nor at the regional level for most of the states.

This divergence can be specified by looking at the share of GDP concentrated in the 44 districts and metrocities⁸ with at least one million inhabitants and more than 50 % of their population living in LC. If their share of the Indian population remained stable between 2000 and 2005, respectively, at 17.5 and 17.7 %, their contribution to the GDP increased steadily from 25.9 to 27.1 % and from 30.9 to 31.6 % for the non-agricultural contribution to the Indian GDP. All the non-agricultural sectors observe a comparable trend of growth or remain stable. For instance, their industrial share increases from 23.4 to 24.6 % as the construction sector stagnated (25.9–25.4 %).

However, we do not observe a strong trend of metropolitanisation of the Indian growth machine. In 2000, 50 % of the total GDP was produced in 113 districts against 91 in 2005. For the non-farm GDP, the number of districts remained identical at 77, mainly metropolitan and adjacent districts, but we must take into account the mining and cluster economy, which also play a role in urban-rural linkages. The average rate of urbanisation for these 77 districts is 55.1 %, very close to that of the 91 districts cited above, where the urbanisation rate is established at 54.9 %. Transition and economic growth are not polarised in a simple manner by the most urbanised districts as very rich agricultural districts are still

⁶Lall et al. (2004) stress that “the benefits of urban concentration do not offset associated costs. The estimated parameters suggest that there are either no benefits or in fact costs of increasing urban concentration. Higher wages, rents, and congestion in dense urban areas counteract benefits such as inter industry transfers and access to productive services”.

⁷In his conclusion, Noe (2015: 34) stresses that “we can conclude from the exercise that agglomeration effects may exist in different capacities in India, as compared to western countries and, therefore, policy prescriptions surrounding issues of economic growth in urban areas must be careful to consider the unique setting of Indian states. Overall, agglomeration economies do not seem to have a net positive effect on returns to scale and total factor productivity”.

⁸Intra-urban districts have been merged in the database used. Delhi, Mumbai and other LC with districts constitute one unit only.

important, for example those of the Krishnagiri/Godavari or the Kaveri deltas, or in the district of Burdwan (Samanta 2014a, b, 2017) as well as many other districts in Punjab, Maharashtra or Kerala. In these districts, agricultural capital drives a rapid transformation of the economy towards services and industries, where small towns play a major role.

In comparison, the 23 districts, where at least 25 % of the population lives in ST, represented 4.7 % of the Indian population in 2000 and 4.3 % in 2005, when their share of the GDP declined slightly from 5.6 to 5.3 %. The GDP to population ratio was 1.23 in 2005 for ST when it stood at 1.53 for LC, the sign of a clear productivity differential in favour of districts where LC are dominant. More significant is that for all the sectors in the 23 districts characterised by their weight of population in ST, their share of wealth generated is declining for all the economic sectors. For instance, it fell from 5.6 to 5.2 % in manufacturing and from 6.3 to 5.9 % in construction. Even their agricultural output contribution has contracted from 6.1 to 5.5 %.

These cumulative measures of distribution and trends indicate that, at the scale of the subcontinent, the ST weight in the district population is the marker of specific interlinkages with agricultural activities. Clusters of ST are forming where agriculture remains the dominant sector of the district economy, notably where it performs well. A large part of the ST are mandi towns or market towns distributing inputs for cultivation, selling farming outputs and dispensing services to the rural population. As long as the local agricultural economy is doing well, these towns flourish in number but they do not expand mechanically to form larger and more diversified cities, something that requires opportunities for an economic transition beyond the agricultural linkage. Some of them, as the data on employment confirm in the next part of the chapter, are places where households have to cope with the decline of job opportunities in the farm sector in a context of underemployment. It explains why ST could also be burgeoning in poorer regions and districts where the farming economy is not doing well and where other economic sectors, such as industries and services, do not ensure a smooth transition capable of absorbing the increasing workforce left without employment because of job destruction in agriculture. This constraint has to be linked to the strong pressure of the numbers of youth entering the job market.

At the national level, the relation between GDP and the demographic weight of ST is weak, except for the agricultural sector, but at the regional level substantial divergences are observed.

In Tamil Nadu, ST experienced a substantial rise in the significance of their relationship to GDP per capita, which increased from 0.12 to 0.33 (LC in Tamil Nadu: 0.59–0.49). There, the number of ST is high and continuously increasing: 9 of the 23 districts with more than 25 % of their population living in ST are located in Tamil Nadu. ST are increasingly associated with agricultural GDP, which grew from 0.26 to 0.43, but they are also increasingly associated with the construction sector, which increased from 0.30 to 0.45 to reach the same level as LC in 2005.

In West Bengal, ST are more closely related to economic growth than the Indian average, but this link shows a tendency to decline. The total GDP was correlated at

0.57 to ST in 2001, but it decreased visibly to 0.40 in 2005. In the same period, LC became more obviously associated with growth, rising from 0.46 to 0.53. All sectors experienced a comparable trend detrimental to ST, except for agriculture which gained one point to reach 0.81 in 2005. The manufacturing sector fell from 0.53 to 0.37 and trade from 0.71 to 0.54. Only construction maintained a significant link, remaining stable at 0.62. The very high correlation of trade with ST reveals a specificity of West Bengal, which is associated with the importance of agricultural trading and the economic centrality of wholesale markets and mandi towns at the regional level.

In Madhya Pradesh, the connection between wealth creation and ST is extremely tenuous, and possibly negative. The link with farm activities is far lower than the national average, established at only 0.44 in 2005.

Behind the ordinary and natural association of ST with farming activities, which is not declining with economic growth and the associated sectorial transition out of agriculture, notably in terms of employment, a contrasted landscape is emerging between states but also at the subregional and bioenvironmental basin levels.

21.3 Small Towns in Transition Between Rural and Urban?

How far are small towns engaged in the ongoing process of urban and economic transition? The previous analysis of the spatial distribution of the GDP and its correlation with the urban dynamic has shown that ST remain, in the first instance, associated with agricultural activities. In terms of employment, the ST economy is characterised by a strong representation of male workers engaged in farm activities. Beyond this first glimpse of LC/ST differences, to what extent does the Indian system of cities adhere to a dual model, where ST could simply be characterised by their linkages with the farm sector and LC by their association with manufacturing and services activities? Considering that 90 % of the Indian cities are ST (less than 100,000 inhabitants), this binary analytical filter could occult an important diversity of ST economic profiles and major regional differentiations.

21.3.1 Agricultural Activities Are Over-Represented in Small Towns

In this section, the sectorial balance of job allocation in ST is analysed through the distribution of male workers over the three broad sectors provided by the Census at the level of localities: (1) agricultural sector, (2) household industries, and (3) secondary and tertiary activities combined. This data has been integrated into the IndiaCities agglomerations database.

Table 21.2 Scaling laws for the distribution of cultivators and agricultural labourers, male workers engaged in household industries and male workers engaged in secondary and tertiary activities

Activity sector	Total male workers	Main male workers	Marginal male workers	Type of distribution
Cultivators and agricultural labourers	0.54 ($R^2 = 0.23$)	0.54 ($R^2 = 0.23$)	0.59 ($R^2 = 0.19$)	Overrepresented in small towns
Household industries	1.02 ($R^2 = 0.59$)	1.04 ($R^2 = 0.58$)	0.99 ($R^2 = 0.43$)	Proportionally distributed
Secondary and tertiary activities	1.15 ($R^2 = 0.90$)	1.17 ($R^2 = 0.87$)	1.08 ($R^2 = 0.72$)	Overrepresented in large cities

The sectorial distribution of male workers according to the city size (the total population of IndiaCities agglomerations) has been measured both by applying scaling laws⁹ and by observing the proportion of male workers engaged in agricultural activities, household industries and secondary and tertiary activities in seven city-size classes, which partially follow the Indian Census Classification (Table 21.2).

As expected, the scaling laws applied to the three broad economic sectors highlight that the distribution of male workers in the secondary and tertiary activities is highly linked to the city size, emphasizing their intrinsic urban characteristics. The exponent of the scaling law (which is 1.15 and a significant R^2 of 0.90) indicates an overrepresentation of secondary and tertiary activities in the largest cities. The highest concentration of males employed in secondary and tertiary sectors is also confirmed by the comparison of the proportion of male workers engaged in secondary and tertiary activities in LC and ST: the proportion in LC rises to 93 %, against less than 80 % for cities below 100,000 inhabitants (descending to 59 % in smaller towns with between 10,000 and 20,000 inhabitants).

In contrast, a clear trend of concentration of male cultivators and agricultural labourers is obvious in ST: according to the distribution of workers by city-size classes, 37 % of male workers are engaged in agricultural activities in ST, against less than 10 % in LC (Table 21.3). The scale exponent is of 0.54, indicating a trend

⁹Scaling laws are originally related to the question of the variation of the proportionality between physical or biological phenomena in which the orders of magnitude are very different. Applied to the social sciences, it allows the measurement of variations, according to the cities size, of variables such as activity, production, consumption or wealth that often increase in a nonlinear manner with the size of the cities (Bettencourt et al. 2007; Pumain et al. 2006; Lobo and Strumsky 2008).

The application of scaling laws to the distribution of specific economic activities in the Indian cities, according to their size, consists of relating these variables by calculating a regression coefficient also called scale exponent. When the scale exponent is close to one, the economic activity is distributed proportionally in all the cities, whatever their size. When the scale exponent is higher than one, the economic activity is over-represented in the largest cities and conversely, when the scale exponent is lower than one, it is over-represented in the smallest towns.

Table 21.3 Proportion of cultivators and agricultural labourers, male workers engaged in household industries and male workers engaged in secondary and tertiary activities by city-size class in 2011

City-size classes proportion of male workers (%)	% Male cultivators and agricultural labourers	% Male workers engaged in household industry	% Male workers engaged in secondary and tertiary activities
10,000–20,000 inhabitants	37	4	59
20,000–50,000	27	4	69
50,000–100,000	18	4	78
100,000–500,000	13	4	83
500,000–1 million	8	4	88
1 million–10 million	8	4	89
More than 10 million	3	4	93
All India	30	4	66

towards overrepresentation, but with a non-significant R^2 of 0.23 (Table 21.2). Moreover, agricultural and household industries are not so highly dependent on the city size. Their R^2 indicates a relative independence (around 0.23 for the agricultural sector, and 0.50 for the household industry).

This result tends to confirm that ST are still associated with agriculture, following the general trend of ST in South Asia, where a lack of industrial production and service activities have been observed earlier (Hinderink et al. 2001). Various explanations can be considered, such as the fact that the commercialisation of agricultural surpluses does not necessarily transit through ST (Hinderink et al. 2001). A more general explanation is that in the LC, agglomeration economies lead to an employment concentration, particularly within the most innovative sectors, because only the investments and outputs in LC can generate an adequate return for the production costs (Davila and Satterthwaite 1987; Duranton and Puga 2004). Hence, these considerations act as a disincentive for investors willing to localise their activities in smaller towns.

Finally, the high proportion of agricultural workers in Indian ST could result from the continuing urban transition, where a lot of ST are moving from an agriculture-based economy to an economic diversification induced by the development of manufacturing and services activities. On the other hand, the high proportion of rural population in India, around 65 %, ¹⁰ could explain that ST are a mix of agricultural activities and services and production of goods destined for the agricultural population. We also have to take into account that a large part of the Indian workforce is involved in more than one activity and that only the one considered the most important, the so-called “main activity”, is reported (Subramanian 2015). We should, however, take into account the increase in the

¹⁰According to the sources: 68 % with Indian Censuses, 62 % with Indianapolis.

numbers of “non-cultivating peasants” (Vijay 2012) as well as the bulk of labourers who work in the fields on a seasonal basis. The rest of the year they are daily wage employees in brick kilns and on construction sites. The India Rural Development Report 2012/2013 stresses that “Indian rural households are typically pluri-active”. “Non-farm income sources are increasingly important—43 % of rural families rely on non-farm employment as their major income source” (Report executive summary). The workers reported as farmers in ST are even more likely to earn a major part of their revenue outside agriculture and thus contribute to the non-farm transition within their town.

However, the regression coefficient of the scaling law applied to male cultivators and agricultural labourers is not significant ($R^2 = 0.23$); this means that the relationship between the city size and employment in terms of agricultural activities is not so obvious. It highlights the heterogeneity of local combinations of primary, secondary and tertiary activities, whatever the city size. Thus, the domination in ST of the link to employment in agriculture in terms of GDP obscures the diversity of their economic profiles.¹¹ To highlight these divergences, cities with an adjacent economic profile, regardless of their size, have been grouped.

21.3.2 *Typology of Indian Cities' Economic Profiles*

They have been gathered using the Ascending Hierarchical Classification (AHC) method, with χ^2 distance. Following this approach, four classes of cities' economic profiles have been identified (Table 21.4): two classes group cities with an *urban profile* (classes 1 and 2), meaning that the proportion of male workers engaged in secondary and tertiary activities is dominant in these cities as compared to other activities, one class assembles cities specialised in household industries (class 3) and a fourth class groups the cities still in transition, where the agricultural workers remain slightly predominant.

Small towns are represented in all these classes and their proportion varies from 82 to 98 % of all cities per class,¹² emphasising their economic diversity. Despite a relative concentration of agricultural activities in ST and an overrepresentation of secondary and tertiary sector in LC, the balance between the three main sectors is far from strictly correlated to the city size. It confirms that Indian urbanisation cannot be analysed through a simple and dual model: on the one hand, the limits of urban and rural are increasingly blurred and, on the other, a partial convergence between ST and LC is observed.

The 2387 class 1 cities, which represent 41 % of Indian cities, include cities with a fully urban economic profile. With 90 % of male workers engaged in secondary

¹¹ A city's economic profile is defined here as the distribution of workers by sector (in percentages) compared to the average combination of their sectorial proportion.

¹² As a reminder, the proportion of ST in the Indian urban system is of 90 %.

Table 21.4 Typology of the economic profile of Indian cities

Classes	Total number of cities	Average city size	Proportion of small towns (%)	Male workers engaged in 2d and 3d activities (%)	Description
Class 1	2387	132,472	82	86	“Urban” activities: cities specialised in secondary and tertiary activities
Class 2	1503	27,894	97	66	“Urban” activities: cities where secondary and tertiary activities are dominant
Class 3	57	30,596	93	44, plus 41 % of male workers engaged in household industry	Town predominantly dedicated to household industry and 2d and 3d activities
Class 4	1910	22,257	98	41	Settlement in transition between rural and urban
All	5857	73,086	90	69	

Source IndiaCities and Indian Census

and tertiary activities, this category includes the largest Indian metropolises Delhi, Kolkata, Mumbai, Chennai, Hyderabad, Bangalore etc., and almost all the million plus cities, as well as 82 % of ST. The latter predominate in terms of numbers, but their proportion remains lower than in the whole Indian system of cities (90 %). Most of the detailed case studies presented in this volume belong to this category.

The 1503 class 2 cities (one-quarter of Indian cities) can also be considered urban as two-thirds of male workers are engaged in secondary and tertiary activities. This class is almost entirely made up of ST (97 %), and few million plus cities. The class 3 and 4 cities are still in transition between rural and urban activities. The 57 class 3 cities are more advanced in the transition process, and 44 % of male workers are employed in industries and services. Their profile is very specific as 41 % of male workers are classified as employed in the household industry. This class 3 includes only 1 % of Indian cities and it consists of 96 % ST. The 1451 class 4 cities (25 % of Indian cities) are mainly small towns (98 %) in transition between rural and urban. Their economy mixes secondary and tertiary activities (41 %) with agricultural employment (54 %).

These four profiles can be analysed as progressive stages of urbanisation reached by Indian cities as they become less and less embedded in agricultural activities. These different levels of urbanisation reflect the urban and economic transition still ongoing in India, where the evolution did not occur with the same intensity and temporality, depending on the location of the cities as well as their historical and cultural heritage and their previous economic structure or their forms of governance.

It is very interesting to stress that cities in different stages of urbanisation are distributed throughout the Indian territories, particularly in what concerns the *urban*

city classes (Fig. 21.1). However, the class 4 cities, which mix urban and rural economies, are slightly overrepresented in the Indo-Gangetic valley, a part of India where the farm sector remains predominant in comparison to other regions. For instance, in Bihar the share of the farm sector in its GDP was still at 21 % in 2012, against an average of 12 % for the whole subcontinent. These mainly backward regions have the lowest GDP per capita in India.

The *class 3 cities*, with a strong predominance of household industry activities, are mainly concentrated, along the west coast (except along the Malabar Coast in Tamil Nadu) particularly in West Bengal, in the southern state of Karnataka, in

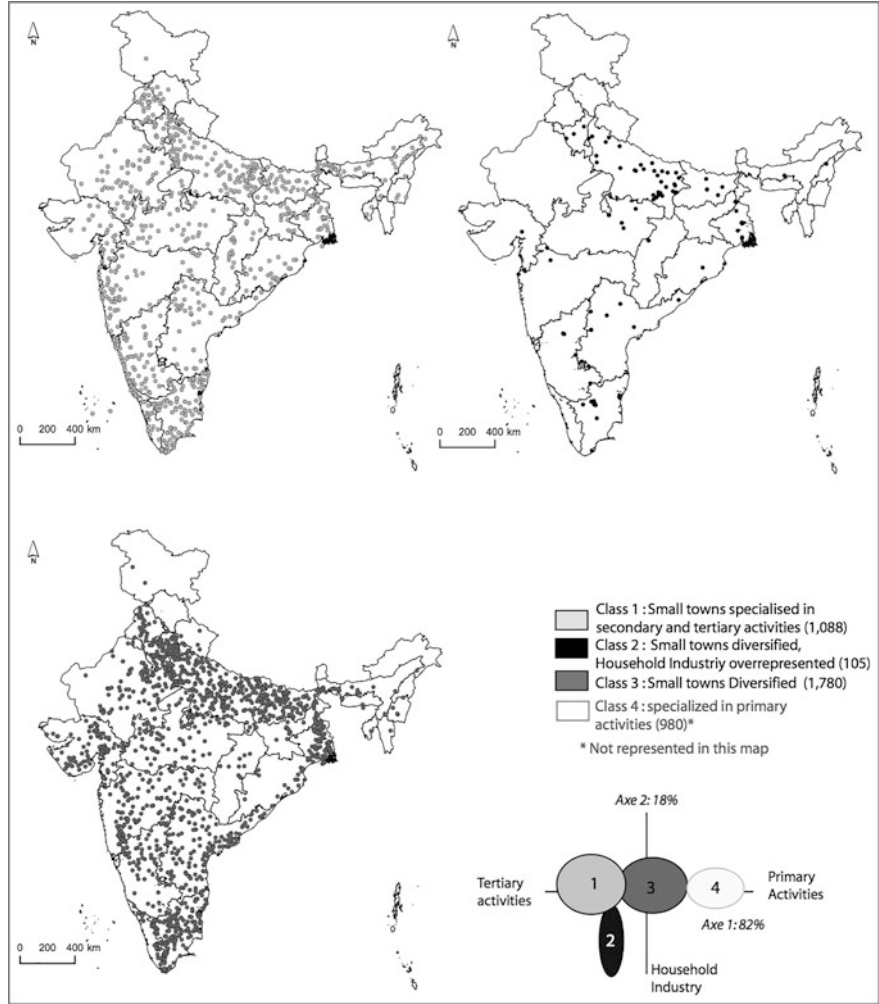


Fig. 21.1 Distribution of small towns by socioeconomic profile in 2011 (*four classes*)

Madhya Pradesh and Uttar Pradesh. This is because of a specific diversification of historical rural activities which have become part of the subcontracting industry in home-based production, as well as regional divergences in the classification of the workforce.

The strong representation of ST in all the classes, in particular the fact that two-thirds of ST belong to the most *urbanised classes* (classes 1 and 2), stresses that ST cannot be considered primarily as places of relegation or banal market towns. On the contrary, they play an active role in Indian economic transformations. Most of them have achieved their transition from rural to urban, partly as a consequence of the shift of the manufacturing sector from LC towards rural locations and ST (Ghani et al. 2012), and also because of the increasing demand for goods and services among the rural and ST populations. Their economic development thus plays a pivotal role in the changes occurring in the rural hinterland; they provide adequate connectivity and services to turn the rural environment towards non-farm activities (Wandschneider 2004). Moreover, when ST entrepreneurs establish long distance economic relations and offer innovative products and services, they can expand into competitive clusters which become major players in several domains from agro-industry, textile or leather sectors to truck assembling (Tastevin 2017).

On the other hand, one-third of ST are still in transition between the rural and urban economy. They often play the role of central locations (Lösch 1954; Christaller 1972), furnishing basics goods and services to the rural population.

21.4 Employment in Small Towns: Job Intensity and Marginal Workers

The economic expansion of ST is partially reflected in the district's GDP, and revealing the agricultural decline and the economic development of the service sector only shows the sectorial aspect of the employment dynamic; we have also to consider the employment structure. We explore it here as the proportion of the population having a job and, among those who have a job, we must distinguish between permanent and marginal workers. Marginal workers are employed less than 6 months per year.

To estimate how far the substantial role of small towns in the process of urbanisation is accompanied by their socioeconomic expansion in terms of incorporating wealth generation and job creation, the variations in job intensity, or the number of inhabitants supported by the male workers, subdivided between ST and LC, have been tested. The application of scaling laws shows that male workers are proportionally distributed across the Indian cities, whatever their size, the scale exponent being equal to 1.00 and an R^2 very significant at 0.99 (Fig. 21.2). Their proportion is around one-third for all the city size classes; there is no structural difference in terms of dependence between ST and LC.

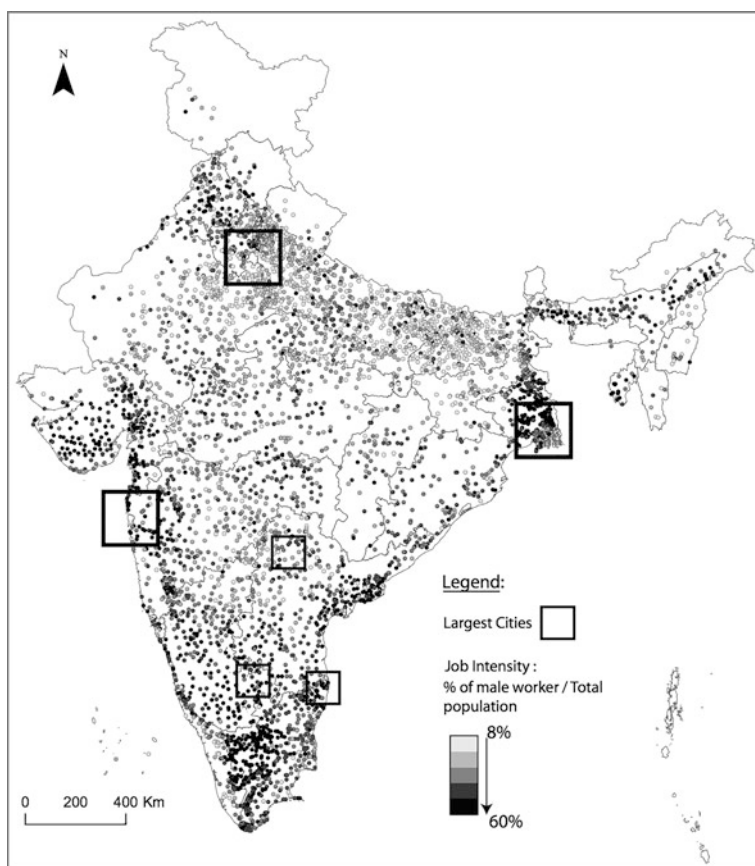


Fig. 21.2 Share of male workers in Indian small towns in 2011. *Source* IndiaCities, Indian Census

However, strong spatial disparities are observed: high job intensity is mainly concentrated in western Tamil Nadu, in eastern Andhra Pradesh, in Karnataka, West Bengal, Gujarat, in the north of Delhi and, to a lesser extent, along the coastal districts, whereas the job intensity is very low in all the central regions.

Small towns with an intense concentration of male workers are clustered in subregional territories where the district industrial GDP is closely associated with the presence of ST, notably in the north west of Tamil Nadu, between Coimbatore and Salem. Here multiple networks of ST and villages specialising in the textile, truck, leather industries etc. combine to compose a form of *citta difusa* highly connected to several global value chains. This also highlights the importance of the largest suburban industrial villages in West Bengal and the specificity of the Gujarati productive system which integrates a lot of ST as well as the Punjab configuration.

If the job intensity is the same whatever the city size, what about the balance between main and marginal workers in the total male workforce? Marginal workers are those who declare they worked less than 6 months during the last year. Are these marginal workers present more in ST than in the larger towns?

Scaling laws applied to the distribution of male marginal workers within the entire Indian system of cities show that they are indeed slightly overrepresented in ST as the scaling exponent is 0.92. However, the regression coefficient R^2 , equal to 0.64, suggests that the connection between male marginal workers and city size is not extremely significant. Moreover, the scaling exponent is only slightly lower than in the case of the male main workers, which is 0.96 (R^2 0.96). Using the distinction by city-size class, the differentiation is not obvious: indeed, the three metropolises with more than ten million inhabitants have only 6 % of marginal workers, but for the other classes the proportion of marginal workers varies between 10 % for the larger cities class and 16 % for the smallest towns class.

However, these measurements of the representation of marginal workers in Indian cities, according to their size, are biased: the distribution of marginal workers varies according to the different sectors of activity. The proportion of male workers in agriculture rises to 20 %, it is 16 % for household industries and only 11 % for secondary and tertiary activities. Insofar as agricultural activities are more highly concentrated in small towns than in the largest ones, the overrepresentation of marginal workers in small towns could be partly a consequence of the overrepresentation of agricultural activities in small towns. Besides, when the proportion of marginal workers is analysed according to the four city classes' economic profiles, the distribution of male workers appears different: the most urbanised class of cities had only 10 % of marginal male workers in their workforce whereas in the class of cities still in transition their numbers double. Strong variations emerge according to the sector of activities considered—primary, secondary or tertiary.

To analyse the distribution of male workers by sector, “all other things remaining equal”, the proportion of main and marginal male workers for each sector of activity based on the total number of male workers has been calculated for the seven city-size classes¹³ for each sector of activity (Table 21.5).

The comparison of the proportions of marginal male workers according to city size, for the three sectors of activity provided in the Census, shows that if a marginal difference is observed for the farm sector, their share is inversely proportional to the city size in the household industry, and industry and services. The difference in the proportion of male marginal workers between the smallest and the largest towns class reaches 10 points. The distribution of marginal workers is equally dependent on the economic sector and the city-size.

¹³In this analysis the calculation is based on the average proportion of marginal workers engaged in agricultural activities, the household industry, and secondary and tertiary activities by city class rather than scaling laws, because the proportion of male marginal workers according to their sector of activities among the Indian system of cities corresponds to the average distribution for all the sectors.

Table 21.5 Proportion of marginal male workers according to city size for each sector of activity

	% Marginal male workers in agricultural industry	% Marginal male workers in household industry	% Marginal male workers in secondary and tertiary activities
10,000–20,000	22	22	15
20,000–50,000	21	20	13
50,000–100, 000	19	18	11
100,000–500,000	20	17	10
500,000–1,000,000	22	15	10
1,000,000–10,000,000	20	14	9
More than 10,000,000	19	10	6
Mean	20	16	11

Regarding the spatial distribution of male marginal workers resident in ST, the dichotomy between the Indo-Gangetic Valley and the rest of the country is very significant (Fig. 21.3).

Highlighting the weight of marginal workers in the workforce of ST for the Indo-Gangetic Valley helps to characterise the nature of the rapid emergence of ST and large villages in backward states such as Bihar (Mukhopadhyay 2017). Indeed these regions accommodate chronic underemployment. There, insufficient job creation did not compensate for the destruction of jobs in the farm sector. This may also partially explain why these poor states are the main providers of a temporary and residential migrant workforce who find employment in the more developed states. Remittances constitute an important component of these ST economies.

21.5 Conclusion

A consistent and unsurprising association of the growth machine with large cities is confirmed here. However, we do not observe a tremendous trend of metropolisation of the Indian growth machine. The GDP distribution tends to be increasingly unequally distributed across Indian districts and captured subsequently by the metropolitan and larger cities districts. Small towns show a solid association with agricultural GDP, far higher than for the larger cities with over 100,000 (1 lakh) inhabitants. The ST weight in the district population is the marker of specific interlinkages with agricultural activities. The main role of urban localities, particularly small towns, is still to serve their rural hinterland and they tend to form clusters in places where agriculture remains the dominant sector of the district economy.

In terms of employment, the ST economy is characterised by a strong representation of male workers engaged in agricultural activities, which could result from the ongoing urban transition. Thus, a lot of ST are still in transition from an

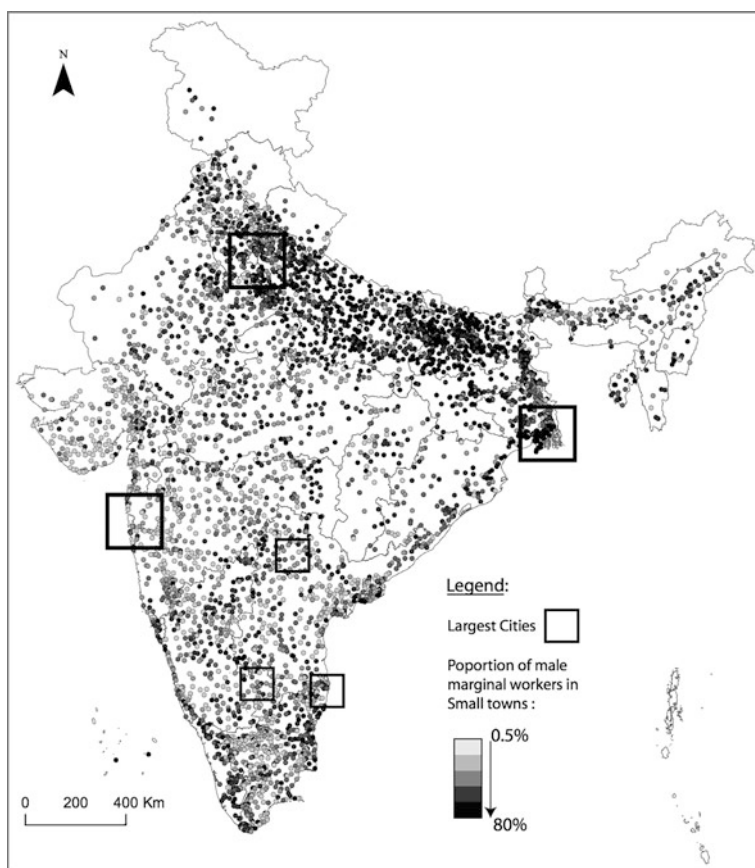


Fig. 21.3 Proportion of male marginal workers in small towns. *Source* IndiaCities, Indian Census

agriculture-based economy to economic diversification, induced by the development of manufacturing and services activities. On the other hand, the high proportion of rural population in India, around 65 %, could explain that ST are a mix of agricultural activities with services and production of goods destined for the agricultural population. We have also to take into account that a large part of the Indian workforce has more than one activity and that only the one considered the most important, the so called “main activity” is reported (Subramanian 2015); we should, then, specifically take into account the increase of “non-cultivating peasants” (Vijay 2012) as well as the bulk of labourers who work only seasonally in the fields.

Moreover, as 90 % of Indian cities are ST, the diversity of their economic profiles remains important; they range from cities with a fully urban profile to cities still in transition, where agricultural workers remain slightly predominant. These different profiles can be analysed as progressive stages of urbanisation reached by

the Indian cities, more or less embedded in agricultural activities. As mentioned above, we should also remember that the pace of urban and economic transition is often dependent on each city's specific characteristics. The balance between the three main sectors is far from strictly correlated to the city size, which confirms that Indian urbanisation cannot be analysed through a simple and dual model: on the one hand, the limits of urban and rural are blurring and, on the other, we observe a partial convergence between ST and LC.

There is no structural difference between ST and LC regarding the variations in job intensity—or the number of inhabitants supported by the male workers. However, strong spatial disparities are observed: high job intensity is largely concentrated in territories where the district industrial GDP is highly associated with the presence of ST. More generally, job intensity is highest in the southern states of Tamil Nadu, Andhra Pradesh and Karnataka, along the coastal districts, and in West Bengal, Gujarat and the north of Delhi and it is very low in all the central regions.

The comparison of the proportion of marginal male workers according to city size for each sector of activity shows that no differences are observed for agricultural activities, but for the two other sectors the proportion of male marginal workers slowly and regularly decreases when the population of the cities increases. Regarding the spatial distribution of male marginal workers resident in ST, the dichotomy between the Indo-Gangetic Valley and the rest of the country is very significant.

This exploration of the relation between wealth generation, job creation and the distribution of towns at the district level invites us to analyse further the contribution of towns and cities to Indian economic growth. We need, specifically, to assess better the link between the extended metropolitan areas as motors of growth and small towns in terms of production and circulation of workers, in order to appreciate better the forms of local autonomy and the level of insertion of small towns' local productive/production systems. Our results also underline the importance of small towns as a privileged space of transition from agriculture to non-farm sectors and as a network of ordinary places where the accommodation of structural underemployment and poverty occurs.

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Chapter 22

Commuting Workers and the Integration of the Rural-Urban Economy

Ajay Sharma

22.1 Introduction

With a focus on equitable and inclusive growth across rural and urban regions, the 11th and 12th Five-Year Plan documents, published by the government of India, emphasised the importance of small and medium towns becoming bridges between rural economies and megacities and thus acting as the channel for achieving comprehensive growth and sustainable regional development. The government suggested that “3682 urban local bodies in the country, spread across 593 districts, should act as economic growth engines at the local and regional level, through access to markets, infrastructure, formal credit, availing job opportunities in non-agricultural sector and linkages to the global economy” (Government of India 2006: 93).¹ Although the government does realise the importance of these urban centres, what is missing is the channel through which rural-urban linkages can be strengthened. In the literature pertaining to development and regional economics, labour mobility is considered one of the most effective mechanisms through which rural and urban interaction can lead to a reduction in the urban–rural divide (Lewis 1954).

¹With an aim to realise these planning suggestions, there have been multiple schemes implemented by states and suggested to these states. Some of these schemes include community participation under the JNNURM through Area Sabhas and Ward Committees for decentralized planning. Another scheme is the Backward Region Grant Fund, in all the districts where the NREGA is operative, to support capacity building and planning. All the states have been recommended to create district planning committees (DPC). Moreover, there was a proposal of earmarking one percent of the total budget for centrally sponsored schemes for use by DPCs (Government of India 2006).

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Labour mobility is considered synonymous with migration in the literature on economic development. In the relevant literature there is a clear distinction between migration and circulation. Whereas migration refers to movement from one location to another, without any possibility of return to the location of origin, circulation is when an individual or a household returns to their place of origin (Prothero and Chapman 2011). Daily commuting and pendular migration are two types of circulation. In the context of developing countries, the commuting habits of workers, which play an important role in the process of regional development, have largely been ignored. In this chapter we present the case that, other than pendulum and long term migration, daily commuting by workers plays a significant role in the integration of rural and urban economies through labour market outcomes, increased job opportunities and direct and indirect benefits of daily mobility across rural and urban areas. In this study we use data from the National Sample Survey Organization (NSSO) survey on employment and unemployment 2009/2010 and a primary survey of commuting workers, conducted in the Burdwan district of West Bengal in 2014. The data from the NSSO survey provide a broad macro picture in the context of overall India, namely the relationship between commuting by workers, distribution of economic activities across rural-urban spheres and labour market conditions. The primary survey highlights some of the important yet overlooked aspects of daily commuting, in terms of mode of transport, time spent, cost of transport and its impact on the livelihood strategies adopted by individuals and households.

The rest of the chapter is organised as follows. In the next section we discuss the importance of rural-urban linkages and the role of urban settlements in the local economy and the way in which this induces workers to commute or migrate depending on their residential location and employment opportunities. Section 22.3 concentrates on the key spatial pattern of commuting by workers, highlighting the industrial distribution of mobile workers. In Sect. 22.4 we focus on the key findings and issues revealed by the primary survey, such as transportation facilities in the area, nature of connectivity, seasonality of commuting by workers, uncertainty in the labour markets etc. The last section concludes with a discussion.

22.2 Rural-Urban Linkages and Labour Mobility

Of the two broad categories of labour mobility—migration and commuting—there is a rich literature on migration, the different types and their implications for regional growth, changing local employment and socio-economic patterns (Labrianidis and Sykas 2009; Gray and Bilsborrow 2014; Chen et al. 2014). Commuting by workers, on the other hand, remains a largely under-researched issue, especially in developing countries. There are a few studies that provide some insights on commuting patterns and their effect on rural development through rural-urban linkages in developing countries. Baker (2007) shows that individuals in north west Tanzania commute to work from rural to urban areas rather than

migrate because of the higher cost of living in urban areas. In the surrounding peri-urban areas of the large urban agglomeration of Dar-es-salaam, there has been a constant flow of commuters across urban and peri-urban areas (Lanjouw et al. 2001). The authors show that because of better employment opportunities in the non-farm sector of urban agglomerations, individuals are able to diversify their place of work and in turn are able to diversify their source of income and reduce the fluctuations in livelihood opportunities.

Bah et al. (2007) point out that better transportation connectivity in south eastern Nigeria is one of the key factors that encourage workers to commute from rural localities to urban areas. The government has taken the initiative to provide subsidised transport facilities, which has led to commuting and improved connectivity between the rural and urban economy.

Looking at the interaction between commuting and migration in the context of Indonesia, Douglass (2007) documents the existence of a trade-off between migration and commuting at the intersection of rural and urban areas. The author finds that within a 60-km periphery of urban agglomerations, commuting remains the dominant choice of mobility for work but is replaced by migration beyond this limit. Moreover, in the plains, longer distance commuting by workers is more likely to be observed, whereas in hilly areas, migration is preferred over commuting because of the longer duration of travelling time.

In the context of India, there are a handful of studies that have highlighted the importance of commuting between rural and urban areas. In the context of rural-urban employment linkages, Basu and Kashyap (1992) argue that, in rural regions, commuting by workers is one of the mechanisms to access employment in the non-farm sector. Because of spatial variations in the socio-economic environment in rural India, this mobility can be attributed to distress diversification, a vibrant and growing non-farm sector and other push or pull factors. Based on primary surveys carried out at multiple locations in rural India, they document that commuting is very common among workers living in the vicinity of urban areas up to a distance of 30 km.

Mohanani (2008) provided the first estimates of the numbers of commuting workers between rural and urban areas, based on the National Sample Survey Organization (NSSO) survey on employment and unemployment for the year 2004/2005. The author estimated that there were 8.9 million rural to urban commuters and 3.6 million workers commuted from urban to rural areas in 2004/2005. Apart from that, there were 12.2 million workers in rural and urban areas with no fixed work location.

In his analysis of the characteristics of workers who commute across rural and urban areas in India, Chandrasekhar (2011) documents that more than two-thirds of commuting workers are engaged in manufacturing, construction and other retail or wholesale activities. Under the assumption that commuting by workers from rural to urban areas is predominant in peri-urban areas, the author estimates that around 32 million individuals or 4.3 % of the rural population lives in peri-urban areas.

Sharma and Chandrasekhar (2014) establish that the size of the commuting workforce across rural and urban areas is estimated at around 24.3 million, which

represents 13 % of the non-agricultural workforce in India. They show that the workers' choice to commute is affected by regional labour market conditions—unemployment rate (rural and urban) and the rural-urban wage differential, spatial distribution of economic activities and the level of urbanisation and the existence of peri-urban areas.

In the context of developed countries,² there have been a few studies that have emphasised the importance of commuting by workers between rural and urban areas. In the context of Canada, Green and Meyer (1997) show that because of lower job opportunities in Canada's rural areas, individuals opt to commute to urban areas for work. Based on the 1991 Census data, they argue that even though the size of the rural population has remained almost constant, there has been a decline in agricultural activities. This has led to the growth of "dormitory towns" in rural areas, whose residents are employed in metro and urban areas. They also find that, with the increase in the industries established in rural areas (25 % of industrial employment opportunities were located in rural Canada in 1971), there has been an increase in the urban to rural commuting of workers. Similar evidence has been documented by Beale (1980) in the context of rural USA, where rural workers were employed in non-farm activities (23 % in manufacturing and 20 % in wholesale and retail activities). This evidence is similar to Ghani et al. (2012), Sharma and Chandrasekhar's (2014) findings in the context of India.

Renkow and Hoover (2000) show that in North Carolina (United States) the decision to commute is dependent on the choice of the housing site, wages, the nature of migration and the distance between the location of the workplace and the residence. The authors find that there has been a constant rise in the number of commuters from rural to urban areas (5.3–15 % between 1960 and 1990) and vice versa. Moreover, the commuting rate from the adjacent rural counties to urban areas (20 % of the workforce in 1990) is very high, as is the inverse. Similar evidence has been documented by So et al. (2001) in the context of the USA, with regard to commuting between non-metro and metro locations.

The literature on commuting by workers highlights the importance of the spatial distribution of economic activities, workers' residence locations, labour market conditions in the rural and urban labour market, the nature of urbanisation and the size of the peri-urban environment in understanding rural-urban daily mobility.

In the next section we provide an estimate of the numbers and distribution of commuting workers at the national and sub-national levels.

²In the developing countries, a distinction has been made in the nature of commuting from rural to urban and metropolitan areas vis-à-vis from suburban to urban. In this chapter, the focus remains on the commuting by workers across rural-urban boundaries. We have limited our discussion to rural-urban commuting in the context of developed countries.

22.3 Proportion and Distribution of Commuting Workers

The main source of information on commuting by workers in India is the nationally representative sample survey on employment and unemployment conducted by the National Sample Survey Organization (NSSO), which asks questions about the workplace location of a worker, provided that he/she is engaged in non-agricultural activities. Here, the implicit assumption is that workers employed in agricultural activities do not commute. Moreover, the broad groups under which the workplace location can be categorised are rural, urban and no fixed place. In this survey, the residential location can be categorised as rural and urban areas. This creates two main issues. The first is that we are unable to capture the daily mobility of workers within rural as well as urban areas. If a worker commutes from one rural location to another rural area it is not possible to identify the individual as a commuter in the survey and the same holds true for intra-urban commuting by workers. The second issue pertains to the distance travelled, time spent and mode of transport used in the process of daily commuting by individuals. Despite these two limitations of the survey data, it is very useful for estimating the magnitude of daily commuting by workers across the rural-urban boundary.

Another salient feature of this survey is to provide estimates of the proportions of the non-agricultural workforce that does not have a fixed workplace location. These workers do not have any fixed workplace premises and they are not restricted to one location for commuting purposes. This means that they can work in either rural or urban areas depending on the nature of their work or the availability of work. Some examples of these workers include street hawkers, vendors, workers in transport related activities etc. Construction workers working on a site in rural or urban areas are not counted among the non-fixed place workforce.

We must note here that in the survey we have no information regarding the state or district of the workplace location, apart from whether it is a rural or urban region, but the survey provides information regarding the state and district of the residence location. Further, for the urban areas, we can distinguish whether the individual resides in a city with one million plus population or not. The implication of this limited information provided by the survey is that we can only identify the flow of commuters based on their residence location. This means that, for a specific state, we can estimate the proportion of residents who are commuters between rural and urban areas based on the state or district of residence, but we cannot deduce whether his/her workplace location is situated in the same state or the same district or in another state or district.

Based on the residence and workplace location of non-agricultural workers, we can identify the following workers' residence-workplace commuting patterns: rural-urban, urban-rural, rural-no fixed place of work and urban-no fixed place of work. Apart from this, we have workers who both live and work in rural or urban areas.

In Table 22.1 we show the national level estimates of commuting by non-agricultural workers across the rural-urban boundary for the year 2009/2010.

Table 22.1 Estimated size of non-agricultural workforce by sector of residence and place of work: all India

Sector of residence	Place of work			
	Rural	Urban	Not fixed	Total
Rural	85,556,220 ^a (86.73)	8,050,036 (8.16)	5,035,493 (5.1)	98,641,749 (100)
Urban	4,370,678 (4.94)	76,947,337 (86.95)	7,177,731 (8.11)	88,495,746 (100)
Total	89,926,898 (48.05)	84,997,373 (45.42)	12,213,224 (6.53)	187,137,495 (100)

Values in bracket are in percentage

Workers in NIC div. 02-99, industry group 012,014,015

Source Author's calculation based on NSSO Employment and Unemployment Survey, 2009–10

^aNumber and percentage of workers living in rural areas and working in rural areas. Similarly for others

Overall, 13.2 and 13.05 % of the rural and urban non-agricultural workforce commutes daily to their workplace (either in rural or urban areas), respectively. In rural areas, there are 8.05 million rural to urban commuters and 5.04 million commuting workers who do not have a fixed place of work, and in urban areas, there are 4.37 million urban to rural commuters and 7.18 million commuting workers with no fixed place of work. The estimated total size of the commuting workforce was 24.6 million in 2009/2010.

One important point, which was raised by Mohanan (2008), Chandrasekhar (2011) is that, when estimating the size of the rural and urban workforce in India only the worker's residence location is taken into account and the workplace location is ignored. This creates either an upward or downward bias in the estimates of the proportion of the rural and urban workforce that commutes. Based on our estimates, if we assume that the no fixed place workers live and work in the same place, then the total number of commuters towards urban areas is 3.68 million. The estimate for the urban workforce size should therefore be increased by 3.68 million and the same number should be deducted from the rural workforce estimate. This can have important implications for the policy and planning process in terms of allocation of funds, provision of public goods etc.

Moving on, some important features of commuting by workers in India are as follows. First, the number of urban-rural commuters is considerable when compared to rural-urban commuters. This is an unusual empirical observation when it is generally argued that in rural labour markets there is no job growth and non-agricultural employment is considered synonymous with urban areas. One possible explanation can be that there has been a shift in formal manufacturing activities from urban to rural environments in the past decade, along with a shift of the informal service sector to urban areas (Ghani et al. 2012). Similar evidence has been found in the contexts of Canada and the USA at different stages of their economic growth and rural development; see Green and Meyer (1997) for Canada and Renkow and Hoover (2000) for the USA.

Second, a considerable share of public sector, government and formal jobs are located in rural areas, and these require some level of skill and education. On the other hand, it is a well-known fact that rural workers are less skilled and less

educated than their urban counterparts. This contributes to creating a spatial mismatch (in terms of location of workers and nature of jobs) in the labour market of rural and urban areas if we assume that individuals are more reluctant to change their residence than their workplace. Therefore, we observe that individuals living in urban areas commute to work in rural areas and vice versa. Here, rural-urban workers are mainly employed either in the informal sector or in low-skilled formal sector jobs such as construction, wholesale and retail trade activities. On the other hand, urban-rural workers are mainly engaged in formal sector activities such as government sector, education, banking and manufacturing jobs. This point is reinforced by the distribution of commuters across economic activities.

Our survey showed that around two-thirds of both rural-urban and urban-rural commuters are primarily engaged in three types of activities—manufacturing, construction and wholesale and retail trade services. The workers with no fixed place of work are mainly employed in construction and transport, storage and communication activities and wholesale and retail trade activities (Table 22.2). These results are consistent with the definition and characteristics of no fixed place workers, suggesting that the findings are robust.

Lastly, the number of workers without any fixed location of work is as large as the number of rural-urban and urban-rural commuters combined. These workers are also referred to as *footloose workers* in the relevant literature (Bremen 1996). This highlights the fact that large numbers of commuters actually work in the informal sector. In 2011/2012, 55 % of workers were engaged in informal sector activities

Table 22.2 Distribution of non-agricultural workers based on industrial classification, residence and workplace location

NIC group	Rural-rural	Rural-urban	Rural-NF	Urban-rural	Urban-urban	Urban-NF
D	22.5	20.5	5.3	23.7	26	5.3
F	27.7	30.7	30.5	14.7	10.5	15.6
G	16.3	12	15	27.7	20.9	21.4
I	8.1	9.9	29.8	7.2	7.1	37.2
K	0.6	1.3	0.7	3.1	3.7	2.1
L	3.4	7.9	0.1	4.3	7.7	0.5
M	5.6	4.9	0.5	6.9	6.1	0.5
N	1.2	2	0.8	1.5	2.4	0.3
O	4	2.5	5.8	3.4	3.8	5
Others	10.7	8.2	11.5	7.4	11.8	12.2
Total	100	100	100	100	100	100

All values are in percentage

Workers in NIC div. 02-99, industry group 012,014,015

Source Author's calculation based on NSSO Employment and Unemployment Survey 2009/2010
NF No fixed place of work, *D* Manufacturing, *F* Construction, *G* Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods, *I* Transport, storage and communication, *K* Real estate, rental and business activities, *L* Public administration and defence; compulsory social security, *M* Education, *N* Health and social work, *O* Other community, social and personal service activities

Table 22.3 Distribution of non-agricultural workforce by gender and residence-workplace location

Residence-workplace pairs	Male	Female	Total
Rural-urban	89.17	10.83	100
Urban-rural	87.34	12.66	100
Rural-no fixed place of work	92.27	7.73	100
Urban-no fixed place of work	94.32	5.68	100
Rural-rural	79.16	20.84	100
Urban-urban	82.77	17.23	100
Total	82.2	17.8	100

Source Author's calculation based on NSSO Employment and Unemployment Survey 2009/2010

(excluding agricultural activities such as growing crops and related work). In rural areas, the informal sector represents 41 % of the workforce and the corresponding number for urban areas is 95 % (Government of India 2014). Among male workers in the informal sector, about 5 % in rural areas and 1 % in urban areas had no fixed place of work. For females, the corresponding proportion was about 11 % in rural areas and 4 % in urban areas. One reason can be the predominance of seasonal livelihood activities among these workers, which change continually based on the nature of job opportunities available on the labour market. Moreover, these workers are largely low skilled with very little education, which makes it hard for them to find employment in the formal sector. Some anecdotal evidence for these workers is provided in a later section.

Coming to the gender aspects of workers' mobility across the rural-urban boundary, we show that commuting is largely dominated by male workers. Among the rural-urban commuters, only 11 % are female workers whereas for the urban-rural commuters, the proportion is slightly higher at 13 % (see Table 22.3). For the workers with no fixed place of work, the share is 8 and 6 % for rural and urban areas, respectively. If we compare this to the overall participation of women in non-agricultural activities in rural and urban areas combined (i.e. 18 %), then mobility among women is very low.

One main reason cited in the relevant literature for lower commuting among women, and especially among married women, is that they have to take care of their children and other household activities along with their job; therefore they prefer to work locally instead of commuting. However, in the NSSO survey we were unable to find any difference in the nature and intensity of commuting between married and unmarried female workers.

22.3.1 Urban-Rural Commuting and City Size Class

The NSSO survey provides information on city size class and from this we can identify whether an individual is the resident of a city with population above one million or not. This is the only classification of city size provided in the survey data.

From our data we cannot identify the destination city type for rural-urban commuters; instead we can only decipher the pattern of commuting from urban to rural areas by city size class (i.e. from the residence location), or cities with a million plus population and other cities to rural areas. Of the 4.37 million urban-rural commuters, 3.57 million live in cities with a population below 1 million and the remaining 0.8 million live in cities with a million plus population. Among the 7.18 million urban no fixed place workers, 5.3 million reside in cities with a population below 1 million and the rest in cities with a million plus population. In urban areas, 5 % of the non-agricultural workforce commutes from urban (i.e. million or non-million cities) to rural areas. The corresponding number for million plus cities is 3.3 and 5.6 % for cities with a population below one million. In what concerns the no fixed place workers, they represent 7.6 and 8.3 % of the non-agricultural workforce for million plus cities and other cities, respectively. There is not much difference in the distribution of urban-rural commuters by economic activity and size class of the residence city, except in the case of manufacturing and real estate, rental and business activities (Table 22.4). In the case of manufacturing activities, the share of commuters from cities with less than a million

Table 22.4 Distribution of urban residents by economic activity, resident city size class and workplace location

National industrial classification	Workplace location					
	Cities with population below one million			Cities with population of one million or above		
	Rural	Urban	No fixed place of work	Rural	Urban	No fixed place of work
D	24.28	24.56	5.34	19.51	28.76	5.05
F	15.43	12.12	15.94	10.3	5.95	14.3
G	28.25	22.35	25.49	28.69	21.56	28.14
I	7.34	6.83	37.11	6.23	7.58	36.79
K	2.27	3.6	2.5	10.73	7.49	2.75
L	3.43	6.73	0	3.72	6.24	0
M	6.97	6.85	0.37	5.94	3.84	0.72
N	1.67	2.27	0.31	0.81	2.72	0.15
O	3.41	3.97	4.53	3.2	3.25	6.26
Others	6.94	10.72	8.42	10.87	12.6	5.83
Total	100	100	100	100	100	100

All values are in percentage

Workers in NIC div. 02-99, industry group 012, 014, 015

Source Author's calculation based on NSSO Employment and Unemployment Survey 2009/2010
D Manufacturing, *F* Construction, *G* Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods, *I* Transport, storage and communication, *K* Real estate, rental and business activities, *L* Public administration and defence; compulsory social security, *M* Education, *N* Health and social work, *O* Other community, social and personal service activities

population is higher than that of cities with a million or above population. In real estate, rental and business activities, we observe that the proportion of urban-rural commuters from million plus cities is almost five times larger than non-million cities (10.73 and 2.27 %, respectively).³

Overall, we can infer from these patterns that cities with a population below one million interact more with the rural areas, than their million plus counterparts through the flow of urban-rural as well as rural-urban commuting and the mobility of no fixed place workers.

22.3.2 *State and Regional Patterns of Commuting*

A state-wise distribution of commuting workers shows some important spatial patterns. Eleven major states of India—Uttar Pradesh, West Bengal, Haryana, Punjab, Rajasthan, Gujarat, Maharashtra, Andhra Pradesh, Kerala, Tamil Nadu and Karnataka—account for 79.5 % of the total number of rural-urban commuters. These states are not only some of the most urbanised but they also have a large number of urban agglomerations.

Approximately 70 % of rural-urban commuters are located in Uttar Pradesh, Delhi, Rajasthan, Bihar, Gujarat, Madhya Pradesh, Maharashtra, West Bengal and the four southern states of Andhra Pradesh, Kerala, Tamil Nadu and Karnataka. Rural workers with no fixed place of work are concentrated in Uttar Pradesh, West Bengal, Jharkhand, Bihar, the four southern states—Andhra Pradesh, Karnataka, Kerala and Tamil Nadu—and Rajasthan (75 % of total rural, no fixed place workers). The states of Uttar Pradesh, Maharashtra, Tamil Nadu, West Bengal, Karnataka, Andhra Pradesh and Gujarat account for 65 % of urban workers with no fixed place of work. This state-wise distribution conceals some of the important spatial patterns of commuting across rural-urban boundaries.

To rank the states on the basis of the type of commuting across the rural and urban boundary, we look at the share of commuting workers as a proportion of the non-agricultural workforce in that state. In Table 22.5 we show the details of the distribution across states for rural and urban areas. Some of the major states, which have a higher share of rural-urban commuting workers (i.e. above the national level average) in their non-agricultural workforce, are Punjab, Haryana, Delhi, Kerala, Gujarat and Chhattisgarh, Jharkhand and West Bengal. On the other hand, states with a higher share of urban-rural commuting are Bihar, Rajasthan, Kerala, Karnataka, Madhya Pradesh, Orissa, Assam, Uttar Pradesh and some north eastern states (see Table 22.5).

³It is possible to compare these numbers because we are concerned with the distribution of urban-rural commuters across different types of economic activities in cities with a population above a million and other cities. If they were absolute numbers the comparison would not have been possible.

Table 22.5 Distribution of rural and urban non-agricultural workforce in rural and urban areas

State	Workplace location for rural residents				Workplace location for urban residents			
	Rural	Urban	NF	Total	Rural	Urban	NF	Total
Jammu and Kashmir	86.17	11.78	2.05	100	4.12	88.21	7.67	100
Himachal Pradesh	89.51	5.43	5.06	100	9.14	85.61	5.25	100
Punjab	70.92	24.75	4.33	100	3.12	86.64	10.25	100
Chandigarh	55.81	39.54	4.65	100	2.08	92.31	5.61	100
Uttaranchal	96	2.71	1.3	100	1.58	91.29	7.13	100
Haryana	70.47	23.14	6.38	100	2.55	89.16	8.29	100
Delhi	77.28	22.72	0	100	4.71	89.79	5.5	100
Rajasthan	90.2	6.38	3.43	100	9.99	82.6	7.41	100
Uttar Pradesh	86.12	7.06	6.83	100	6.04	84.68	9.29	100
Bihar	87.22	5.65	7.13	100	15.88	71.58	12.54	100
Sikkim	90.65	4.93	4.42	100	0.05	84.88	15.07	100
Arunachal Pradesh	92.75	6.65	0.6	100	15.34	82.14	2.52	100
Nagaland	92.14	6.09	1.77	100	9.97	81.37	8.65	100
Manipur	90.95	6.22	2.82	100	5.04	88.46	6.5	100
Mizoram	99.31	0	0.69	100	2.41	88.78	8.81	100
Tripura	92.1	2.76	5.15	100	4.43	87.61	7.96	100
Meghalaya	95.58	2.63	1.79	100	2.63	87.42	9.95	100
Assam	89.53	4.8	5.68	100	7.84	85.15	7.01	100
West Bengal	85.07	8.75	6.18	100	4.18	87.71	8.11	100
Jharkhand	74.29	9.27	16.44	100	3.35	80.66	15.99	100
Orissa	92.4	3.45	4.15	100	8.58	80.62	10.8	100
Chattisgarh	80.42	11.59	7.99	100	4.48	87.29	8.23	100
Madhya Pradesh	90.3	8.14	1.56	100	6.83	85.48	7.7	100
Gujarat	85.77	10.27	3.96	100	2.58	88.69	8.74	100
Daman and Diu	96.49	0.01	3.49	100	0	80.95	19.05	100
Dadra and Nagar Haveli	99.37	0.63	0	100	0	93.92	6.08	100
Maharashtra	90.04	7.25	2.71	100	3.74	90.3	5.96	100
Andhra Pradesh	91.91	4.24	3.84	100	4.3	86.88	8.82	100
Karnataka	87.88	6.92	5.2	100	5.86	86.87	7.27	100
Goa	83.91	11.71	4.37	100	3.77	84.23	12	100
Lakshadweep	84.22	0	15.78	100	0.2	90.5	9.31	100
Kerala	84.74	11.07	4.19	100	6.92	82.41	10.66	100

(continued)

Table 22.5 (continued)

State	Workplace location for rural residents				Workplace location for urban residents			
	Rural	Urban	NF	Total	Rural	Urban	NF	Total
Tamil Nadu	88.28	8.47	3.24	100	3.31	88.78	7.91	100
Pondicherry	82.85	14.21	2.94	100	3.13	92.84	4.03	100
Andaman and Nicobar	93.23	5.81	0.96	100	2.24	94.01	3.76	100
Total	86.73	8.16	5.1	100	4.94	86.95	8.11	100

Source Author's calculation based on NSSO Employment and Unemployment Survey 2009/2010

In what concerns workers with no fixed place of work in rural and urban areas, the principal states where they are located in the rural areas are Jharkhand, Chhattisgarh, Bihar, Uttar Pradesh, Haryana West Bengal and Assam, and for the urban areas the states are Jharkhand, Bihar, Chhattisgarh, Kerala, Punjab, Orissa, Andhra Pradesh and some of the north eastern states (see Table 22.5).

Next, we consider some of the regions that have a large share of commuters, from rural to urban areas or urban to rural areas or both. In the NSSO surveys, a region is defined as a statistical unit consisting of districts from the same state, with similar characteristics in terms of demographic, geographical or other related factors. The sampling done in the NSSO surveys is considered to be representative at the NSSO region level, which means that estimates of various indicators generated at this level are robust and are little biased as compared to the lower disaggregation of the micro data. In the 2009/2010 survey of employment and unemployment related particulars, India was divided into 87 regions comprising 618 districts and 35 states and union territories. Here we discuss some of the regions and the nature of commuting by workers in these regions.

There are two regions in Punjab—north and south—which are home to 7 % of the total number of rural-urban commuters in India. Both these regions have large industrial production centres located in Mohali, Jalandhar, Kapurthala and Amritsar for the northern region of Punjab and Ludhiana and Patiala for the southern region. Manufacturing and construction activities represent around 40 % of the non-agricultural workforce. The share of urbanisation in this region is also above the national average (based on estimates from the NSSO survey 2009/2010, it is 35 % as compared to the national average of 27.6 %). Thus the large share of non-farm employment as well as urbanisation are key factors in explaining workers' commuting.

In the eastern region of Haryana comprising Gurgaon, Panipat, Sonipat, Faridabad, Rohtak and Ambala, a large number of rural residents commute to urban areas. The proportion of rural-urban commuters is 27 % of the non-agricultural workforce in this region (as compared to the national average of 8.2 %). This region

alone comprises 6 % of the total number of rural-urban commuters in India, the prime reason being the proximity of India's largest urban agglomeration, namely Delhi, combined with efficient road connectivity (National Highway 1 or the Grand Trunk Road passes through these districts). Moreover, the industrial clusters in Panipat, Ambala, Sonipat and Gurgaon also attract workers who commute from rural areas.

In the north eastern region of Rajasthan, which includes Jaipur, Bharatpur, Ajmer, Sawai Madhopur and Alwar, both rural-urban and urban-rural commuting is observed. The share of rural-urban and urban-rural commuters in the non-agricultural workforce is 12 and 18 %, respectively, in this region (which is above the national average). This region has 3.7 % of rural-urban commuters and 4.8 % of India's urban-rural commuters. One explanation for rural to urban commuting is the proximity of Delhi and the big cities of Jaipur and Ajmer, whereas urban to rural commuting can possibly be explained by the marble industry located in the surrounding rural areas of Jaipur, Sawai Madhopur and Bharatpur.

In the southern region of West Bengal the existence of the Kolkata and Howrah agglomerations is the primary reason for workers commuting from rural to urban areas. The proportion of rural-urban commuters in the rural non-agricultural workforce is 11 % each for both the eastern and southern regions. In the eastern region which includes Birbhum, Malda and Murshidabad, the mining industry in Birbhum and the adjacent districts of Jharkhand (Bokaro, Dhanbad etc.) attracts workers from rural areas. Moreover, the industrial belt in the Durgapur-Asansol region also contributes to the large numbers of commuters from rural to urban areas.

In the industrial region of south east Gujarat we see higher levels of commuting from rural to urban areas (23 % of the rural non-agricultural workforce) whereas in the Saurashtra region urban to rural commuting of workers (10 % of the urban non-agricultural workforce) is more prevalent. In the coastal region of Maharashtra, which includes Mumbai, we see both large numbers of rural-urban and urban-rural workers commuting (21 and 5 % of the rural and urban non-agricultural workforce, respectively).

Among the southern states, the north western region of Andhra Pradesh, the inner southern region of Karnataka and coastal Tamil Nadu have a large share of commuters from rural to urban areas, which can be explained by the location of large urban agglomerations in these regions.

Kerala is considered an example of *desakota*, which is a mix of rural (*desa*) and urban (*kota*) characteristics (Pauchet and Oliveau 2008). In this type of region, both rural-urban and urban-rural commuting is observed. These patterns are confirmed by our findings in the context of Kerala.

For the depiction of the regional intensity of commuting by workers across rural and urban areas in India, we have made four maps at the NSS regional level for rural-urban, urban-rural and no fixed place workers in rural and urban areas (see Figs. 22.1, 22.2, 22.3 and 22.4).

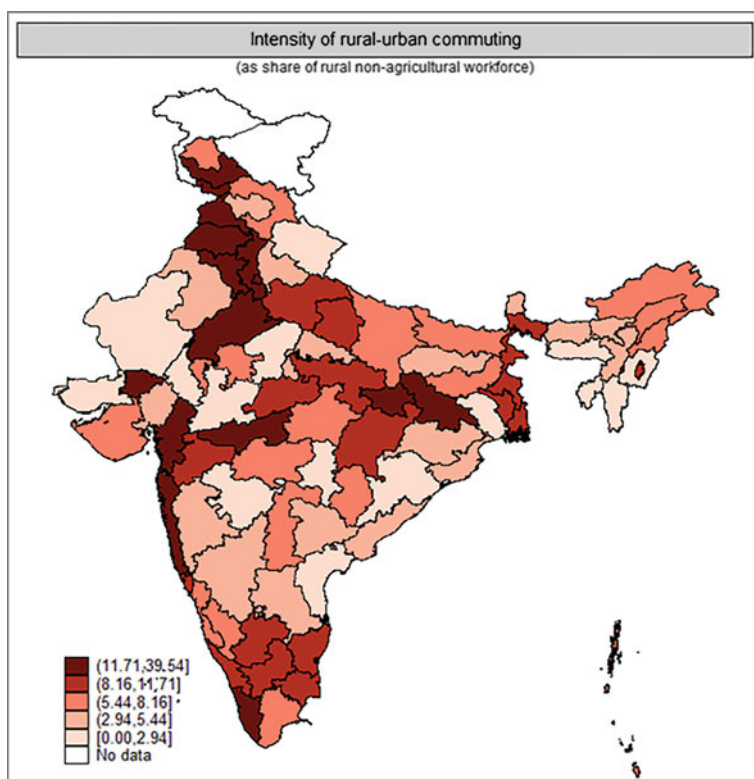


Fig. 22.1 Intensity of rural-urban commuting at the regional level (quantile maps). *Source* Author's work

22.4 Evidence from the Primary Survey

In the previous section we discussed the spatial pattern of commuting by workers in India. However, some of the important information regarding commuters is not requested in the NSSO survey. To complement the NSSO survey, we conducted a primary survey to collect information about the distance that commuters travel between their place of residence and their workplace, the mode of transport, the cost of commuting in terms of time spent in commuting and transport costs. Moreover, we also collected information about the expectations and perceptions of the commuting workers.

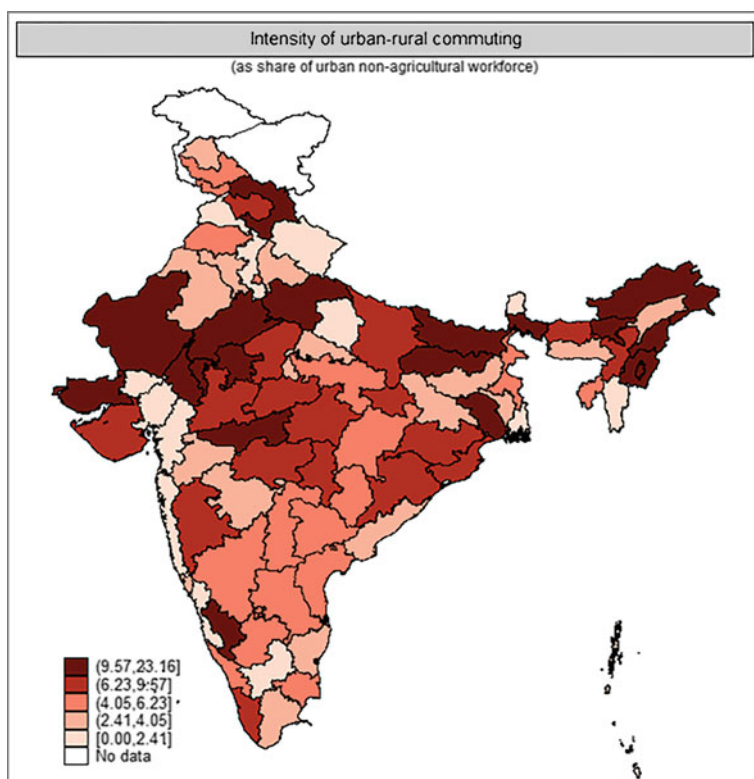


Fig. 22.2 Intensity of urban-rural commuting at the regional level (quantile maps). *Source* Author's work

22.4.1 Description of the Primary Survey

The primary survey was conducted from April to July 2014 in the Burdwan-Durgapur region of the state of West Bengal. As the scale of the study was not large enough to obtain a regionally representative sample, we considered three different locations in the Burdwan and Durgapur district to capture some of the diversity in the types of commuting by workers. The first location was the villages in the vicinity of Khana Junction (a railway station around 10 km from Burdwan). The second location included the villages around Panagarh Station (i.e. around 48 km from Burdwan and 17 km from Durgapur). The third location was the city of Durgapur.⁴ The first two locations are rural areas whereas the third is an

⁴Durgapur is a Municipal Corporation with 566,937 inhabitants as per the Census of India 2011 and is part of Asansol urban area, including Asansol, Durgapur, Ranigan, Jamuria and Kulti (Asansol-Durgapur Development Authority). It is also a prime industrial employment location.

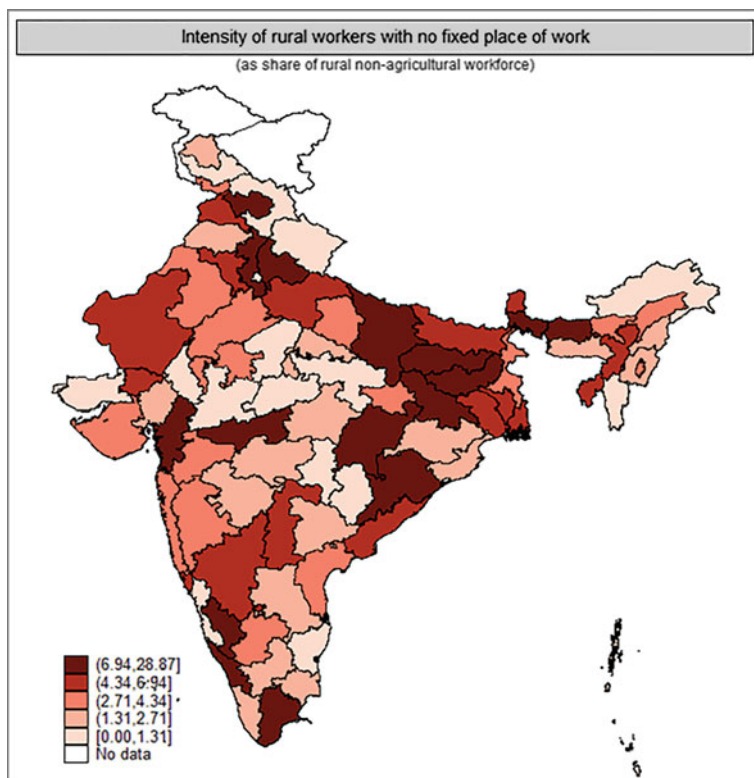


Fig. 22.3 Intensity of rural workers with no fixed place of work at the regional level (quantile maps). *Source* Author's work

urban area. Some of the households were surveyed in their village of residence and we also surveyed individuals at their workplace.⁵

Because the identification of the households with the commuting workers is difficult⁶ when conducting the survey, we adopted a combination of a snowball and purposive sampling method. A snowball sampling method involves conducting the survey through a chain of respondents. This type of methodology is also used for surveying migrants. In the case of purposive sampling, the target group is over-sampled in the survey to obtain a large enough sample. These sampling methods do

⁵Based on the residential location of households, we were able to match 43 villages to the Primary Census Abstract from the Census of India 2011.

⁶As we are not focusing on the representative sample of the commuters from the field survey, and are interested in understanding the situation of the commuters and their socio-economic profile, we have not used a random stratified sampling design. Moreover obtaining a large enough sample of commuters when the size of the field survey is small, becomes very tedious using the random stratified sampling method.

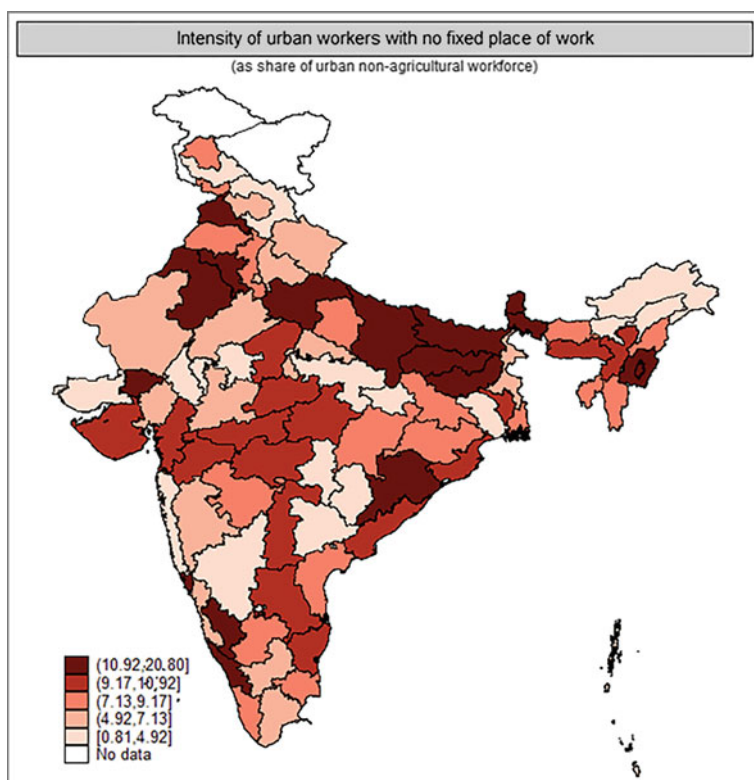


Fig. 22.4 Intensity of urban workers with no fixed place of work at the regional level (quantile maps). *Source* Author's work

not allow us to generate representative estimates for the surveyed region but they allow us to obtain answers more easily to questions pertaining to the survey target group.

The survey targeted 242 households comprising 1092 individuals. In our sample we have 421 individuals who are part of the labour force and 306 of them commute daily for work-related reasons. A look at the gender aspect of commuting by workers reveals that, out of 306 commuters, 36 (12 % only) were female. This number is similar to the findings of the NSSO survey as discussed earlier.

The average one-way distance travelled by commuters in our sample is 27 km, the minimum is 1 km and the maximum 180 km (Fig. 22.5).

The average time spent commuting was 51 min and the range was a minimum of 10 min to a maximum of 180 min. We also have information about the weekly frequency of commuting by workers. Around two-thirds of commuting workers travel six days a week and 23 % of commuters travel every day of the week.

A look at the economic activities of the workers and their choice to commute reveals that around 40 % of commuters are involved in transportation and storage

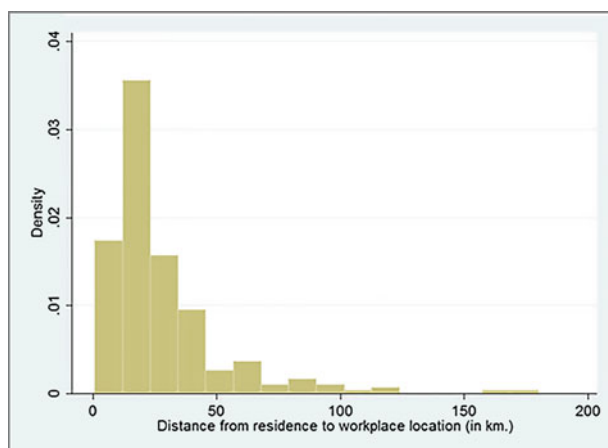


Fig. 22.5 Distance from residence to workplace location (in kilometres). *Source* Author's work

activities, followed by education, manufacturing and construction-related activities (Table 22.6). A significant number of workers are also attached to wholesale and retail trade activities. These results are coherent with the national level distribution of economic activities among commuters from the NSSO survey 2009/2010, with the exception of the transportation and storage sector (which mainly involves workers employed in railways, road transport and other local transport services) (Chandrasekhar 2011). Among non-commuting workers, agriculture is the main economic activity.

Apart from the survey, based on our observations and discussions with village authorities, we found that a large number of educated commuters were employed in three main activities: government sector jobs, private sector temporary or contractual jobs and contractual teachers in primary and secondary schools. This is also evident from Table 22.6. Among the rural-urban commuters there were government employees⁷ working in railways, banks and other government jobs; the private sector workers were mainly employed in medical shops, medical labs and marketing, which come under wholesale and retail trade activities. These were primarily rural to urban commuters. For the contractual teachers, the commuting pattern was from urban to rural areas or rural to rural areas. They were employed in either government or private schools in rural areas.

⁷From the NSSO survey we observed that among the urban-rural commuters there were a large number of government employees working in rural locations. These workers were largely employed in high-skill jobs in education, public administration etc. On the other hand, the workers mentioned here are largely at the lower end of the skill level and are mainly peons, clerks, mechanics, railway workers etc.

Table 22.6 Economic activities of the commuting workers

NIC classification	Whether workplace differs from residence location		
	Yes	No	Total
Agriculture	12	71	83
Manufacturing	40	4	44
Construction	31	4	35
Wholesale and retail trade	24	8	32
Transportation and storage	120	11	131
Education	43	6	49
Not available	36	11	47
Total	306	115	421

Source Author's calculation using the primary survey data

22.4.2 Mode of Transport

Beyond the availability of work and the wage level at the destination, transport connectivity and the cost of transport play a very important role in the decision to commute. In our primary survey we collected information about the sequential modes of transport (including last mile connectivity) used by commuters in their journey from their residence to their workplace location. We also asked about the monthly cost distribution across the different modes of transport used.

Not surprisingly, because of the selective samples we surveyed in the vicinity of railway stations, we find that railways remain the prime mode of transport for daily commuters, followed by the bus service. In the region where we conducted our study, road connectivity is very limited and the frequency of the bus service within rural and between rural-urban areas is low. Moreover, the cost of the bus service is very high in comparison to the railways. Although the average monthly cost of a season ticket for rail travel varies between 85 and 150 INR (approx. US\$2.24⁸), the cost of using the bus service is a minimum of 300 INR (approx. US\$4.5) and can be as high as 1000 INR (approx. US\$15) a month. Therefore among commuting workers, the railways remain a popular option as a mode of transport. For last mile connectivity between the place of residence and the railway station or bus stop, and from the destination railway station or bus stop to the workplace, commuters very frequently use bicycles. Generally, there is a bicycle stand outside the railway station where individuals either keep their own bicycle for a monthly rent or rent the bicycle from the owner of the stand for a monthly fee. Bicycles are a very popular mode of transport among the workers because they are cheaper than shared local transport or any other public transport in urban areas and this reduces their dependency on the timings of public transport. Another reason for the use of a bicycle instead of walking is that most of the villages are located 3–4 km from the

⁸At exchange rate 67 IRS per USD.

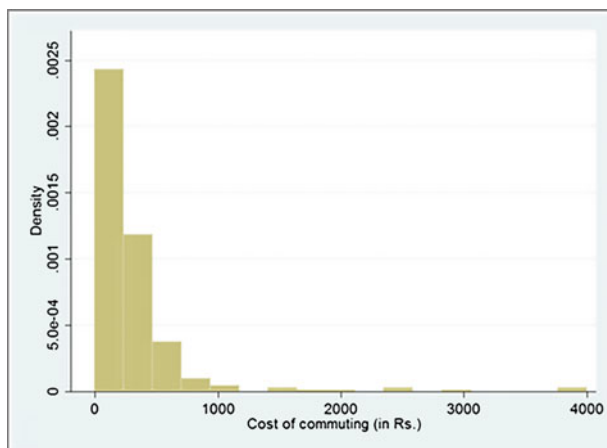


Fig. 22.6 Distribution of monthly cost of commuting (all modes of transport). *Source* Author's work

railway station and walking, especially in the mornings, can lead to delays in reaching the railway station or bus stand.

Apart from bicycles, the local bus service, rickshaws, shared local transport and owned vehicles are some other modes of last mile connectivity used by the commuters. The cost related to a bicycle involves the purchase or rent along with dues paid for using the bicycle stand. The cost of using the bicycle stand can vary from 40 INR per month in villages to 150 INR (approx. US\$2.24) per month in the city. In our sample, the average cost of transport for commuting is 314 INR (approx. US \$4.7) per month. The distribution of the total cost of commuting is provided in Fig. 22.6.

When commuters were asked about changes in their mode of transport over the past 5 years, only four respondents answered that they had changed their mode of transport, from public transport to their own vehicle. A discussion with the respondents indicated that the prime reason for such inertia is that not much has changed in the past 5 years as far as connectivity between rural and urban areas is concerned. This response suggests that local authorities have not taken any measures to improve connectivity between rural-urban areas or to create better connectivity between rural areas.

22.4.3 Seasonality of Commuting and the Job Search Process

In both the rural and urban labour markets, the commuters with no fixed place of work are affected by the seasonality of job availability. These workers shift across

jobs based on various factors ranging from local agricultural patterns, rainfall and other seasonal disturbances to other factors such as MGNREGA-related work. The NSSO survey does not focus on information pertaining to no fixed place workers and their job search process. To understand these workers' job search process better we collected information about them through questions and discussions.

In our survey region, one of the important features of the commuting pattern is the seasonality of economic activities among the commuters, which is linked to the agricultural seasons. During the crop sowing and reaping periods, a large number of commuters (mostly landless or marginal farmers) travel to nearby villages to work in paddy fields. They obtain regular employment during these seasons, which lasts about 1 month for each season. In the off-season for agricultural activities they seek employment in nearby towns or cities, mainly in the construction sector.

Finding a job in the construction sector depends on the supply and demand of workers, their skill levels and their willingness to do hard menial work for long hours. The commuters' job search process involves the following steps. Most of the commuters living in rural areas commute to the nearby town in search of work and gather at the junction points, which are part of the daily labour market. Workers meet employers at these junctions and, depending on the employers' requirements, the individuals are hired. These daily labour markets consist of not only local workers and commuters but also migrants.⁹ An individual who finds a job can earn 170 INR (approx. US\$2.54) as a labourer (unskilled) and 300 INR (approx. US\$4.5) for semi-skilled activities such as mason or carpenter. If a commuting worker is unable to find job during the morning window which lasts from 8 a.m. to 10 a.m., he returns home because he is very unlikely to find another job that day. Thus most of the commuters who are part of the informal sector do not obtain regular employment. In our sample, the average number of days a commuter manages to find work is about 15–20 days in a month. Most of these workers commute in search of work on a daily basis (including Sunday). From discussions with the commuters involved in construction work, we find that most of them do not like this type of work. They said they were willing to work in the nearby villages even if the wages were lower than those offered in town because of the long hours of commuting as well as the cost of transportation and the constant uncertainty of finding work on the daily wage labour market in urban areas.

For rural commuters, the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), provides an alternative and helps them work in their own village. It promises to offer 100 days of employment per household on demand. However, the ground realities are somewhat different. In the surveyed villages, even though most of the households had job cards and were eligible to

⁹With regard to daily labour markets in Navi Mumbai, Naraparaju (2014) provides a detailed analysis of the labour market outcomes for migrant workers.

access work on demand, they were not provided with enough work. In Satinandi¹⁰ (one of the villages where we conducted our survey), based on the MGNREGA¹¹ work records for the month of June, 2014, the number of workers engaged was 1626 and the number of person-days of work generated was 7749. This represents about 5 days work a month for workers who were engaged in the work. If we consider that every household in the village demanded work under MGNREGA, then the per household work generated under MGNREGA was only 5 days in a month. Under these conditions, workers preferred to look for other job opportunities in the village or in nearby areas or to commute to towns in search of work.

22.5 Discussion and Conclusion

This chapter analyses the role of commuting by workers in the process of rural-urban interaction. From the national level estimates of commuting by workers across the rural-urban boundary, we show that a sizable portion of the rural and urban non-agricultural workforce commutes to its workplace. The state and regional level analyses identify some salient patterns, which point towards the association between industrial concentration, road connectivity, location of urban agglomerations and intensity of commuting. We also show that manufacturing and construction are the primary economic activities that employ commuting workers, followed by retail and wholesale trade activities. One of the limitations of the NSSO survey is that it is limited to specific types of commuting. Hence, we conducted a primary survey, which provides important insights about commuters. Although there is an overrepresentation of commuting workers using railways because of the purposive sampling carried out near the railway stations, most of the commuters still preferred railways over the bus service (in the case of availability of both) because of the lower cost of commuting and the fixed timetable. We document that the commuting patterns are seasonal. During the agricultural season many of the workers commute within rural areas to work in agriculture fields, whereas in the off-season they commute to urban areas to work in the construction sector. MGNREGA plays a very limited role in affecting the pattern of commuting because of the minimal days of work the programme offers and the lack of regularity of the work provided.

Some of the policy implications of this chapter can be outlined as follows. First, commuting by workers can help bridge the gap between rural and urban areas. Instead of relying solely on migration flows, commuting by workers can act as a

¹⁰The total number of households in Satinandi was 1531 comprising 6564 individuals as per the Census of India 2011. The village has 2822 workers.

¹¹These figures were obtained from the online database on MGNREGA-related activities at the panchayat level. This data can be accessed at <http://164.100.129.4/netnrega/loginframegp.aspx?salogin=Y&state_code=32> for the year 2013/2014, district Burdwan, block GALSI-II and panchayat Satinandi.

potent strategy for policy makers and regional planners in the process of regional development. Second, commuting can act as an optimal strategy in reducing the spatial mismatch of skills and employment requirements in local labour markets. This point can be explained as follows. In rural and urban areas there is a documented difference in terms of workers' skills and education levels as well as a demand for specific types of labour. The rural areas have low skilled workers (such as agricultural and casual labourers) but there is demand for both highly skilled (teachers, doctors, jobs in banks and other government jobs) and low skilled workers in the rural labour market. On the other hand, the informal sector in urban areas requires low skilled workers, whereas workers are comparatively better skilled in urban areas. This spatial mismatch between the rural and urban labour market can be corrected through labour mobility. For this the policy makers would need to improve physical connectivity (roads and transport facilities) between rural and urban areas to encourage workers' commuting instead of their relocation. Lastly, the choice of commuting is a strategy that involves fewer risks because only the workplace location changes; the residence location remains fixed. In short, we can say that commuting is an important channel to encourage rural-urban interactions.

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Chapter 23

Non-timber Forest Products and Small Town Economies

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23.1 Introduction

Drivers of growth in developing countries seem to be large urban centres and a supporting rural, agricultural foundation. In this schema, what is ignored is that there are a large number of smaller urban centres—which do not qualify as cities nor are they truly rural—which contribute substantially to the country's development. These small towns have high growth, employment and economic stability thanks to innovative local technologies, small-scale value added product development and a local skill base. Some of these small and very small towns have grown because of a resource base dependent on their proximity to forests and access to ecosystem services of these forests. These ecosystem services are not only timber, but also Non-timber Forest Products (NTFPs).^{1,2}

Research has been done on the role of forests and NTFPs in rural economies. However there is very little work done on these small towns—described as such either in terms of population size, geographical area or in spatial relation to rural areas—and their relationship to NTFP harvesting, processing and trade. Because many such towns straddle the divide between rural (predominately agricultural, subsistence agriculture or forest-based economies) and small industrial towns (small scale manufacturing or service industries), their social structures and economic development differ significantly from those of large towns.

¹http://www.cifor.org/publications/pdf_files/infobrief/4407-infobrief.pdf; Edwards (1993).

²Also see discussion by Planning commission at: <http://planningcommission.nic.in/reports/articles/ncsxn/index.php?repts=ntfp.htm>.

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These towns' dependence on agroforestry may belong in the past: from small rural towns many have grown into economically significant urban centres (albeit still "small towns" in terms of population). The proximal and distal drivers of growth may be as varied as closeness to railway lines, crop intensification or new agricultural products, tourism, new found mineral deposits or industrialisation because of resources or government policy. Yet NTFPs were at some point a critical input to which these urban centres owe their growth and stability; what attests to this is the still ongoing livelihoods of communities living in or near towns which are often categorised as "tribals" and the evolved support systems that weave into a town's economic and social systems. For example, NTFP harvesters provide factories and local agriculture with manual labour outside the harvesting season; charities and NGOs, with financial support from around the world, exist to fight for their causes; money lenders and informal financial institutions provide immediate cash for weddings and house building, and animal husbandry by these communities provides food for the townspeople. These are just some examples, but these networks may provide one key to unlocking the dynamics of urban development.

Understanding how such towns develop and grow (or die out when their products are not used anymore or a skilled generation dies out) in relation to NTFPs would help in developing models for development policy, town and rural planning, zoning and strategic area development. It may also lead to understanding the seasonal ebb and flow of people into urban centres and the services and support structures they require as they move. An added output may be that this may also lead to understanding the "push" aspect of the push and pull that leads to unplanned urbanisation.

23.2 What Are NTFPs and Their Linkages with the Urban Economy?

NTFPs, sometimes also known in Indian government publications as Non-wood Forest Products (NWFPs) or Minor Forest Produce (MFP) are a wide range of goods and products acquired from forests. This terminology serves to differentiate such goods and products from the other commonly used forest product, timber or wood, the primary high-value commercial product obtained from forests. This terminology also highlights the fact that NTFPs are obtained from forests, not harvested from agricultural crops.³ Although many NTFPs are harvested for personal use and are part of a micro-level subsistence economy, there are many commercially exploited NTFPs in India. These include bamboo, Tendu leaves,

³NTFPs are a very wide group of species, both plant and animal, and used for an even wider range of purposes, from fodder to firewood, from decoration to religious artefacts, from medicinal plants to luxury edibles, from dyes to alcohol; building material for livestock to luxury material for the urban rich, NTFPs fit into all these categories. The species range from bamboo and cane, animals including insects, leaves of various plants, plant waxes and resins and many edible products including nuts, wild fruits, honey and seeds.

mahua flowers and seeds, sal leaves and seeds, lac resin, amla fruit, tamarind, chironji and honey. Many of these enter the national economy because of government price support which exists to provide some income to otherwise marginalised communities.

According to the subgroup report for preparation of the 12th Five-Year Plan, NTFPs harvesting is one of India's largest unorganised sectors, having a dependent population of about 275 million and an annual business turnover of more than 6000 crores INR.⁴ More important perhaps is that these NTFPs contribute to about 20–40 % of the annual income of forest communities.⁵

By definition, NTFPs are necessarily forest-based goods and hence occupations related to their harvesting and processing are specific to these rural locations, yet there are NTFP links that may impact a town's economy. Three that are explored in this chapter are:

- The value addition processes that take a harvested forest product and turn it into something useable is inextricably linked to urban economics. This process could range from presses that manufacture oil from seeds and fruits, drying and dehydrating units that turn leaves or other species into packable and storable goods, or even bale-making equipment that straps large amounts of material into easily transportable forms. There are also later (as in further down the chain) value chains which (for example) turn essential oils into perfumes or incense, or package and label them for urban consumers.
- Rural people who are NTFP-dependent may need to interact with a town's economic systems as a supplement to their traditional livelihood activities. This may be because of changing economic needs, changing levels of access to forest lands and goods, deforestation, or just urban growth which may engulf the areas in which they live. Given this dynamic, the present work demonstrates that though it may be minor in terms of financial flows (as compared to RIICO (see below) or the Mt Abu tourism industry), it is an important part of this urban centre in terms of the impact it has on rural development.
- NTFP collecting and processing is often gender based. If this is the case, women do the NTFP collecting unless it is dangerous and the men may work in urban factories in town.

Understanding this dynamic, and recognising its many facets; for example its seasonality, could help in policy and practical interventions to strengthen the small-town economies, protect rural landscapes, provide better quality of life and build on local assets. Should NTFP-based livelihoods be encouraged? Or is it better to see this as a small community indulgence or a minor cultural artefact and encourage harvesters to find other, more stable occupations?

⁴http://planningcommission.gov.in/aboutus/committee/.../enf/wg_subntfp.pdf.

⁵See Yadav and Basera (2013).

23.3 Research Location

These urban-NTFP links were explored in the town of Abu Road in Rajasthan state in western India. Abu Road is one of the five blocks in Sirohi district in south Rajasthan and is the railhead for the better-known hill station town of Abu Road 27 km away. The railway line is one of the main lines between Delhi and Ahmedabad. The railway line of Abu Road divides it into two halves. They are Bhakar (hilly) and Bhitrot (plain). Abu Road is located on the banks of river west Banas. There are 25 panchayats and 85 villages in this block. Although 50 % of the panchayat lie in the plains, the other half is dispersed in small, scattered clusters of houses situated on the slopes of the mountains and small valleys.⁶

Abu Road has a large industrial estate, part of the Rajasthan State Industrial Development and Investment Corporation (known as RIICO), with industries based mostly on marble and other stones, small scale cement plants, synthetic yarns and other small scale industries. It also has a railway diesel shed where a large number of people work. Abu Road also has a small but socio-economically significant Tendu leaves-based NTFP industry (Table 23.1).

Understanding the local climate explains the reason for agriculture here being seasonal and the need for tribals to find alternate livelihoods during the off season. Generally, the climate is hot and humid in the summer, with an average temperature of 40 °C with hot sandy winds. In winter, it is 7–14 °C, which is quite cold as compared to other cities in Rajasthan. During monsoon, the average rainfall is about 14–20 inches.

23.3.1 NTFPs Collected in Abu Road Block

Tendu leaves were amongst the most significant of the NTFPs harvested in the Abu Road vicinity. However, they were not the only ones collected by the local rural and forest communities.

Tendu Leaves: These are a major source of income from mid-April to May for tribal families during the off season, that is, when there is no other employment and nor general agriculture. It is the women and children who collect Tendu leaves, rarely the men. Collecting work usually lasts for 25–30 days depending on the availability and quality of the leaves. After collecting they pack the leaves into bundles of 50 leaves and sell them to the cooperative the same day. They get 75 INR for 100 bundles and in a good season tribals are able to sell 250–300 bundles per day.

Wax: Wax is collected from March to June (Dav and Kadaya) and December to June (Salat). The market price of forest wax fluctuates widely.

⁶The two halves of Abu Road, <http://governancenow.com/news/regular-story/two-halves-abu-road-block>. Accessed on 12 March 2014, 2.06 p.m.

Table 23.1 Population of Abu Road block in the 2011 Census

	No. of household	Total population	Total male	Total female	SC total	SC male	SC female	ST total	ST male	ST female
Total	43,041	224,404	116,769	107,635	25,171	13,161	12,010	114,360	58,019	56,341
Rural	25,232	136,676	69,911	66,765	6459	3389	3070	103,058	52,116	50,942
Urban	17,809	87,728	46,858	40,870	18,712	9772	8940	11,302	5903	5399

Source Census of India 2011

Puand: The Puand plant is used for animal feed and in coffee powder and is collected in November and December. This is collected by the entire family. The price is 8–10 INR per kg for the collectors.

Honey: Wild honey is collected in April, May, June and mid-July (before the rainy season).

Mahua: Mahua is collected during the end of March and April with the flowers being used to make alcohol and the seeds used for oil. However, Mahua trees have recently become rare in this area.

Beyond these specific species, there is also a more general collection of NTFPs such as dry and green grass collected for fodder and dry wood collected throughout the year for fuel. The firewood they collect is fallen from trees and the forest department allows people to take it.

23.4 Tendu Leaves in Abu Road

The present chapter focuses on Tendu leaves. The information gathered here is from interviews with 12 local tribal people—four men and eight women. Contact with these interviewees was made via an NGO operating in the Abu Road area Jan Chetna Sansthan. Other NGOs such as the Adivasi Tendu Patta Sangrahan Sahkari Samiti Ltd. were also contacted and provided introductions to local medical practitioners, block level government officials and schoolteachers.

Tendu leaf (*Diospyros melanoxylon*) is the second largest forest product in India after timber and is exclusively used in making bidi wrappers, bidis being the traditional cigarettes smoked all over South Asia and wherever there is an expatriate South Asian labour force. Annual production of Tendu leaves is around 300,000 tonnes.⁷ Madhya Pradesh is the biggest Tendu leaves producing state of India⁸ but most of the states which have forests have some Tendu leaves collecting activity (Table 23.2).⁹

Tendu leaves are collected from mid-April to May with a collection period of 20–25 days. The collection period was much longer earlier, but has notably shortened, this shorter period being credited to deforestation, especially to thinning and lack of re-growth of the Tendu trees. Tendu wood is useful for making pallets and cheap furniture and the trees are often illegally harvested.

Mostly women and children (rarely men) go to collect leaves in the forest. They go early in the morning at 5.30–6 a.m. and return home at 12 p.m. The leaves are bought home wrapped in cloth and once home they are packed into bundles with locally made plant ropes, 50 leaves making up one bundle. The whole family takes

⁷See Gupta and Guleria (1982).

⁸The average annual production of Tendu leaves in Madhya Pradesh is around 25 lakh standard bags, which is nearly 25 % of the total Tendu leaves production of the country.

⁹<http://mfpfederation.org/website/content/Tendupatta.html>. Accessed on 1 April 2014, 4.58 p.m.

Table 23.2 Production & Income of Tendu Leaves in Sirohi (Rajasthan)

Name of the forest range	Name of the unit of Tendu leaves collected	Number of standard bags collected			Average (3 years)		Income in INR			Average (3 years)	
		2011	2012	2013			2011	2012	2013		
Sirohi	Abu Road	1,764,201	3,208,274	1,079,600	2,017,358		1,311,111	1,451,000	511,000	1,091,037	
	Swarupganj	1,191,000	1,757,900	0	928,967		260,000	516,000	0	388,000	
	Pindwara	171,000	756,000	252,500	393,167		90,000	516,792	75,000	227,264	
	Total	3,126,201	5,722,174	1,332,100	3,393,492		1,661,111	2,483,792	586,000	1,706,301	

Source Information from office of the Add. Principal Chief Conservator of Forest, NTFP, Aravali Bhawan, Jaipur—2011 to 2013
http://rajforest.nic.in/writereaddata/tandu_patta_jaipur1.pdf

part in making the bundles, including the men. In the evening the women and children go to the cooperative office or the nearby collection centre to sell the bundles and the selling process takes place till 11 p.m. The role of the harvesters/gatherers finishes here.

An important point to note is the seasonality of this: the income incurred from Tendu harvesting sustains the tribal families during the agricultural off season when they are unable to support themselves through their rainfed agricultural work.

23.5 Auction by Forest Department

It was in the 1960s that governments realised the commercial value of Tendu and several states passed laws to “nationalise” the Tendu trade in the 1960–1970s, the aim being to ensure maximum revenue for the governments and better returns for the tribal collectors.¹⁰

In Rajasthan, Tendu leaves have been nationalised under the Tendu Patta Act 1974 (11 April 1974). Under this act the collection and marketing of Tendu leaves are given in advance to the agent to collect and sell them to the buyer. From 1984 this law was changed. The buyer was given the direct charge of collecting Tendu leaves by taking lump sum of money from the buyer as royalty through tender.¹¹

The way this process works is that the forest department invites sealed tenders of lump sum amounts for collection and extraction of Tendu leaves. Those who are registered under the forest department can bid in these. The successful bidders, namely those who give the highest royalty, are appointed as licensees to the units purchased by them. The licensees collect, process, transport, store and sell the Tendu leaves at their own cost. The bidder who gets the license publicises the bid and announces that the harvesters have to sell the Tendu leaves to them. The forest guards also ensure that the harvester sell their bundles to the licensees.

Prior to 1998, any traders who are involved in the Tendu trade and registered under the forest department (from and outside Abu Road) used to bid for Tendu leaves. Most of these were from outside the Abu Road area but from 1998 the highest royalty was given by Adivasi Tendu Patta Sangrahan Sahkari Samiti Ltd (Tendu leaf cooperative) which gets the tender to collect, process, transport and store the Tendu leaves of Abu Road. The cooperative is a response to three main problems: (1) the very low price paid by the traders, (2) the rejection of the leaves under claims that the leaves were not up to mark and (3) many times the harvested leaves were taken and were not paid for.

This cooperative was formed in Abu Road by a local NGO, Jan Chetna Sansthan (JCS), who, on working with the tribals of this area, found that they used to pawn

¹⁰<http://www.indiaenvironmentportal.org.in/content/9732/the-Tendu-leaf/>. Accessed on 1 April 2014, 4.58 p.m.

¹¹<http://www.rajforest.nic.in/writereaddata/Tendupatta.pdf>. Accessed on 9 April 2014.

their gold and silver jewellery for small loans from the moneylenders at a very high rate of interest ranging from 60 to 120 %. Their initial work, from 1990 to 1993, was to help people retrieve ornaments worth 1,650,000 INR. When working on this issue, many other problems of the tribal people came to light, one of which was the low rate of payment for Tendu leaves; they used to get 4–5 INR for 100 bundles. In 1992, JCS started working on procuring better rates for the Tendu leaf collectors by organising the workers to boycott and stop collection until they created the Samiti.

However, in the early years the cooperative was unable to support itself and 1995 Swiss Aid was impressed enough by the movement to want to fund it. However, the cooperative members decided that they would take the money only if Swiss Aid was willing to see the money as a loan and repay the money, the idea being that if the cooperative did not learn to be self-sufficient it would not survive. After some negotiation, Swiss Aid accepted this and provided 15 lakh INR as a loan with a yearly interest of 4 %. The loan was paid back in 3 years. Jan Chetna Sansthan meanwhile provided the cooperative with training and there are now 42 tribal members in this cooperative who look after the day-to-day activity of the cooperative, and even the board members of the cooperative are from among the tribals.

The cooperatives collective force has succeeded in getting a better price every year for the Tendu leaves harvesters. In 2011/2012 the forest department's rate for a standard bag (per 1000 bundles) is 625 INR. However, the cooperative fixed the rate as 650 INR for the standard bag. In 2012/2013 the price for one standard bag was 750 INR.

Every day during the season, 4000 tribal Tendu harvesters come to the respective collection centres and sell Tendu leaves. The collection centres are set up wherever there is a large open property. Usually this is in one of the tribal villages where a fallow field is used; however, sometimes areas in Abu Road such as the industrial estate are used. When the centre is some distance, the cooperative bears the transportation charges. After this the cooperative starts processing and packaging the Tendu leaves. All the traders in the area now know about the cooperative so they do not deal with individuals.

The cooperative employs the same harvesters to process the collected leaves. After procurement of the leaves from the harvesters the leaves are dried in fields for 7 days on each side and any damaged leaves are removed. The dried leaves are then divided into bundles of 200 leaves. These are then wetted by sprinkling water on them and dried again. After this, packing starts at 8 p.m. so that the leaves do not lose their quality. Before packing the leaves are kept in airtight bags. These are then packed in large jute bags which are stored in a dark and dry place.

Throughout, collecting, negotiating prices and processing is all done by the local tribal communities and for the final packaging the cooperative hires labourers from Gondia, Maharashtra, who are experts in such leaf packing. These labourers camp in the industrial estate or are provided with short-term accommodation by the cooperative. They do stay beyond the time needed for the packaging process which may be 1–2 weeks.

23.6 Seasonal Work and Cyclical Income Streams as a Reflection on Socio-Economic Transition

Geographically and sociologically, Abu Road town and its environs is divided into two halves, the Bhakar (hilly) and Bhitrot (plain) parts. In the plain area there is good supply of agricultural water thanks to a system of dams and reservoirs. The plains people farm from August until March and they cultivate wheat, pulses (pigeon pea, black gram), fennel, castor, vegetables such as carrots, okra and corn. On the higher hilly land, rain-fed agriculture is practised and the farming is mostly around the rainy season, from July to October. They cultivate chola, corn, urad dal (black gram) and tuar dal. This sustains them for 2–4 months. Women are more involved in such fixed agriculture than men. Most agricultural products are sold in Abu Road markets.

The men, on the other hand, go for wage labour in the RIICO industrial area. This is an industrial area set up by the Rajasthan State Industrial Development and Investment Corporation, a Rajasthan Government industrial development agency. RIICO is mainly engaged in site selection and acquisition of land to set up industrial estates for small, medium and large-scale projects and has developed about 327 industrial areas so far. RIICO also acts as an investment agency and provides technical consultancy.¹²

As the tribals do not live in Abu Road town, they travel from their villages up to 25–30 km away to this industrial estate where they work for daily wages in the marble and granite industry, powder plants which manufacture base material for dyes and tooth paste or the Bhansali Polymers plastic bag factory. Women in the area generally work as construction labour rather than in the industrial area. Work is not always available but when they do get work they earn anywhere from 200 to 300 INR per day.

An interesting aspect here is the seasonality of the urban-rural connection, which is dependent on seasonality of NTFPS. Before the RIICO industrial estate came along, the communities used to stay in rural-based work: both men and women along with their families used to travel to Gujarat in March and April to work as agricultural labourers. They again travel to Gujarat for 15–20 days during the Bajara harvest season—the end of June—which is a bumper crop in Gujarat. Once the estate was developed, the migration was much smaller and most preferred to work in much closer RIICO than travel to Gujarat (Table 23.3).

This seasonality is also reflected in the income streams. On average, according to interviews, if a family sells 300 bundles in a day then it gets 225 INR in a day. So if they collect Tendu leaf for 20–25 days the income earned is 4500–5625 INR. As compared to other sources of income, it corresponds to around 22.5 % of the total family income (Table 23.4).

¹²<http://www.riico.co.in/> seen on 30/3/2015.

Table 23.3 Monthly work cycles for men and women

	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Men	Wage labour	Wage labour	Wage labour	NTFP collection	Tendu leaf drying and packing, wage labour	NTFP collection	NTFP collection	NTFP collection, agriculture, wage labour	Agriculture, wage labour	Agriculture	Wage labour	Wage labour
Women	Agriculture, NTFP collection	Agriculture, NTFP collection	Agriculture, NTFP collection	Wage labour, NTFP collection	Tendu leaf collection	NTFP collection	NTFP collection	Agriculture	Agriculture	Agriculture	Agriculture, NTFP collection	Agriculture, NTFP collection

Source Author

Table 23.4 Income sources of an average family

Income source	Months involved	Wages income	Yearly earning (INR)	Percentage (%)
Tendu leaf	One month (20–25 days)		4500–5625	22.4
Agriculture	5–6	–	2500–3000	11.9
Other NTFPs	Seasonal	–	1000–1500	5.9
Wage labour	5 (15 days a month)	200 INR per day	15,000	59.8
Total (based on highest earnings)			25,125	100

Source Gathered from the people interviewed

This small exercise confirms how, as a town, Abu Road's economy is mainly dependent upon three sources.

The first is the RIICO area. Not only the local full-time workers but also the people from nearby villages and Mount Abu come here to work in the industries, related construction sites and the quarries. RIICO also processes much of the stone quarried in the region.

The second is tourism and transport. Being a railhead and a tourist hill station for Mount Abu, there is much travel and tourism-dependent work including the western railway shed which requires both technically skilled and purely manual labour. There are staff and service people needed for the hotels and local transport up to the hill station. One of the main service "industries" in the area is the headquarters of a large religious institution, the Brahma Kumaris; their residential complex and an educational institutions are situated in Abu Road, and this brings in tourists from India and abroad. However, except for a few, the tribals do not work with the Brahma Kumaris as there is some feeling that the land the Brama Kumaris have built on was obtained from uneducated tribals using unfair practices. However, this was reported by one of the NGOS and could not be confirmed by either side.

The third income stream is agroforestry. As was seen earlier, the Tendu leaf collectors earn up to a quarter of their annual income from NTFP collection, with the rest coming from working at the RIICO estate.

23.7 Discussion: Are NTFP-Small Town Links Worth Exploring?

It is now well-accepted that NTFPs generate sustainable income for food and livelihood security. However, the picture drawn by this quick exploration of the Tendu leaf harvesting and trade in a small town in Rajasthan show what the connections are with local businesses and industry, both service and manufacturing. There is a large class of people who gain food and livelihood security from a

combination of NTFP harvesting, processing and other activities. There are connections with the larger international world: expert packers come to the town to work on packing leaves which then take train and trucks to other states where they are converted to export quality goods. When smokers abroad reduce their use of bidis, the tribals of Abu Road feel it.

The factories of RIICO use the manual labour provided by the off-season Tendu leaf workers. In turn, RIICO has prevented the biannual (twice a year) migration of these workers to other states where they would work as daily waged agricultural labourers. The close proximity of the industrial estate in Abu Road allows the tribals to live off their own agriculture for the rest of the time and to continue with their traditional lifestyles. The other option would be to move to the larger cities and seek longer term work as migrant labourers. So it could be said that RIICO, along with the more rural livelihood activities, is correcting a tendency to urban migration. Because Abu Road has limited employment opportunities—religious tourism, the train yard and mining—the other option is moving to bigger cities in Rajasthan or other states. It is worth noting that RIICO, rather than destroying traditional rural lifestyles, as industries are perceived to do, is actually supporting the tribal subsistence agriculture/forest livelihood lifestyle, preserving communities and their lifestyles.

The dynamic tripartite links between NTFP collection, seasonal agriculture and an industrial estate can illustrate or even serve as a test case to see which of the links are most resilient to change and which would benefit from a strengthening, depending on what policy framework is in place. For example, if Rajasthan develops a policy of strengthening small-scale agriculture via providing borewells to previously solely rainfed areas, would this diminish the available labour at RIICO? On the other hand, if the state pursues a policy of aggressive industrialisation via supporting small industrial units, would Tendu leaf collecting die out? Alternatively, if it is decided that preserving and providing support for traditional cultures and livelihoods is important (perhaps as a way of preventing unplanned urban migration and the resulting slum creation), what would the appropriate policy be?

The next step to understand this triangle would be to map it more clearly as a network. Such a map would show weak points, links and nodes where interventions, both positive and negative, have had or could have impacts. For example, it may be interesting to see how critical is the role of the NGOs? A useful part of such a mapping project is that it could indicate where interventions—such as technology, financial including guaranteed minimum prices or increase in transport connectivity—could be directed to have maximum impact on forest-dependent communities.

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