Advances in Asian Human-Environmental Research

Hari Mohan Mathur Editor

Assessing the Social Impact of Development Projects

Experience in India and other Asian countries



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Assessing the Social Impact of Development Projects

Experience in India and other Asian countries

Development projects may no longer unintentionally inflict poverty on those in their path. This book will help us understand the social impact assessment (SIA) methodologies that have emerged to anticipate and alleviate human costs which are often unavoidable in the development process. This landmark volume has earned an honoured place on my desk.

Theodore Downing, President, International Network on Displacement and Resettlement (INDR) is Professor of Social Development, University of Arizona

Professor Hari Mohan Mathur has assembled an excellent set of chapters focusing on SIA experience in Asia. With the new land acquisition and resettlement law in India effective since 2013, SIA is now a central requirement for development planning. Whether required by law or not, SIA improves development outcomes and delivers benefits to impacted communities, project proponents and regulators. This book provides a much-needed contribution to the growing field of SIA. I highly recommend it.

Frank Vanclay, Past Director of the International Association for Impact Assessment (IAIA) and is Professor at the University of Groningen

This volume is a significant contribution to Social Impact Assessment studies. In India and several other Asian countries, SIA is now slowly gaining acceptance as a tool for planning better development. Analytical, yet jargon-free, this book is bound to become an indispensable reference guide for development planners, practitioners, social scientists and students everywhere, not in Asia alone.

Yogesh Atal, former Principal Director, Social and Human Sciences, UNESCO, Paris, is currently with the Indian Association of Social Science Institutions (IASSI), New Delhi.

Easily readable, this outstanding volume on social impact assessment comes at a time when it is needed most. While interest in the subject is growing, no other book

that addresses SIA issues in the Asian context exists. For policymakers, in particular, this book should be an essential reading.

Hafiza Khatun is Professor in the Department of Geography and Environment, University of Dhaka, Bangladesh

Foreword

Social Impact Assessments and Safeguard Policies at a Fork in the Road: The Way Forward Should Be Upward

Michael M. Cernea

Social issues, risks, and negative impacts are often neglected in development decision-making. When the architect of this volume, Professor Hari Mohan Mathur, started its preparation a couple of years ago, SIA issues weren't at all a "breaking news" item on the screens of development agencies or private sector corporations. Nonetheless, confident in SIA's importance, he proceeded. Today, this highly valuable book, with contributions from an array of leading scholars and practitioners, represents a rich resource on SIA for governments, policymakers, planners, development agencies, private sector industry, and teachers and students of development everywhere.

Being deeply concerned by development's negative impacts, I was delighted to accept the editor's invitation to write an overview and commentary on the current international status, trends, and practice of SIAs as a foreword essay to this volume. The current context of recent and ongoing events makes this book even more necessary than could have been anticipated several years ago. The destiny of social impact assessments is part of the ongoing worldwide debate around safeguard policies that searches for improved methods to anticipate development's effects and increase the safeguards against its risks and negative impacts.

SIAs and Safeguard Policies Are Twins

Both as concept and as methodology, "social impact assessment" has become over the last 50 years a classic chapter of social theory and a widespread activity in applied social science practice. It has acquired academic respectability; it is described in handbooks and taught in countless university courses.

However, the relatively calm seas upon which SIA has been floating became more turbulent recently. What appeared to be accepted and increasingly validated in practice has started unexpectedly to be challenged through a series of cascading and surprising events. I'm describing these events as, first, "cascading" because first,

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they've evolved in rapid succession in the last 2–3 years and, second, "surprising," because some of these events go *against* the dominant consensus on the necessity of SIA as a premise for all planned development programs. Specifically, the use of SIAs suddenly started to be questioned or reduced. At times, paradoxically, it is myopically maligned as a "competitive disadvantage"; in one major agency, the World Bank, it was even "retired" without replacement in current use. Attempts to limit the use of SIA go hand in hand with the misguided attempts to dilute and dislodge the social safeguard policies from their position as *policies* guiding international and national development.

I'll review further in this foreword some of these ongoing contradictory trends. But I'd like to stress from the outset that SIAs and the safeguard policies, by their nature, content, and function, are *twin policy* and *operational tools*. Thus, what affects one usually does affect the other too. The safeguard policies are refined forms of social assessment writ large, as they are specialized tools to identify, assess, and counteract some specific risks and sets of negative effects of development. And they serve to *prescribe sets of counter-risks norms and material measures* (preventive and curative), deemed apt to counteract the risks before they morph into actual impacts. Reductions in the status and use of either tool result in mutually reinforcing unhealthy effects.

The trends I'll examine further are mixed and contradictory; some are positive, as India's newly adopted SIA and Land Law and the new laws in Brazil, Guatemala, China, and other countries. Other trends are weird, puzzling, and negative, like in Indonesia, or at the World Bank, that is now critiqued worldwide for pushing "safeguard policies" out of its catalogue of official "operational policies" (OPs). In contrast to the bank, a highest stature agency as UNDP crafted and introduced in 2015 in practice, first time, its own "Social and Environmental Principles and Standards" (SES) that include *Human Rights Principles* and defined them explicitly: "The SES are UNDP Policy."

What is happening? Why are such opposing trends going on simultaneously?

A Metaphorical Fork in the Road

At close scrutiny, this ongoing international debate appears to have different drivers, vectors, and forms in different countries or development agencies.

First, I will start this overview with the "state of the SIA art," pointing both to new advances and recent setbacks in SIA's institutionalization. In doing this, I'll be using as a lens the proverbial *fork in the road* as the metaphor for the critical point where a choice must be made on whether to increase or decrease the level of protection offered through laws and mandatory policies against the risks inherent in certain development projects. I am assuming an invisible fork in the road that governments and agencies are facing when they must decide on risks they are knowingly imposing on people and on what safeguards they regard as their duty to provide to those negatively affected.

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In my own interpretation of this *fork in the road* metaphor, one of the roads leads *upward*, as when states and agencies adopt legislation that mandates SIA and safeguards as indispensable for proactively protecting against negative impacts. The other road goes *downward*, as when norms for carrying out SIAs are avoided, or diluted, or bypassed and not enforced: this reduces the protections morally due to those hurt by the negative impacts of some projects (even if other people might benefit from the same projects). This vector must be defined as *downward* or as going *backward*.

Legislating SIA is a strong commitment: political, institutional, and financial. However, many national governments, public agencies, or private corporations openly or surreptitiously bypass the social assessments. They do so because they are *willfully* transferring costs and certain risks of development either upon specific groups or to the society at large.

Economic science has a well-defined concept – cost externalization – for such behavior. Sound economic theory – and ethics – banishes externalization. Yet in the real world, such externalization is being practiced widely. Disingenuous attempts to deny or camouflage it are legions. This volume on SIA continues the battle against risks and externalization of costs.

The majority of states in the developing world do not yet have at the present time domestic laws mandating SIA and social safeguards (i.e., they do not have "country systems" to substitute for international safeguards). Therefore, many private projects and public projects in such countries can easily avoid mitigation and continuously externalize risks and costs on the public at large. By and large, in African countries, SIAs are used much less in government-supported domestic projects than in Latin American countries. The latter are characterized by a higher frequency in applying SIAs in development projects. Progress is made, but rather too slow.

In sum, this means that the "fork in the road" and its hard dilemmas are not confronted in Asia alone, but are mirrored in various ways in non-Asian countries too. This is another reason the lessons distilled in this book are of great interest for many countries beyond Asia too.

This Book's Central Message

This book's *central message is that impact assessment is indispensable*. It is here to stay.

Any government or project that diminishes the role of SIA – to put it in polite academic terms – lags behind the knowledge bar and the ethics required today for managing development soundly. Speaking in more colorful jargon, any government or agency that chooses to bypass or ignore SIA, or go "SIA-lite", would be shooting itself in the foot.

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Hari Mothan Mathur has captured this message concisely. He writes up front: "SIA is essentially an aid to understanding beforehand the likely social repercussions of embarking on a new development project." (See, in this volume). Affirming the same idea, a book coauthor, Shekhar Singh, opens his study with a strong straightforward statement: "The social impact assessment is the most fundamental of assessments for all development, infrastructure, or commercial projects and activities. It endeavors to assess the impact that any project or activity is likely to have on society...[It] goes beyond mere outputs and assesses the possible social outcomes." (Singh, pp. 80)

Risks' Identification Must Be Candid: Calling a Spade a Spade

Impact assessment requires, first, the detection of potential risks. A hallmark of this volume is the open discussion by its coauthors of various risks that may be hidden in a project's design or might surface during its implementation. Risk disclosure in projects requires revealing the risks' roots and content, both to warn the risk bearers and for building explicit counter-risk measures. By sheer definition, the term "identification" calls for the transparent and candid *naming of each risk* according to its substance, like in the case of population displacement: the risk of landlessness, or the risk of joblessness, or of food insecurity, or of social disorganization, or of homelessness, and others (Mathur 1998, 2006; Scudder 2005; Cernea 2000).

Conversely, not labeling the risks with their true name is dishonest and unethical, since it leaves risks publicly *unperceived*. It disarms affected people by not preparing them to act. Nevertheless, many governments and agencies avoid openness on risks; they don't name risks by their content. They tend to speak only about a project's benefits, but not about the same project's risks. This is tantamount to avoiding calling a spade a spade.

Avoidance of candid *risk anticipation* and *naming* through SIAs means to willfully obscure the risks' toxic content. Such avoidance is cowardly, lacks dignity, and is immoral, because nontransparency means leaving affected people not properly informed. This is not a matter of complex philosophy: sheer semantics tells us that risks' identification *requires first and foremost defining the risks*. In practice, it is only when a given risk's content is clearly defined can its *intensity/degree* be realistically assessed, understood, and counteracted by all concerned.

Equally pernicious is to deliberately avoid, or even just not consciously ask, the crucial question: Whose risks are these? Risks to whom? Each project has different categories of risks: some are risks to the project's *owners* (public agencies or private entrepreneurs); others are risks to *the people* adversely affected. This is where SIA as a precautionary methodology serves as an analytical lens for risks and a roadblock to obscuring the risks' origins. And this is precisely why it is necessary for each project (for an excellent SIA textbook, see Vanclay 2014; Cernea 1991).

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An Unusual Step Back: The World Bank "Retires" Its SIA Policy

I'll now shift this overview to a bizarre recent event regarding the status of SIA in international development practices: the "retirement" in 2013 of the World Bank's policy guidelines on social assessment, which were an organic part of the bank's official policy on "Project Appraisal": OMS 2.20 (World Bank 1984). This so-called retirement is part of the current turbulence in the status of the SIA art: it still remains largely unknown to many SIA specialists outside the World Bank and thus is of direct interest to this book's readers.

How did the World Bank take that bizarre "retirement" step?

In 2013 the World Bank decided to compress 13 of its operational policies into one single document. Among them was the key bank policy on "Project Appraisal" that guides bank staff on the set of mutually complementary analyses (economic, financial, social, technical, a.o.) indispensable to ascertain the readiness of a new project for the board's approval. That document had a distinct and detailed chapter that outlined the bank's *framework for sociological appraisal* (Cernea 2015). This was the bank's own version of SIA; more than *only* anticipating impacts, it also aimed to generate the knowledge and impetus for imprinting into the content of bank projects a proactive *orientation to social goals* as well, not only goals of an economic growth nature. For 40 years – since the bank's founding in 1945 until 1984 – such social appraisal was *not* part of bank policy and toolkit. Only in 1984 did bank management decide to make it a general rule for all projects.

For understanding the intricate dialectics of changing policies – upward or downward – it is worth emphasizing that in 1984 the then bank management issued the social appraisal policy not just by *fiat*, but only after 3 years of in-house intellectual debate, during which the arguments for social analysis of projects clashed with strong resistance, each side engaging opposed development philosophies. Having been then the main proponent and the writer of the new social appraisal guidelines, I know firsthand how strong was the in-house resistance to this change, because the economic reductionism mind-set was still powerful in the bank then. Introducing sociological appraisal as a new concept and analytical tool into the World Bank's instrumentarium became possible only as outcome of open debate and intense advocacy for reform. The argument that the World Bank needs and must conceive projects that are deliberately *socially and culturally adequate to the local population* started as an uphill effort, yet it finally prevailed.¹

Introducing the *social* appraisal in its thinking and practice became a game-changer in bank staff's mind-set and work. It modified the bank's paradigm conceptually and operationally, by committing the bank to recognizing the basic sociocultural variables of development: it nurtured new thinking patterns. The bank set itself new tasks and aspirations in project-making to account for the *characteristics of the local*

¹For a historical retrospective, documented in detail, of this in-house World Bank debate, see Cernea (2015b).

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societies within which its projects were implemented and to knowledgeably include the social factors and variables of development in the components and driving mechanisms of its financed projects. Before 1984, not just the World Bank but none of the other multilateral agencies had this kind of policy and analysis in their books. After the World Bank introduced it, all other multilateral banks did the same.

Through a set of new requirements and social provisions, that policy became one of the key levers that lifted the bank's projects from the narrow pursuit of economic growth to the broader objectives of *integrated social development*. Over the next decades, "social assessments" passed the tough tests of bank and countries' practice with flying colors. An unanticipated yet widely convincing proof of the utility of sociological appraisals emerged when the Soviet system collapsed and the former Soviet republics became en masse member countries of the Word Bank. For all intents and purposes, the staff of the World Bank knew literally nothing about these new countries. Yet it had to learn very fast and help produce immediately development projects to assist in the economic reversals and transitions of these countries. That historic moment made incontrovertibly clear that the social assessments was the tool of choice for gaining the knowledge to attune the projects providing economic support to the social and political realities of these new bank member countries (see vol. *Social Assessments for Better Development*; Cernea and Kudat 1997).

Fast-forward now to *the outcome* of the 2013 "consolidation" of OPs and the bank's ongoing revising of other safeguards too. The lessons on the usefulness of sociological appraisal of projects were suddenly forgotten during the "consolidation": its product was a new document, *OP/BP 10.00 Investment Project Financing* (World Bank 2013), issued with a note laconically informing that the bank's Project Appraisal policy (OMS 2.20), together with other OPs, was – verbatim – "retired." That note stated that their content was included in OP/BP 10.00. However, at a close examination of the new document, it turned out that the assertion about content transfer was untrue and biased against the *social* guidelines. The provisions for economic and financial analysis of projects were of course transferred and maintained into the new OP/BP 10.00. But no substantive content from the prior guidelines on sociological appraisal was reinserted in the guide for "investment financing." All content-specific provisions for SIA were tossed out of the rewritten 2013 requirements for preparing and financing the World Bank's development investment projects.

Was the bank's own large community of professional social specialists consulted on this brusque withdrawal of the social guidelines? It was not. The "retirement" came as a shock to many bank staff too.² After 30 years of successful SIA practice, the World Bank suddenly left itself with no detailed mandatory operational policy

²The vacuum created by the "retirement" of the bank's policy on social appraisal surprised and caused high concern across the bank's social specialist staff. This social community scrambled to put together a substitute. Laudably, they initiated and prepared an "Interim Guidance Note to Staff" with guidance for carrying out SIA as part of another safeguard policy, the bank's OP 4.01 for Environmental Assessment. A draft note titled "Inclusion of Social Aspects during the Application of the OP 4.01" was proposed to the bank's OPSVP Vice-Presidency in charge with bank policies (which in fact had initiated that wrong "retirement" too); yet OPSVP refused this option offhand; that "draft" remained to this day a "draft."

for social impact analysis as an organic part of its project work. The implausible, outright ludicrous excuse given for "retiring" this policy was "to modernize operational policies and procedures." Surely, the bank's social appraisal policy needed updating and improvement, which is the polar opposite to biased elimination. Pretending that "modernizing policy" requires retiring the bank's only SIA tool defies development logic. We may respectfully ask the drafters of this excuse: by whose philosophy, inside or outside the World Bank, is social analysis in conflict with "modernization of policies and procedures"?

SIA and Human Rights

Today, to genuinely "modernize" the bank's impact assessments tools would primarily mean to expand the bank's SIA to identifying impacts that violate human rights. A policy for preventing human rights violations under bank projects is still missing - in 2015 - from the World Bank's policy architecture. The broadest public demand from World Bank's management is to self-correct this historic lacuna, not to lamely excuse it by invoking the bank's "articles of agreement" of 70 years ago: 1945. Upholding its Articles of Agreement does NOT ask for bank passive tolerance of atrocious HR violations in the execution of its financed projects, occurring often even within the projects' perimeters, under the eye of the bank. The absence of a certain policy is policy by default. Refusing the clear-cut statement that universal human rights violations are incompatible with bank financing of development means tacitly to tolerate, hold its nose, and practically turn away its gaze from such basic rights violation. I hope that the World Bank will have the wisdom to reconsider the "retirement" of its one operational policy on project social analysis and impacts and reinstate SIA to its foothold as normal and indispensable. In fact, SIA is the adequate policy location for such principled statement that would be incontrovertible today to bank member countries' governments, even to those who now object.

Major Advances in Legislating SIA in Asia and Elsewhere

While the World Bank has been busying itself with retiring its SIA-equivalent appraisal tool, several major developing countries have stepped upward to far-reaching decisions that introduce SIA explicit instruments into their national architecture of *laws* on development. I'm pleased to concisely highlight here several such advances of SIA on the global scale – in India, Brazil, Guatemala, China, and elsewhere, which are redefining now the international context in which this book comes out in print. Some of these events are seminal new steps; others, however, reflect the unevenness that still buffets the condition of SIA on various meridians of our globe. Many other countries could be considered, but I'll cover in this overview only some trend-embodying events.

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On the list of major advances in institutionalizing SIA in the developing world during the last few years, India has moved recently to the top. The new legislation voted in by India's Lok Sabha in 2013 is its new Land Act, titled almost as a manifest: "The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act" (GOI 2013). Before this law, the main entry road for SIA into India had largely been for decades its internationally co-financed projects. The LARR 2013 represents a 180° turnaround, which granted SIA, for the first time, a legal statutory role as mandatory for projects doing land acquisition and causing population displacement. In defining SIA's role, the LARR elaborates and legislates in detail the roles of SIA and the democratic procedures of anticipating potential risks and impacts not only through qualified experts but also in consultation with affected people themselves. Assisted by India's social scientists, the lawmakers went to great lengths to specify in the Land Act itself what the SIA must cover, when it has to be carried out, and what kind of specialists should do it and vested in SIA's legislation other precautionary functions too. In sum, during the current decade, India has made the world's most significant step for introducing SIA on a large scale as a state-legislated tool.³

The Historic Merit of India's Social Scientists

There is no need to explore here further the history of India's laws and policies, addressed elsewhere in this book. But this commentary is, for me, a happy opportunity also to express my deep respect and admiration for the vast contribution that three generations of India's social scientists have made to this decades-long policycum-law legislation writing process, crowned now by LARR with its SIA state mandate. They've carried out research on countless projects and on legions of people expropriated, under-compensated, and left worse off. More incisively than done in any other country, they have documented the toxicity of impoverishment resulting from mass-scale application of eminent domain. India's scholars and social researchers have applied the analytical and evaluation IRR model in India (Mathur 1998; Mahapatra 1999; Bharali 2015) more intensely than scholars anywhere else; they refined and enriched further the methods of risk analysis. The indefatigable civic militancy of India's scholars brought the knowledge distilled from empirical facts to the attention of India's many successive governments and to its civil society at large. This knowledge fruitfully impacted the political process that led to India's new Land Act. The world's community of resettlement researchers owes a great debt of gratitude to their militant Indian colleagues.

Moving now this commentary beyond India to Latin America, this overview must record also the important advances made in several Latin American countries

³After the LARR's enactment, "the industry" has made strong efforts to curtail SIA's protective prerogatives as given in the LARR. But India's parliament has not supported these attempts, thus preserving for now LARR's integrity. The debate on, and the risks to, SIA's procedures, however, will still continue, since the country's democratic legal system provides, under certain circumstances, options for modifying some provisions of this All-India Law at the level of states.

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in introducing SIA and related instruments. Among them, Brazil adopted for the first time a new *Portaria* (Legal Ordinance) to identify and help mitigate the negative social impacts of Brazil's multiple processes of urban displacement (GoB 2013). Further, from Guatemala, recent news signal a historic legal breakthrough. Based on facts and retroactive social assessments, Guatemala's president issued an unprecedented legal decree recognizing after over three decades the *tragic legacy* of the country's Chixoy Dam displacement: the decree orders the payment of substantial financial reparations for this legacy to families of those killed for defending their lands and livelihoods against unjust uprooting and to a large number of persons who were victimized by that brutal violent displacement. This legal resolution of a longago case is likely to become the precedent for similar reparations elsewhere.

Coming back to Asia, this overview must also note the decision taken by China's State Council in August 2012 to add to its existing legislation on SIA a new type of *mandatory* ex ante assessment of risks and impacts from infrastructure projects: this is defined as "the assessment of risks to social stability (China 2012)." This new law is significant because it expands the traditional uses of SIAs to the purposive identification of *political* risks. Learning from its own experiences with public unrest, China decided to *upfront* incorporate into project design the prevention of risks to stability, before the actual projects start.

China is also using social assessments retroactively. Ex post evaluations are a reversed form of SIA in that instead of anticipating likely future impact, ex post evaluations are measuring actual impacts that have already occurred. China carried out retrospective evaluations on the economic outcomes from displacement caused by China's hydropower projects built throughout the prior 55 years: 1950–2005. The conclusions from these retroactive social analyses led to an unprecedented decision: By a new law (2006), the government of China introduced a historical innovation – a mass-scale corrective and retroactive supplementary compensation in cash (Cernea 2008) to all persons (over 22.5 mil. people) displaced by dams during the prior 55 years and to their descendants, payable over the next 20 years in annual installments. This gigantic financial program is steadily unfolding now.

The entire architecture of China's resettlement laws and policies, instituted in the last 20–30 years, which in other contexts would be called sectorial "safeguard resettlement policies" (China doesn't use this term), is rooted in social impact assessments. In sum, it can be said that *the upward curve of creating and fortifying robust SIA procedures* is continuing in China: no downward slope from the "fork in the road" there. The SIA processes follow a vector pointed uphill, expanding the precautionary methodologies, not reducing them.

The Paradigmatic Importance of the Safeguard Policies

Without doubt, the most debated international event related to SIA and social safe-guard policies – for the last 3 years, still ongoing, and scheduled to continue through part of 2016 – is the World Bank exercise to "revise and update" its system of environmental and social safeguard policies (ESSP). The stakes are high. This process

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may ultimately profoundly affect the bank's overall development paradigm and would reverberate far beyond the bank itself.

When this exercise started, the World Bank's President, Jim Yong Kim, committed himself and the bank that this exercise "will not dilute" the existing safeguard policies but will strengthen them. However, the "no dilution" assurance was received with great concern and with more than a "grain of salt." The reason was that, in the immediately prior years, two major wholesale reductions were introduced by the bank's management in applying the safeguard policies to bank lending. Indeed, the World Bank had opened two new lending windows (for Development Policy Loans (DPLs) and for Projects for Results (P4R)), which were unnecessarily exempted from applying the safeguard policies (World Bank 2012a). The populations exposed to negative impacts by country domestic projects financed through these two windows are not benefiting from the protection offered by the SES. We should make no mistake: the DPLs and P4Rs loans are not financial peanuts. They account now, every year, for almost half of the bank's total lending. Therefore, the big uncertainty in the air was whether the trend of dislodging the safeguard policies from their place would be continued through the "revision and update exercise."

The immense role of the social and environmental safeguard policies derives from the fact that their adoption three decades ago both triggered and embodied a paradigm shift in international development. Outlining why and how these policies emerged and their fundamental status and functions helps illuminate and understand what is at stake in the ongoing debate about how to handle the risks and the best known negative impacts of development and the choices confronted now at today's fork in the policy road.

When the World Bank – in the early/mid-1970s – deliberately reoriented its lending to poverty reduction, it substantively embarked on new ways of treating the social dimensions of its projects. At that time, the bank had no social policies on its formal books. Their crafting started in the late 1970s. During the 1980s, the bank's small but growing number of social specialists proposed and drafted one after the other a series of five innovative operational social policies (and related measures) that the bank adopted formally and started to pioneer in its borrowing countries through its policy dialogues and project lending (World Bank 1980, 2001). The bank's effective concern for environmental issues began in earnest nearly a decade later.4 These new social policies communicated to the world at large the bank's determination to recognize and change some of its rudimentary prior practices, onesided economic analyses, and rules of project financing and in their stead to implement new social, moral, institution building, and technical approaches. One after the other, each of these new policies introduced radical normative reforms in the bank's previous narrower focus on economic growth; in the late 1980s, the bank's first environmental policy was adopted. The new policies also generated an increasingly

⁴A disjunction which was neither intentional nor helpful but was a product of accidental circumstances. The bank's President at that time, Barber Conable, took the leading role in introducing environmental policy.

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stronger demand for in-house new staff (and outside consultants) professionally trained on social and environmental issues. The adoption and cumulative implementation of this series of interlocked policies (plus other internal and external⁵ factors that would require a fully detailed treatment in themselves) coalesced into a shift in the work-and-lending paradigm of the World Bank. In turn, these changes became the epicenter of an expanding ripple effect to the broader expanses of development assistance. These policies – both precautionary and constructive of novel solutions – came later to be known collectively as the bank's social and environmental safeguard policies.

The inclusion of social policies into the bank's formal operational policy structure and into its practices did not come easily or by top-down *fiat lux* type decree. On the contrary, each was the product of intense in-house debates, sometimes intellectual clashes and confrontations of social and economic philosophies, that deserve being recalled elsewhere. Such internal debates continued during the 1980s and 1990s: the bank's social and environmental specialists, inspired by lessons derived from the bank's own experiences and by outside scientific research, have engaged in repeated subsequent rounds of improving these policies. Practically, each of these rounds was accompanied by such internal open debates.

International Ripple Effect

The tangible positive impacts of these novel social policies also created a model for other financial institutions, both public and private. After initially resisting (for about a dozen years) the adoption of similar policies, virtually all 24 bilateral aid agencies of OECD countries (such as USAID, GTZ, JICA, etc.) and all regional development banks (ADB, IADB, AfDB, and, later, EBRD) started to take the World Bank safeguard policies as a template for modeling similar policies for their institutions and projects (see Cernea 2005). Transnational private sector banks followed suit and announced publicly their replication of the World Bank's safeguard policies under the name of *The Equator Principles*. Soon thereafter – and again with a strong push from the CSOs – the Export Credit Agencies of the 24 OECD countries did the same. This "ripple effect" kept rolling, and it geographically expanded the ambit of the safeguard policies.

The buildup, the interconnectedness, and the expansion of their areas of influence gradually created a de facto *international governance pattern* for financially induced development, broadly still in existence today (Cernea 2005). It also stimulated some governments of developing countries to promote more or less similar domestic laws, though this "track" is still lagging behind: at this time still, unfortunately, the majority of developing countries in Africa, Latin America, and even in

⁵Among these influential drivers was the constant criticism of the bank from civil society groups and from project affected people; this criticism acted like holding a mirror to project weaknesses and failures caused precisely by still insufficient attention to environmental and sociocultural variables, thus making them more visible to bank managers and to those bank professionals most committed to achieving the bank's stated poverty reduction goals.

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Asia do not have yet robust and comprehensive legal "country systems" for safeguarding against such adverse social and environmental impacts.

The Proposed Replacement to the Existing Safeguard Policies

In July 2014 the bank issued the first draft of a totally refashioned text with which it proposes to replace the 10 existing safeguard policies. The drafts ESF (Environmental and Social Framework) and ESS (Environmental and Social Standards; World Bank 2014) have a structure that fully differs from all other existing official "Bank Operational Policies" and "Bank Procedures" as normative institutional documents. Examined under our "fork on the road" analytical lens, the drafts contain some elements previously absent: on labor, children, health, and climate change. These additions were welcomed in the public discussion of the draft. But compared with the existing policies, on the contrary, the drafts display a prevailing trend down, materialized in systemic and content departures from the policy instruments, the protection levels, and the procedural mechanisms to which the World Bank had committed itself for decades. The product of the first phase of this exercise – the drafts ESF and ESS – represents a fundamental change downward in the institutional nature and the category of normative documents into which the existing safeguard policies would be relegated. This draft combines a severe dilution of *content* with the attempt to dislodge the existing safeguard policies from their status as formal and mandatory policies for the bank itself.

The international public reaction to the ESF and ESS has come in waves of overwhelming criticism. They arrived from all corners of the world: from various segments of the public, environmental institutions, civil society organizations, scholars and scientific associations, the Women Nobel Peace Prize winners, as a major statement of 27 United Nations high-level rapporteurs on human rights, extreme poverty, standards of living, etc. (see Alston 2014; Bicusa 2014; IDI, INDR, Oxfam and assoc. 2015; countless critical comments are easily accessible on the web). The criticism included also several important statements on behalf of the US Government made by the USA Dept. of the Treasury (see USA-TD 2014, 2015; ENS 2015) and by other countries. The bank reputation suffered: the institution's performance had not received a similarly grave evaluation, rebuttal, deconstruction of its promises, and public moral beating since perhaps the Narmada debacle (see also Wade 2011). There was also favorable support to the revised draft coming officially from a number of governments that pleaded for even further simplification and the hollowing-out of the bank's current policies from their important content.

Something unanticipated by the World Bank also happened: many participants in the debate on the safeguard policies restarted questioning also the bank's decisions in the previous few years (e.g., the exemption of DPLs and P4Rs, noted above) that fenced off nearly 50 % of bank-lent dollars from applying the bank's safeguard policies. The public debate highlighted retroactively the step-by-step recent trend to erode and gradually eliminate the SIA and the safeguard policies. The proposal of a

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transparent reexamination of the unjustified reasoning that motivated those steps is now on the debate table too.

Following the tsunami of reactions received, the bank issued a revised version of the first draft in July 2015 (just as this foreword was going to print) and submitted it to a new phase of consultations. The 2nd draft took into account some of the most frequent public objections, particularly on some issues of content omitted in the first iteration. This produced a series of slight improvements but no radical substantive content change. The improvements are local. No change was made to the overall structure of the draft document, envisaged to become a lower level substitute to the existing full-fledged safeguard policies.

The public consultation debate continues, and a would-be pre-final version is to be produced for submission to the bank's board at the beginning of calendar year 2016.

Systemic Downgrading and Dilution of Content

Although the drafts ESF and ESS were proposed as a mere "revision and update" which wouldn't change or dilute the safeguard policies which they are supposed to replace, their detailed analysis reveals that they are a multilayered downgrading and dilution of the institutional status, content, and functions of the existing safeguard policies. The major flaws of EFF/ESS could be summarized in the following three points:

First, the substitution of the current safeguard policies with the EFF/ESS would be a structural and systemic change in the bank's current policy system. This is a systemic change because it pushes the existing safeguard policies out wholesale, in one fell swoop – from the category of "World Bank Operational Policies." The status of safeguard policies as mandatory policies for the bank itself in the exercise of its responsibilities is discontinued. The performance standards for borrowers are not policies. This is not an insignificant semantic change. It is a change in the norms and culture of the World Bank. This change formally degrades the designation of what had been mandatory policies for the bank into discretionary "standards" recommended to the borrowers. The resulting difference is deeply consequential for operations.

Second, and in addition to systemic downgrading, the other large category of damaging dilutions and omissions of the existing bank polices is those reducing content. The public consultation has signaled the elimination of many content elements from the existing policies. The obligation taken by this exercise by naming itself an "update" of the prior policies requires including the new knowledge gains generated by environmental and social and science research in the last two decades. Except the inclusion of issues omitted before (such as labor, health, and children and climate change), the important bodies of new knowledge relevant to improving the content of the safeguard policies (such as the resettlement policy) are ignored. The public discussion has pointed to these and many other new knowledge findings not included out from the ESF and ESS drafts.

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Third, EFF/ESS transfers to the borrowers the existing bank responsibilities for protecting the populations impacted negatively. Current policy responsibilities of the bank are converted into aspirational standards recommended to the borrower. Noticeably, the ESS not even once within its over 100 pages defines the proposed "standards" as "policy standards," as if the concept of policy is banished. Nor does the bank commit itself within the ESS to ensure that these reduced standards will be achieved by its borrowers measurably and that the bank will be accountable for having the standards met by the borrowers in the projects that it is financing. The drafters of the ESS made sure to never associate the concept of "safeguards" to the concept of "standards" throughout the length of ESS. This is nowhere explained. Is "safeguarding" not any longer a "modern enough" notion, like the "retired" SIA guidelines discussed earlier and one that has to be "retired" too? Noticeably, as shown in the next section, the UNDP defines its social and recent policy document using the terminology of standards and explicitly states that: "Social and environmental standards are UNDP policy." The presence of a similar statement in the bank's EFF/ESS, indicating that the "the environmental and social standards are bank policy" would go a long way to increasing the protection of project area populations against adverse impacts.

From the draft EFF/ESS, it is clear that all the existing safeguard policies defined now as "OP/BPs" of the World Bank will stop having this designation, once substituted. They are destined to stop being an integral systemic part of the bank's policy architecture.

This is such a major and deeply consequential paradigm and policy decision, with predictable multisided effects over the bank's entire work, that it is appropriate to suggest that before such a decision is adopted, the bank's management and the bank's board should examine once again: Is such a decision appropriate and consistent with the objective of poverty reduction and of preventing impoverishment under the wing of bank-financed projects? Will such decisions help or undermine achieving what the bank's president has recently defined as the bank's goal of "boosting shared prosperity"?

UNDP's Decision: A Newly Adopted System of Safeguard Policies

An eloquent recognition of the necessity of social and environmental safeguard policies came in 2014 from another major international organization: the UNDP (United Nations Development Programme). The UNDP carries out thousands of medium-size projects that provide financial and technical support to the world's poorest countries. Until 2014, the UNDP didn't have safeguards. But its management's candor about adverse impacts led it to craft anew and adopt for the first time a set of social and environmental safeguard principles as its mandatory normative framework.

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Significantly, and in sharp contrast with the World Bank's avoidance to define the "standards" it proposes as "policy standards," UNDP's document firmly states that its new "Social and Environmental Standards (SES) are UNDP policy" and include three basic elements: "overarching policy and principles, project-level standards, and guidelines for application." Further, these policy principles address: (1) human rights, (2) gender equality and women's empowerment, and (3) environmental sustainability. For its projects, UNDP's policy standards are organized in seven groups, among which are "displacement and resettlement," "community health, safety, and working conditions," and "indigenous peoples."

The 2014 adopted SES became effective UNDP policy on January 1, 2015. This policy:

"...Requires that all UNDP programs and projects enhance positive social and environmental opportunities and benefits, as well as ensure that adverse social and environmental risks and impacts are avoided, minimized, mitigated, and managed." These newly adopted standards are defined as "UNDP policy, and apply to all UNDP programs and projects, including global, regional, national, or locally implemented projects" approved since January 1st, 2015. (UNDP 2014)

Worth noting as well is UNDP's explicit and strong commitment to human rights:

In furthering the realization of rights, UNDP shall both refrain from providing support for activities that may contribute to violations of a State's human rights obligations and the core international human rights treaties, and seek to support the protection and fulfillment of human rights. (ibid. 2014)

Compared with the ambiguities and hedging that inhabit officialdom's language elsewhere, these categorical UNDP statements are refreshing. They resoundingly contrast with noncommittal avoidance. Under our "fork in the road" lens, the UNDP wisely took the way upward.

Emerging Trends and Implications: Massive Infrastructure Investments

What do today's trends in development tell us about tomorrow's challenges facing the community of scientists, researchers, and applied social specialists working on SIA and safeguards?

The current decade is carving its place in history as the decade of international macro-changes in the global institutional architecture for financing development. For achieving new development objectives, unprecedented and extraordinary amounts of financial resources are being mobilized. This is described as the "launching of the largest investment boom in human history" (Alexander 2015). A new term is coined for the vehicles of this boom: "infrastructural mega-projects." This current year, 2015, is seen as the threshold to the new "era," defined as the "Post-2015 Objective in Financing" and announced with official bells in the "joint statement"

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made by an impressive conclave (April 2015) of giant financial organizations: the IMF, the World Bank, and five other regional banks. The statement was titled grandiosely: From Billions to Trillions – Transforming Development Finance Post-2015 (see IMF-World Bank 2015; also, Flyvbjerg 2014). Another converging event is the establishment of the new AIIB mega-bank (the Asian International Infrastructure Bank) in Shanghai, joined by over 60 countries. Brazil, Russia, India, and South Africa are now reported to prepare the launching of their own international development-finance banks.

Scholars and political scientists, philosophers, policymakers, leaders of civil society organizations, and many others are absorbing this stream of "breaking news" struggling to grasp and foretell the short- and long-term multisided effects of this unprecedented orientation. With respect to the subject of this volume, one fact is clear: bigger programs and bigger infrastructure will entail also bigger and more widespread risks and severe social impacts. Therefore, the advance toward these larger-than-ever objectives must be inseparably twinned with stronger social policies, measures, and tools to anticipate and counteract such risks. Strong political will to commit to their implementation is ever more indispensable. Infrastructure development has historically been, and certainly will remain, the single largest source of forced displacement and involuntary resettlement. Besides their known fundamental benefits, the expanded infrastructural investments will also bring their painful cortege of social risks and adverse environmental effects, including unequal hard impacts on the more vulnerable and poorer segments of the population.

We can anticipate with knowledge-based concern that what is now named history's "largest investment boom" would also entail history's largest development caused-displacement "boom." Given this, it is indispensable to militate for creating a global legal protection regime for development-displaced people and for introducing social impact assessments and social safeguard legislation where such policies and normative systems are still missing.

In this light and given emerging trends, there is but one conclusion to this overview of SIA and safeguard issues. The right way for going forward is not to reduce the protections against adverse social and environmental impacts. On the contrary: the imperative is to strengthen the tools and norms for using SIA and social safeguard legislation in development practice.

This means to be on the right side of history.

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References

Alexander N (2015) The World Bank. The Vanguard of an infrastructure boom. Bretton Woods observer. Winter 2015. http://www.brettonwoodsproject.org/2015/02/world-bank -vanguardinfrastructure-boom/. Accessed 7 May 2015 Alston P (2014) Rethinking the World Bank's approach to human rights, keynote address on 'The Way Forward'. Washington, DC, 15 Oct

- Bharali G (2015) The application of IRR model to involuntary resettlement research in India. SFAA annual meeting, Pittsburgh, PA
- Bicusa (2014) Civil society statement on world bank safeguards, 8 Oct 2014. http://www.bicusa.org/wp-content/uploads/2014/10/Civil-society-statement-on-World-Bank-safeguards1.pdf
- Cernea MM (1991) Knowledge from social science for development policies and projects. In: Cernea MM (ed) Putting people first. Oxford University Press, New York, pp 1–41
- Cernea MM (2000) Risks, safeguards, and reconstruction: a model for displacement and resettlement. EPW, 7–13 Oct 2000, Nr. 41, pp 3659–3678
- Cernea MM (2005) The 'ripple effect' in social policy and its political content. In: Likosky M (ed) Privatizing development: transnational law, infrastructure and human rights. Martinus Nijhoff, Leiden/Boston, pp 65–101.
- Cernea MM (2008) Compensation and investment in resettlement: theory, practice, pitfalls, and needed policy reform. In: Cernea M, Mathur HM (eds) Can compensation prevent impoverishment? OUP, Delhi, pp 15–98
- Cernea MM (2015) A landmark in development: the introduction of social analysis. In: Susanna P, Robinson K (eds) Making a difference? Social assessment policy and praxis. Berghahn, New York, pp 35–59
- Cernea MM, Kudat A (eds) (1997) Social assessments for better development: case studies in Russia and Central Asia. World Bank, Washington, DC
- China (2012) National development and reform commission for assessing the social stability risk in material asset investment projects. NDRC (National Development and Reform Commission). Fagaitouzi No. 2492.16 Aug
- ENS (Environmental News Service) (2015) US congress blocks world bank move to slash safeguards. http://ens-newswire.com/2015/01/09/u-s-congress-blocks-world-bank-move-to-slash-safeguards/. Viewed 24 Apr 2015
- Flyvbjerg B (2014) What you should know about megaprojects and why: an overview. Proj Manag J 45(2):6–19
- GoB (Government of Brazil) (2013) Ordinance 317. Ministry of Cities. Portaria no 317, de 18 de julho de 2013. http://pesquisa.in.gov.br/imprensa/jsp/visualiza/index.jsp?data=19/07/2013&jornal=1&pagina=42&totalArquivos=144
- GoI (2013) The right to fair compensation and transparency in land acquisition, rehabilitation and resettlement act, 2013, The Gazette of India. Government of India, New Delhi
- IDI, INDR, Oxfam, Boell H Foundation, Urgewald, and assoc. (2015) Safeguards submission on involuntary resettlement and land (Comments and recommendations). Indonesia Government. 2015 Decree of the President of Indonesia no. 1 2015 on Handling the Social Impact of the Jatigede Dam. Gazette of the Republic of Indonesia Nr. 2 2015
- IMF-World Bank (2015) From billions to trillions: development finance post-2015. Statement by the Heads of the AFDB, ADB, EBRD, EIB, IDB, World Bank and IMF. http://www.imf.org/external/np/sec/pr/2015/pr15170.htm
- Mahapatra LK (1999) Resettlement, impoverishment and reconstruction in India. Vikas Publishing, New Delhi
- Mathur HM (1998) The impoverishment risk model and its use as a planning tool. In: Mathur HM, Marsden (eds) Development projects and impoverishment risks. Oxford University Press, pp 67–78
- Mathur HM (ed) (2006) Managing resettlement in India. Oxford University Press, Delhi
- Scudder T (2005) The future of large dams. Earthscan, London
- UNDP (2014) Social and environmental standards. UNDP, New York
- USA-TD (2014) US comments on World Bank safeguards review: importance of World Bank safeguards and aspirations. http://www.treasury.gov. Read 25 May 2015
- USA-TD (2015) United States comments on World Bank safeguards review phase 2, 26 Mar 2015. http://www.treasury.gov. Read 25 May 2015
- Vanclay F (2014) Developments in social impact assessment. Edward Elgar, Northampton

xxiv Foreword

Wade R (2011) Muddy waters: inside the world bank as it struggled with the Narmada. EPW, 1 Oct World Bank (1980) Social issues in involuntary resettlement OMS 2.33. Washington, DC

World Bank (1984) Project appraisal. OMS 2.20. Washington, DC

World Bank (2001) Involuntary resettlement. OP/BP 4.12. Washington, DC

World Bank (2012a) Program-for-results financing - OP 9.00, February

World Bank (2012b) Proposed review and update of the world bank's safeguard policies: approach paper, Oct10. http://siteresources.worldbank.org/. Accessed 4 May 2015

World Bank (2013) Investment project financing. Operational policy 10.00. Note, p 1

World Bank (2014) Environmental and social framework: standards for sustainable development. ESF and ESS First draft for consultation, 30 July

Preface

Social impact assessment (SIA) is a tool for doing development better. It originated fifty years or so ago as an impact assessment tool to anticipate and mitigate negative potentially negative social consequences of building dams, power stations, urban transport systems, highways, industries, mining and other development projects. This has since been in use mainly in USA and other developed countries for planning development projects with a positive effect on their performance. Generally development planners in Asia have been hesitant to adopt SIA in the planning process, but the situation is gradually changing

In India and elsewhere in Asia, SIA has lately emerged in response to an unprecedented surge in protests by farmers against displacement from their lands for development projects, which often leaves them worse off than before. The planners' concern for the plight of people hurt by such projects, coupled with their own worries over the possible adverse impact of increased land-related conflicts on the development process, is now prompting them to look for ways that could prevent or at least minimize disruption associated with involuntary resettlement. This has given rise to the need to understand beforehand the implications of potentially adverse impacts on project-area people who are often forced to bear the brunt of displacement. Experience has shown that prior knowledge of the likely negative development impacts can assist the planners to put in place in advance the plans to mitigate impacts that are found to be socially harmful. Seeing the advantages of SIA, the planners in developing countries are also gradually beginning to adopt and integrate SIA findings into the planning process to ensure better development. The issue no longer is whether SIA should be carried out or not but rather how it should be carried out so that the project-affected people benefit from the development process and do not end up as losers, impoverished forever, as has often happened in the past.

This book seeks to understand what social impact assessment is about, the methodology of identifying a project's likely social impacts, the issues in integrating SIA into the process of project planning, and the mitigation of those adverse impacts that may cause hardships to people living in the project area. The contributors provide examples of social impact assessment from projects in different development

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sectors, such as dams, urban development, mining and transport, highlighting a wide range of complex issues involved in doing SIA. The book emphasizes the special need for SIAs to take into account gender concerns and the distinctive social and cultural aspects of tribal communities. The book goes on to spell out the basic steps involved in preparing a resettlement action plan – the tool meant to manage development's adverse social impacts.

The idea for this publication recently arose in the Council for Social Development (CSD). The Council in New Delhi was concerned to note that while the interest in SIA is currently on the upswing, the paucity of relevant literature remains. Because SIA originated in USA and has since been in use mainly in developed countries, most literature produced on the subject is relevant to their particular social problems. This CSD initiative is intended to fill the need for a publication that reflects the distinctive SIA issues and concerns of developing countries. Focusing on India, this volume also looks at SIA experiences in half a dozen other Asian countries that include Bangladesh, China, Laos, Nepal, Pakistan and Sri Lanka.

The initiative of the Council for Social Development to undertake this publication merits acknowledgement. In particular, I would like to convey my heartfelt gratitude to the Council's President Muchkund Dubey for giving me the responsibility to prepare this volume and also the necessary support required to carry out the task. I couldn't have wished for a better place to do this book.

Again, working with the contributors for this volume was a very fulfilling experience. Their response to the invitation to collaborate on this publication was at once prompt and positive, and then the papers they agreed to contribute also arrived sooner than I expected, all in good shape. I wish to convey my most grateful thanks to them all – a truly supportive bunch of friends.

I must also add that the contributors supporting this effort are among the leading specialists on development, social impact assessment and resettlement issues, representing a diverse background: government, World Bank, ADB, academia and nongovernmental organizations. Based primarily on their first-hand experiences of assessing and mitigating social impacts from different project types in different countries, this material is a tremendous resource on Asia, not accessible elsewhere.

Michael Cernea has contributed a Foreword to this volume. He provides a comprehensive account of the fast developing events around SIA and associated social policies taking place globally, beyond India and Asia, and hopes that this important book will provide a most valuable intellectual and policy service to the ongoing debates, making it even more necessary and relevant. My grateful thanks to him for accepting my suggestion to share first with us the outcome of his recent research contained in this new, very illuminating overview.

This book also owes much to several other eminent scholars and experts. I have immensely benefited from their writings and experiences, and they often generously shared with me their new books, published journal articles and other publications, enriching my personal library. Among them I count Gordon Appleby, Asit K Biswas, Michael M Cernea, Chris de Wet, Theodore E Downing, Ramaswamy R Iyer, David Marsden, Christopher McDowell, Anthony Oliver-Smith, T K Oommen, Felix

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New Delhi, India

Hari Mohan Mathur

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World Bank: *Doing a Dam Better: The Lao People's Democratic Republic and the Story of Nam Theun 2 (NT 2)* https://opemknowledge.worldbank.org/handle/10986/2540 Ian C Porter and Jayasankar Shivakumar (editors) Washington DC: The World Bank, (2011): Overview (parts from pages 2–5, 18–19), and Chapter 3 "The Project is Prepared", specifically Teresa Serra's contribution "*Social and Environmental Issues*" (pages 52–72).

World Bank: *Management of Environment and Social Issues in Highway Projects in India* by Sonia Chand Sandhu, Mridula Singh, Tapas Paul, S Videswaran and R Viswanathan New Delhi: The World Bank (India Country Office), Environment and Social Development Unit, South Asia Region. (2006). "*Note 18 Model Terms of Reference for Social Impact Assessment*" (pages 123–127).

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Chapter 1 Introduction

Hari Mohan Mathur

Abstract Social impact assessment (SIA) in India and elsewhere in Asia has emerged largely in response to farmer protests against development projects that often leave them worse off than before. Governments, concerned over the plight of these people, are now increasingly taking into consideration an assessment of potentially negative social impacts of projects before their commencement so that they may be in a position to plan remedial action well in advance. International financial institutions have been at the forefront in integrating SIA into development planning, but developing countries are also slowly catching up. The chapter concludes with an elaborate overview on the thirteen chapters included in this book.

Keywords Farmer protests • Social impact assessment • Indian and other Asian country SIA experiences • Development planning • Multilateral development agencies • Resettlement planning

In the past two decades or so, developing countries have generally experienced high economic growth at a rate they had not known before. This growth has not occurred without hurting people. The fact is that millions of people around the world have lost their lands, livelihoods, homes and communities in the process of development (Cernea 1996; Scudder 1996; Robinson 2003; Downing 2002). In India alone, development projects in the last 60 years or so are estimated to have displaced over 60 million people, some of them more than once, reducing most of them to a state of permanent poverty (Mathur 2013). Displacement on such a massive scale has now provoked unprecedented protests almost everywhere, forcing investors to even roll back their plans and move to other places where doing business may be easier. For governments, the worrisome aspect of this conflict is that it could scare away investors and slow down pace of the entire development effort. Now, this apprehension together with their more serious concern over the plight of people displaced for the sake of development projects has forced the

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planners to consider all possible social consequences of a project in advance before it is initiated, so that they may be in a position to plan mitigation of those impacts that are identified as socially disruptive. This is the context in which social impact assessment (SIA) has recently gained recognition in India and elsewhere in Asia as well.

Social impact assessment (SIA) has been around for quite some time though. It originated in the USA in 1969, the year the National Environmental Policy Act (NEPA) was enacted, which required that social issues be considered as part of the environmental impact assessment (EIA). However, there was then little comprehension about what considering social issues really meant and how social impact assessment would or could actually be carried out. It was not until 1973 that social issues really came to the fore. This concern then led to the establishment of strong interest in social impact as an issue, and specific methodology and theoretical basis to the field gradually emerged (Vanclay 2006: 4).

Social scientists and their professional organisations have since defined SIA in various ways. Burdge and Vanclay (1995: 32) define SIA as 'the process of assessing or estimating the consequences that are likely to follow from specific policy actions or project development, particularly in the context of appropriate national, state or provincial environmental policy legislation'. According to the International Association for Impact Assessment (IAIA) studies, 'Social Impact Assessment includes the process of analyzing, monitoring and managing the social consequences, both positive and negative, of planned interventions (policies, programs, plans, projects) and any social change processes invoked by those interventions. Its primary purpose is to bring about a more sustainable and equitable biophysical and human environment (IAIA 2003: 2)'.

SIA in Development Planning

In recent years, social impact assessment both as a field of applied social research and practice has gained immense popularity, and there is a growing interest in this approach to improve development performance. Finsterbusch and Freudenburg (2002: 421) are emphatic that if some of the problems and failures of development projects are to be prevented or alleviated, 'SIA needs to be more strongly asserted in development project planning'. This reinforces the belief that failure to integrate SIA into the planning process diminishes the significance of rational planning and weakens the quality of its decisions (Rickson et al. 1990).

International development agencies, especially the World Bank, International Finance Corporation (IFC) and Asian Development Bank (ADB), have been at the forefront in incorporating SIA in their resettlement planning processes. Projects financed by these institutions are required to carry out SIA 'to identify a project's adverse impacts and the populations that will be affected' (IFC 2002: 12). Affected populations and impacts are then identified through a series of steps including a census, an inventory of lost and affected assets and socioeconomic surveys and

studies of all affected people (IFC 2002: 13). This data serves not only as a basis for designing resettlement plans but later also for monitoring the implementation of those plans. Even private sector projects and private banks now require some kind of a prior assessment of impacts that the proposed intervention may produce on the project area population.

Critics of the donor-driven approach have, however, pointed out several shortcomings of SIA especially in its implementation. A major flaw is that in a hurry to get project clearance the projects fail to conduct an assessment of potentially adverse impacts properly and it is not uncommon for large numbers of affected people to go uncounted (Gill 2006). As Scudder (2005: 21) pointed out, 'This is also true of projects financed by the World Bank, known for its meticulous methods of researching and documenting the minutest details. When figures are available, they are likely to be underestimates than overestimates'. For example, a review of the World Bank-funded projects found the actual number of people to be resettled 47 % higher than the estimate made at the time of appraisal (World Bank 1994: 88). Critics allege that SIA is often carried out simply as a 'window-dressing' exercise to comply with the procedural requirements of the funding agency (Horberry 1985). In short, SIA tends to degenerate into a ritual to be undertaken when necessary for project approval purposes.

Social Impact Assessment in India

Till recently there was no formal requirement to conduct social impact assessment or even environmental impact assessment in India. However, environmental impact assessments (EIAs) of large dams began to be carried out since 1978, although in the beginning they often lacked data comprehensive enough to identify their full impacts. Much later, SIA was also included as part of the EIA study (Singh and Banerji 2002). Generally conducted as an appendage to the environmental impact assessment clearance process, SIA did not receive adequate attention.

SIA was introduced in India by the World Bank, Asian Development Bank (ADB) and other multilateral development agencies mainly because they required it for processing the funding requests. Even now SIAs are mostly carried out in projects that they finance to meet their requirements for a prior social impact assessment.

In India, social impact assessment as a planning tool is relatively a new development. This was officially mandated as an integral part of the resettlement planning process for the first time when the government issued a new Resettlement and Rehabilitation Policy in 2007, replacing the earlier policy Resettlement and Rehabilitation Policy promulgated in 2004. The new policy laid down that SIA be carried out whenever either a new project or expansion of an existing project was undertaken (GOI 2007). This was then seen as a major development, but on closer examination it turned to be not as promising as it seemed at first sight. The policy viewed impacts rather narrowly to cover only physical assets (Iyer 2011). The emphasis in SIA was primarily on counting loss to physical assets, not to social

impacts. Moreover, as a recent review of the 2007 resettlement policy found, the SIA provision has remained largely on paper, unimplemented. The fact is that SIA is still not integrated into the process of resettlement planning in India.

A new land acquisition and resettlement law has now come into effect. 'The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act 2013' replaces a nineteenth-century-old land acquisition law of 1894 and integrates the 2007 resettlement policy into the new law with some amendments (GOI 2013). Under the new law, SIA is compulsory in all cases of proposed land acquisitions, which must be completed within six months. To ensure credible SIAs, it provides for consultation and public hearing and even prior consent (80 % of all landowners in case of private projects and 70 % for public–private partnership projects). To ensure that the SIA report is evaluated independently, it also provides for the constitution of an expert group. Before going ahead with the acquisition of land, the government examines the SIA report in detail primarily to see that the acquisition is for a legitimate and bona fide public purpose and involves minimum displacement.

The provision of SIA in the new law is a step in the right direction, but it is not clear whether SIA will receive the same importance in development decision-making processes as other components—technical, economic, environmental and financial, for example. In accordance with this law, SIA is to be conducted, not before a new project is undertaken, but much later, just before initiating the land acquisition process. Normally acquisition of land begins only after a decision has been made to proceed with the project. In that case, SIA under the new law may well turn out to be yet another case where voluminous SIA reports are produced but with no intent to ever use them, simply an exercise in futility.

Putting SIA into practice is not going to be a simple task. The challenges at the operational level will be enormous. At present the lack of skilled manpower to carry out SIA is an obvious hurdle. The required capacity for the purpose cannot be built overnight. No training institutes exist to provide training in SIA. Training programmes, trained trainers, training curricula, training manuals and training materials are all virtually non-existent. It takes time to build institutional capacity, but no effort seems to have been initiated in this direction so far. The fact is that there is lack of high-level commitment, which explains why even the guidelines on conducting SIA, promised in the policy as well as law, have not been issued as yet (Mathur 2011a, b, 2013).

Some criticism against the new land acquisition and resettlement law has already appeared. Critics allege that it has left investors largely unhappy and civil society groups complaining that it has not gone far enough to protect farmer interests. A major criticism from developers against the new law, especially its provisions regarding the prior consent of farmers, mandatory SIA and other time-consuming procedures, is that these will ensure that the slow-moving land acquisition process gets still slower. But this view is not acceptable to all stakeholders, particularly those claiming to speak for farmers. Taking these conflicting viewpoints into consideration, the government is trying to amend the law suitably enacted barely 2 years ago. But this is not

going to be achieved easily or anytime soon, given strong opposition to the proposed amendments from some political parties

Organisation of the Book

Developed countries pioneered the use of SIA for planning purposes much before its debut in developing countries, and they have also produced most literature on this subject, though focused largely on their own particular experiences. As SIA is relatively new in developing countries, not much has been written on SIA on specific issues and concerns that presently confront them. In this regard, the EIA situation is somewhat different, partly because it emerged much earlier than SIA, and for this reason there is no dearth of literature on EIA in developing countries (Modak and Biswas 1999). However, the need for such materials on SIA is now being increasingly felt. With contributions from leading experts representing administrators, scholars, consultants and researchers from around the world, this book is an effort to fill the gap.

This is the first book on SIA in India. This is also the first to provide a perspective on social impact issues and concerns in several other Asian countries: Bangladesh, China, Laos, Nepal, Pakistan and Sri Lanka. New developments in this field are taking place in these countries as well, especially in China where SIA has now become a formal requirement for certain types of development projects (Price and Robinson 2015).

Though focused on India and other Asian countries, the book will be an indispensable resource anywhere in the world for governments, multilateral development agencies, policy makers, development planners, practitioners, researchers, trainers, environmentalists, social scientists, consultants, academic activists and others who are increasingly beginning to see SIA as a tool for planning better development.

The thirteen chapters in this volume are grouped in four parts: (1) The Framework, (2) Social Impact Assessment: Policy and Practice in India, (3) Social Impact Assessment: Experience in Other Asian Countries and (4) Mitigating Adverse Social Impacts. In addition, the book opens with an elaborate 'Introduction'.

Part I: The Framework

Chapter 2 Emphasising the critical role of SIA in the development process, Hari Mohan Mathur points out that projects launched without any prior knowledge of their likely adverse social impacts tend to unintentionally inflict poverty on the affected people, thus defeating the very objective of eliminating poverty that development aims for. Concerned over the fate of those hurt by such interventions, planners are now turning to social impact assessment—the tool known to help

foresee and mitigate socially disruptive projects' impacts. The author next proceeds to provide a brief history of SIA, which within a short time of its existence, since 1969, has been adopted widely by the World Bank, IFC, ADB and other international development agencies and to a limited extent also by governments, business and industry and now even by private banks. This is followed by a description of the steps involved in conducting SIA and the principles of good SIA practice. The participatory social science research methodology for identification and assessment of impacts is described in the following section, keeping in view the particular need of resettlement planners. Finally, the discussion turns to a question that is frequently asked: Can SIAs be done objectively? Probably not, seems to be the general experience, maintains Mathur. The truth is that distortions in SIA findings often arise because of pressures from developers to obtain a favourable report by any means possible, as this helps in obtaining the project clearance. But SIAs can still be done fairly and contribute to a better development outcome. This, however, is possible only under certain conditions that include: (a) affected people are involved in the entire SIA process, and SIA is conducted in a manner that the key concerns of the community get clearly identified through a consultative process; (b) SIA is conducted in the very beginning stage of project preparation when it is easier to affect changes in the project design; and (c) most importantly, the consultant engaged to do SIA is a trained and an independent practitioner, not seen as someone working for the developer.

Chapter 3 Gordon Appleby begins by highlighting certain special characteristics of mineral mining projects. These projects differ significantly in several respects from other kinds of projects, such as urban, linear and areal, the three categories in which they are conventionally divided (World Bank 1994). They take large areas, but land acquisition is not a one-time affair in mining projects; it occurs in phases over long periods, even decades. This presents some challenges for SIA. While commencing mining, the social assessment necessarily first focuses on the immediate or short-term need for land. Areas to be taken later are not included in this social assessment because these areas are likely not precisely known and it cannot be known for certain that they will be developed in the event. SIA for such areas is, therefore, held back till remaining areas for mining are clearly marked. The special characteristics of mining projects also present challenges for the planning of resettlement. One basic requirement of resettlement policy is to avoid or minimise physical as well as economic displacement, but the fact that mining can be done only where mineral deposits occur makes it almost impossible to avoid or reduce displacement by changing the mining site. The special characteristics of mining, however, also give rise to several opportunities. Mining companies require official approvals to operate, but that alone may not be enough. In addition, they increasingly require the 'social license' to operate, which is an informal approval of the community but no less necessary for that reason. Mining depends on the cooperation of the local population, and a mining company must gain the trust of the local population and maintain it over time. The need for a social license underlines the creation of a resettlement unit, a community welfare scheme and possibly a benefit-sharing mechanism. SIAs conducted over time provide an opportunity to correct mistakes

made earlier, enabling the mining company to plan its long-term operations more carefully. And, perhaps most importantly, continuous SIA provides a rationale for effective monitoring, an activity that is otherwise seldom fully implemented. In most projects, the SIA is a one-off event. By contrast, in mineral mining projects, SIA is often a continuous process. The mine will be operating for years, and it is essential that senior management maintain its social license to operate all the time. To do so, it makes investments in the local communities and updates its resettlement programme to accord with ever-changing realities. Thus, SIA also contributes significantly to the well-being of the local population.

Part II: Social Impact Assessment: Policy and Practice of India

Focusing on SIA experience in India, this section is divided into five chapters. SIA policy and law is the subject of the first chapter in Part II. The following next two chapters present SIA experiences with two major project types: dams and urban development. The fourth chapter dwells on the importance of incorporating the gender concerns in SIA for all development projects that entail involuntary resettlement. The unique challenges of and the suggestions on conducting SIA for projects that displace tribal people are discussed in the final chapter of this section.

Chapter 4 Till recently, adverse social impacts of development projects were mostly ignored. Shekhar Singh points out that for a long time it was assumed that financial and economic cost-benefit analysis was adequate to determine the social desirability of a project, even though most social costs were neither recognised nor 'costed'. The first focused thrust on SIAs came with the National Rehabilitation and Resettlement Policy 2007, which envisaged that an SIA would be conducted for all projects having significant displacement. This has recently, through 'The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013', been made legally mandatory. Unfortunately, there is still poor understanding of what an SIA involves and a shortage of adequate trained human resources, appropriate protocols and literature. The current policy and law focuses only on those projects that displace a significant number of people. Shekhar Singh is of the view that SIAs must be made mandatory for all projects and activities that impact society, whether they displace people or not. However, in order to mainstream SIA findings, interface protocols have to be developed by which we can factor in social costs appropriately into a decision-making system, which still remains rooted primarily in traditional economics.

Chapter 5 In Orissa, the Lower Suktel Irrigation Project was launched with no prior assessment of its possible adverse impacts on a large tribal and Dalit (socially and economically backward group) population. This, however, need not come as a surprise, because underestimating or downright overlooking of social impacts is quite common among dam builders around the world. The World Bank (1994, p. 331), acknowledging this reality, aptly remarked: 'The planning process of many

dams is based on an inadequate assessment of adverse impacts'. Anita Agnihotri, the author of this chapter, notes that a new window of opportunity recently opened for the government to consider the social consequences of going ahead with the Suktel project which it initially missed. In 2004, as part of a UNDP project on resettlement policy development, a study of this project was commissioned from the viewpoint of assessing its local acceptability and viability, and a research team carried out this field-based study. Though not planned as a SIA, not even remotely, it developed into a study that came close to being an SIA of the Suktel project. The government could have benefited from this study, especially because earlier no SIA was done, but the government preferred to ignore the findings even of this study. The study, however, raises some serious questions for the government planners to consider: Should this project go on even in the face of resistance to the project by those who will be forced to bear the brunt of displacement and also apprehensions about its viability in the minds of a large group of displaced people and some experts? Or should even now an alternative be explored that dispenses with displacement of large numbers and generates benefits for the entire local population rather than only for a select group of powerful landowners? Agnihotri concludes that the consideration of an alternative requires decision-making and consultative processes of a kind different from what presently exists in the Orissa administration. The decisions in regard to development matters in the government are often taken not on considerations of whether or not the people are for or against a project. The government's own perceptions of gains from the project, and the pressures of big farmers of the command area, far outweigh the apprehensions of those likely to be adversely affected and even the cost considerations. Eventually, an alternative to the Suktel project was never explored, and according to the latest reports, the project is proceeding the way it was initially designed, knowingly ignoring the dam's unavoidable adverse impacts that are bound to hurt the poor.

Chapter 6 Studies have shown that the deficiencies in the initial survey of project impacts subsequently make it difficult to prepare realistic resettlement plans and to deliver resettlement entitlements in ways that may be acceptable to the projectaffected people. Still, the planners seem to ignore lessons from such experiences. Citing the case of the Mumbai Urban Transport Project (MUTP), which displaced a large urban population of 120,000 persons, Renu Modi provides an insightful account of how rehousing the relocated people became a hugely contentious issue due to an inadequately conducted initial survey. Surprisingly, this happened in a project partly funded by the World Bank, known for its systematic process of resettlement planning based on a thorough assessment of adverse impacts. The consequences of a flawed initial Baseline Socio-Economic Survey (BSES), which failed to make a precise inventory of the various categories of affected persons and their incomes, soon began to complicate the MUTP's resettlement implementation process. The delivery of compensation package consisting of rehousing and the other post-displacement entitlements based on this inadequately conducted BSES records then failed to meet the expectations of the affected people. This led to angry protests, but when the affected people did not find the government responsive to contestations around BSES, which was the basis for their entitlement package, they

filed a request for inspection to the World Bank's Inspection Panel. A major grievance was the relocation of their residential and business structures to a distant resettlement site, which meant cutting them off from their original sources of livelihood and social networks. The lack of consultation on compensation and resettlement issues at the project planning stage was also one of their constant complaints. The Inspection Panel investigation and its recommendations eventually led to some improvements in the government policy on resettlement, and the Mumbai Metropolitan Regional Development Authority (MMRDA), the project executing agency, adopted a more flexible approach and offered a choice of alternative resettlement sites and the option of monetisation of compensation in some cases. The author concludes that had the initial impact survey been conducted with care, in a participatory manner, many problems that subsequently made implementation of the MUTP so problematic would not have arisen.

Chapter 7 The impact of displacement by development projects is known to be far more severe on women than on men. For example, when relocated to a new, unfamiliar place, women usually lose previous income-earning opportunities which, in turn, reduces their voice in family matters, uproots them from their social base back home built over the years and puts an additional burden of walking long distances to fetch water and fuelwood. Worse, as land is registered only in the name of men, while men get all the cash compensation only to fritter away to cater to their whims and fancies, women get nothing at all. Yet, such gender-specific negative impacts of development projects mostly remain unaddressed. Enakhsi Ganguli Thukral and Shweta Tripathi, in their paper, strongly argue for a special focus on gender in social impact assessments. Otherwise, no resettlement planning process can ever undo injustice to the displaced women and compensate and resettle them fairly. The authors provide many examples to show that it is often male genderinsensitivity and the gender-blind laws and policies which tend to perpetuate, rather than redress, gender biases long sanctified by custom and tradition. The new law, 'The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013', which makes SIA mandatory before initiating land acquisition proceedings, had aroused much hopes. But this, too, fails to include any special provision for women in SIA. For example, there is no specific provision for including women in the committee provided in the law to evaluate an SIA study. In conclusion, the authors recommend that the gender focus must be especially built into the process of assessment and not left to the good will or good intentions of the assessment practitioners. The gathering of gender-disaggregated data for SIA is the first step in addressing gender concerns. In addition, the SIA process should include training of personnel to conduct gender assessments, inducting female staff or working through women's groups to collect data, ensuring participation of women from different socioeconomic groups in SIA preparation meetings and linking SIA with the resettlement process. Lastly, unless an effective monitoring and evaluation system is put in place and remains fully operational, the good intentions of SIA are unlikely to be fully realised.

Chapter 8 While tribal people constitute barely 8 % of India's total population, approximately 50 % of those displaced are from this group alone. The reason why

tribal people happen to be the most adversely affected group is because their culture and identity are inseparably bound up with land. Such deep attachment to land is of a kind that is uniquely their own and for outsiders not easy to understand. Felix Padel argues that the inability to comprehend tribal culture is often a handicap in carrying out SIA objectively. A development project that may normally work in the mainstream society, if imposed on tribal societies without understanding their particular way of life, could instead cause irreparable damage to their culture, amounting to 'cultural genocide'. An estimated 60 million people have been moved off their land in the last 60 years, and a lot more massive displacement is in the pipeline. Seeing how destructive development has been to the tribal people, they are currently fiercely opposing it and asking: 'How can you call these projects "development"?' For tribal people, big dams, mining, industrial, infrastructure and all other kinds of projects are nearly always antidevelopment, because they take away their land and destroy the environment on which they subsist. The key point that the author emphasises is that without an understanding of how destructive the development impact on traditional tribal societies can be, SIAs will likely remain sterile. The paper concludes with some useful suggestions for SIA practitioners. The most significant recommendation is the need to include in social assessments a wide spectrum of people's voices, listening to what they are saying, even when this is uncomfortable, and bringing out clearly their perspective on the impacts of development. Many displaced people will be afraid to express their real feelings in front of project authorities, out of fear that later they may be penalised, so if necessary, they need to be given an option of making statements anonymously. Finally, the SIA process is meaningless unless a monitoring mechanism is put in place to carry out studies during the implementation process so that the forecasts can be monitored and, when necessary, corrective actions taken.

Part III: Social Impact Assessment Experiences in other Asian countries

This part includes four chapters on recent experiences with SIA in six Asian countries, which include Bangladesh, China, Laos, Nepal, Pakistan and Sri Lanka. The first chapter presents an account of several significant initiatives that have recently been taken place in China, a detailed account of which is not easily accessible outside China. The next chapter discusses challenges in conducting assessments and the planning of resettlement and provides useful lessons learned from preparing a dam project in Laos. The third chapter provides a comprehensive account of the ways the social impact concerns are identified and incorporated into resettlement planning processes from four different externally funded infrastructure projects in Bangladesh, Nepal, Pakistan and Sri Lanka. The fourth and the final chapter in this part describes efforts made to mitigate adverse impacts of a transport project through an income-generating programme in Sri Lanka and its not so encouraging performance.

Chapter 9 In response to growing protests against displacement for development projects, China has recently taken several new initiatives on SIA. The author of this chapter Susanna Price provides a comprehensive analysis of these new initiatives in China and enlarges the scope of this analysis to bring in SIA practices of China's burgeoning aid and investment projects worldwide. Dwelling on the national scene first, she describes how initially the planning for rapid development focused on economic, financial and technical dimensions of investment and then slowly things began to change. In 1989, environment emerged as an additional dimension, but not SIA. While there is still no national regulatory framework for SIA, key agencies have recently taken significant steps in this direction. The National Development and Reform Committee (NDRC), for example, has recognised SIA as an integral part of feasibility study for certain nationally approved investment projects and in 2002 and 2007 issued necessary guidelines for their implementation. Effective from 2012/2013, NDRC also requires a social unrest risk assessment to gauge the level of likely social unrest, again for nationally approved projects. Following on the NDRC initiative, the Ministry of Environment in 2011 has also issued new technical guidelines to strengthen requirements for public consultation and SIA for projects with construction impacts. However, the Environmental Protection Bureaus (EBPs) that are expected to implement these guidelines lack the requisite social skills. Internationally, China has rapidly grown as a financier, engineer and builder, especially of large infrastructure development projects. Chinese companies or financiers are involved in over 300 dam projects (mostly for hydropower generation) in 70 different countries around the world, nearly half of them in Southeast Asia and also Africa, Latin America and South Asia—in particular, Pakistan. This immediately raises some serious concerns, as the Chinese financiers have provided funding for projects previously rejected by other financing institutions on issues of social and environmental impacts. The author concludes that while China's achievement in gradually building its national regulatory framework for compensation and resettlement is significant, its further strengthening will require better SIA in resettlement planning. The recent NDRC initiatives towards making SIA and resettlement plans mandatory at the feasibility stage for selected key projects open an opportunity for a systematic SIA that sets the basis for better resettlement.

Chapter 10 The building of the Nam Theun (NT2) Hydroelectric Dam in Laos caused widespread regional and cumulative environmental and social repercussions. Impact analysis and mitigation planning had to be of a standard acceptable to the World Bank, comprehensive, including planning for the resettlement of 6,200 people living in the affected area. Teresa Serra describes the challenges in gathering high-quality information and formulating a comprehensive detailed plan in consultation with all stakeholders. At first, the government, NTPC (Nam Theun 2 Power Company) and other stakeholders found adhering to the World Bank's requirements too demanding. They also saw the World Bank as continuously expanding both the geographical scope and the coverage of the impact analysis, without clearly defining what those acceptable requirements were. Civil society groups, on the other hand, were of the view that analyses were not comprehensive enough and ignored the potential problems of the people who were likely to be affected by the project. Next,

the author highlights lessons on a number of impact assessments and mitigation planning learned from preparing this project. These include: (a) defining project boundaries and area of impacts; (b) rebuilding livelihoods and improving living conditions, especially of vulnerable groups; (c) balancing biodiversity conservation and protection of wildlife habitats; (d) promoting local development; and finally (e) addressing downstream risks. Teresa Serra then moves to discuss lessons pertaining to some common but oft-neglected issues, including (i) addressing uncertainty through budgets and legal instruments, (ii) establishing realistic and responsive institutional arrangements, (iii) engaging in participatory consultation and transparent communication throughout the project life, and finally (iv) ensuing regular internal and independent external project monitoring. To be effective, the author considers it important that in the very beginning of the project preparation the World Bank clarify for the benefit of the developer and the government the key aspects of its approach to addressing the project's social and environmental impacts.

Chapter 11 Zaman and Gonnetilleke present a comprehensive overview on how social impact dimensions have been integrated and addressed in four large infrastructure development projects in Bangladesh, Nepal, Pakistan and Sri Lanka and what needs to be done for preparing such projects better in future. These projects are (a) the Jamuna Multipurpose Bridge Project in Bangladesh, (b) Kali Gandaki 'A' Hydropower Project in Nepal, (c) Ghazi-Barotha Hydropower Project in Pakistan and (d) the Southern Transport Development Project in Sri Lanka. Undertaken during 1995-2005, these projects belong to the 'first generation' of projects funded by multilateral agencies, following the adoption of safeguard policies requiring systematic approaches to impact assessments and data collection for project preparatory work. In all these cases, new and/or renewed attention to project-induced displacement was clearly evident from various policy developments and new institutions building to deal with resettlement operations and management at implementation stage. Because of the authors' involvement in the projects as social/ resettlement specialists, a point to be noted about these case studies is that they provide 'inside' knowledge and understanding of the social/resettlement processes and outcomes, which would not have been possible otherwise. They found that social impact assessment was not always done adequately due to limited time and inputs for social specialists during project preparation. The lack of knowledge and understanding of sociocultural implications of infrastructure development projects among executing agencies and project staff was also a major constraint. In the event, the results or outcomes were mixed but definitely positive to addressing social and resettlement in development projects. Finally, the lesson from their studies that comes out loud and clear is that much more attention needs to be paid to incorporating the social impact dimension into project designs. This would, however, require conducting early, detailed surveys to identify the precise scope and extent of impacts and risks associated with livelihood, housing, settlement, food security, employment/income, health and hygiene as well as access to new opportunities that come with the projects.

Chapter 12 The fourth chapter in this part presents a case study of the income restoration programme undertaken for people displaced by the Southern Transport

Development Project (STDP) in Sri Lanka. STDP was selected as a case study because it was the first project in Sri Lanka where an SIA was conducted with follow-up studies to facilitate income-generating programme. In this chapter Jayantha Perera, who had a long association with the project, demonstrates how an SIA could help identify potential harmful impacts of a project on project area people and monitor how well the mitigation measures were performing. It also focuses on the link between SIA and income restoration of the affected people. SIA provides a database for resettlement planning, implementation and result monitoring. A poorly planned SIA generates an incomplete database. It makes difficult the identification of project-affected persons and their losses. Moreover, project authorities also fail to resolve land disputes and compensation claims and to update resettlement implementation plans to reflect changing ground realities. Whenever SIA database is found inadequate, a supplementary SIA is usually carried out. Although STDP conducted a supplementary SIA, it followed the same old flawed methodology and definitions. As a result, resettlement planning and management of STDP continued to be haphazard and ineffective. Unless different methodologies used in SIAs are well coordinated, they can generate contradictory databases, which can then confuse project managers, evaluators and project-affected people. The difficulty in ascertaining the actual number of 'poor' households in STDP is a good example. Perera argues that a flexible resettlement implementation plan based on a comprehensive database, derived from a scientifically conducted SIA, is a prerequisite of any development project that triggers land acquisition and resettlement. Adequate budget and committed resettlement personnel are needed to implement a resettlement plan. Affected persons' aspirations, views and suggestions also need to be taken into account in resettlement planning and implementation. These key elements, especially an adequate budget and a strong institutional setup, were largely absent in STDP, which then conspired to ensure that the income restoration programme, although well intentioned, did not succeed.

Part IV: Mitigating Adverse Social Impacts

Chapter 13 When people are displaced by development projects, this arguably turns out to be the worst crisis in their lives. They lose almost everything, from livelihoods to kinship ties, often even their identity. Therefore, international and increasingly national resettlement policies now require that a Resettlement Action Plan (RAP) be put in place to rebuild the lives of those devastated by such unsettling experiences. In this closing chapter, Hari Mohan Mathur describes the basic steps involved in preparing a Resettlement Action Plan, which is based on an assessment of a project's social impacts, as identified by an SIA study. The planning begins early in the project development process, which involves census, land acquisition and socioeconomic surveys. These surveys are carried out to establish pre-project baseline conditions, which serve as the basis to build a resettlement plan on and also monitor its implementation. The plan, then, proceeds to describe social, cultural and

economic impacts on different groups and the corresponding measures to address each one of those impacts, which generally include compensation for land, houses and other assets taken and assistance to vulnerable groups. The plan forbids shifting the affected people to relocation sites without first ensuring that they have been fully paid the compensation and resettlement dues according to their entitlements. Entitlements are determined for every single household on the basis of their loss from the project. Another major step in the planning process at this stage is to initiate measures not only to restore but also to improve the living standards of the displaced people and possibly also to share with them the benefits that projects generate. The basic plan approach is to treat resettlement as a development opportunity, which apart from other measures requires provision of adequate budget to carry out the planned resettlement activities. The plan document also includes a time-bound implementation schedule of all resettlement activities, together with the details of various tasks, the agencies responsible and the time required for their completion. Effective plan implementation requires a well-equipped resettlement unit within the implementing agency, as well as trained resettlement personnel for ground-level operations willing to work in a participatory manner with the affected people. In addition, the plan is designed to ensure that the affected people have recourse to a grievance redress mechanism that is prompt, responsive and easily accessible. The final major step in the planning process is to ensure that an effective monitoring and evaluation (M&E) mechanism is put in place. This will be essential to tracking the progress of plan implementation, especially whether or not it is assisting the displaced people to recover and improve their standards of living—the basic objective of all resettlement planning.

References

- Burdge RJ, Vanclay F (1995) Social impact assessment. In: Vanclay F, Bronstein DA (eds) Environmental and social impact assessment. Wiley, New York, pp 31–65
- Cernea MM (1996) Understanding and preventing impoverishment from displacement: reflections on the state of knowledge. In: McDowell C (ed) Understanding impoverishment: the consequences of development-induced displacement. Berghahn Books, Providence/Oxford
- Downing TE (2002) Avoiding new poverty: mining-induced displacement and resettlement. International Institute for Environment and Development/World Business Council for Sustainable Development, London
- Finsterbusch K, Freudenburg WR (2002) Social impact assessment and technology assessment. In: Dunlap RE, Michelson W (eds) Handbook of environment sociology. Greenwood Press, Westport, pp 4407–4447
- Gill M (2006) Large dam resettlement: planning and implementation issues. In: Mathur HM (ed) Managing resettlement in India: issues, approaches, experiences. Oxford University Press, New Delhi
- Government of India (2007) Rehabilitation and resettlement policy 2007. Government of India (Ministry of Rural Development, Department of Land Resources), New Delhi
- GOI (2013) The right to fair compensation and transparency in land acquisition, rehabilitation and resettlement act 2013. Government of India/Ministry of Rural Development, New Delhi

Holbery J (1985) International organizations and EIA in developing countries. Environ Impact Assess Rev 5:207–222

- IFC (2002) Handbook for preparing a resettlement action plan. International Finance Corporation, Washington, DC
- Iver R (2011) Converting resettlement policy into resettlement law: a welcome initiative but no occasion for celebration yet. In: Mathur HM (ed) Resettling displaced people: policy and practice in India. Routledge, New Delhi/London
- Mathur HM (2011a) Social impact assessment: a tool for planning better resettlement. Soc Change 41(1):97–120, 2011 Jan–Mar
- Mathur HM (2011b) Resettling displaced people: policy and practice in India. Routledge, New Delhi/London, pp 77–84
- Mathur HM (2013) Displacement and resettlement in India: the human cost of development. Routledge, London/New York
- Modak P, Biswas AK (1999) Conducting environmental impact assessment in developing countries. Oxford University Press/United Nations University Press, New York/Tokyo
- Price S, Robinson K (eds) (2015) Making a difference? Social assessment policy and praxis and its emergence in China. Berghahn Books, Oxford
- Rickson RE, Burdge RJ, Hundloe T, McDonald GT (1990) Institutional constraints to adoption of social impact assessment as a decision making and planning tool. Environ Impact Assess Rev 10:233–243
- Robinson WC (2003) Risks and rights: the causes, consequences and challenges of development-induced displacement. The Brookings Institution (SAISD) Project on Internal Displacement, Washington, DC. (An occasional paper, May 2003)
- Scudder T (1996) Resettlement. In: Biswas AK (ed) Water resources: environmental planning, management and development. McGraw Hill, New York
- Scudder T (2005) The future of large dams: dealing with social environmental, institutional and political costs. Earthscan, London/Sterling
- Singh S, Banerji B (2002) Large Dams in India: environmental social and economic impacts. Indian Institute of Public Administration, New Delhi
- Vanclay F (2006) Principles for social impact assessment: a critical comparison between the international and US documents. Environ Impact Assess Rev 26:3–14
- World Bank (1994) Involuntary resettlement sourcebook: planning and implementation in development projects. The World Bank, Washington, DC

Part I The Framework

Chapter 2 Social Impact Assessment: An Approach to Improving Development Outcomes

Hari Mohan Mathur

Abstract Social impact assessment (SIA) is a tool for doing development better. Impact assessment methodologies have now emerged that can predict negative project impacts, enabling the planners to put in place the plans to mitigate their adverse social consequences taking into consideration the fact that displacement impacts affect different groups differently, with poorer groups bearing the most brunt. Impacts also differ from one project type to another. Impacts from mining projects occur over time in stages, not all impacts at one time. Dam impacts, on the other hand, affect an extensive area all at once. This chapter provides a brief history of SIA; describes steps involved in conducting SIA using participatory social research methodology; spells out elements that need to become part of SIA standard practice, if SIA is to contribute to better development outcomes; and then finally suggests a format for preparing a report on SIA for its submission to the sponsoring agency.

Keywords Social impact assessment • Sardar Sarovar dam • Steps in conducting SIA • Checklist-based assessments • Data sources • Screening • SIA methodology • Public involvement plan • Resettlement Action Plan

In the past, development projects have often been launched without any prior consideration of their possible adverse social impacts. Resettlement literature is replete with examples of such projects that were undertaken to promote development, but instead ended up leaving millions of people impoverished, in a condition worse off than before (Colson 1971; Cernea 1995; Scudder 1996; Mathur and Marsden 1998). The Sardar Sarovar dam on the river Narmada is a case in point. As Morse and Berger (1992) noted in their report on Sardar Sarovar, this project was launched without even the basic data on the number of people likely to be affected, with the result that till today the task of resettling those displaced over a quarter century ago remains unfinished, and worse, mired in an unending controversy.

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The concern to save people from the disastrous development effects accounts for the current growing interest in social impact assessment (SIA)—a tool that can help predict and contain potentially harmful project impacts.

In simple terms, SIA is essentially an aid to understanding beforehand the likely social repercussions of embarking on a new development project. If project impacts identified are potentially harmful, the planners can put in place measures to mitigate them (Mathur 2011, 2013). Depending on the impacts that are likely to follow an intervention, the planners have the following options: (a) proceed with the project as it is, or (b) redesign the project to soften its adverse impacts, or (c) just dump the project completely if its negative impacts are found to be too severe to manage. The most useful outcome of SIA is to provide a prior assessment of the likely negative consequences of a project proposal which resettlement planners can then integrate into resettlement plans to neutralise their severity.

Business and industry are increasingly recognising significance of the SIA process. Shell International, for example, believes that focused attention to social dimension shows definitive business returns (Jones 2002). Early identification of issues during the planning stages has shown to deliver projects on time and with much wider stakeholder support. It also minimises delays and allows incorporation of the communities into the benefit stream as a partner.

A Brief History

Social impact assessments, analogous to the assessments that have now become standard practice in environment field, are not a new idea (Kaul 1999). Social scientists have long been involved in doing impact assessment, almost since the beginning of their discipline. A canal study carried out by Condorcet in the nineteenth century is believed to be the first SIA (Prendergast 1989). However, social impact assessment, as it is practised today, emerged much later.

The beginnings of social impact assessment can be traced to developments as recent as those during the 1970s. By this time, development agencies began to use these approaches 'which were about predicting, before the start of a project, its likely environmental, social, and economic consequences—in order to approve, adjust, or reject it' (Roche 2009: 18).

By the early 1990s, a group of social scientists under the aegis of the Interorganizational Committee on Guidelines and Principles for Social Impact Assessment were able to develop a widely acceptable set of SIA guidelines and principles (IOCGP 1994). Subsequently, these were further refined (IAIA 2003; IOCPG 2003). The International Association of Impact Assessment (IAIA) has recently published a new Guidance Note building on its earlier International Principles for Social Impact Assessment issued in 2003 (Vanclay et al. 2015). The purpose of this Guidance Note is to provide advice to various stakeholders about what is expected in good practice social impact assessment (SIA) and social impact management processes, especially in relation to project development.

Social impact assessment has now become a regular part of the project preparation process for development projects, especially for preparing a Resettlement Action Plan. Even bilateral aid agencies, including private banks, now require some kind of prior social impact assessment for all the projects that they fund (Franks 2012). As part of project development process, the preparation of a Resettlement Action Plan involves several steps: conducting a census, land acquisition assessment and socioeconomic survey to identify adverse project impacts and designing appropriate actions to address them (IFC 2002). SIA is now a legal requirement in several countries. India has also recently enacted a law that makes SIA mandatory for all new projects that involve land acquisition, displacement and resettlement (GOI 2013).

Social impact assessments have been carried out for a variety of projects, including projects in such diverse sectors as water, energy, sanitation and health, mining, coal sector, resource projects, urban transport systems, pastoral development programmes, biosafety protocol and livelihood support projects (Geisler 1994; Cernea and Kudat 1997; Stabinsky 2000; Roche 2009; Schreckenberg et al. 2010). But it is for resettlement projects that SIAs have been found particularly useful. Modak and Biswas (1999: 209) noted:

The subject has evolved basically to identify project-affected people and find measures to mitigate negative impacts, or compensate irreversible losses following a participatory process.

SIAs now tend to go beyond the conventional type of social impact study. Referring to such assessments as social desirability assessments, Kaul (1999) observes that the concern here is not just about minimising social costs—the negative social impact of developmental strategies—but also with enhancing the responsiveness of policies to people's needs, maximising social benefits. The concern is for putting people first.

SIA has emerged as a field of research and practice in its own right (Esteves et al. 2012). In recent years, much has been written on applications and methodology of social impact assessment (Budge 2004; Goldman 2000; Roche 2009; Vanclay 2006; Vanclay and Esteves 2011). The subject is widely taught, often in conjunction with other professional and academic courses and training programmes. Numerous consulting firms have come up to offer SIA expertise in project preparation, implementation, monitoring and evaluation. These firms, along with skilled practitioners and social scientists, are regularly hired by projects to produce SIA reports that are required in advance of proposed new projects for their approval.

In the beginning, SIA was carried out as part of environmental impact assessment (EIA), which 'as a planning tool, was conceptualized as an outcome of a rational decision-making process in which analysis of more information during the planning stage was expected to reduce the uncertainties and consequences in the later construction and operation stages of a project' Choudhury (2014:102). Increasingly, SIA is now conducted as an exercise independently of EIA. Despite some similarities, EIA and SIA are essentially two different kinds of impacts and therefore better carried out separately.

What are Social Impacts?

Social impacts are the changes that occur in communities or to individuals as a result of an externally induced change. The Interorganizational Committee on Guidelines and Principles defines social impacts as 'the consequences to human populations of any public or private actions that alter the ways in which people live, work, play, relate to one another, organize to meet their needs, and generally cope as members of society. The term also includes cultural impacts involving changes to the norms, values, and beliefs that guide and rationalize their cognition of themselves and their society' (IOCGP 2003: 231).

Changes may affect employment, income, production, way of life, culture, community, political systems, environment, health and well-being, personal and property rights, and fears and aspirations. These impacts can be positive or negative. In short, a social impact is a significant improvement or deterioration in people's well-being.

Types of Impacts

Development projects affect different groups differently. Not all project area people are hurt equally. Some people lose, while others tend to gain. The Sardar Sarovar Project (SSP) is a case in point. While the project has displaced tribal people in Madhya Pradesh, the farmers of Gujarat getting irrigation from the dam have emerged as its beneficiaries. Often, impacts are particularly severe for vulnerable groups: tribal people, women-headed households, elderly persons, landless persons and the poor.

Not all projects cause similar impacts. For example, dams involve submergence of vast areas, forcing large numbers to relocate with all its attendant severe negative consequences (WCD 2000; Scudder 2005; Egre and Senecal 2003). The impacts associated with highway projects, on the other hand, are much less severe. People lose narrow strips of land, but generally gain much more from sudden spurt in property values due to increased contact with the world outside. Adverse project impacts specifically associated with dam projects, as identified by the World Bank, are given below (Box 2.1).

The following is an illustrative list of possible social impacts from development projects that involve relocation:

1. Social/Cultural Impacts

- Break-up of community cohesion
- · Disintegration of social support systems
- Increase of women's dependence on their husbands
- Loss of time-honoured sacred places of worship
- · Loss of archaeological sites and other cultural property

Box 2.1: Typical Adverse Social Impacts of Reservoirs

- Land taking for the reservoir and the dam itself
- Relocation of residences
- Impacts on access to common property resources, such as forests in the vicinity of the proposed reservoir, for grazing, fuel or fodder collections
- Temporary impacts on houses and agricultural land at the edge of the reservoir during flooding season, including riverbank gardens
- Temporary impacts on houses from construction noise, flying debris and other nuisances and dangers
- Disruption of fishing in the downstream stretches of the river and impacts on downstream agriculture
- Temporary annual flooding of houses at higher levels in the rainy season during dam construction
- Impacts on communities left behind that had depended on relocated communities
- Break-up of communities
- Impacts on host communities, especially overcrowding and increased pressure on public infrastructure
- Disruption in seasonal use of the river by people living outside the edge of the propose reservoir
- Impacts of construction of other dam infrastructures, such as access roads, transmission line canals, power house, contractors' and workers' colonies and borrow pits
- Health impacts, especially waterborne diseases, such as malaria, as a result of standing water

Source: World Bank (2004: 331)

2. Economic Impacts

- · Loss of agricultural lands, tress and wells
- Loss of dwellings and other farm buildings
- Loss of access to common property resources
- Loss of shops and commercial buildings
- Loss of businesses/jobs
- Overall reduction in income due to above losses

3. Impacts on Infrastructure and Public Services

- · Government office buildings
- School buildings
- Hospitals
- Roads
- Street lighting
- · Public taps

Impoverishment Risks

When projects are not managed well, the affected people face impoverishment risks. The eight most common impoverishment risks, as identified by Cernea (1995) in his Impoverishment Risks Model, are as follows: (1) landlessness, (2) joblessness, (3) homelessness, (4) marginalisation, (5) food insecurity, (6) increased morbidity and mortality, (7) loss of access to common property and (8) social disarticulation. These impoverishment risks must be identified by an SIA study.

The World Commission on Dams (WCD) is emphatic that the impact assessment studies must identify and delineate various categories of adversely affected people in terms of the nature and extent of their rights, losses and risks. This signals a departure from the way that social impacts were assessed in the past and will empower the planners and stakeholders to incorporate the full extent of social impacts and losses in the decision-making process (WCD 2000: 241).

Project-induced impoverishment risks are adverse impacts that are foreseeable. Cernea's (1996) impoverishment risks analysis model adds substantially to the tools used for explaining, diagnosing, predicting and planning for development (WCD 2000). But the fact remains that guidelines on using risks model for resettlement planning do not exist as yet. A handbook for preparing Resettlement Action Plan, issued by the International Finance Corporation, an arm of the World Bank for private sector projects, mentions nothing either on the risks concept or on how to operationalise it for purposes of resettlement planning (IFC 2002). Thus the potential for actual use of risks model remains largely unexploited.

A Checklist of Possible Social Impacts for All Projects

Since social impacts vary from project to project and place to place, it would seem futile to develop a checklist that could be used as a tool to identify impacts for any kind of project, anywhere (Vanclay 2002: 184). In fact, there are some strong arguments against this whole idea. If such a checklist is developed, apprehension is that some consultants may begin using it exclusively for their assessments instead of conducting a proper SIA that involves several steps, including visiting the affected communities, listening to them and understanding their concerns. It is also doubtful if checklist-based assessments carried out by outside experts can ever accurately identify the social impacts that may be unique to a particular community in a particular location.

There is, however, another view that does not consider the development of a comprehensive list of possible social impacts such a bad idea. Those who support this view argue that a checklist could make consultants and the others concerned better aware of a range of all the possible social impacts that go with development projects, and as a result this may lead to even better assessments. But the danger is that some consultants may become too dependent on such a tool and often even miss out on impacts that may be unique to the community, which a properly conducted SIA alone can identify.

Vanclay (2002: 208) cautions: 'while awareness of the list is useful for expanding awareness of the full range of social impacts, the list should not be used as a checklist'. No checklist can be a perfect guide, and this limitation needs to be kept in view.

What is Social Impact Assessment?

There is no widely agreed definition of social impact assessment (SIA). Put simply, it focuses on the possible impacts of a development proposal on people (UNEP 2002: 463). SIA seeks to identify, in advance, the social repercussions that are likely to follow from proposed development projects (Finsterbusch 1980). SIAs traditionally tend to focus on the assessment of potentially adverse impacts. With prior knowledge of the possible harmful consequences of their actions, planners can formulate plans that help avoid or at least minimise the hurtful impacts on people. As an aid to the decision-making process, SIA provides information on social and cultural factors that need to be taken into account in any planning decision that affects the lives of project area people.

The Interorganizational Committee on Principles and Guidelines (IOCPG 2003: 231) defines SIA in terms of efforts to assess, appraise or estimate, in advance, the social consequences that are likely to follow from proposed interventions. These include specific government or private projects, such as construction of power generation plant, large transportation projects and similar undertakings. As defined by the US General Services Administration (1998), social impact assessment is a method of analysing what impacts actions may have on the social aspects of the environment. It involves characterising the existing state of such aspects of the environment, forecasting how they may change if a given action or alternative is implemented and developing means of mitigating changes that are likely to be adverse from the point of view of the affected population.

Departing from early definitions, which tended to see SIA as being inherently linked to a regulatory context, Vanclay (2006: 1) observes: 'Today, the objective of SIA is to ensure that the developments (or planned interventions) that do occur maximize the benefits and minimize the costs of those developments, especially those costs borne by the community. Too often, these costs (externalities) are not adequately taken into account by decision makers, regulatory authorities and developers, partly because they are not easily identifiable, quantifiable, and measurable. By identifying impacts in advance, better decisions can be made about which interventions should proceed and how they should proceed'.

Social impact assessment is not about the assessment of social and cultural impacts alone; it includes the assessment of economic impacts as well. While economic impacts can be expressed in quantitative terms, social and cultural impacts largely remain among the intangible impacts of development. SIA the term widely in use is, in fact, a short form for social, cultural and economic impact assessments together.

Though SIA and expost evaluation are two concepts quite distinct from one another, yet these are often mistakenly used interchangeably. It must be remembered that SIA is conducted before a project is implemented to determine its desirability. Evaluation, on the other hand, is carried out to evaluate the experience and impact of a project after its completion, essentially as a lesson for better future project designing. As Meidinger and Schnaiberg (1980) noted, social impact assessments aim to anticipate the likely future outcomes before a project is implemented, while evaluation research gauges the impacts of ongoing or past projects.

Benefits of Doing Social Impact Assessment

The main advantages of doing a systematic social impact assessment (SIA) include the following:

- *Identifying negative development outcomes*: SIA helps in identifying social impacts that are disruptive and impoverishing.
- *Identifying affected groups*: SIA helps in identifying people and groups who affect or are affected by project impacts.
- Avoiding adverse impacts: SIA provides the basis for preparing mitigation measures to avoid, reduce or manage adverse impacts.
- Enhancing positive impacts: SIA also helps identify measures to maximise/share project benefits.
- *Reducing costs*: Addressing social impacts at an early stage helps to avoid costly errors in future.
- Allying fears and winning trust: SIA can help allay fears of affected groups and build a basis of trust and cooperation which is so essential for successful project implementation.
- Getting approval faster: A well-prepared SIA demonstrates that social impacts are taken seriously and helps in getting project clearance faster.

Steps in Conducting Social Impact Assessment

The time spent in planning to conduct a social impact assessment is rarely wasted. At the outset, it is however important to be clear about the purpose of the assessment, the unit of assessment, the time available, the competence of the team for the task and such other issues (Roche 2009). Social impact assessment study should be carried out in the project planning stage as early as possible.

The Interorganizational Committee on Guidelines and Principles for Social Impact Assessment spells out the steps involved in carrying out the comprehensive SIA process with suggestions on how to follow them (IOCPG 1994: 107–152). These are briefly restated, as follows.

Step 1: Define the Impact Area

The first step is to define the 'area of impact'. The size of the area varies according to a project. A dam submerges a large, contiguous geographic area affecting several villages. The impact from a highway and other linear projects occurs along the corridor as only small strips of land on either side of the road are acquired. The SIA team must get a map showing a clearly demarcated area that will be affected by the project (both directly and indirectly). In addition, field visit to the area needs to be undertaken to have a better understanding of the geographic limits of the area and the people living there.

Step 2: Identify Information/Data Requirements and Their Sources

Review the existing data on impacts likely to follow from the project to see if that could be used for assessment purposes. This may provide disaggregated data according to caste, religion, sex and other administrative categories, such as persons below the poverty line. The secondary data should be checked as much for its adequacy as for its reliability.

This review will also help identify the need for collection of additional primary data through surveys and participatory methods.

Step 3: Involve All Affected Stakeholders

Share information and consult with all stakeholders. Stakeholders are people, groups or institutions that are likely to be affected by a proposed intervention (either negatively or positively) or those who can affect the outcome of the intervention. Develop and implement an effective public involvement plan to involve all interested and affected stakeholders. The first step in developing plans for consultation and participation is to identify stakeholders who will be involved in the consultative processes. The basic questions to consider in identifying stakeholders include:

- Who will be directly or indirectly and positively and negatively affected?
- Who are the most vulnerable groups?
- Who might have an interest or feel that they are affected?
- Who supports or opposes the changes that the project will produce?
- Whose opposition could be detrimental to the success of the project?
- Whose cooperation, expertise or influence would be helpful to the success of the project?

Step 4: Conduct Screening

The SIA process begins with screening. Screening is undertaken in the very beginning stages of project development. The purpose of screening is to screen out 'no significant impacts' from those with significant impacts and get a broad picture of the nature, scale and magnitude of the issues. This helps in determining the scope of detailed SIA that would be subsequently carried out.

Step 5: Carry Out Scooping in the Field

The next step is scooping. Essentially, this involves visit to the project site and consultation with all stakeholders. It is important to confirm their understanding of key issues. On-site appreciation of impacts is indispensable for projects that cause displacement on a large scale. The local knowledge can be invaluable in finding alternatives that help avoid or at least reduce the magnitude and severity of adverse impacts.

This is an initial assessment of likely impacts and not meant to determine the level of impact. It should only identify all of the issues and affected groups to get 'all the cards on the table'

Step 6: Prepare a Socioeconomic Profile of Baseline Condition

To assess the extent of social impacts, it is necessary to assess the socioeconomic conditions of the affected people. This assessment generally involves conducting a socioeconomic survey and a broad-based consultation with all affected groups. The socioeconomic profiling should not be restricted to the adversely affected population. The survey should also include those who benefit from the employment and other economic opportunities generated by the project.

Step 7: Survey of Host Population

This survey is carried out to see that in the host area enough land, income-earning opportunities and other resources exist to sustain additional population from the affected area and that this influx does not put pressure on local resources that the host population may resent. The other important thing to see is that the people being relocated and the hosts are from a similar sociocultural background. The similarity in background helps greatly reduce social/ethnic frictions.

Step 8: Identify and Assess the Impacts

Once the range of impacts that are predictable has been identified, the next step is to determine their significance (i.e. whether they are acceptable, require mitigation or are unacceptable). Since many impacts are not quantifiable, it is impossible to rank them objectively. The community perceptions of an impact and those of the SIA team are not necessarily the same. The affected people should therefore be consulted in ranking impacts.

If impacts are found unacceptable, the SIA must clearly state that giving reasons. Generally, the SIA is expected to result in specific mitigation plans to address relevant social/resettlement issues and potential impacts.

Step 9: Develop a Mitigation Plan

A social impact assessment not only predicts impacts; it should also identify means to mitigate adverse impacts. Mitigation includes avoiding the impact by not taking or modifying, rectifying or reducing the impacts through the design or operation of the project or policy or compensating for the impact by providing substitute facilities, resources or opportunities.

Principles of Good SIA Practice

The principles to guide the concepts, process and methods of conducting social impact assessment are by now well established (see Box 2.2). These are meant to ensure sound scientific enquiry. The principles are based on expert judgement of the professionals from relevant disciplines, including sociology, anthropology, development studies, economics, geography, policy planning and management, and the best practices established in the area over the past 30 years.

The Interorganizational Committee on Guidelines and Principles for Social Impact Assessment first spells out the Guidelines and Principles for Social Impact Assessment as follows (IOCGP 1994). Basically, these principles are as follows:

1: Involve the Diverse Public

It is important to first identify all potentially affected groups and individuals and involve them throughout the SIA process. This involvement must especially reach out to groups that are routinely excluded from decision-making due to cultural, linguistic and economic barriers (women, scheduled caste and tribes, minorities and poor people). The involvement should be truly interactive, with communication

Box 2.2: Principles for Social Impact Assessment

- Involve the diverse public.
 - Identify and involve all potentially affected groups and individuals.
- Analyse impact equity.
 - Clearly identify who will win and who will lose, and emphasise vulnerability of under-represented groups.
- · Focus on assessment.
 - Deal with issues and public concerns that really count, not those that are just easy to count.
- Identify methods and assumptions and define significance.

 Describe how the SIA is conducted, what assumptions are used and how significance is determined.
- Provide feedback on social impacts to project planners.

 Identify problems that could be solved with changes in the proposed action or alternatives.
- Use SIA practitioners.

 Trained social scientist employing social science methods will provide the
- Establish monitoring and mitigation programmes.

 Manage uncertainty by monitoring and mitigating adverse impacts.
- Identify data sources. *Use published scientific literature, secondary data and primary data from the affected area.*
- Plan for gaps in data.
 Evaluate the missing information, and develop a strategy for proceeding.

Source: IOCGP (1994)

flowing both ways between the agency and affected groups. This engagement will ensure that stakeholder groups understand what the project is about and the possible ways it might affect them, both positive and negative.

2: Analyse Impact Equity

Projects affect different groups differently. SIA should clearly identify who will win and who will lose, but no groups and individuals that are considered vulnerable due to race, ethnicity, caste, gender, occupation, age or other factors should have to bear the brunt of adverse social impacts. Impacts should therefore be specified differentially for affected groups, not just measured in the aggregate. There will always be winners and losers as a result of the decision to build a dam or undertake some other development work. Identification of all groups likely to be affected is central to the concept of impact equity.

3: Focus the Assessment

Time and resources available for doing social impact assessment are often limited. In such circumstances, the best course is to focus on the most significant social impacts, giving high priority to impacts identified by the people themselves, and not just those that are easier to count. It is well known that some groups low in social hierarchy do not usually come out and participate in project preparation stage, but SIA must ensure that their concerns are fully addressed. At the same time, the role of SIA practitioners in impact analysis and assessment remains important. They have the expertise to help prioritise issues and are able to identify impacts often missed out by the people themselves.

In addition to the impacts on households, an accurate assessment of loss to the community assets also needs to be carried out. This impact assessment should include the following: (a) common property resources, (b) public structures, (c) cultural property and (d) infrastructure.

4: Identify Methods and Assumptions and Define Significance

SIA should use easily understood methods and assumptions that are transparent and replicable. The methods and assumptions used in the SIA should be made publicly available. A brief summary should clearly describe the methods used, the assumptions made and the significance of impacts determined. This will allow decision-makers as well as affected people to evaluate the assessment process.

5: Provide Feedback on Social Impacts to Project Planners

The SIA findings are inputs for designing a project to mitigate negative impacts and enhance positive impacts, a Resettlement Action Plan, for example. Therefore, SIA should be designed as a dynamic process identifying impacts at all through the project cycle. The project design process must ensure that all affected and interested persons get an opportunity to comment on the draft before it is given a final shape.

6: Use SIA Practitioners

Trained social scientists using social science research methods alone will get the best results. An experienced SIA practitioner will know what data to look for. His familiarity with impacts that have occurred elsewhere under similar settings will be an asset. It will be easier for him to identify the full range of impacts and then select procedures appropriate for their measurement. The presence of a social scientist in

the interdisciplinary team will reduce the probability of any major social impact remaining uncounted.

It is extremely important that the SIA practitioner be an independent social scientist, not a part of the agency sponsoring the SIA study.

7: Establish Monitoring and Mitigation Programme

The monitoring of important social impact variables and the mitigation programmes is critical to the SIA process. The monitoring and mitigation should be a joint responsibility of the project and the affected community.

A social impact assessment not only predicts the likely impacts; it should also identify means to mitigate those adverse impacts. Mitigation includes avoiding the impact by not undertaking the project or undertaking it with a modified design that reduces the impact or by compensating for unavoidable and/or irreducible impacts.

8: Identify Data Sources

Generally, SIAs draw on the following three sources of information: (a) published scientific literature, (b) secondary data sources including various government documents and official reports and (c) primary data from the affected area. All these three sources are important, but not all projects may need them in equal measure. Some SIAs may require more primary data from the affected area than the published materials from journals or books, for example.

The SIA can usefully consult previously published social science books, journal articles that document knowledge of impacts and case studies from similar projects. The best secondary data sources include census, compendium of statistics, land record data and other government planning and development reports. Survey research, informant interviews and participant observation are among the important primary data sources that can be used to verify data collected from other sources. Often, project area people are quite knowledgeable about the local socioeconomic situation and can provide a better understanding of the broader range of likely impacts.

9: Plan for Gaps in Data

Often, data relevant and necessary to carry out an assessment is not available.

The available documents, especially project documents, are usually long on engineering data, but short on social and cultural information. It is a challenge to conduct an assessment from such poor data sources. Yet the SIA is to be carried out.

In circumstances when information is incomplete or unavailable, it should be made abundantly clear that assessment has been made in the absence of relevant and necessary data, explaining why this could not be obtained.

SIA Methodology

Conducting SIA involves the use of a broad array of data collection methods, quantitative and qualitative, common in social science research. 'Such data range from the highly quantitative—such as demographic data—to more qualitative data on local traditions and beliefs' Rickson and Rickson (1990: 106). The SIA survey team should be familiar with the sources of information and methods and tools of data collection. The SIA methodology discussed in this section has kept in view the particular requirements of data for purposes of resettlement planning.

(a) Sources of Information

The SIA relies on both secondary and primary data.

- 1. Secondary source: Such sources of data include:
 - · Government census data
 - · Land records
 - District gazetteers
 - · Other administrative records
 - Anthropological resettlement literature
 - Documents from non-governmental organisations

2. Primary Source:

The existing data from secondary sources cannot however be a substitute for project-specific surveys. In fact, SIA derives far more relevant information from primary data generated through its own surveys, including land acquisition survey, census and inventory of assets and socioeconomic survey and consultations with the affected people during these surveys. Data currency is always a problem with secondary sources. 'Secondary data sources quickly become outdated and it is often necessary to supplement desk research with local data collected by skilled social researchers. Primary data helps strengthen baseline information and better identify what inner unmet needs exist' (Esteves et al. 2012: 38).

(b) Methods and Tools

A number of data collection method tools are used in conducting social impact assessment. Often, a combination of tools may be required to do social assessment. In addition to substantive analytical tools, SIA uses participatory methods that contribute to a better understanding of the project (Finsterbusch and Partridge 1990). These can also help increase the ownership of projects (World Bank 2003).

The choice of tools and methods will depend on several factors, such as the project and the affected people. The methods that work for urban projects may not prove much useful for projects located in tribal areas, for example. Other factors will include time and resource constraints for social assessment and the availability of experts.

Clarity on social assessment methodology is important. SIA often needs to use multiple units of analysis, such as households, individuals within the households and communities. The household unit is generally used for purposes of resettlement planning. (A household may consist of a nuclear family, extended family or a unit including non-related members.) In addition, it is important to always consider the gendered nature of impacts (Lahri-Dutt and Ahmad 2012; see Ganguly Thukral and Tripathi in this volume).

(c) Data Collection Methods

There are several methods of collecting socioeconomic data for purposes of conducting social impact assessment (ADB 2007; IFC 2002). Methods in use include both quantitative and qualitative:

Quantitative Methods

- Land acquisition survey
- · Census survey
- · Socioeconomic survey
- Other administrative records

Qualitative Methods

- · Key informant interviews
- Focus group discussions (FGDs)
- · Rapid appraisal
- Public hearing
- · Consultation with local groups, NGOs and others

Quantitative Methods

(1) Land Acquisition Survey: Land acquisition for projects leads to displacement and loss of livelihoods for local people. A land acquisition assessment survey provides detailed information on who and how many will be adversely affected by land loss. This survey is largely based on government land records, land use maps, statistical information and existing legislation and administrative practice with respect to land acquisition and project planning documents, but the data often require on-the-spot verification during a field visit.

This is a rapid, low-cost preliminary assessment done at the project identification stage. The land acquisition survey is expected to provide answers to questions such as the following:

- Where is the land that is required for the project?
- Who is the land's current owner?
- What is the tenure status of the present land users?
- What is the procedure for land acquisition?

Typically, the land acquisition survey includes only persons with legal title to land. The non-titled persons (sharecroppers, tenants, informal dwellers) are not included. This is often referred to as the 'official' list of affected persons. It is important that land-dependent, non-titled persons are also included in the survey, as this information is required later for purposes of mitigation planning.

- (2) Census Survey: This is the most important survey, as it helps to determine the exact number of people who will bear the brunt of adverse project impacts and the total property affected. Since the purpose of the census survey is to prepare an inventory of all affected persons and properties, it should cover the following:
- · All affected persons living in the project area
- All affected property
- The level and sources of all incomes and the project's impact on them

Typically, the census uses the household as the basic unit for data collection.

- Common property resources: these include pastures, fishing ponds and forests including sources of building and craft materials and biomass for domestic energy.
- Public structures: these include schools, clinics, places for worship, bathing and washing places, community centres, lampposts, playgrounds, wells and bus stops.
- Cultural property: cultural property includes archaeological sites, monuments, burial grounds and places of historical or religious importance.
- Infrastructure: this includes all infrastructure destroyed or disrupted by project construction activities, including roads, bridges, power lines and water and sewage lines.
- (3) Socioeconomic Survey: This study generates information about impacts on critical socioeconomic aspects of the affected population. These include demographic details (family size, sex ratio, literacy/education levels, population by caste, tribe, religion, gender, age groups and vulnerable groups), socioeconomic, production

systems, sources of income, patterns of social organisation and leadership, women's economic activities and income, ancestral property provisions and custom, levels of health and nutrition, etc.

In projects that do not involve a large population, socioeconomic survey and census are usually combined. In projects that cause large-scale displacement, the socioeconomic survey is a separate sampled survey of roughly 10–20 % of the total affected population, selected on a random basis. It is, however, important that the survey covers a statistically valid representative sample of all strata of the affected population (including women and other vulnerable groups).

The socioeconomic profiling should not be restricted to adversely affected population. The survey should include those who benefit from the employment and other economic opportunities generated by the project.

The Limitations of Quantitative Methods: Quantitative data collection methodology has its limitations. Factors such as the adequacy of sample, the cooperation of respondents, the experience of the survey team and the adequacy of supervision over the team in the field can bias not only sampling but data collection as well. Kanbur (2001) adds: 'Numerical information can be more easily aggregated, but it can miss out on nuance and texture. General coverage aids representativeness, but it can lose context. Statistical inference can help in discussion of causality, but miss out on the power of inductive approaches. And so on'.

Qualitative Methods

(a) Key Informant Interview: A questionnaire helps to establish baseline conditions prior to undertaking a project. The questions should cover all aspects of socioeconomic situation (such as religion, caste, family size, education, skills, occupation and income).

The design of the questionnaire is rather important. It should focus on key issues, yet be simple and in the local language. Persons selected to conduct the interviews should be properly briefed and trained to get the questionnaires completed.

The team conducting the interviews should include female members, as they alone are in a position to talk to women, especially in rural areas and among communities where there are restrictions on their movements.

The quality of information generated through interviews is dependent on a number of factors (Roche 2009). The following are among some major such factors:

- The relationship that the interviewer is able to establish with the respondent
- Willingness to adjust interviews to the time convenient to respondents
- Ability to listen to answers patiently and to probe and cross-check them in a thorough but polite way
- Recognising that same questions can be asked (and answered) in several others ways
- Taking notes in a way that does not interrupt the flow of conversation and appear threatening

- (b) Focused Group Discussions (FGDs): In FGDs, one or more researchers guide a group discussion using probes but letting group members discuss the topic among themselves. The researcher usually uses an interview guide but minimally structures the discussion. The group has 6 to 10 participants to discuss issues set out by the researcher. In organising FGD care must however be taken to ensure that the powerful individuals/groups alone do not dominate the discussion.
- The disadvantages of focused group discussions (FGDs) include:
 - (a) They do not give quantitative estimates of characteristics of a population.
 - (b) They are susceptible to interviewer biases.
 - (c) There are many things that participants will not reveal in group situations.
- The advantages of focused group discussions (FGDs) include:

Group interviews can...provide background information for designing projects and programmes, generate ideas and hypotheses, for intervention models, provide feedback from beneficiaries, and help in assessing responses to recommended innovations. They are also useful for obtaining data for monitoring and evaluation purposes and for interpreting data that are already available. (Kumar 1987)

- (c) Rapid Appraisal: Sometimes the approach known as 'rapid appraisal' (known by several different names) may be valuable. Partly, this approach arose as a reaction against time- and budget-consuming surveys. This low-cost method is based on indepth interviews with critical informants known to be knowledgeable about the issues to be explored. In-depth interviewing is supplemented by analysis of secondary data and group interviews with representatives of relevant groups in the community. The key to rapid appraisal techniques is to compress the research process so that data are collected, analysed and put together in a usable form in the shortest possible time span.
- (d) Public Hearing: A public meeting is open to all affected and interested persons. The SIA team at this meeting first describes the project and its likely impacts, both positive and negative, and then allows free discussion on all issues. People often provide useful feedback on the project and its impacts, which can be a useful input to the process of decision-making. 'Simply talking, and listening to people is probably the most common and useful way of assessing impact' (Roche 1999: 108).

Meetings should be held at places and times convenient for the affected people, especially women. In traditional societies women do not come out to present their concerns, yet it is important to get their perspective on many important matters. The SIA team in the field must therefore include a female member. Meetings should be so organised that all are heard. Local languages should be used in both presentations and discussions.

SIA practitioners will do well to balance quantitative and qualitative methods of collecting data to ensure as complete an understanding of the project's impacts on the affected people as possible.

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Can SIAs be Done Objectively?

Experience has shown that the potential for biases in SIA is enormous. Surprisingly, the potential for such lapses in environmental impact assessments (EIAs), which largely rely on quantifiable data, is also no less common. SIAs, on the other hand, where social and cultural impacts are not measurable, the possibilities for huge errors in assessments should be neither unexpected nor uncommon.

Often, a major reason for distortions is the pressure on SIA team from project developers to give a report that downplays negative impacts but highlights benefits from the project, simply because a favourable report helps in getting the necessary clearance. Livingston (2013: 4) cites the case of fisheries component of the ESAI for the Don Sahong Dam in Laos where the company went even further and itself totally changed the consultant's report to suit its interests (See Box 2.3).

Some consultants yield to the pressure from their employers, and even if initially reluctant, they do give reports that are not based entirely on impacts as felt by the affected people. Otherwise, they fear losing future employment opportunities. Such distortions can, however, be avoided, if impact assessments are conducted by independent and trained professionals. Clearly, the question who conducts the SIA is crucial.

Generally, project developers themselves fund SIA studies in the hope to obtain the mandatory clearance for their proposed projects without hassles. This practice is, however, fraught with certain risks of manipulation, because the developer will invariably prefer to hire a consultant who will produce an assessment report that will be favourable to the project, regardless of how damaging would it eventually turn out for the affected people.

Apart from not leaving the task to unqualified consultants, transparency in the process of conducting SIA would also be extremely helpful (Livingston 2013:4). Experts therefore demand that the reports be made public by consultants instead of being hidden or potentially altered by project proponents. An informed public is more likely to take action to make sure their interests are accounted for and addressed.

Box 2.3: Distorting the Findings of a Consultant's ESIA Report

In the case of the Don Sahong Dam in Laos, the consultant did identify the potential serious impacts of the project, but all those impacts were removed from the report by the company that hired the consultant, after the company was unable to bully the consultant into changing his findings (in most cases, bullying is successful). Thus, the final report submitted to the government had the consultant's name on it, but did not include his actual findings.

Source: Livingston (2013: 4)

The other two major factors that determine the outcome of an assessment are (a) who is consulted during the assessment and (b) who carries out the assessment. That is why social impact assessments conducted by two different consultants often tend to diverge. In fact, Stabinsky (2000: 269) firmly holds the view that SIAs cannot be objectively duplicable.

Reporting SIA Results

Once a social impact assessment has been completed, a formal report with an executive summary should be prepared for submission to the authority that sponsored the study (Table 2.1 A Format for SIA). The SIA sponsors should ensure that the report is publicly made available once it has been formally submitted. Any comments received on the report should then be considered before finalising the SIA report.

This report should be divided into several distinct sections beginning with an executive summary and followed by each section dealing with different aspects of the SIA process, such as (a) introduction [describes scope of the report and provides a brief outline of the contents of the report]; (b) description of the project; (c) methods used in identifying project impacts; (d) affected population; (e) anticipated project impacts on different groups, both positive and negative; (f) affected vulnerable groups including scheduled castes/scheduled tribes/other backward classes, women-headed households, squatters and encroachers, disabled and those unable to work, elderly and children without support and the very poor; (g) inventory of losses to households; (h) losses to the community; (i) public consultation and disclosure; (j) findings and recommendations; and (k) mitigation plan.

The report should conclude with its recommendations, clearly stating whether the project could proceed in its present form, proceed with some changes or dropped completely.

SIA and Development Decision-Making

Social issues often remain among the least important concerns in development decision-making. There is not much support for the SIA process either. Because it is an elaborate process, SIA is often criticised as a process that is cumbersome, expensive and time-consuming. Governments seem not particularly supportive of transparency in the decision-making process. Developers are wary of early disclosure of SIA results. Communities often see SIA as a way to deflect their objections to a project, not as an impartial process designed to help them (WCD 2000). This lack of support, in turn, considerably reduces the ability of SIA to influence development decision-making and resettlement planning in particular.

SIA can, however, significantly improve development outcomes if the following elements become part of its standard practice:

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Table 2.1 Content and format of a social impact assessment report

Executive Summary

Introduction

Description of the Project

Methods in Identifying Project Impacts and Affected People

Land acquisition survey

Census

Socioeconomic survey and studies

Consultation with project area people and other stakeholders

Anticipated Project Impacts

a. Positive Impacts

b. Adverse Impacts

Affected Population

Directly affected project area people Indirectly affected population

Affected Vulnerable Groups

Scheduled castes/scheduled tribes/other backward classes

Women-headed households

Squatters and encroachers

Disabled and those unable to work

Elderly and children without support

The very poor

Inventory of Losses to Households

Land

Jobs

Houses

Other structures

Income and livelihood

Social networks

Losses to the Community

Public buildings

Common property resources

Cultural property

Infrastructure

Public Consultation and Disclosure

Findings and Recommendations

Mitigation Plan

Relocation

Income and livelihood restoration

- SIA is carried out at an early stage of the project preparation process when it is possible to effect changes in the project design.
- SIA reports are seen as decision-making tools, not merely as a process clearance requirement.
- The consultant conducting SIA is an independent, trained and licensed expert and not a staff member or a paid consultant of the project developer.
- Above all, project-affected people are involved in the entire SIA process, and SIA studies are publicly reviewed prior to preparation of resettlement plans.

Finally, it is important to acknowledge, as Stanley (2004: 4) pointed out, that social impact assessments will not necessarily lead to perfect solutions and satisfied communities. Individuals and groups will always have differing views on development and its outcome, and even the most detailed and conscientious SIA is unlikely to change this. However, by identifying key problems before they arise and by involving the community in both the problem identification as well as the problem solving processes, negative impacts can be reduced or at least managed for and negotiated.

References

ADB (2007) Handbook on social analysis: a working document. Asian Development Bank, Manila Budge RJ (2004) The concepts process and methods of SIA. The Social Ecology Press, Middleton Cernea MM (1995) Understanding and preventing impoverishment from displacement: reflections on the state of knowledge. Keynote address presented at the international conference on development-induced displacement and impoverishment, held at the University of Oxford, pp 1–32, 3–7 Jan 1995

Cernea MM (1996) Understanding and preventing impoverishment from displacement: reflections on the state of knowledge. In: McDowell C (ed) Understanding impoverishment: the consequences of development-induced development. Berghahn Books, Providence

Cernea MM, Kudat A (1997) Social assessments for better development. The World Bank, Washington, DC

Choudhury M (2014) Environment in an emerging economy: the case of environmental impact assessment follow-Up in India. In: Marcus N (ed) Large dams in Asia: contested environments between technological hydroscapes and social resistance. Springer, pp 101–124

Colson E (1971) The social consequences of resettlement: the impact of the Kariba Dam upon the Gwembe Tonga. Manchester University Press, Manchester

Courtland RW (2003) Risks and rights: the causes, consequences and challenges of development-induced displacement. The Brookings Institution, Washington, DC (SAID Project on Internal Displacement) An Occasional Paper may 2003

Downing TE (2002) Avoiding new poverty: mining-induced displacement and resettlement. International Institute for Environment and Development/World Business Council for Sustainable Development, London

Egre D, Senecal P (2003) Social impact assessments of large dams worldwide: lessons learned throughout the world. Impact Assess Proj Appraisal 21(3):215–224

Esteves, Ana M, Daniel F, Frank V (2012) Social impact assessment: state of the art. Impact Assess Proj Appraisal 30(1):35–44

Finsterbusch K (1980) Understanding social impacts: assessing the effects of public projects. Sage Publications, Beverly Hills

- Finsterbusch K, Partridge WL (1990) The development anthropology approach. In: Finsterbusch K, Jasper I, Lynn L (eds) Methods for social analysis in developing countries. Westview Press, Boulder/Colo, pp 55–71
- Franks D (2012) Social impact assessment of resource projects. The University of Queensland/ University of Western Australia, Canberra/AusAId/Brisbane, St Licia
- Geisler C (1994) Adapting social impact assessment to protected area development. In: Davis SH (ed) The social challenge of biodiversity conservation (global environmental facility working paper no 1). The World Bank, Washington, DC, pp 25–43
- GOI (2013) The right to fair compensation, transparency in land acquisition and rehabilitation and resettlement act 2013. Government of India, Ministry of Rural Development, New Delhi
- Goldman RL (ed) (2000) Social impact analysis: an applied anthropology manual. Berg, Oxford/ New York
- IAIA (2003) International principles for social impact assessment. Fargo: International Association for Impact Assessment (Special Publication Series No 2, May 2003 (pp 1–8)) www.iaia.org
- IFC (2002) Handbook for preparing a resettlement action plan. International Finance Corporation, Washington, DC (Environment and Social Development Department)
- IOCGP (Inter-organizational Committee on Guidelines and Principles for Social Impact Assessment) (1994) Guidelines and principles for social impact assessment). Impact Assess 12(2):107–152
- IOCPG (Inter-organizational Committee on Principles and Guidelines for Social Impact Assessment) (2003) Principles and guidelines for social impact assessment in the USA. Impact Assess Proj Appraisal 21(3):231–250
- Jones MG (2002) "Social impact assessment: more than ever a business need", impact assessment in the corporate sector IAIA business and industry series no 1, May 2002, p 4
- Kanbur R (2001) Qualitative and quantitative poverty appraisal. The state of play and some questions. Paper presented at qualitative and quantitative poverty appraisal: complementaries, tensions and the way forward workshop held at qualitative and quantitative poverty appraisal Cornell University, March 15–16
- Kate S, Camargo I, Withnal K, Corrigan C, Franks P, Roe D, Scherl LM, Richardson V (2010) Social assessment of conservative initiatives: a review of rapid methodologies. IIED, London
- Kaul I (1999) Introduction: steps towards social progress in the new millennium. Int Soc Sci J (Policy Options for Social Development) L1(4):425–436
- Kumar K (1987) Conducting group interviews in developing countries. U.S. Agency for International Development, Washington, DC (Program Design and Evaluation Methodology Report No 8)
- Lahri-Dutt K, Ahmad N (2011) Considering gender in social impact assessment. In: Vanclay F, Ana Maria E (eds) New directions in social impact assessment: conceptual and methodological advances. Edward Elgar Publishing, Cheltenham
- Lahri-Dutt K, Ahmad N (2012) Considering gender in social impact assessment. In: Vanclay F, Esteves AM (eds) New directions in social impact assessment: conceptual and methodological advances. Edward Elgar, Chaltenham
- Livingston H (2013) Talking to the experts: can we improve the ESIA process? World Rivers Review, March 2013, p 4
- Mathur HM (2011) Social impact assessment: a tool for planning better resettlement. Soc Chang 41(1):7–120
- Mathur HM (2013) Displacement and resettlement in India: the human cost of development. Routledge, London/New York
- Mathur HM, Marsden D (eds) (1998) Development projects and impoverishment risks: resettling displaced people in India. Oxford University Press, New Delhi
- Meidinger E, Schnaiberg A (1980) Social impact assessment as evaluation research: claimants and claims. Eval Res 4(4):507–535
- Modak P, Biswas AK (1999) Conducting environmental impact assessment in developing countries. Oxford University Press/ Tokyo: United Nations University, New York Press (also published in India by Oxford for sale only in South Asia)
- Morse B, Berger T (1992) Sardar Sarovar: the report of the independent commission. Resource Futures International, (RFI), Ottawa

- Prendergast C (1989) Condorcet's canal study: the beginnings of social impact assessment. Impact Assess Bull 7(4):25–38
- Rickson RE, Rickson ST (1990) Assessing rural development: the role of the social scientist. Environ Impact Assess Rev 10(1–2):103–112
- Roche C (ed) (1999) Impact assessment for development agencies: learning to value change. Oxfam, Oxford
- Roche C (2009) Impact assessment for development agencies: learning to value change. Oxfam, Oxford, reprinted 2002, 2004, 2005, and 2009
- Scudder T (1996) Resettlement. In: Biswas AK (ed) Water resources: environmental planning, management, and development. Mcgraw Hill, New York
- Scudder T (1997) Social impacts of large dams. In: Dorcey T (ed) *Large dams: learning from the past: looking at the future* (workshop proceedings, gland, Switzerland, 11–12 April) gland and CIUCN Cambridge. The World Bank Group, Washington, DC, pp 41–68
- Scudder T (2005) The future of large dams: dealing with social, environmental, institutional and political costs. Earthscan, Sterling
- Scudder T (2012) Resettlement outcomes of large projects. In: Cecilia T, Dogan A, Biswas AK (eds) Impacts of large dams: a global survey. Springer, Berlin
- Stabinsky D (2000) Bringing social analysis into a multilateral environmental agreement: social impact assessment and the biosafety protocol. J Environ Dev 9(3):260–283
- Stanley J (2004) Conducting social and economic impact assessment: a practical guide for regional NRM bodies in queensland the state of queensland (department of natural resources, mines and energy)
- UNEP (2002) UNEP's environmental impact assessment training resource manual, 2nd edn. UNEP, Geneva
- US General Services Administration (1998) Social impact assessment fact sheet http://www.gsa.gov/pbs/pt/call-in/factsheet/1098b/1098bfact.htm
- Vanclay F (2002) "Conceptualizing social impacts". Environ Impact Assess Rev 22(2002):183–211 Vanclay F (2006) Conceptual and methodological advances in social impact assessment. In:
- Becker HA, Frank V (eds) The international handbook of social impact assessment: conceptual and methodological advances. Edward Elgar Publishing, Cheltenham
- Vanclay F, Esteves AM (2011) New directions in social impact assessment: conceptual and methodological advances. Edward Elgar Publishing, Cheltenham
- Vanclay F, Esteves AM, Aucamp I, Franks D (2015) Social impact assessment: guidance for assessing and managing the social impacts of projects. International Association for Impact Assessment, Fargo
- WCD (2000) Dams and displacement: A new framework for decision-making (the report of the world commission on dams). Earthscan Publishing, Sterling
- World Bank (2003) Social analysis sourcebook: incorporating social dimensions into bank-supported projects. The World Bank/Social Development Department, Washington, DC
- Word Bank (2004) Involuntary resettlement sourcebook: planning and implementation in development projects. The World Bank, Washington, DC

Chapter 3 Integrating SIA into Resettlement Planning: An Example from Mineral Mining Projects

Gordon Appleby

Abstract Mineral mining projects present special opportunities for SIA. The large geographic scope and long timeframe are unusual for conventional SIA, which necessarily becomes a rolling exercise with areas investigated only as they are needed. These special characteristics also create new opportunities. Because mining companies must maintain a 'social licence' to operate, the companies create a resettlement unit, a community welfare programme, and, possibly, a benefit-sharing mechanism to reach out to local communities. SIAs conducted over time provide an opportunity to correct mistakes, enabling better planning. And, perhaps most importantly, continuous SIA provides a rationale for effective monitoring, an activity that is otherwise seldom fully implemented. In these ways, SIA contributes significantly to the well-being of the local population.

Keywords Areal resettlement • Continuous social impact assessment • Resettlement planning • Delimitation of project area • Mineral mining • Social license • Zone of impact • Replacement land • Equator principles

This chapter examines the use of social impact assessment (SIA) for resettlement planning in mineral mining projects that entail land-take, involuntary resettlement and livelihood restoration. A key point is that mineral mining projects are very similar to any areal project that dislocates people across a wide area, such as a dam and its reservoir. Such projects are seldom benign; they often dislocate hundreds if not thousands of people, with devastating consequences on livelihoods and incomes, as well as social well-being (Scudder 2005; Padel and Das 2011; Mathur 2013; Lahri-Dutt 2014; WCD 2000).

However, mineral mining projects also differ significantly from multilateral and bilateral donor-financed, public sector projects in important ways. First, they are now generally private sector investments, so firms have the lead rather than public sector agencies, which implies a different set of attitudes or mindset. With the

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promulgation of the National Mineral Policy 1993, the mining sector in India is also now open to private sector (CSE 2008: 28). Second, these projects take place over decades rather than months; they are long-term activities whose financial goals shift over time. And third, the implementers are mostly engineers, which staffing, though reasonable, raises questions of effective communication of social findings to senior managers and decision-makers. Even though SIA is as much art as science, properly used, social assessment can be a tremendously effective tool for resettlement planning, including developing the requisite social license for the mine to operate. Moreover, the special factors that make SIA so useful for private sector mining projects provide potential lessons for area-wide public sector projects.

Types of Resettlement Projects and the Special Nature of the Mineral Mining Projects

Involuntary resettlement is conventionally divided into three categories: urban, linear and areal (World Bank 2004: 269–360). Urban projects are distinctive because of high population density, the diversity of the population and a context of rapid change. Even projects that require little land can cause significant displacement, and the location of such investments may introduce more political factors than in other projects (World Bank 2004: 271). Linear projects such as roads, transmission lines, pipelines and primary irrigation canals usually take a long, but relatively narrow, corridor of land. These projects typically have less severe impacts on people because the infrastructure can be rerouted around populated areas, and most (but certainly not all) land-take is bits of lots, so there is both limited physical relocation and, for the most part, relatively limited economic dislocation (World Bank 2004: 299). By contrast, areal projects that include large dams and coal mining take large areas, dislocate entire communities, destroy production systems, require significant relocation into already populated areas, increase human and animal population densities in the receiving area and pose major difficulties in restoration of people's livelihoods (World Bank 2004: 321).

Mineral mining projects do not fit this common typology. They are areal projects in that the mining concession may cover many square miles in area. But these projects have both linear and even urban subareas. The mining concession is typically laced with roads to link the mines to the mine offices, to any processing and transport facilities and to the worker camps. Mineral mining projects may even have

¹There are various types of investments in the extractive mineral sector. This essay focuses on open-pit mineral mining within large concession areas because such operations require land throughout the concession almost at random. By contrast, oil wells are point developments, that is, they take small areas around the well site. Meanwhile their pipelines are linear projects that take corridors of land through multiple administrative districts. These impacts are important but more limited than mineral mining operations. Finally, underground mines may not require large surface areas, so these are not explicitly considered here.

urban components if a seam of minerals runs under a town. But mineral mining projects have quite special characteristics. The concession grants the company the right to work in any part of that area, but the mine will in fact require only some of the area. Second, mine investments are increasingly private sector initiatives² that are managed by company employees, who are mostly engineers. A third distinguishing factor is time. Mineral mines may operate for decades, and mining areas may be opened up at different times in different areas of the concession. Land acquisition—resettlement—can be a constant gnawing away at the available (or remaining) land area in the project concession rather than a one-time acquisition that once completed is over and done with. 'The major challenge in such incremental resettlement is maintaining a consistent approach to compensation and income restoration over the life of the project' (IFC 2002: 6–7). The spatial scope, staff hierarchy and the distinctive temporal dimension all add significantly to the complexity of resettlement in mineral mining projects.

The other difference of mineral mining projects from most public investment projects is that subsurface rights—the right to mine subterranean minerals—supersede surface rights. With almost any other type of project, the investment is fixed on the surface of the land, so that legally the sponsoring agency must acquire the land before initiating its activities. With mineral mining, by contrast, depending upon the country's permitting process, the national government, through its Ministry of Mining or equivalent agency, may grant a concession to a company with no thought to the fact that there may be—and indeed almost certainly are—people living and working in the concession area. The concession is granted for subsurface rights, which trump surface rights. The fact that people may be living on or working in the project area is typically not taken into consideration when the concession is granted to mine in an area. The mining company effectively owns the entire area and is often on its own in dealing with the local population.³

Social Impact Assessment Requirements

Although social assessment may not be a consideration in the granting of the mining concession, company nonetheless will undertake an SIA for several reasons. If the company is seeking international financing for the project—or wants the imprimatur of a multilateral financial institution in order to obtain private sector

²Because of confidentiality clauses in consultant contracts, this essay necessarily generalises from experiences without specifying specific investments. The points made in this essay are generally applicable to the subsector of mineral mining.

³ It warrants mention that social planning for a mineral mine operation takes place within the context of the concession. In mineral-rich areas, many concessions may be granted by the government, with the result that mining companies are not free to consider developing relocation sites or villages outside of their concession areas. Further, it is commonly the case that mining companies find it difficult, though not impossible, to coordinate among themselves. This raises the question, not taken up in this essay, of the cumulative impacts of several mining initiatives in the same area or region.

financing—it will contract for an SIA in order to satisfy international donor requirements, such as the Equator Principles. Less bureaucratically, the company may do an SIA in order to identify the issues that will arise while mining in its concession area and, importantly, to develop a social license to operate. And, the company may use the SIA to respond to issues raised by civil society agencies. In other words, if nothing else, the SIA is a necessary, although not necessarily required, step for the mining company to obtain locally and maintain its social license to operate, that is, the cooperation and collaboration of the people in the area.

Every social impact assessment requires a clear definition of the project and a precise delimitation of the project area. The nature of the investment activities—the definition of the project—determines what will likely happen among different segments of the population. The delimitation of the project area, in turn, determines the geographic range of those impacts.

(a) **Project Definition** A clear and complete description of project activities is the first step in any social impact analysis. In the ideal case, the final technical plans are available so the project activities and their location can be assessed precisely. In fact, final technical plans are often not available at the time the social impact assessment is to be conducted. It is not uncommon for the social analyst to be given engineering plans that are at a 65 % or an 80 % state of readiness. In other words, there is a significant margin of error, mostly in the location of project activities but, depending upon the investment, possibly also in the types of activities to be undertaken.

Mineral mining projects have a greater problem in defining the project because of the timeframe for mining activities. At the outset, engineering plans are likely being developed even as the SAI is being conducted. Initial planning for land-take therefore focuses on the location of mining areas, office areas, storage depots, worker camps and connecting roads, whose locations and alignments would be basically known. Indeed, some areas—offices and worker camps, in particular—may already have been developed in part because various facilities likely have already been built for pioneer exploratory teams that preceded actual mine development. Thus, while the general location of different functional activities may be known, the precise boundaries of each functional area are often still undetermined, pending further studies.

No less importantly, only some of the ore deposits may be identified precisely and their development prioritised. It is usually the case that various areas of exploitable deposits are marked off but not studied in depth in the initial period. Consequently, the more distant in time the development of a potential deposit is, the less well defined are its boundaries and its ancillary needs, such as haul roads and tailings ponds. In fact, there are likely no engineering plans available for the long-term investments. The initial social assessment therefore necessarily focuses on the immediate or short-term need for land—the initial mine area, staff offices, other work and storage areas, any processing plant and the connecting road network. Areas to be taken later are not included in the initial social assessment because these areas are likely to be not precisely known—and indeed it cannot be known for certain that they will be developed in the event.

Finally, international resettlement policy expects that the project proponent will have considered "feasible alternative project designs to avoid or minimize physical and/or economic displacement, while balancing environmental, social and financial costs and benefits, paying particular attention to impacts on the poor and vulnerable" (IFC 2012: Performance Standard 5, Para. 8). Minimisation in the context of mineral mining has a rather special connotation. Areas where mineral deposits occur will be taken at some time, almost regardless of their current uses. Minimisation of land-take consequently pertains to the siting of any processing facilities (which nonetheless likely need to be near the deposits in order to reduce transport costs), offices, depots and worker camps, as well as the connecting roads. Put simply, the ore is sacrosanct.

(b) Delimiting the Project Area Delimitation of the project area defines the area where these activities will take place. The project area is usually readily identifiable. A school rehabilitation project would likely take place within the footprint of the existing school grounds, which are clearly demarcated. A road or electrical transmission line project will have an alignment and a specified right of way. And at the far extreme, a national park or a dam and its reservoir would have definite geographic limits.

As the discussion of project activities above indicates, only some of the concession area will be studied in depth in the beginning, for the exact limits of the mining area may not be precisely known. Mineral projects typically develop definite knowledge of where the minerals lie, and the value of those deposits, over time. At the outset, there will be definite knowledge of deposits or veins in defined areas based on initial exploratory work. These deposits are the basis for the economic analysis and for the financial decision to go forward. However, exploratory drilling is expensive—it can cost over \$100,000 US to drill for core samples in one place. Because of these costs, companies typically pace their exploratory drilling over time. The drilling programme is defined by the need to identify and assess outlying deposits for the continued operation of the mine. Thus, at the outset of the programme, only a core area may have been defined precisely, along with any areas needed for worker camps and processing plants. The total area that will be mined, however, is likely not known for years.

The social analyst therefore necessarily focuses on those areas where land-take is most certain. Even here, the full geographic or substantive range of the impacts may not be known. So the social analyst has to make worst-case scenario assumptions. If office and other work areas, for example, have not been decided on finally, the analyst must add a contingency area to the estimate in assessing how much land will be lost and how many people will be affected. Similarly, if mines, processing plants or tailings ponds are involved, the analyst will have to assume a greater than

⁴Also, there are often debates over the extent of the zone of influence of a project and the zone of impact. In mineral mining projects, the concession can be taken as the zone of influence while land-take areas represent the zone of impact. However, as mentioned earlier, this conventional interpretation overlooks the question of cumulative impact when there are various concessions in the same region.

normal buffer zone in order to be sure to have included those areas and people who will be affected. If in the event the area required is smaller than the worst-case scenario assumptions, the resettlement plan can be modified to reflect the actual need.

- **(c) Conducting Social Impact Assessment** Once the project activities and land need, at least in the short term, are defined, the social analyst can carry out a census of the population in the project area and assesses how the project might impact specific segments of the population. Three instruments are used in this work:
 - (i) Demographic census of all the affected families that includes information about land holdings, occupations and income, as well as household furnishings and agricultural equipment⁵
- (ii) An inventory of all the fixed assets that will be lost, which includes land, structures, ancillary infrastructure (e.g. fences, animal pens, outdoor kitchens, latrines), crops and trees
- (iii) A socioeconomic survey of a sample of the population in the project area, including both project-affected people (PAP) and others, that covers community services, organisations and views about the project and the company

The extent of the social impact or resettlement studies depends on the types of impacts, the number of people affected and the severity of the impacts. Projects with limited impacts can develop relatively simple resettlement plans. For example, a relatively benign project, such as school rehabilitation, may affect street vendors who sell candies and other goods to the school children. Such vendors typically locate along the road that leads to the school and so should not be affected by rehabilitation of the school's physical plant if the school continues to operate during the rehabilitation period. But there are instances where some vendors work inside the school grounds. These vendors might have to relocate within the school grounds if the construction contractor needs their area, for example, for storing materials or equipment. In some cases, it turns out the vendors pay an informal fee to occupy space within the school grounds to school officials, who use these funds to finance school needs such as chalk or paper. Removing the vendors from the school grounds would, in such instances, mean that small sums that are important for financing school needs would be lost, thus impacting school—and perhaps student—performance. In other words, even in projects with ostensible limited impacts, close, on-the-ground investigation by experienced social analysts can identify probable knock-on effects that can have significant consequences locally.

The SIA process in mineral mining projects is similar but much more extensive. Mine development requires significant areas and has severe impacts on local populations. Because mining usually takes place in rural areas, most resettlement will be rural. That means at least parts of villages will surely have to be relocated, many fields will be lost, and there are likely to be other economic and social impacts. For example, a village that has to relocate may have a school that accepts students from outside its area. When the village moves, the school will close, and the outside stu-

⁵Community infrastructure is inventoried separately.

dents may be left without access to an education facility. Thus, the job of the social analyst is to discern just what impacts will affect which groups of people and what can be done to mitigate them, which is, needless to say, as much an art as it is a science.

The tools for social impact assessment of mineral mining investments are basically the same tools used in any social analysis. The social analyst has to census all the people in the project area, inventory the fixed assets that will be lost (e.g. land, structures, crops) and determine what the people do for a living in order to determine how many people will be affected and to what extent. For those who must move, the analyst must not only determine how many people will need to move and the number of structures that will be taken but also look into less obvious matters such as authority and leadership patterns and social support networks. Other key questions are: whether all those moving from one place will all move together to the new village or town, where the group or groups can move to and whether the people affected accept those options, not to mention the details of where social infrastructure will be located in the new villages, the design of houses and outbuildings and the allocation of the house plots and residences. For those who will lose livelihoods or jobs, the basic questions are: who loses what job or livelihood and the extent of the impact. But resolution of these questions requires a deeper analysis: whether or not in-kind replacement of lost assets will restore livelihoods and standards of living, whether additional income-generating activities—for men, for women and for both men and women — will be necessary and if so, what sorts of activities (e.g. intensified agriculture, small enterprises) are feasible and the supporting activities that must be put in place, from vocational training, to start-up capital, input supply, storage facilities and marketing arrangements.

Resettlement Planning Requirements

Resettlement planning requires not only identification of the impacts, the SIA, but also studies to determine what remedial measures need to be put in place. The resettlement action plan is the combination of the SIA with what could be called, in parallel with the environmental management plan, the social management (or development) plan.

Areal projects pose a number of particular social impact questions. Reservoir projects, for example, raise questions about how close to the project area habitations can be allowed and about 'leftover' or 'left out' areas. With reservoirs, there are questions about proximity of population to the reservoir because of considerations of sanitation and siltation (deforestation). Further, the reservoir may inundate part of, but not the entire, village, which raises the question of whether those who are not inundated can remain in place or must also be moved. Lastly, some villages that ostensibly can remain in place may be isolated, if not entirely cut off, which again raises the question of whether they can remain in place.

Similar questions arise in mineral mining projects. Just as with reservoirs, some villages will have to move in their entirety, others may remain in part, and some can remain although they will have difficult access. Each case has to be examined individually. Villages that have to move in their entirety may all move together, even if in waves, or they may opt to go to different locations. Segments of villages that may remain in part at this time may still need to move in the future, so that it is advisable to move the entire village at this time. Or, possibly, some of the villagers may remain in their original location.

Access to the residential or farming area is another question that must be examined in detail in resettlement planning. A mine may not need the entire area if, for example, the seams of ore encircle an area like crab claws. But the interior space formed by the ore deposits likely will not be habitable and may not even be usable for agriculture because of difficulties of access due to the mine roads. The natural inclination on both social and financial grounds will be to leave the people in the enclave if there are no safety issues. However, access to the area may become so impeded that in fact the population should be removed because the people cannot get easily to their homes or fields.

Apart from whether a village or family must move, there are the questions of distance from each of the mine facilities—the mining camps, the mine offices, the mine depots and storage facilities, the mine areas, the tailings ponds and any processing plant. Each facility has its own probable distance or buffer zone. In some instances, people may be relatively close to the mine facility. For example, Project-affected People (PAPs) can usually live quite close to worker camps and mine offices. Meanwhile, storage areas might require greater distances in order to reduce the extent of pilferage. And, the mine areas, tailings ponds and any processing facilities may require a significant distance from any population clusters, especially when there are issues of wind-borne dust contaminated by trace amounts of chemical from the mining facilities.

Type of occupation also influences the decision about distance between the mine and the local populations. Mineral mining companies can usually accept greater latitude in where people farm than they can in where people live: residences will typically be farther from mine facilities than fields. But even here, it is important to take into account questions of accessibility of fields when haul roads are put in and of dust and pollutants falling onto cultivated crops.

In rural areas, agriculture remains the major livelihood restoration activity. Thus replacement fields have priority. Finding replacement fields is never an easy task. All the good land is, presumably, already occupied. In mineral mining projects, the identification of potential replacement land is even more complicated because the operation needs to avoid settling people on areas that might be taken in the future, even though the mining potential has not been studied in great detail. In other words, finding available land is always difficult and is only more so in mineral mining projects. Moreover, putting more people on a smaller land area increases the population pressure on the remaining area, with the strong possibility of vegetation loss, erosion and land degradation. In rural areas, the agricultural options are the likeliest

Box 3.1: A Success Story of Marketing Products Made by Mining-Displaced People

Experience shows that the marketing of products locally made by displaced people generally does not much succeed. But an NGO headed by Subash Bakshi in the mining areas of Coal India Limited proves that failure is not inevitable. The innovative approach of this local NGO to small-enterprise development centred on identifying products purchased by the mining operation that could be produced locally. To identify the products, Bakshi walked through the mine warehouses and depots, taking note of the items the company bought that could be made locally by producer groups composed of project-affected people. Brooms, helmet assembly, uniforms (and stitching badges onto shirts) and sample bags—a wide range of items—could be commissioned locally rather than bought elsewhere and brought to the site. To make each item, a small producer group would be formed, and since the market for the item was basically assured, the likelihood for success would be high as long as quality was maintained.

Source: Appleby (1997).

to succeed because they do not involve new skills. But they are also relatively limited: open new land or intensify production on available replacement land.⁶

Where other options are to be considered, it is best to focus on the guaranteed demand of the mine operation since marketing is often the overlooked dimension of small-enterprise development and thus the Achilles heel of so many well-intentioned programmes. A successful example of this approach was pioneered by an NGO working in the mining areas of Coal India Limited (CIL) in Ranchi, a state in eastern India (see Box 3.1).

Finally, it warrants mention that the most obvious livelihood restoration measure, direct employment by the company, is not the preferred alternative, unless the company takes decisive action to ensure that PAP employees actually perform the work expected. The fact is that PAPs who are offered employment with the mining company can come to consider their employment to be an entitlement because of their relocation and so do little or nothing on the job. In China, for example, older farmers are employed as company watchmen, even though they may not be very effective guardsmen. And in CIL, the children of deceased PAPs who had been given employment with the company came to believe that they had a hereditary right to employment and, in some instances, that all the male children had the right to permanent employment with the company. Clearly, the company can offer employment, but it

⁶Irrigation projects have an advantage in that they can allocate irrigated plots of smaller size to PAPs. However, there are other considerations that have to be taken into account, such as ethnic differences and landholding size, for different groups may not work together well and larger-scale famers typically dominate water user and cooperative groups, to the detriment of smaller farmers.

has to be clear that all employees are expected to work to the highest standards possible and that employment is not a hereditary right because of resettlement.

Special Characteristics of Social Impact Assessment and Resettlement Planning in Mineral Mining Projects

(a) The Mine Project Cycle in the Private Sector Mineral mines have a project cycle of their own, which can be characterised, in parallel with the standard approach in environmental impact assessment, as development (construction), operations and closure. The financial concerns of senior management are different in each phase. In the initial phase, when the mine operation is coming up but nothing is yet being produced, the company will be paying interest on borrowed sums of money and therefore want to start operations—and start earning money—as quickly as possible. In the second and longest period, operations, the mine is producing, and the mentality shifts to maximising profits to the fullest extent possible, which likely means cutting costs. In the last period, closure, the mine is likely reprocessing low-quality ore as it winds down its operation, so there is little money to do all the various tasks that may contractually need to be completed.

The financial concerns of each phase of the mine's cycle give rise to a distinctive mindset among senior staff in each phase. During the construction phase, when the concern is to bring the mine into operation as quickly as possible, time rather than money is considered the more important concern. In contrast to public sector investments where money is often a limiting factor, problems in mineral mining projects tend to be resolved as quickly as possible and usually through financial payments. The aim is to get the obstacle out of the way, almost at any cost, so the works can begin.

That mindset changes dramatically once the mine does come into operation. Now profit maximisation becomes the fundamental concern, and that means limiting costs to the fullest extent possible. What was possible—in fact what might have been acceptable and even done—in the first phase now comes into question. In the last phase, closure, the mine likely not only operates on limited funds; it also has to fulfil various commitments such as revegetating areas that have been mined just when the funds available are most limited. In the best-case scenarios, this work was done progressively over the life of the project, and the contributions to regional development funds were invested productively. However, it is more likely in the event that both of those options are deferred in time so that more work needs to be done near the end of the mine's life than there is budget.

These shifts in approach over the mine cycle are often evident in resettlement planning and implementation, particularly because each phase implies a reduction in benefits contrary to the expectations built up among PAPs during the previous phase. During construction, the issue is moving people and re-establishing their livelihoods. The unit cost of housing or the long-term cost of an agricultural support

programme is less important, in implementers' minds, than getting the people moved and re-established elsewhere. Once the mine is in operation, however, the unit cost of housing and the long-term cost of agricultural support programmes, just like every other aspect of the resettlement programme, are apt to come under close scrutiny. The questions in decision-makers' minds are often twofold: What benefits or entitlements can we change without provoking a serious negative reaction among the next wave of PAPs who will not receive the same benefits as the previous groups? And, how can we present this change to the PAPs in order to damp down negative reactions? These concerns become even more salient in the transition to the final phase, closure, when much remedial work remains to be done and the funds to do it are more limited than ever.

- **(b) Long-term Timeframe** The long-term timeframe of mineral mining operations underlies a number of issues. This section will take up two of these implications: gaining and maintaining the social license to operate, and monitoring as a form of continuous social impact assessment for resettlement planning.
- **1. Social License to Operate** Both the concession agreement and the environmental approval system of permitting are formal and administratively mandated. By contrast, the local social approval process—the 'social license' to operate—is informal but no less necessary. Mining depends on the cooperation of the local population, and a mining company must gain the trust of the local population and maintain it over time.

Mineral mining companies typically sponsor three initiatives to gain and maintain their social license: resettlement activities, community development (or community liaison) activities and a longer-term development foundation for regional investments. Each initiative has its own specific purposes and its own staff. The resettlement unit works on land acquisition, physical relocation of PAPs, and land replacement and/or economic rehabilitation (livelihood restoration) of PAPs. The Community Development department, by contrast, works in all of the communities in the mine concession area. The unit typically responds to a wide range of requests from local communities: refurbishment or building of schools and clinics; repair, widening or opening of access roads; repair of community infrastructure such as cemetery walls; development of producer groups in the communities; provision of technical assistance to producer groups; and so on. Finally, the Development Foundation is a longer-term initiative, often mandated by the concession agreement which states that the company will put aside a specified amount or percentage of money for long-term regional development objectives.

⁷ Senior mine staff can, with the best of intentions, mistakenly interpret international policy. For example, engineers see the expectation that land-take be minimised, so they may limit compensation to only the land taken, not taking into account whether or not the remainder of the parcel is economically viable. Or, to take another example, project managers may treat each instance of land-take separately, paying cash if only a small area is taken and replacing the land loss if a significant area is taken. This approach fails, however, to take into account the cumulative impact on individual farmers of multiple small acquisitions of land.

Ideally, the three departments will work together, with the community development unit complementing the work of the resettlement department, and both supported in the medium and long term by the Development Foundation. In practice, the three departments often operate separately—so much so that the Community Development department may exclude resettlement villages and PAPs from its programme on the grounds that these people are already taken care of by the resettlement programme. In such instances, if the Community Development department has an employment programme or a producer group programme, resettlement villages and resettlement villagers are not eligible to participate and are thus excluded from significant opportunities for income restoration. Similarly, the Development Foundation department needs to take a long-range view of regional development needs once the mine closes. The Development Foundation programme can actually be staged over time, so capacity building for regional planning takes place in the first decade or so, with strategic investments supporting mine-sponsored initiatives in the medium term and other initiatives for regional development implemented later in anticipation of mine closure.

The basic objective of all this work is to develop and maintain a social license to operate. Resettlement planning addresses the impacts on people of physical relocation and economic dislocation. Community development programmes aim to foster local support in a wider range of villages through specific investments, usually defined by the communities. And, finally, the Development Foundation supports longer-term planning for the time when the mine will no longer be operating.

2. Monitoring as Continuous Social Impact Assessment for Future Resettlement Planning Social impact assessment is usually a one-off event early on in the project cycle. An investment is proposed; its probable environmental and social impacts, as well as financial costs, are assessed; and a decision is taken on whether or not to finance the project. Once completed, the SIA is over and done with.

Social assessment, however, does not need to end with the initial assessment. Once the project is underway, administrative and substantive monitoring of project activities are usually put in place. Administrative monitoring tracks project progress. To follow the school example, project implementers would track the number of schools being rehabilitated, any problems encountered, the amount of space rehabilitated at each point in time and the amount spent to date to accomplish that work. Substantive monitoring would verify these periodic administrative progress reports and would add qualitative material such as teachers' or students' opinions about inconveniences during the rehabilitation work and how such impacts might be reduced or eliminated.

The long-term nature of social assessment is more evident in mineral mining projects where land-take is a continuous, rather than a one-time, event. The mine keeps opening new pits and new veins, taking down this mountain, creating another

tailings pond. Consequently, social impact assessment in mineral mining projects is often a continuous process of monitoring or of social assessment.

Project monitoring of resettlement operations in mineral mining projects is an important tool for defining resettlement, community development and regional development initiatives. The monitoring of resettlement centres on rehousing and economic rehabilitation. Monitoring relocation of residences and businesses is the easier of the two activities: house locations are identified, house designs are drawn up, foundations go in, the structure goes up, utilities are hooked up, people move in and, finally, title is delivered to the PAP residents.⁸

Monitoring economic recovery is the more difficult task and requires more time and more approaches than are usually the case. In rural areas, agriculture is the basic economic activity of most people. By its nature, agriculture is a risky venture, some years giving good results and other years giving poor results. Thus a simple comparison of the baseline income information against the agricultural income in some future year, corrected for inflation, is only a crude measure of the success of income restoration. The monitoring timeline must be over several years in order to even out the natural fluctuations that occur in agricultural production. Also, self-reported income information is notoriously unreliable. But it is possible to independently verify reported incomes, for example, by monitoring crop conditions in the fields and checking reported yields against expected yields estimated by qualified agronomists.

With these caveats in mind, monitoring current incomes against pre-project baseline incomes can—and should—be done on an individual, case-by-case basis. Since the resettlement imperative is to restore incomes to the extent they were impacted, income monitoring must first take into account the different income streams each family has. That is, for each family, what are the economic activities they engage in and approximately how much income is earned in each activity? Income streams can include: agricultural production, livestock production (e.g. meat, milk, wool), craft production and sales, seasonal labour earnings as well as remittances. Distinguishing the income streams is important because the project is responsible only for those impacts that it has caused. For example, the project is responsible for lower agricultural production due to land-take but not for lost remit-

⁸Resettlement policy and practice emphasises that PAPs be given title to their new locations. Since mining companies effectively own all the land within their concession, they may not be willing to cede title to the PAPs unless it is certain that there are no exploitable mineral resources in the areas to be ceded to the PAPs by issuing title. In such cases, it is reasonable for the company to provide the equivalent of a lease in the short and medium term, with the stipulation that the company will facilitate delivery of title before closure of the mine.

⁹ Village averages indicate whether the group as a whole is doing better, the same as or worse than before the project. However, the policy requirement is that PAP household incomes be at least the same as before the project. Thus the only valid indicator of income restoration is a individual case-by-case analysis.

tance income if a child working abroad loses his or her job and stops sending money home.

When the monitoring programme is set up to deal adequately with the vagaries of longer-term social monitoring, it is possible to track the fate of individual families over time by comparing current income to the baseline. A graphic presentation of this information is telling. Pre-project (baseline) income is on the horizontal or 'x'-axis, and post-project income is on the vertical or 'y'-axis; income is depicted in amounts of, say, 500 units along each axis; and, a diagonal line is drawn through the points where income is identical in the two time periods, from the intersection of the two axes (0 income in both time periods) to whatever point the analyst wishes. Interpreting this presentation is relatively simple. Each family's pre- and post-project income is plotted on the chart as a single point. All families above the diagonal line earn more income, corrected for inflation, after the project than they were earning in the pre-project period. These are the project success cases. All families below the diagonal line are doing less well today than before the project and are, therefore, the cases that most concern project officers. Any families on the diagonal line have seen no change in annual income.

This analytic presentation can suggest remedial measures to assist those families below the diagonal, i.e., those who have lost earning power because of the project. Assume that one thousand income units denote the poverty line. Thus any family with less than 1,000 income units before the project was poor, as is any family with less than that amount in annual income today. The number of families in each situation will be evident in the plot. Interestingly, the post-project situation provides several possibilities. First, families who are in the lower leftmost bottom part of the matrix, that is, within the box defined by 1,000 income units before and after the project, were poor before the project and remain poor. The project is not responsible for their situation, but it has not improved their situation either. Meanwhile, some families who were poor before the project are much better off today, while others may have lost income and have become poor. The questions for the social analyst are then twofold. First, what did the successful families—the first group—do to so greatly increase their income over the course of the project? And, second, is it possible to replicate these actions for those families that remain poor—the second group? Of course, the analyst needs to investigate each case and determine whether the improvement in incomes is due to project actions (e.g. direct employment, producer group membership, individual entrepreneurship) or not (e.g. remittances from a family member that started after the project was underway). In those instances where some PAPs were able to take advantage of project opportunities to increase their incomes, the mining project, through either its resettlement programme or its community development programme, can work with the still very poor families to try to replicate the successful initiatives of the formerly poor PAPs.

If social assessment is to inform project management, the findings must be communicated effectively to decision-makers. Engineers manage the mine operation, including overseeing any resettlement operations. No matter how sensitive mining engineers are to social issues, they are not social scientists. They not only do not

have a profound understanding of the issues and concerns of the impact experts; they oftentimes do not speak the professional language of impact assessment.

Communicating effectively with engineers means adopting their mindset and thought patterns. Engineers are trained to think systematically—one step leads to another. Flow charts and finances communicate best with senior mine staff. A graphic that communicates impacts and resettlement packages to mining engineers is basically a decision tree that categorises PAPs based on their tenurial status (e.g. owner, renter) and residency (e.g. live in area or not). The decision tree branches lead to specific combinations of compensation package in a simple, graphic approach to presenting resettlement thinking to mining engineers.

Conclusion

The question today is not whether an SIA is necessary or useful. It is quite clear that impact assessment heads off issues that can cost the project proponent not only money but also, and even more importantly for private sector investors, time. The question confronting social analysts today is how to make impact assessment an effective tool for decision-makers. In other words, the question is not the assessment study itself but its use during implementation.

Resettlement planning in mineral mining projects provides a useful example of effective SIA. The SIA done at the outset of a mining project is the first half of a resettlement plan, the identification of probable impacts. In a resettlement context, the SIA entails a population census, an asset inventory and a socioeconomic survey, as well as any qualitative studies that may be undertaken. The tools of social assessment and those of resettlement planning are essentially the same. However, the aim of the Resettlement Action Plan (or a Resettlement and Livelihood Restoration Plan; RAP or RLRP, respectively) is not only to identify impacts but, in parallel with the Environmental Management Programme, to propose remedial measures that have been discussed with—and, in some instances, suggested by—the people affected. In other words, the RAP, like its cousin the environmental management plan, provides information, analysis and implementation recommendations to decision-makers.

In most projects, the SIA is a one-off event. By contrast, in mineral mining projects, SIA is often a continuous process more usually termed 'monitoring'. In mining operations, the monitoring programme tracks physical relocation and economic rehabilitation. These administrative and substantive monitoring systems are effectively continuing social impact assessments whose findings are communicated directly to the senior decision-makers in project management.

This use of continuous social assessment by project management distinguishes mineral mining programmes from many other types of investment. The mine will be operating for years. Senior management must maintain its social license to operate. To do so, it makes investments in the local communities and updates its resettlement programme to accord with ever-changing realities. Thus the social analyst has an

important and real opportunity to contribute to the well-being of the local population.

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References

- Appleby, G (1997) Field notes of the meeting with an NGO working with the people displaced by a Coal India mining project in Parez, Ranchi, Bihar (now Jharkhand)
- CSE (2008) Rich lands poor people: is sustainable mining possible? Centre for Science and Environment, New Delhi
- IFC (2002) Handbook for preparing a resettlement action plan. International Finance Corporation (Environment and Social Development Department), Washington, DC
- IFC (2012) Performance standard 5: land acquisition and involuntary resettlement (January 1). International Finance Corporation, Washington, DC
- Lahri-Dutt K (ed) (2014) The coal nation: histories, ecologies and politics of coal in India. Ashgate, London
- Mathur HM (2013) Displacement and resettlement in India: the human cost of development. Routledge, London/New York
- Padel F, Das S (2011) Out of this Earth: East India adivasis and the aluminium cartel. Orient Blackswan, New Delhi
- Scudder T (2005) The future of large dams: dealing with social, environmental, institutional and political costs. Earthscan, London
- World Bank (2004) Involuntary resettlement sourcebook: planning and implementation in development projects. The World Bank, Washington, DC
- WCD (2000) Dams and development: a new framework for decision-making. Earthscan, London/ Sterling

Part II Policy and Practice of Social Impact Assessment in India

Focusing on SIA experience in India, this section is divided into five chapters. SIA policy and law are of recent origins in India and this is the subject of the first chapter in Part II. The following next two chapters present SIA experiences with two major project types: dams and urban development. The fourth chapter dwells on the importance of incorporating the gender concerns in SIAs for all development projects that entail involuntary resettlement. The unique challenges of and the suggestions on conducting SIA for projects that displace tribal people are highlighted in the final chapter of this section.

Chapter 4 Turning Policy into Law: A New Initiative on Social Impact Assessment in India

Shekhar Singh

Abstract No assessments of the social impact of development projects were carried out until recently in India. If ever the affected people pointed out social impacts from development projects, they were ignored. SIA began to be conducted along with the environmental impact assessment (EIA) much later. A major development occurred when SIA became part of the National R&R Policy issued in 2007. The policy prescribed that SIAs be conducted for all projects that cause significant displacement. In 2013, the government promulgated a more strengthened policy, making SIA compulsory. In recent years, SIA has become a highly contentious issue. In this situation, it is difficult to predict what the final outcome of this debate will be.

Keywords Unintended effects • Scope and coverage • Public disclosure • Significance interconnectivity resourcing process • Paucity of data • Retrospective assessments • Administrative and political pressures • No guidelines • Interfacing social costs with financial gains

Essentially, a social impact assessment is the most fundamental of assessments for all development, infrastructure or commercial projects and activities. It endeavours to assess the impact that any project or activity is likely to have on society. In a sense, it goes beyond mere outputs and assesses the possible social outcomes.

This is particularly important because most projects and activities have costs, benefits, and unintended side-effects. Correspondingly, they affect people differently; there are some who directly bear the costs, there are others who directly benefit from projects, and still others who end up as their unintended victims. Therefore, a social impact assessment seeks to determine what the costs and benefits are, what the possible unintended effects are, and who will benefit and who will lose.

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Looking at it from this perspective, social impact assessments subsume a lot of other assessments, specifically economic impact assessments, environmental impact assessments, health impact assessments and the assessment of other such impacts.

Historical Context

Till recently, whatever social assessment of development projects was done, it was carried out as part of the environmental impact assessment (EIA) that has been carried out since the late 1970s. In India, the requirement of getting environmental clearances and therefore conducting an environmental impact assessment was introduced only in 1978 and that also more as a matter of policy than a statutory requirement. Most major projects were required to get an environment clearance from the Department of Science and Technology (DST), before they could be posed for investment clearance to the Planning Commission. The DST accorded environmental clearances based on an environmental impact statement (EIS) prepared by or on behalf of the project proponents and assessed by the National Committee on Environmental Planning and Coordination (NCEPC).

In 1980, the Department of Environment was formed and the responsibility of according environmental clearances was transferred to it. In the same year, the Forest (Conservation) Act was notified, and under this act any diversion of forest land for non-forest purposes, which included dams, had to be cleared by the Government of India. From 1980 till 1985, the Department of Forests and Wildlife in the Ministry of Agriculture had the responsibility of according forest clearances for forest lands to be submerged or otherwise diverted for any non-forestry purpose.

In 1985, the Ministry of Environment and Forests was set up and both the Department of Environment and the Department of Forests and Wildlife became a part of this new Ministry. Since 1985, it is this ministry which has the responsibility of carrying out an environmental impact assessment and giving both the environment and the forest clearances.

The Ministry of Environment and Forests (MoEF) issued, from time to time, guidelines for environmental impact assessment of various types of projects. These guidelines contained, perhaps for the first time in India, a requirement to assess some of the social impacts of a project, especially where human populations were to be displaced. For example, Section 8 of the *Environmental Management of Mining Operations*¹ deals with 'human settlement problems' and lists many of the

¹Department of Environment, Government of India, 1982

safeguards that must be taken while carrying out mining activities. It also prescribes various facilities and services for the affected human populations.²

It became a statutory requirement only in 1994, with the necessary notification³ under the Environment (Protection) Act (EPA) of 1986, covering a wide variety of development, infrastructure and commercial projects. The notification, while prescribing the composition of the expert committees for environmental impact assessment (Schedule III), mandates the membership of an expert in social sciences/rehabilitation. It also mandates the preparation of a comprehensive rehabilitation plan, if more than 1000 people are likely to be displaced, and a summary plan, if there are less. These plans were to be presented and discussed in the public hearing called (or, as per the notification, 'could be called') for projects involving large displacement of people or having 'severe environmental ramifications'. However, in 1998, public hearings were made mandatory by an amendment of the EPA's rules.

The putting together of all the impacts and costs and holistically looking at them in terms of their impact on the society was not mandated till very recently. The first national policy making social impact assessments mandatory, though not statutorily, was in 2007, with the formulation and adoption of the National Rehabilitation and Resettlement Policy of the government of India (GOI 2007).

The requirement to carry out SIAs was made a legal requirement only in 2013 with the passing of the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, by Parliament (GOI 2013). The salient features of the policy and law, insofar as they pertain to social impact assessments, are described below.

The Policy

The National Rehabilitation and Resettlement Policy came into effect on 31 October 2007. Chapter IV of the policy is on social impact assessments (SIAs) of projects. It specifies that the appropriate government (central or state) will ensure that an SIA study is carried out whenever a new project or the expansion of existing projects displaces 400 or more families in the plains or 200 or more families in tribal or hilly areas and other special areas (Section 4.1). It specifically exempts Ministry of Defence projects involving emergency acquisition from conducting an SIA study (S. 4.7).

²There are similar references in *Environmental Guidelines for Communication Projects*, Ministry of Environment and Forests (1989); *Environmental Guidelines for Rail/Road/Highway Projects*, Ministry of Environment and Forests (1989); *Environmental Guidelines for Airport Projects*, Ministry of Environment and Forests (1989); and *Environmental Guidelines for Ports and Harbour Projects*, Ministry of Environment and Forests (1989).

³Notified on January 27, 1994, with mandatory public hearings, and amended on May 4, 1994, making public hearings optional.

It lists out the various types of impacts that need to be taken into consideration by an SIA. These include impacts on public and community properties; assets and infrastructure, particularly roads, public transport, drainage, sanitation, sources of safe drinking water, sources of drinking water for cattle, community ponds, grazing land, and plantation; and public utilities such as post offices and fair-price shops. Also listed for consideration are impacts on food storage, electricity supply, health-care facilities, educational and training facilities, places of worship, land for traditional tribal institutions and the burial and cremation grounds (S. 4.2.2).

It specifies that if an EIA is also required, both the SIA and the EIA will be carried out simultaneously (Section 4.3.1). Also, the report of the EIA shall be shared with the expert group conducting the SIA and vice versa (S. 4.4.2). The public hearing for the EIA shall also cover issues related to the SIA (Section 4.3.2). However, even where there is no EIA, a public hearing will be organised around the SIA report (S. 4.3.3).

The policy specifies that the SIA report will be examined by an expert group which has at least two non-official social science and rehabilitation experts (S. 4.4.1). It states that an SIA clearance will be mandatory for all the projects for which SIA is mandatory, and the conditions laid down in the SIA clearance shall be 'duly followed by all concerned' (S. 4.6). However, the procedure for according clearances has not been specified and the policy just states that it may be as prescribed in the rules (S. 4.5).

The Law

The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013, (R&R Act) got Presidential assent on 26 September 2013. Chapter II of the R&R Act is titled 'Determination of Social Impact and Public Purpose'. This chapter lays down the scope, process, significance and interconnectivity of social impact assessments.

Part A of Chapter II of the act deals with what it calls 'Preliminary Investigation for Determination of Social Impact and Public Purpose'. It starts by specifying that before a government acquires land, it must consult the local panchayat or municipal body and carry out a social impact assessment study in consultation with them (S. 4(1)). It must publicly announce the commencement of the SIA study, ensuring that representatives of panchayats and municipalities are appropriately involved in the SIA process and that the process is completed within 6 months from its commencement (S. 4(2)).

There are strong provisions regarding proactive transparency of the SIA process and documents at various stages. Specifically, the SIA study report (S. 4(3)), the proposed social impact management plan (S. 6(1)), the recommendations of the expert group set up to evaluate the SIA report (S. 7(6)) and the decision of the appropriate government on the recommendations of the expert group (S. 8(3)) will be made proactively available to the local people, in an appropriate form and in the

local language. There is also the requirement to hold a public hearing (S. 5) to both inform the local people and consult them.

The R&R act recognises the linkages between the SIA and the EIA and specifies that EIAs must be simultaneous (S. 4(4)) and a copy of the SIA report be made available to the agency conducting the EIA (S. 6 (2)).

Section 4 (4) of the R&R act lays down some of the issues that must be covered in an SIA. These include assessing:

- · Public purpose
- Number of affected and displaced families
- Extent of area, including land, and public and private property, likely to be affected
- Whether land proposed to be acquired is the minimum required
- · Social impact of the project
- · Nature and cost of addressing such impacts
- The final cost-benefit ratio of the project, after incorporating all costs

In addition, Section 4 (5) lists some of the impacts that the SIA must take into consideration. These include impacts on:

- · Livelihoods of affected families
- Public and community properties
- Assets and infrastructure, specifically roads, public transport, drainage, sanitation, sources of drinking water, sources of water for cattle, community ponds, grazing lands and plantations
- Public utilities such as post offices, fair-price shops, food storage godowns, electricity supply, healthcare facilities, educational and training facilities, anganwadis, children's parks, places of worship, land for traditional tribal institutions and burial and cremation grounds

There is also a requirement to prepare a social impact management plan listing the required ameliorative measures, which should be at least at par to government schemes and programmes operated in the area (S. 4 (6)).

Surprisingly, Section 6 (2) excludes all irrigation projects where EIAs are required to be conducted, from carrying out SIAs. Also, it authorises the appropriate government to exempt acquisition of land under urgency provisions from conducting an SIA(S. 9). In addition, Section 105 (1) specifies that '...the provisions of this Act shall not apply to the enactments relating to land acquisition specified in the Fourth Schedule'. The Fourth Schedule specifies the following:

- The Ancient Monuments and Archaeological Sites and Remains Act, 1958 (24 of 1958)
- 2. The Atomic Energy Act, 1962 (33 of 1962).
- 3. The Damodar Valley Corporation Act, 1948 (14 of 1948)
- 4. The Indian Tramways Act, 1886 (11 of 1886)
- 5. The Land Acquisition (Mines) Act, 1885 (18 of 1885)
- 6. The Metro Railways (Construction of Works) Act, 1978 (33 of 1978)
- 7. The National Highways Act, 1956 (48 of 1956)

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8. The Petroleum and Minerals Pipelines (Acquisition of Right of User in Land) Act, I 962 (50 of I962).

- 9. The Requisitioning and Acquisition of immovable Property Act, 1952 (30 of 1952).
- 10. The Resettlement of Displaced Persons (Land Acquisition) Act, 1948 (60 of 1948)
- 11. The Coal Bearing Areas Acquisition and Development Act, 1957 (20 of 1957)
- 12. The Electricity Act, 2003 (36 of 2003)
- 13. The Railways Act, 1989 (24 of 1989)

Section 105(3) specifies that the applicability of this law could be extended to cover displacement under one or more of the laws listed in Schedule Four, if the government so notifies within 1 year of the law becoming operative. Unfortunately, the provision of the law that mandates the conducting of SIA is not covered under this provision.

Part B of Chapter II of the law is titled 'Appraisal of Social Impact Assessment Report by an Expert Group.' Section 7 (1) mandates that the SIA report will be evaluated by an independent, multidisciplinary, expert group constituted by the appropriate government. Such a group will include two non-official social scientists, two representatives of panchayats or municipalities, two experts on rehabilitation and a technical expert in the subject relating to the project (S. 7 (2)).

This expert group, if it determines that the project does not serve any public purpose or that the social cost and adverse social impacts of the project outweigh the potential benefits, shall recommend the abandonment of the project, with detailed written reasons, within 2 months from the date of its constitution. However, if the appropriate government nevertheless wants to persist with the project and the acquisition of land, then it shall ensure that its reasons for doing so are recorded in writing (S. 7 (4)).

Where the expert group feels that the project will serve public purpose and potential benefits outweigh the costs, it would give a view on whether the proposed acquisition of land was the bare minimum required for the project and whether no other less displacing options were available. This would also be with detailed written reasons and within 2 months (S. 7 (5)).

It would be the responsibility of the appropriate government to ensure that there is public purpose, greater benefits than costs, and minimum acquisition of land and that no earlier acquired and unutilised land is available. It must also ensure that there is minimum displacement, minimum disturbance to the infrastructure and to the ecology and minimum adverse impact on the individuals affected (S. 8 (1) and (2)).

Evaluating the Policy and Legal Framework for SIA

In order to evaluate the policy and legal framework relating to social impact assessments in India, perhaps five specific aspects must be evaluated. These are:

1. *Scope and Coverage*: how comprehensive is the requirement for an SIA in terms of the types of projects and activities it covers and in terms of what it assesses

- 2. *Significance*: what is the influence that an SIA study has on project identification, location and assessment of viability and whether the findings of the SIA are binding
- 3. *Interconnectivity*: whether the SIA process is linked with other assessment processes related to the same activity of project
- 4. *Resourcing*: whether there are adequate financial and economic resources to ensure a proper SIA and to fund the recommended measures for prevention and amelioration of adverse impacts
- 5. *Process*: how credible, transparent, participatory and independent is the process for conducting an SIA

1 Scope and Coverage of the Law and Policy

The National Rehabilitation policy of 2007 declares that SIA will be carried out for all new projects or for the expansion of existing projects where 400 or more families are being displaced in plains area or 200 or more families in the hills or in special category areas. It exempts defence projects where an emergency acquisition of land has been decided upon, from conducting an SIA.

The R&R Act 2013, however, while not laying down the minimum number of families that must be displaced before an SIA becomes mandatory, again restricts it to only displacement and excludes most irrigation projects. It further excludes those projects where people are being displaced under various other laws listed in Schedule Four of the R&R Act.

In short, policy and law in India at the moment envisage that an SIA would be conducted only where families are displaced and that also for certain types of projects and under certain specific laws. It does not envisage the need for an SIA for activities or for projects which do not physically displace families.

In terms of the subjects covered under the prescribed SIA, though both the policy and the law give a similar list and the list is comprehensive in terms of the most obvious deprivations that could possibly occur when families are displaced, the focus remains very narrow. The policy and law do not distinguish specifically between the various types of stakeholders, especially those who are indirectly affected, sometimes living far away from the site of the project.

Often remote communities are also adversely affected by projects. Some of the well-recorded cases are those who use, or live near, roads on which traffic significantly increases because of a project, either temporarily or permanently. There are often migratory communities whose access to resources or their migratory routes are temporarily or permanently disrupted because of projects. In short, focusing just on displaced families, and only on those directly affected, while conducting an SIA, is a very narrow focus.

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2 Significance

The policy specifies that the findings of the SIA would be mandatory. However, the law allows the appropriate government to overrule the findings as long as they give reasons in writing. Therefore, in effect, the SIA becomes an advisory instrument which can be ignored by the appropriate government.

3 Interconnectivity

Both the policy and the law recognise the relationship between a social and environmental impact assessment. Accordingly, it is specified that where any EIA is also required, it should be carried out concurrently or simultaneously with the SIA. However, the law and policy do not spell out the many interrelations and interdependencies between the SIA and the EIA. There is no mention of other types of assessments, especially cost—benefit assessment and the assessment of economic viability. However, there is a suggestion that if, after an SIA, it is found that the costs are greater than the benefits or that alternate project designs or locations are available that involve no displacement or less displacement, the project could be recommended for abandonment. Similarly, the amount of land being acquired can be cut down if found to be more than what is required. Unfortunately, such recommendations can be overruled by the appropriate government.

4 Resourcing

Neither the law nor the policy lays down either the specific source of funding for the conduct of the SIA or the quantum of funds to be made available. This is a major problem, as has been observed in the conduct of EIAs.

A proper SIA can be expensive, depending on the type and quantum of problems involved. Very often a way of ensuring that the SIA is not very thorough is to give inadequate resources for its implementation. This is also a danger in the currently described system. If SIA studies are to be done at the cost of the project proponents and their cost added to the project cost in the calculations regarding the economic viability of the project, there would be a tendency to try and do them as cheaply as possible, thereby cutting corners and compromising on quality.

The project proponents are interested in getting their project cleared as soon as possible and with the least costs. Consequently, there is pressure on project consultants to produce a report that either shows no adverse social impacts or suggests very cheap (and, consequently, ineffective) methods of mitigating these impacts. As the consultants are hired and paid for by the project proponents, they often find it difficult to stand up to such pressures.

It might be better to prescribe a system by which the financing of SIA studies can be done by an independent institution like the Planning Commission and debited on a fixed percentage basis to project cost, thereby freeing the project consultants from the conflicts that arise when they are hired and paid for by the project proponents.

Though the law does lay down that there must be a social impact management plan which lists out the ameliorative measures that are required to prevent or minimise adverse social impacts, there is no mention of who would fund such a plan and how much resources would be available. This again creates a major problem in the effective implementation of such a management plan.

5 Process

The policy and law do not lay down the details of the process to be followed in conducting an SIA. In fact, Section 109 (2) of the R&R law specifies that the appropriate government would make rules relating to the manner and time for conducting SIAs. This appears to be an error as the technical aspects of SIA are not widely understood. It would have been much better if professional institutions would have been involved and manuals developed which could have been made mandatory under the law.

Fortunately, both the policy and the law stress that the process of conducting an SIA must be transparent. The law prescribes that starting from the intent to conduct an SIA, through public hearings, and in the final results and outcomes, there must be a strong process of public disclosure. Also, the law prescribes that there be consultations with various local bodies prior to and during the conduct of the SIA. There is also a requirement, in the policy, for a public hearing.

Some of the major problems anticipated with the laid-down process are listed below:

(a) Paucity of Reliable and Appropriate Data

There is a general paucity of data, especially credible independent data, on social aspects relevant to the assessment of projects. There are revenue and land-use records maintained by the local administration, which, along with the Panchayati Raj institutions, also maintain data regarding the various common property resources. Different departments like the Public Health Engineering Department and the Electricity Department maintain data about the use and distribution of water and electricity respectively. However, this information is not always accurate, adequately detailed or appropriate for the purpose of carrying out an SIA.

Once a project has been announced, it becomes difficult to collect accurate data, as various vested and powerful interests tend to distort information and even distort the reality. Many instances have been recorded where landholding data has been manipulated or where land has been bought by outsiders, after a project has been announced, in order to get the benefit of the rehabilitation package.

As SIA studies are time bound (6 months), there will be a tendency to hurry them along so that the SIA clearance and the consequent completion of the project are not delayed. Considering that data have often to be collected from scratch, this could result in the use of unscientific methodologies and a resultant inadequate assessment.

Unfortunately, no system exists by which basic social parameters are studied much before the project is posed for clearance or as soon as potential sites for projects have been identified.

(b) Lack of Retrospective Assessments

There is no provision in the relevant policy or law for a mandatory retrospective assessment after the completion of the project. As it is, thousands of projects have been constructed all over the country with little or no social impact assessment and some social management and rehabilitation plans. A scientific retrospective assessment of these would have given the nation very valuable lessons in what works and what does not and how accurate and reliable earlier SIAs had been. The lack of such assessments makes the task of assessing the overall impacts of projects on society very difficult. It is also a wasted opportunity to learn from past experience. Consequently, even today, many of the impacts assumed and the ameliorative measures planned have little experiential basis.

Even now, there is no prescription, or a budget, to conduct such retrospective assessments, and therefore, it would be impossible to learn from the mistakes and successes of successive projects. Though it might no longer be possible to fully assess many of the adverse impacts, especially those on the poorest of the poor who have migrated away or otherwise disappeared, many of the other impacts could be assessed even today. However, no effort has been envisaged towards this end.

(c) Political and Administrative Pressures

The process of environmental impact assessments has been subjected to political and administrative pressures almost from the start. Pressure is brought upon the professional project consultants to prepare EISs in a manner such that the project is cleared. Pressure is brought upon the environmental appraisal committees (EAC) to recommend the clearance or rejection of projects. Also, the MoEF or the Government of India rejects recommendations of the EAC, without assigning any reasons. In all likelihood, SIA studies will face similar pressures, unless institutional and procedural methods are devised to immunise them.

(d) The Inability to Enforce and Monitor Conditions

There are no effective measures prescribed in the law or policy to monitor the proper implementation of a social impact management plan. Also, there is no provision that the project, at whatever stage it might be, could be halted and even scrapped if the requirements and obligations laid down in the management plan are not complied with.

Projects that are cleared are basically of two types.

First, there are those which are unconditionally cleared, which means that the project proposal, in terms of the anticipated social impacts and the proposed preventive and mitigative measures, is found acceptable.

The second (a large majority) are those where certain conditions are specified while clearance is being granted, and in that sense, the clearance is conditional.

For each of these types, it is essential to monitor that their social impacts are within the anticipated limits, that the preventive and ameliorative measures proposed by them or stipulated by the expert committee are being carried out properly and in time and that they are having the anticipated effects.

Where the project is found viable, it then has to be ensured that appropriate action plans are formulated and implemented in time to prevent and mitigate all that is preventable and mitigable.

The government must also have the willingness and capability to withdraw SIA clearance and thereby stop construction of projects, where the prescribed social conditions are not being complied with. It must also have the willingness and ability to scrap projects, even after their initiation, if they prove to be socially non-viable.

(e) No Prescribed Standards and Processes

There are no detailed guidelines for the conduct of the SIA, and the decision on how to conduct them, what methodologies to use and what sort of a report to write has been left to the appropriate governments. Considering these appropriate governments are usually the project proponents, this creates a huge conflict of interest.

To draw any final conclusion on the social impact of projects becomes difficult because there are no standards prescribed specifying what levels of social impacts are acceptable. How many people can be allowed to be adversely affected by a project? How much power or industry would justify such impacts? What is the weightage that needs to be given to impacts on different strata of society? For example, should there be much less tolerance for adverse social impacts affecting the poor and marginalised communities, the tribals, women and children? These questions have not yet been answered in India.

A lesson that should be learnt from the earlier Indian experience of conducting EIAs, relevant to the conduct of SIAs, is that there needs to be clear and transparent standards prescribed for the assessment of projects. In the absence of such standards, even where social impact assessments are carried out, the determination of the viability of the project becomes a matter of arbitrary opinion.

Whereas economic standards are easier to fix and one can assess whether an activity or project is viable from the point of view of economics, the same is not true for most other social parameters. For example, in economic terms it can be insisted that the 'project-affected persons' (PAPs) must not, with the project, be worse off, in any tangible measure, than they were prior to it. In fact, they must invariably be better off so that they are at least partly compensated for all the intangible and

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non-quantifiable losses. It can also be ensured that whatever their status prior to the project, they must, in economic terms, be above the poverty line with the project. However, what about the less tangible social parameters?

It is not that standards cannot be fixed. For example, one can list the factors that contribute to social happiness, harmony, security, economic well-being and physical and mental health. However, in the R&R Act, there is an implicit demand to put economic and monetary values on these elements of social needs, despite the fact that there are many pitfalls in working with the assumption that all aspects of social impacts can be correctly valued in monetary terms.

Nevertheless, only once this is done can the social viability of a project be established, taking into consideration the monetary costs of ameliorative measures. However, as we have almost no experience and no acceptable methods for coming to this sort of a judgement, there is the danger of decisions being subjective, arbitrary or, what is even worse, motivated.

What Needs to be Done

What perhaps is required is a two-pronged approach. First, basic standards of social sustainability must be formulated. What defines a happy, harmonious and progressive society in the relevant cultural context?

Second, a trade-off mechanism needs to be designed. Subject to the basic standards already determined, the inevitable social disruption caused by a project must be compensated elsewhere by helping develop other elements of desirable social practices. Therefore, the loss of access to a natural landscape could be partly compensated by developing an extensive park which has the theme of the ecosystem left behind. The splintering of a traditional social group could, in part, be compensated by the providing of efficient and affordable communication and transport facilities so that erstwhile neighbours can still keep in touch.

In short, while it is difficult to quantify, monetise or replace many of the social institutions and processes, a sensitive approach can help develop, with the participation of the affected people, 'comparable social fabrics' to partly compensate for the lost ones.

References

GOI (2007) National rehabilitation and resettlement policy 2007. Government of India (Ministry of Rural Development, Department of Land Resources), New Delhi

GOI (2013) The right to fair compensation, transparency, land acquisition and rehabilitation and resettlement act 2013. Government of India (Ministry of Rural Development, Department of Land Resources), New Delhi

Chapter 5 Building Dams, Ignoring Consequences: The Lower Suktel Irrigation Project in Orissa

Anita Agnihotri

Abstract Dams have often been built without adequate assessments of their adverse social impacts. The Lower Suktel Irrigation Dam Project in Orissa provides one more such example. Prior to the commencement of building this dam, no assessment was made of its likely impacts on people living in the project area. Later, when a UNDP study, undertaken as part of preparation for a resettlement policy, found that the consequences of this dam would be disastrous, the government had another opportunity to take its findings into consideration. Rather than consider an alternative plan that this study suggested to reduce displacement and save the livelihoods of many poor people, the government preferred to ignore it, and according to the latest reports the dam building is going on oblivious of its severe displacement and impoverishing impacts on the affected people.

Keywords Displaced people • Lower Suktel irrigation project • World Commission on Dams • Project resettlement study • Land acquisition difficulties • Resistance to projects

Dams provide numerous positive benefits, with water and electricity being the most visible. Water for irrigation, industrial and urban uses and flood control are among the other major benefits from dams (WCD 2000, Nusser 2014). At the same time, they are also known for their devastating social, cultural and economic impacts. Over the years, 'dams have evicted from their homes and lands millions of people, almost all of them poor and politically powerless, a large proportion of them from indigenous and other ethnic minorities' (McCully 1996:73). Studies have shown that the displaced people seldom recover their previous standards of living and end up worse off than before (Mathur 1999, 2006). Yet, the negative social impacts of dams are often ignored in the planning process (Scudder 1997, 2005). The World Commission on Dams (2000:98) also emphatically noted, 'these impacts are – even today – often not acknowledged or considered in the planning process and may remain

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unrecognized during project operations'. The experience with Suktel dam project in Orissa is consistent with the planning process experiences elsewhere where social impacts often do not count in making decisions on dam building.

Orissa has a long history of building dams. The Hirakud Dam is one of the first major dams built in India. The disastrous consequences of dams especially on the tribal people of Orissa have been extensively documented and are widely known (Baboo 1992; Ota and Agnihotri 1996; Mahapara 1999; Sahu 2000). But ignoring the lessons from past experience, the planners of the Suktel project chose to go ahead with the construction of the dam without any assessment of social impacts that could adversely affect the lives of the local population. The factors taken into consideration were mostly techno-economic. Political factors also played a part.

The Project and the Displaced People

The Suktel Irrigation Dam Project, which started in the late 1990s, aims to provide irrigation and drinking water to Bolangir, a predominantly drought-prone district with a significant tribal population. The project is targeted to irrigate 31,000 ha of land. Upon its completion, it is estimated to submerge 16 villages fully and 10 partially, involving 4160 families, of which 1222 belong to Scheduled Tribes. The cost of the project will be borne by governments, central and state. No external financing is involved.

The percentage of rural families below the poverty line is rather high, ranging from 67.44 % in Sonepur district to 91.90 % in Bolangir. The poorest are mostly the landless and marginal farmers, belonging to Scheduled Castes (SCs) and Scheduled Tribes (STs). With the major irrigation project rendering the landholding pattern much more skewed (as a result of dislocation), poverty among the poor will accentuate. The project will cause a significant increase in the area under assured irrigation and open large areas to double cropping, but it is another question how this benefit will be shared in reality.

The project area has a low density of population, and a substantial percentage of people belong to weaker sections, that is, Scheduled Castes (SCs) and Scheduled Tribes (STs). The female literacy rate is very low, not higher than 24 in any of the blocks – indicating a general pattern of underdevelopment.

The Suktel project presents a case of a very slow pace of implementation for a dam project in recent memory. It initially started in the 1990s, but the work stopped soon thereafter. Work restarted in 2012 but was again stopped. In the middle of April 2013, the construction of the Lower Suktel Irrigation Project has begun again. Due to delays in construction, the project cost has gone up much beyond what was first estimated, from Rs 270 crores in 1966 to Rs 1042 in 2009. This may still go up. Difficulties of land acquisition, the resistance of people and the inadequate flow of funds have been the reasons for slow implementation. The intervening time gap between land acquisition and resettlement, land acquisition and construction/project implementation has added enormously to the miseries of the displaced people

and disappointment of the potential beneficiaries and put burden on the government exchequer.

The UNDP Suktel Project Resettlement Study: SIA by Another Name

In 2004, the United Nations Development Programme (UNDP) launched a project for the preparation of a comprehensive resettlement policy for the government of Orissa. As part of the resettlement policy development process, several studies were commissioned. One such study was on the Suktel Irrigation Project, which the present author carried out during 2004–2005 (Agnihotri 2005). A major objective of this study was to get people's perspective on the project, especially on how it was going to impact their lives. Though not planned, even remotely, as an SIA for the Suktel project, it developed into a study of a sort that attempted to broadly assess the likely social effects of the project on project area population. This study came close to being a regular SIA and the government could have found it useful, especially in the absence of a formal SIA, which initially was not carried out, but surprisingly even the findings of this study were also ignored, though UNDP which commissioned the study found it useful in the preparation of the resettlement policy for the government.

Issues in Data Collection for Field-Based Studies

One problem in gathering information on local socioeconomic conditions is that people are often unwilling to share it. In some cases, they take this opportunity to turn their anger against the government, even resisting the entry of research team into their villages. In this case too, the survey team had difficult time in working in the field; it could not enter some villages. The Budi-Anchal Sangharsha Samity (the local NGO protesting against the dam) made it clear that the team would not be allowed entry unless it promised to get their demands fulfilled. Because the author leading the team was then a senior Orissa government official, the village people thought that preventing the entry of the researchers into the village could serve as an effective way of pressurising the government to concede their demands for better resettlement.

The deep distrust of the people in the government was evident from the fact that they cited to the team numerous examples of resettlement failures and resultant poor plight of the people displaced from the Hirakud and other such projects. Displacement from the Hirakud Dam was indeed massive, and its treatment of the displaced people remains a concern even today (Baboo 1992). Because of their perceptions of the past failed resettlement, they would not trust printed materials either, let alone the

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verbal promises of the team, which were circulated in advance as excerpts from the government's policy on resettlement and rehabilitation (R&R). Their perception of the project – strengthened by frequent work stoppages – was that it was not going to happen ever.

People also saw this project as a deliberate method of delivering project benefits in the command area to a few influential families that possessed large holdings of land either in their own name or as 'benami'. Identifying and offering encroachment-free command area land to the affected families (additionally by acquisition of private land/by de-reservation of government land) would have been the better way to ensure equitable sharing of irrigation benefits and containing protests. The R&R plan originally prepared did refer to the command area land, but there was nothing thereafter in any other published document on its details, current status or accessibility.

It seems that there was no effort to reduce the distrust level of people or to assure them in any way that the project would not work to their disadvantage. This distrust could have been overcome by a comprehensive and sustained information campaign by the district administration with support of the Directorate of R&R (resettlement and rehabilitation). In the event, the strong resistance to the project considerably constrained data gathering for the socioeconomic study.

Research Methodology

The methods used in this study were both primary and secondary. The emphasis was on gathering of primary data through a field survey method. The survey was carried out in the project's core area, both in fully and partially affected villages. This involved a series of meetings and interviews with people from all groups and institutions in the community, such as the NGOs, PRI (Panchayati Raj Institutions) representatives, local—level government functionaries, higher officials and others. In addition, the survey team conducted several focused group discussions (FGDs).

The families affected by the project were the main source of information. They were interviewed in depth so that various aspects of their socioeconomic condition got reflected in the study. These included demographic characteristics, occupational pattern, educational background, ownership of assets, pattern of family income, utilisation of compensation rehabilitation grant, difficulties faced on account of the project and their notion of well-being before and after the project. Information relating to the extent of property acquisition, rate and amount of compensation paid, eligibility of individual PAPs for rehabilitation assistance, etc., were also collected from various project-implementing units and so on.

In addition to the above primary sources of data, the study also drew information from secondary sources as well as the author's own interface with key government officials, including Secretary of the Department of Water Resources (DOWR),

Director of Resettlement and Rehabilitation (R&R), Chief Engineer (planning) of the DOWR, District Magistrate of Bolangir, additional District Magistrate of Bolangir, Special Land Acquisition and R&R Officer, Tahsildars (land revenue officials), project engineers, representatives of people like the local MLA (member of legislature) and NGOs working in the area. The author herself conducted FGDs in two villages: San Telenpalli and Khuntapalli.

A Profile of the Affected People

During the field survey, the study team interviewed 24 sample households in 5 fully affected and 5 partly affected villages covering affected people from all sections of the society. The findings of the survey may be summarised as follows.

The number of displaced families is 248, and the number of displaced persons 521. Nearly 20 % of the displaced people belong to the Scheduled Tribe, 29 % belong to the Scheduled Caste, and 46 % belong to the Other Backward Castes (OBCs).

Of the displaced persons, 88 % are in the working-age groups of 18–60 years. Women constitute only 9.22 % of the total. Ninety percent of the sample women of the project are either illiterate or educated up to primary level. Forty three percent male Scheduled Caste, 35 % male Scheduled Tribe and 21 % male OBC are either literate or just literate. Fifty percent of the working project displaced persons are cultivators, 3 % depend on forest produce collection, 15 % are farm labour wage earners, 10 % are in service and profession, and nearly 9 % are in trade and business. Fifty five percent of the total affected families are joint families and 44 % are nuclear families.

A majority of displaced persons, that is, 72 % from SC, ST and OBC groups, will lose land in the range of 75–100 % of their total landholding. The percentage of landless ST and SC among displaced people will go up from 78 to 87. In the post-acquisition phase, no SC, ST or OBC person will be left with any land. In the landholding size category 4–10 acres, there are nearly no SC and ST members. The percentage of SCs and STs with landholding from 0 to 2 acres is also expected to come down considerably.

The average annual income is perceived to decline by 40 %, 33 % and 39 %, respectively, for SC, ST and OBC groups after displacement. The annual household expenditure after displacement will come down by 26 %, 24 % and 35 %, respectively, for SC, ST and OBC groups.

From an analysis of the socioeconomic profile, it would appear that where economic well-being and human development status of the population are already low and weaker sections account for a significant percentage of the population under survey, project-induced displacement will further affect them adversely by causing landlessness, decline in income and several other ways.

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People's Perspective on Possible Project Impacts

The purpose of the study, as stated above, was to understand how the affected people viewed the possible consequences of the dam construction on their lives. The following two main concerns emerged from data gathered in this regard.

(a) Loss of Livelihoods and Its Supporting Resource Base

Forest is an important resource for the project's rural population. Due to frequent drought and the lack of other earning sources, people of this area treat forest resources not only as a means of production but also as a basic source of livelihood. The project is estimated to submerge 1575.15 acres of forestland. It will also submerge thousands of trees, which have grown over several generations of people living in these villages. The conditions for the forest clearance stipulate that while the government can acquire land for creation of new forest, large tracks of forest with their wealth of minor forest produce that sustained generations of people in more than one way would be submerged.

The loss of livelihoods is the worry uppermost in the minds of the affected villages. With rapidly diminishing forest resource, mainly the timber, the dependence of rural poor has increased in recent years on other minor forest products, such as honey, seeds, banks and medicinal plants. These people mostly subsist on collecting forest produce, including harida, bahada, anal, karanja, podina and aparajita of medicinal value, and selling it in the local market or to visiting traders outside the state The project area is close to Paikmal and Padmapur forests in Bargarh district, known for various rare plants of medicinal value. The traders from all over the country visit this area regularly to purchase medicinal plants. The association of these rural families with forest medicinal plants is age old. But this has increased in recent days, owing to frequent drought and the traders' interest in the project area.

The study also reveals that one of the major income sources contributing to the annual household income is the collection and sale of minor forest produce. On an average, 14.82 % of the average annual household income comes from this source. This source ranks second only to the cultivation in the preacquisition period. In addition to forests, they also collect minor forest produce from homestead land and farm perimeters that abound in age-old trees. These income sources would be severally curtailed due to the building of the reservoir. Building a dam involving loss of valuable resources at a huge cost needs a further detailed scrutiny.

The affected villages have existed there for generations, from 4 to 7, and the people are well settled. All these villages are electrified (electrified long ago, 44 years or so ago), with facilities for education, health and other basic needs. The survey found the construction quality of residential houses to be very good, even though these were built a long time ago. There are also temples in all the affected villages. Some villages have mosques and churches as well. Most people are settled agriculturists, earning their livelihood from agriculture and related business activities.

The proposed submergence area of the project is well irrigated, with fertile land. The government, after the drought, took the initiative in setting up lift irrigation points on the riverside in many of these villages to provide irrigation facilities. Out of ten villages under study, in five villages, there are lift irrigation points, in, namely, Khagsabahal, Kakhal, Santelenpalli, Dhulsar and Kankara. Similarly in two villages, namely, Barpita and Barpudgia, there are eight water-harvesting structures irrigating about 215 acres of land. In addition, the farmers have dug irrigation wells on their farms and are lifting water using diesel pump sets. The number of private irrigation wells in the study villages varies between 20 (in Barpita village) and 200 (in Khuntpalli). Similarly, the number of diesel pump sets varies between 5 (in Santelenpalli) and 150 (in Khuntpalli village). Secondary data collected on the type of irrigation sources and irrigated area (Profile of the Project Area Table) indicates that a total of 5137 ha was irrigated in Bolangir and Loisinga Block through these sources. The farmers of both submergence and command area are cultivating vegetables using their own irrigation sources. These vegetables are being exported to Raipur, Bhawanipatna and other nearby towns.

It is evident from the above analysis of the field data that the Lower Suktel Irrigation Project will develop assured irrigation, but not before submerging and destroying all the fertile and irrigated lands of these villages. If we presume that the objective of irrigation is important to agricultural productivity and thereby improvement of the entitlements of people, it should still be examined whether there are alternative and definitely more resource-efficient ways of achieving this goal.

(b) Fear that Tribal and Lower Caste Groups Will Lose More

The apprehension in the minds of the affected people especially those belonging to tribal and lower caste groups is that the command area irrigated land will only reinforce the exiting inequality in agricultural landholdings. While the better-off farmers from the higher strata of society will gain from irrigation, poor farmers will lose even that which they now have. As this study reveals landlessness is getting particularly accentuated among the tribal and lower caste groups that include Scheduled Castes (SCs), Scheduled Tribes (STs) and Other Backward Classes (OBCs). For example, 72 % of SC, ST and OBC displaced persons are losing land in the range of 75–100 % of their total landholding.

The percentage of landless ST and SC among displaced people is going up from 78 to 87. In the post-acquisition phase no SC, ST or OBC will have any land left. There are nearly no SCs and STs in the landholding size category 4–10 acres. The percentage of SC and STs with landholding from 0 to 2 acres is also coming down considerably.

The average annual income is likely to decline by 40, 3×3 and 39 %, respectively, for all SCs, STs and OBCs after displacement. The annual household expenditure after displacement will come down by 26 %, 24 % and 35 %, respectively, for SC, ST and OBC.

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(c) Worries Whether the Dam Will Ever Come Up and Deliver Benefits

Project-affected people are not worried about their impending displacement alone. They are concerned whether the project will ever come through and deliver the promised benefits. What strengthens this apprehension is the slow progress of construction, long periods of time during which nothing happens, except the cost escalation. Even after 8 years of project commencement, land acquisition could be completed only in 2 out of 26 affected villages. Given the existing slow pace of land acquisition, compensation and resettlement assistance disbursement processes, the project is unlikely to be completed even within the next 10 years. By the time water would actually be released in the canals, the cost of per hectare irrigation (in terms of money alone) would have gone up to over Rs. 3.00 lakhs, possibly higher than per hectare cost by any other mode of irrigation as well as that of any other major irrigation project in Orissa.

The history of irrigation projects in Orissa shows that cost and time overruns are not unusual. The cost escalations to the tune of 10–15 times and time overruns ranging from 6 to 15 years are a routine occurrence, hence the persisting doubt whether the project will ever bring its promised volume of water in the canals.

The socioeconomic data indicate that an additional command area of 13,095 ha was added to the original command area presumably after the people of Loisinga raised a demand. The chief engineer planning of the Department of Water Resources confirmed that such addition is not uncommon. This additional work will also upset the time and cost estimates for project completion further.

This concern about the project delay came up again and again during interactions with the project-affected people. It is common knowledge that if a whole generation of people is expected to make sacrifices for a development, they must get the assurance that the gains will materialise during their lifetime; otherwise they will have no other recourse but to oppose the project, which only displaces them with no gain but all its pain.

The Official View

The discussions with the government officials brought out that the people who are agitating against the project are not those project area who will bear the brunt of displacement but outsiders who have nothing to gain or lose from it. When the affected people hear stories of unfulfilled promises of Hirakud and other dams, they only get more disenchanted with the promises of a better life. The government officials think that the affected area people need to be more fully informed about the project, as the project will also eventually generate opportunities for everybody.

But such words cut no ice with the affected people. Their apprehensions about the growing poverty and inequality, which the project will accentuate, will not go away until they are:

- (a) Shown the exact R&R package for each affected person
- (b) Explained the position of irrigated land in the command area
- (c) Assured that they will get all their due compensation and R&R benefits before being relocated

Is an Alternative Possible?

From the findings of socioeconomic survey, interactions with and feedback from the people, an analysis of the socioeconomic profile of the affected people and their perception about the project in terms of its costs and benefits, it is evident that the initial decision to go ahead should not have been taken without a proper assessment of its social impacts on the lives of people, especially in this area with a significant Scheduled Castes and Scheduled Tribes population. Evidently, the project is going to produce largely negative impacts on people facing displacement, and given the way the resettlement issues are being approached, affected people can only expect to get into a situation worse off than before.

The question now is: should the government still go forward with the project, ignoring resistance from the affected people and their concerns about the livelihoods lost, or should the government explore some other option for the benefit of these people of Bolangir for whom this project was initially designed?

Most people, including representatives of the Panchayati Raj Institutions (PRIs) interviewed during the field study expressed themselves against major irrigation projects but were in favour of small irrigation projects. In their view, small projects deliver almost the same benefits as the big dams, yet they do not involve displacement on a large scale and can be implemented in much less time and also at much less cost.

During discussions, senior DOWR officials conceded that other viable options exist, and an alternative in terms of small non-displacing means for the provision of irrigation as a comprehensive mechanism was never considered at any stage.

The consideration of an alternative will however require a very different kind of decision-making and consultative processes than presently exists in the state. In the government, the decisions in regard to development matters are taken not on considerations of whether or not the people are for or against the project or even cost factors. Often, the considerations that count most are political. The government's own perception of gains from the project and views of the potential beneficiaries (landholders) of the command area far outweigh the apprehensions of those likely to be adversely affected and even the cost considerations. Therefore, an alternative to the Suktel project may not be explored at all, and the project is likely to proceed the way it has been initially designed, ignoring painful consequences on the already poor people in the Bolangir district of Orissa.

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Postscript

The construction of the long dormant Lower Suktel Irrigation Project has started in April 2013 once again. The cost of the dam, started in the 1990s, is reported to have hugely escalated in the course of the last 13 years. The media reports as well as government sources indicate that the protests, which started a decade back in most villages, have now weakened, except in one village, Dunguripali, with only some 200–300 protestors. Pro-project people who will benefit from the incremental irrigation facility have prevailed over a majority of displaced people, who will gain nothing from the project, not even get fully compensated.

The Directorate of Rehabilitation and Resettlement has implemented the R&R plan partially, while construction has started full stream. While land acquisition has been completed in 50 % of the reservoir area, resettlement and rehabilitation benefits have been extended only to 2 out of 20 villages. The compensation for land as per R&R policy has been disbursed to 14 out of 29 affected villages. Four resettlement colonies are being developed and homestead land has been allotted to 800 people. The Directorate of R&R in the DOWR has made it clear that R&R work will continue in parallel with construction work, more intensely in locations affected by project construction work.

The genesis of the pro-project group also has a history embedded in local inequality. These are mostly urban landowners who purchased parcels of land early in the reservoir area from poor farmers in the full knowledge that the dam will definitely be built and are now seeking compensation as displaced persons. In fact, their interest in the project coming up is obvious, as their original homes in the Bolangir town will also not be affected in any manner. As the anti-project group has by now been reduced to a voiceless minority and the pro-project group emerged strong, the job of government in managing discontent has somewhat eased. However, it should be imperative on the part of the government to ensure that at the minimum no one is displaced on account of the project without being fully compensated at the least.

References

Agnihotri A (2005) Resettlement and rehabilitation in Suktel irrigation project. Paper prepared for the UNDP Orissa Resettlement Policy Project, Bhubaneswar

Baboo B (1992) Technology and social transformation: the case of the Hirakud multi-purpose dam in Orissa. Concept Publishing Company, New Delhi

Mahapara LK (1999) Resettlement, impoverishment and reconstruction in India: Development for the deprived. Vikas Publishing, New Delhi

Mathur HM (1999) The impoverishing potential of development projects: resettlement requires risk analysis. In: D + C Development and Cooperation No 6/1999 Nov/Dec (pp 24–26). Deutsche Sutifung for Internationale Entwicklung, Frankurt

Mathur HM (2006) Introduction and overview. In: Mathu HM (ed) Managing resettlement in India: approaches, issues, experiences. Oxford University Press, New Delhi

McCully P (1996) Silenced rivers: the ecology and politics of large dams. Zed Books, London

- Nusser M (2014) Technological hydroscapes in Asia: the large dams debate reconsidered. In: Nusser M (ed) Large dams in Asia: contested environments between technological hydroscapes and social resistance. Springe, Dordrecht/Heidelberg/New York/London, pp 1–14
- Ota AB, Agnihotri A (eds) (1996) Involuntary displacement in dam projects. Prachi Prakashan, New Delhi
- Sahu B (2000) Development and displacement: a case study of Rengali Dam project in Orissa. Ph.D. thesis, Department of Anthropology, Utkal University
- Scudder T (1997) Social impacts of large dams. In: Dorcey T (ed) Large dams: learning from the past looking at the future. IUCN/The World Bank, Gland/Cambridge/Washington, DC, pp 41–68
- Scudder T (2005) The future of large dams: dealing with social environmental, institutional and political costs. Earthscan, London/Sterling
- WCD (2000) Dams and development: a new framework for decision-making. Earthscan Publications Ltd, London/Sterling

Chapter 6 The Consequences of Inadequate Surveys: Resettling People Displaced by the Mumbai Urban Transport Project

Renu Modi

Abstract In this government of Maharashtra project partly funded by the World Bank, the initial Baseline Socio-Economic Survey (BSES) conducted for the Mumbai Urban Transport Project (MUTP) failed to make a precise inventory of the various categories of affected persons and their incomes. The compensation package consisting of rehousing and other post-displacement entitlements based on this flawed assessments then failed to meet expectations of the affected people. This led to angry protests and in response the World Bank took steps to set up an Inspection Panel. The recommendations of the Panel ultimately proved somewhat helpful in resolving the issue. The fact, however, remains that had the initial assessment been carried out properly with the participation of displaced people, the MUTP resettlement implementation would not have been so troublesome as it turned out to be.

Keywords Basic socio-economic survey • Urban displacement • Re-housing • Squatters • World Bank's inspection panel

This paper focuses on the challenges of rehousing residential and commercial structures that were demolished and relocated from the existing to new sites to make way for the Mumbai Urban Transport Project (MUTP). The roots of how this turned out to be such a highly complicated resettlement operation lie the initial decision of the Mumbai Metropolitan Regional Development Authority (MMRDA) to

This paper is based on field research conducted among the PAP's at several project/resettlement sites in the author's capacity as a short-term consultant with the Inspection Panel of the World Bank (2005) and later as an independent researcher. The views expressed are her own.

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¹Hereinafter, the preparation for the project by the World Bank and the MMRDA (government of Maharashtra) began way back in 1995 (for details, see World Bank Inspection Panel (WBIP) 2005:xviii–xix) and the World Bank funding formally came to a close in June 2011. However, the MMRDA continued to resolve issues of R&R beyond 2011 and the engineering work such as the bridge on the Santa Cruz–Chembur Link Road (SCLR) was completed in the end of April 2014.

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delegate the responsibility to conduct the surveys to local NGOs, in particular SPARC/NSDF (Society for Promotion of Area Resources Centre/National Slum Dwellers Federation) and SRS (Slum Rehabilitation Society), which lacked sufficient capacity for the task (World Bank Inspection Panel 2005:64). Based on the data collected during interactions with the project-affected persons (PAPs) between 2005 and 2012, this research highlights several shortcomings in basic assessment, the socioeconomic surveys (BSES), conducted at the pre-project stage that failed to make a precise inventory of loss to the affected population and which needed compensation and resettlement.

The MUTP Resettlement Policy

The Resettlement and Rehabilitation policy (R&R policy) for the project was based on the fact that 99 % of the affected structures were of 'squatter category'. According to the Resettlement Action Plan (RAP) for the MUTP undertaken by the Mumbai Metropolitan Regional Development Authority (MMRDA), the coordinating agency responsible for implementing the R&R segment of the project, '99 % of households in the project are squatters and 40 % of the people are below the poverty line (at Rupees 2,500.00-) and the average monthly income of households is enumerated as Rupees 2,978.00-' (MMRDA 2002:15). However, this was an erroneous assumption because there were several affected persons who were private property owners while several others belonged to the middle-income group (see also, Modi 2011:402).

The compensation package and the post-displacement entitlements of the PAPs were based on the BSES records. Therefore, the errors in the BSES with regard to the status of land tenure and structures – both residential and commercial – were reflected in the compensation package that carried forward the inadequacies and caused major problems later at the implementation stage in delivering the compensation package, inter alia, housing to the MUTP displacees.

The MUTP is the first and the largest case of urban displacement that the World Bank (with the exception of China) or the government of India has undertaken in the country. It is a mega-infrastructure project that has been partly funded (49 % of project cost) by the World Bank² and redefined the existing land use patterns in the city. It comprises of three parts: overhauling select segments of the railway transport system; improvement and widening of two highways, the Santa Cruz–Chembur Link (SCLR) and the Jogeshwari–Vikhroli Link Road (JVLR), to augment east–

²As per the revised estimates of April 2004, mentioned in the Bank management dated 28 April 2004, there has been an increase from 19,200 to 23,000 PAHs (approximately 20,000 houses and 3,000 shops, representing approximately 120,000 people). This increase has been on account of 'changes in the scope of some sub-projects and detailed assessments that updated the preliminary numbers' (See World Bank (2004:5).

west connectivity; and finally the Resettlement and Rehabilitation (R&R) component that involves the dislodgement and relocation of about 23,000 (revised estimates)³ project-affected households (PAHs) or an estimated 120,000 persons (World Bank Inspection Panel Report (WBIP) 2004:5). The third component of the project was the most critical given the challenges of resettlement in the context of high population density and adverse land—man ratio in the city of Mumbai. 'The population of Greater Mumbai was 12477 thousand as per 2011 census and a population density of about 25,000 persons per square kilometer in the BMC⁴ areas and over 50,000 persons in some wards of the Municipal Corporation of Greater Mumbai (MCGM)' (Bhagat and Sita (n.d.): 230–231). The magnitude of displacement and R&R 'was unprecedented in both the Bank's and India's urban project histories' (WBIP 2005:xix, 46).⁵

Post facto, it is evident that there was an absence of a 'common language' of communication between the PAPs and the Mumbai Metropolitan Regional Development Authority (MMRDA), the nodal agency responsible for the resettlement and rehabilitation of the project-affected people. There was a difference in understanding between the MMRDA and the PAPs about what constituted rightful or fair recompense inter alia with respect of their entitlements to housing.

Complaint to the World Bank Inspection Panel

The government of Maharashtra's (GoM's) R&R policy for urban displacement in general and MUTP in particular has evolved over the past several years, mainly since 2005, in response to the challenges that surfaced during the implementation of the project. According to the MMRDA, the R&R policy was all encompassing and generous. In pursuance of the GoM's objective of 'rehousing' each and every project-displaced family, the R&R policy provided compensation for all the structures (residential and commercial) and the criteria were expansive enough to include lessee who resided in the 'right of way' (RoW) of the project. However, several PAPs from the rail and the road component and, in particular, those displaced from the Santa Cruz–Chembur Link Road (SCLR) and the Jogeshwari–Vikhroli Link Road (JVLR) contested their categorisation in the 'slum' category or the allocation of lesser floor space as compared to that surrendered to the project. At the onset of the R&R process by the end of 2003 and early 2004, some of the PAPs expressed their grievance through individual representations to the MMRDA, while others from the same or contiguous affected localities protested collectively to the

³Brihanmumbai Municipal Corporation, the city's civic body is also known as the Municipal Corporation of Greater Mumbai (MCGM).

⁴Ten percent of the total project cost, i.e. USD 100.08 million was earmarked for the R&R segment (component 3) of which USD 79 million is financed by the IDA credit (World Bank 2004; MMRDA 2002).

⁵The largest R&R sites with 1,811 tenements (Ecosmart India Ltd: p. 14)

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MMRDA that dealt with their grievances on a case-by-case basis. When the PAPs did not find the government responsive enough to deal with the contestations around the BSES on which the entire gamut of entitlements were founded, they filed a request for inspection to the World Bank's Inspection Panel in early 2004 (for details, see WBIP 2005; Modi 2009:21).

The Inspection Panel received four requests in 2004, from PAHs in the RoW of the SCLR and the JVLR. The four requesters were:

- 1. United Shop Owners Association, Kurla West (SCLR), April 2004
- 2. The Hanuman Welfare Society, Gazi Nagar (SCLR), July 2004
- 3. Bharati Nagar Association, Chembur (SCLR), November 2004
- 4. EktaWyapari Jan SevaSangh, BhandrekarWadi, (JVLR) December 2004

The requesters' grievances were, inter alia, centred on the issues related to the relocation of their residential and commercial structures. Displacees from mainly the SCLR were aggrieved that the R&R sites at Mankhurd (M/East ward),⁶ earmarked for them, were located at a considerable distance that cut access to their erstwhile community networks and sources of livelihood. 'The main earners retained their previous jobs but supplementary earners, usually women working as domestic help or engaged in hawking lost their jobs' (Tata Institute of Social Sciences (TISS) 2003:III, 13–15).

PAPs of the affected road component, the SCLR and the JVLR, complained that the to-be-displaced people who occupied 1+1 structures (houses with a low-roofed mezzanine floor), a common practice in the space-starved city of Mumbai, or who lived in larger houses at the time of the BSES should have been compensated with residential structures at R&R sites equivalent to the area acquired by the project even though they were categorised as 'slums' in the pre-project surveys. They also protested about the lack of consultation at the project planning stage on issues related to their compensation and other entitlements including those related to housing. They reported inadequate disclosure of information about the project or the exact purpose of the government surveys while the BSES was conducted. The aggrieved PAPs informed the WBIP in early 2005 that since they did not know the reason for the BSES, they did not tender information about the status of their land tenure, their income or the number of persons employed by the commercial structures in the RoW of the project. The PAPs were also distressed about the poor quality of construction of buildings at the R&R sites and allotment of a standard floor

⁶World Bank's Operational Directive (OD 4.30 of 1 June 1990) on Involuntary Resettlement describes Bank policy and procedures on involuntary resettlement, as well as the conditions that borrowers are expected to meet in operations involving involuntary resettlement. (World Bank, June 1, 1990,' Operational Manual, at http://www.ifc.org/ifcext/enviro.nsf/AttachmentsByTitle/pol_Resettlement/\$FILE/OD430_InvoluntaryResettlement.pdf). The Bank's operational policies and procedures (4.12) together replace OD 4.30, Involuntary Resettlement. These Bank operational policies and procedures apply to all projects for which a project concept review (PCR) takes place on or after 1 January 2002. Since the PCR for the MUTP took place in 1999, OD 4.30 applies to the MUTP (Bank Management Response, 27 May 2004: p 2).

space of 225 square feet to all residential structures and area equivalent to the floor space lost and up to a maximum space of 225 square feet to commercial structures, irrespective of the area occupied by them prior to the project. To sum up, they stated that the project failed to comply with World Bank's safeguard OD 4.30^7 on Involuntary Resettlement.

Resettlement Entitlements for Residential and Commercial Structures

The R&R of all PAHs has been undertaken as per the Resettlement and Rehabilitation policy for the MUTP, government of Maharashtra (GoM), of March 1997 (as amended in December 2000)⁸ (GoM 2000). The GoM's R&R policy was drawn up initially in 1997 and amended later to comply with the Bank's policies and safeguards on Involuntary Resettlement (OD 4.30) and accepted by the Bank in 2000 (for details on the R&R entitlement matrix, see GoM 2000). The basic objective of the R&R policy was to counter impoverishment of those displaced or at least to restore their living standards to a level existing before (World Bank 2004:1).

The R&R policy categorised PAPs into two broad categories; those with legal entitlement to their structures/land were grouped as private property owners while those without a legal title were clubbed in the 'slum' or 'squatter' category, unless they provided an evidence of title to their property or the *satbara*⁹ (seven twelve extract government document) as a proof of their legal claim to land or structure in the right of way (RoW). As per the R&R policy, only PAHs' own private property (residential and commercial) was entitled to a compensation of floor space equivalent to the area surrendered to the project. According to the above policy, all the residential premises in the 'slum' category located in the RoW of the rail or road component of the project were entitled to a 225-square feet tenement as compensation, at any of the R&R sites allocated for the project, irrespective of the size of the house the PAPs occupied. The residential allocations were:

...in the form of leasehold rights of the land to the co-operative society of the PAPs and the occupancy rights of built floor space to the members of the society. The membership of the co-operative society and the occupancy rights will be jointly awarded to the spouses of the PAP household... (MMRDA 2002:55)

⁷ See GoM (2000).

⁸ 'The *satbara* extract 'is the official document of legal significance maintained by the Revenue Department of the state of Maharashtra for agricultural land and for land that was converted into non-agricultural land (NA). *Satbara* contains key information such as location, area, name of the legal owners of the land, survey number, *hissa* number' (for details, see http://nripro.com/dp/what_is_satbara_extract, accessed on 29 June 2013).

⁹ For the matrix on entitlements, see MMRDA 2002:62–65.

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(a) Resettlement Issues in the Residential Category

Commercial structures in the 'slum category' that were surrendered to the project were compensated with floor space equivalent to the area surrendered to the project, with a maximum carpet area of 225 square feet at no cost, as permissible under the GoM's R&R policy for this category. To illustrate, a shop of 50 square feet was compensated with a commercial structure of the same area, while shops of 225 square feet or 1,000 square feet or more were entitled to a maximum of 225 square feet as compensation, i.e. as per the R&R policy a commercial structure was entitled to a maximum compensation of 225 square feet only, irrespective of the floor space occupied at the pre-project stage. PAPs with large shops were in the businesses, among others, of selling marble slabs and tiles for flooring, auto spares, printing of garments, restaurants and multipurpose stores. Owners of large shops complained that they could not restore their livelihoods in a smaller commercial space and therefore the R&R policy had harmed them and led to a decline in the livelihoods, which was contrary to the Bank's safeguards on Involuntary Resettlement (OD 4. 30). As a redress mechanism, the GoM provided that those PAP's in the 'squatter' category who surrendered an area in excess of 225 square feet to the project could purchase the floor space equivalent to the area lost up to a maximum of 750 square feet, at a rate specified by the MMRDA. 10 The PAPs complained that the above provision for recompense existed only in policy, as there was a severe shortage of commercial space at the R&R sites. Space was either not available for purchase on payment or the shops offered were not at strategic location, i.e. did not face the main access roads.

There was acrimony between the PAPs and the MMRDA with regard to the choice of shops at the R&R sites (for details, see TISS 2008:88–90). All the PAPs wanted a shop situated near the main entrance because shops situated on the rear side of the R&R site had limited visibility and access to customers and therefore the PAPs expressed concerns about the drop in the sales of their merchandise and its adverse impact on the restoration of their livelihoods at these disadvantageous locations.

As the BSES had under-enumerated the number of structures impacted by the project, there was a serious space crunch. The problem was more acute with regard to the commercial space, when the MMRDA had to recompense and allocate space for larger number of shopkeepers after the estimates of total number of PAPs (including owners of residential structures) were revised from over 19,000 to 23,000 PAHs.

¹⁰ On 1 May 1960, Maharashtra came into existence when Bombay Presidency State was split into the new linguistic states of Maharashtra and Gujarati.

(b) Resettlement Issues in the Residential Category

Structures on Non-titled Land Several PAPs were dissatisfied with the R&R policy that categorised their residential structures as 'slum' or in 'squatter' category, as according to them, it implied that their structures were 'illegal'. During field surveys conducted in 2005–2006, the affected persons residing alongside the SCLR and JVLR specified that they had secured access to piped water and electricity connections with the permission of the MCGM for the past several decades where their families had been residing. Several of the older PAPs stated that they were born and raised in settlements along these two roads. They contested their being labelled as 'illegal' because they paid for their utility services and all the taxes levied on them by the civic body, the MCGM.

According to the PAPs, the neat characterisation as residents/shop owners of titled and non-titled land/structures did not coincide with the actual systems of tenure that prevails in the city. The ground reality was much more complex than that recognised by the GoM's R&R policy for the project. In the city of Mumbai, large-scale 'informal' land occupancy and illegal encroachments have existed for several decades now. Sixty-five percent of the land occupancy/structures are unauthorised. 'There are informal systems of tenure such as *pagri* [that has been practised prior to 1947] (where land is transferred with minimal documentation in return for key money) and has a system of leasehold, ownership and tenancies and works parallel to the formal tenure system' (WBIP 2005:81). Evidently, the BSES did not take into account the different types of ownerships that form the basis for the varied land tenure in Mumbai. For example, the tenants under the *pagri* system objected to their categorisation as 'squatters' and the application of the policy for slum dwellers to them for the above-stated reasons.

In some cases, owners of hutments in the 'slums' had purchased their dwellings in the price range of about two to five lakhs of rupees and leased them to generate rental income. In pursuance of their objective of 'rehousing' each and every project-displaced family, the R&R policy compensated the lessee with a free structure (residential or commercial). But the government's R&R policy did not recognise the rights over hutments purchased through informal arrangements by PAPs in the 'slum' category. This benefited the lessee who got a 225-square feet tenement as recompense but disadvantaged the PAP who actually invested money and purchased the hutments in the areas designated as 'slum' by the GoM. The R&R policy caused a sudden and unanticipated loss of assets worth lakhs of rupees as well as the loss of rental incomes for the PAPs who derived their livelihood from hiring out their structures. The PAPs complained bitterly about the lack of disclosure of project information and told the author that if they were informed well in advance about the forthcoming project, they would not have bought property in the 'slums' situated in the project-affected area.

During the first phase of project implementation, it was reported that residential and commercial structures on private or titled property were also categorised in the 'squatter' category. During investigation by the WBIP in 2005, it was found that the BSES undertaken by the two NGOs contracted for the project, Society for Promotion of Area Resources Centre (SPARC) and Slum Rehabilitation Authority (SRS), were inexact in documenting a cluster of residences in Ghatkopar (affected by the Thane–Kula railway line component of the project) and commercial structures owned by a group of merchants located opposite the main gate of the Indian Institute of Technology (IIT) Powaii, JVLR (WBIP 2005:82; for details, see Modi 2013:71–74). According to an NGO staff, they did not conduct a case-by-case enquiry about the land tenure of the structures referred to above. During the Bank's investigation, they informed the Inspection Panel that the property owners with legal titles to their structures did not show their property documents (*satbara* extracts) to the surveying agency. The PAPs, on the other hand, blamed the lack of project disclosure as the main reason for the inaccurate BSES.

They informed the author that the NGOs did not give them details about the purpose of their survey or the project. They also stated that they were caught unaware when the NGOs knocked at their door for survey, at times in the afternoon hours when the heads of the household, usually the men (except in the case of single-women-headed households), were away. Even when the male heads of households met the surveyors, they were apprehensive that the survey could be from the income tax department, and therefore several owners of small- and medium-sized businesses were hesitant to give personal details of their income or of their property as they had concealed partially or evaded the payment of taxes that were due to the government.

According to the MMRDA, SPARC and SRS, the onus of proving the accurate land tenure status lay exclusively on the PAPs/PAHs. An official in the R&R unit at the MMRDA narrated, 'only when they [the PAPs] shout loudly do we give them a hearing and check their papers as the onus of proving the status of their tenure is not ours and we have not included any PAP in the "slum category" if they have shown us the paper of title to land/structure' (Pers. comm.: 2006: See also Modi 2013:73–74).

According to the NGO personnel, land records of some of the displacees' structures were not updated by the concerned land department. MMRDA could recognise land titles only on the basis of land records of the revenue department and the cadastral surveys that were conducted. If there were no records in the revenue department as well, the land/house was automatically categorised as 'squatter'. The PAHs claimed that since the land on which their structures were built were purchased prior to the 1960s, when the present-day Mumbai was a part of Bombay Presidency and encompassed the present-day states of Maharashtra and Gujarat, the property documents of transactions prior to 1960 were available only in Gujarati. Further, the local NGO workers were conversant only in Marathi and thus were unable to read and understand these documents in Gujarati.

Structures on Titled Land The BSES did not make an accurate inventory of private property. The R&R policy for the project was based on the GoM's understanding that 99 % of the affected structure were of 'squatter category' (MMRDA 2002:13). In fact, the number of occupants on private property was much larger, and at the time of notification for vacating the land/house, it led to contentions/litigation with regard to their entitlements. In the context of R&R, the World Bank's Project Information Document (PID) refers only to compensation for the squatter category of households impacted by the MUTP. It states:

The main investment under this component would include the construction or purchase of about 19,000 tenements (225 square feet each) to resettle those displaced by the main investment components. In addition, about 5,000 transit houses will also be built under this component to provide transit accommodation as an interim measures to those resettled on emergency situations in response to the Bombay High Court's intervention and railway safety policy. (World Bank 2002:5)

Therefore, the PID designed prior to the commencement of the project did not mention commercial structures and compensation for land acquisition for private property of project-affected household (PAH) with a legal title and admeasuring 225 square feet or more.

However, at the time of project implementation, the MMRDA realised the number of private property owners (residential and commercial) in the RoW of the rail and road segment of the project was much larger than that reflected in the BSES. Further, the R&R package was not designed to deal with the magnitude of displacees on private property. They were 'discovered' during project implementation when the nodal implementing agency realised that their structures were enumerated in the 'slum' category during the official BSES for the project. PAPs with legal entitlement to their property were also given compensation at par with structures displaced from the 'squatter' category. Several PAPs on private property went to court on the issue of inadequate compensation (for details, see Modi 2013:72-74). The MMRDA resurveyed their properties, and PAPs with a legal entitlement to their structures were compensated with an area equivalent to that lost to the project. However, while upholding the right to compensation for titled owners as per the GoM R&R policy, the courts facilitated the speedy vacation of the structures, as in the recent case of private residential structures in cluster of 13 MAHADA buildings in the Motilal Nehru Nagar locality that is impacted by the project. Thus, the eminent domain of the state has been used to facilitate the vacation of affected structures on private property, and the courts gave a pro-government ruling on ground that the project is in 'public interest'. Litigations certainly delayed the land acquisition process and therefore the project implementation and led to cost overruns (Ibid.:72-74).

In some cases, the owners of structures on private land had bought several small houses for leasing and generating rental income. The R&R policy provides for the rehousing of each and every PAH provided a 225-square feet house at the R&R sites. As in the case of shifting tenants from the 'slum' category, the relocating of tenants on private property, at short notice, resulted in the loss of rental income for private property owner.

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Entitlements Issues for Commercial Structures As in the case of residential structures, there were discrepancies in the BSES conducted for the commercial structures. The entitlement matrix identified two broad categories of shop keepers: those with legal entitlement to their land/structure and those listed in the 'squatter' category or as encroachers, though the ground realities with regard to land tenure were knottier. The R&R policy assumed that shops in latter category were owned by slum dwellers that had meagre earnings. Based on this premise, it was further assumed that this segment of the PAPs would be content to relocate and gladly accept *pucca* (concrete structures) shops with ownership rights at the R&R sites.

The affected shopkeepers on non-titled land were a stratified lot. Though they were categorised as 'slums', their establishments had existed along the SCLR and the JVLR for the past decades – some shops were established over 50 years ago! By and large, the project-affected shopkeepers had small shops and modest earnings, but there were a few shops measuring 1,000–1,500 square feet. The PAPs from the latter category had business on a larger scale and therefore had high earnings and also generated employment for shop assistants that they employed. They had also paid establishment taxes for their commercial structures as well as income tax on their earnings to the government agencies.

The government's validation of its R&R policy is based on the land tenure status. According to the R&R policy, since the shopkeepers in the 'squatter' category did not have a legal entitlement to land, the government was unable to provide them with compensation of larger space equivalent to the area surrendered to the project, free of cost.

All the requesters contested their entitlements and complained about a decline in the level of income generated after their displacement. The WBIP Investigation Report noted 'the absence of economic analysis of the displacement and resettlement operation in the proposed Project' (WBIP Report 2005:44).

Besides, the relationship between the PAPs and the NGOs and SPARC and SRS, involved in the BSES of the middle income-generating shopkeepers, was tenuous. Unlike in the rail component, the NGOs who were familiar with surveys in the slums had not dealt with shopkeepers of the above category. It was alleged that the two NGOs indulged in corrupt practices and favoured some shopkeepers and gave them multiple allotments (Modi 2009:22). The NGOs and the government countered these claims and blamed the shopkeepers for non-cooperation with the surveying agency at the time of the BSES. However, it needs to be reaffirmed that, by and large, allocations for shops and residences were done in accordance with due process and in a transparent manner. The above-stated allegations were very few and unproven, and there was no evidence of money changing hands between the PAPs and the NGOs for getting compensation that was due to the project-affected people (see also TISS 2008:111–113).

The 'rehousing' and resettlement of all the PAPs on private property and from the 'squatter' category was definitely a major achievement for the project. But soon after their removal and relocation, PAPs from mainly the latter category were aggrieved about the challenges in the second phase - i.e. during the post-relocation phase of rehabilitation.

Issues During the Post-relocation Phase at Resettlement Sites

Poor Quality of Construction At the R&R sites that housed residential and commercial structures of those displaced from the 'squatter' category, the PAPs were disappointed inter alia with the quality of construction of the tenements. After the first monsoon showers, dwellings in the multistoried buildings at the R&R sites developed leakages, seepages and cracks which indicate poor monitoring and quality checks of these structures, while they were under construction (for the details on issues related to sanitation, water supply, solid waste, electricity, lifts and other amenities, see Ecosmart India Ltd May 2002:24–25; TISS 2003:6–12). The builders and officials who gave clearances and approvals for construction at these sites probably had a close nexus with government departments that were responsible for the procurement and construction of tenements under the three options explained earlier. The builder was let off the hook and could no longer be held accountable in the post-R&R phase because most of these constructions were beyond the defectliability period (DLP), when the PAPs moved in. Though the procurements under the public-private partnership (PPP) model are certainly a novel initiative, it has its limitations due to the reasons cited above.

High Maintenance Cost and Property Tax The PAHs were unable to pay the maintenance and property taxes for the high-rise structures that were allotted to them. For example, about 10,933 PAHs (including 107 commercial structures) were relocated from along the railway track to the apartments at the R&R sites (WBIP 2005). These and several other displacees alongside the SCLR and JVLR had incomes below the poverty line or just at the threshold and barely managed to support their families. The extra burdens of property and maintenance taxes pushed some of the PAPs into leasing out their tenements and use the rental income to pay for the property and maintenance taxes in the high-rise buildings and support their families. To illustrate, one building (64 tenements) at the Lallubhai Compound (Mankhurd) was served a notice for the payment of outstanding cumulated bills of property tax for the period 2005-2011 that amounted to a whopping sum of 5,263,026 rupees, of which 185,854 rupees was the penalty imposed at the rate of 2 %/month (Ref: Letter no: AC/MAS/E-05/89 of 2011-2012, n.d., MCGM, Pers. comm, April 2012). In yet another 'final notice' served to a building at Lallubhai Compound, for the payment of property tax dues of 5,173,574 rupees, the letter from the MCGM states 'a penalty of 20 % of the amount of tax due will be levied under Section 207 of the said Act [Section 203 of the Bombay Municipal Corporations Act] if you fail to pay the amount of the tax within 48 h from the date of receipt of this notice' (MCGM, Ref: ME 4928 (Ward No), signed Assistant Assessor and Collector M/E Ward, Pers. comm, April 2011). Since the PAPs deferred the payments for various reasons since they were relocated in 2005 or thereafter, the dues have added up to a staggering sum that is beyond their paying capacity!

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The Policy of Free Housing and a Slum-Free Mumbai

Though the GoM's R&R policy for the MUTP was designed to rehouse each and every PAH, this novel initiative had certain inbuilt drawbacks. At stakeholders' meetings conducted during the project, several middle-class taxpayers voiced concerns about the policy of free housing in the city. As per the Slum Rehabilitation Policy of the state government, the flats allotted to PAHs cannot be resold for a period of 10 years. However, impact assessment studies for the displacement of 10, 933 PAHs (including commercial structures) located close to the Harbour Railway Line that were carried out by March 2001 indicate that 'about 5 % of the houses were already sold out by the PAHs through the use of 'power of attorney' (TISS 2003:21).

During the impact assessment of the R&R process, conducted among 9,000 PAHs which were displaced in the second phase of the MUTP, it was reported that:

Thousands of people contested their entitlement- whether genuine or fake; several intermediaries and brokers emerged on the scene for tampering with entitlements and luring the PAPs to rent or sell out their structures (houses and shops); pressure was exerted by slum lords, local politicians and influential persons for such irregularities. (TISS 2008:111)

During interviews conducted by the author at resettlement sites in 2005 and 2006 and with the NGOs involved in the R&R process, the renting and sale of houses through the 'power of attorney' were reported. Though the exact magnitude of these transactions is not known, it may be pegged at about 10–15 % as per rough estimates. Against the backdrop that a percentage of the PAPs sell/rent their premise and move back to the slums in the hope of getting enumerated in the BSES of another project, the crucial issue is will the policy of free housing make Mumbai slum free? To prevent the misuse of free housing in lieu of making way for the project, the GoM may need to explore the efficacy of measures such as linking of allotment of tenements with the *Aadhaar Card* or the unique identification authority of India (UIDAI) scheme of the central government that is based on biometric identification of every individual (UIDAI 2013).

Resettlement: A Challenge for Government Agencies

The crucial issue that arose in the R&R process for the MUTP was that it ended up as a mere rehousing scheme, where planning for the disruption of access to schools, hospitals, community assets and sources of employment in the new neighbourhoods at the R&R sites was done to a limited extent. However, it was by no means an easy task for the implementing agency as well because:

some PAPs themselves made dubious claims through over- night partitioning their preresettlement structures into a house and a; owners of commercial structures resisted against their shifting to new resettlement due to uncertainty of business there; and some claimants even forged f or getting benefits under the scheme. Given such odd challenges, it was really a difficult task before the implementing agencies to achieve a successful and genuine resettlement of PAPs under the MUTP. (TISS 2008:112)

The Inspection Panel investigation and its recommendations among others, for improved R&R in the context of contestations around entitlements to residential and commercial space and the suspension of funding soon after in March 2006, led to a rethinking on the R&R policy by the borrower and the implementing agency. Subsequently, there were marked improvements in terms of, inter alia, disclosure of project information on the MMRDA's website and setting up of public information centres, increased stakeholder participation whereby the PAPs were invited to consultation meetings and access to a grievance redress procedure wherein the grey and multiple types of land tenure for structures located on land with legal title and on non-titled land as well the inaccuracies in BSES were brought to the notice of the MMRDA. The implementing agency adopted a more flexible and people-centred R&R policy and offered a choice of alternative resettlement sites and the option of monetisation of compensation for certain categories of MUTP displaces, who were not satisfied with the existing R&R package on housing and related issues. Therefore, the lesson learnt is that if the BSES is conducted in a transparent and consultative manner, the complications that arose in the R&R process of the MUTP can potentially be circumvented.

Further, this case study foregrounds the fact that the dissonant voices between the MMRDA and the PAPs necessitate the urgent need to evolve a common language of communication between the stakeholders on issues of rehousing of commercial and residential structures and addressing the problems of livelihood reconstruction at R&R sites.

References

Bhagat RB, Sita K (n.d.) Population change and economic restructuring in Mumbai, Viewed on 27 June 2013 (http://www.udri.org/udri/MumbaiReader10/14%20R.%20B.%20Bhagat%20 & % 20 K . % 20 Sita % 20 % 20 Population % 20 Change % 20 and % 20 Economic % 20 Restructuring % 20 in % 20 Mumbai.pdf)

Government of Maharashtra (GoM) (2000) Resettlement and rehabilitation policy for Mumbai Urban Transport Project (MUTP), Government of Maharashtra, Housing and Special Assistance Department, Mantralaya, Mumbai, Resolution number Prakalpa 1700/CR 31/Slum 2, Dated 12 Dec 2000

MMRDA (2002) MUTP: resettlement action plan, RP74, April, Mumbai Urban Transport Project, Mumbai Metropolitan Region Development Authority

Modi R (2009) Resettlement and rehabilitation in urban centres. Econ Pol Wkly 44(6):20–22

Modi R (2011) The best and the worst of World Bank: involuntary resettlement and the Mumbai Urban Transport (MUTP), India. Development 54(3):400–406

Modi R (2013) Displaced from private property: resettlement and rehabilitation experiences from Mumbai. Econ Pol Wkly 48(23):71–74

Tata Institute of Social Sciences (TISS) (2003) An impact assessment of the initial phase of R&R implementation for the Mumbai Urban Transport Project (MUTP), Mumbai

Tata Institute of Social Sciences (TISS) (2008) Impact assessment of resettlement implementations under the Mumbai Urban Transport Project (MUTP), Mumbai

Unique Identification Authority of Indian (UIDAI) (2013) "What is Aadhaar?," viewed on 27 June 2013 (http://uidai.gov.in/what-is-aadhaar-number.html)

100 R. Modi

World Bank (2002) Project information document: India – Mumbai Urban Transport, Report no. PID8175, South Asia Regional Office, 16 Jan 2002, World Bank

- World Bank (2004) Bank management response to request for inspection panel review of the India Mumbai Urban Transport Project (IBRD LOAN No. 4665-IN; IDA CREDIT No. 3662-IN), 27 May 2004
- World Bank Inspection Panel (WBIP) (2005) The inspection panel investigation report: India: MUTP, (Report no 34725, 21 Dec 2005)

Chapter 7 Social Impact Assessment: Bringing in the Gender Perspective

Enakshi Ganguly Thukral and Shweta Tripathi

Abstract Women tend to suffer far more than men do in displacement situations. The male gender insensitivity coupled with biased resettlement policies and laws, which perpetuate such outdated mentality, makes the situation worse. Resettlement literature is replaced with examples of their sufferings that arise from such unjust persisting biases. The remedy suggested to correct the situation weighted against the women is to provide a strong gender focus in resettlement policies and planning and their implementation. This will require greater involvement of women and their groups in all stages of the planning and implementation processes. This alone may also not be enough. In addition right and equity concerns need be first identified, confronted and tackled effectively.

Keywords Male biases • Common property resources • Tehri Dam • Household survey • Domestic violence • Gender-disaggregated data • Sociocultural impacts

Development projects that involve displacement and resettlement usually have overwhelmingly negative impacts for the affected population. The process hurts everyone undergoing this traumatic experience, but not everyone is hurt equally. Although the risks are the same for both men and women, women bear the impact of forced resettlement much more than men do. While losing much more in the process than do men, women get far less access to the benefits of development. Yet, such gender-specific negative impacts of development projects remain largely unaddressed.

The long-standing existing customarily sanctified male biases, coupled with gender-blind resettlement policies and practices, further work entirely to the disadvantage of women, deepening their sense of disempowerment. Mehta (2009: 5) is emphatic that 'male and gender biases negatively affect displaced women in two

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© Springer International Publishing Switzerland 2016 Hari Mohan Mathur (ed.), *Assessing the Social Impact of Development Projects*, Advances in Asian Human-Environmental Research, DOI 10.1007/978-3-319-19117-1_7 ways: first the widespread nature of male biases in Indian society helps perpetuate gender inequality in terms of unequal resource allocation and distribution, and also legitimizing the silencing of women's interests; second, biases within state institutions, structures and policies help perpetuate these societal inequalities'. The displaced women are often caught in a double blind.

People displaced by development projects confront eight main risks of impover-ishment: landlessness, joblessness, homelessness, marginalisation, morbidity, food insecurity, loss of access to common property assets and social disarticulation (Cernea 1996). Although both men and women face these risks, their lives are affected in different ways because 'Displaced populations are not a monolithic socio-economic group; they have non-homogenous interests, potentials and cultural characteristics...vulnerable population groups are hurt differentially, not uniformly. For instance, recent research has revealed that women suffer more severe impact' (Cernea 1998: 55–6).

In 1997, a household survey conducted in the Upper Krishna Irrigation Project found that the move hurt women more than men. Most women thought that they had less personal disposable income than in the old village, which, in turn, had reduced their decision-making power in family decisions. Their income from farming and livestock decreased, and they became more dependent on wage income. The availability of fuelwood and fodder decreased. Livestock had to be sold. Women had to migrate to work. Most women thought their lives had worsened, and they are less happy now than before (Picciotto et al. 2001: 34). Similar studies from other projects elsewhere have also reported negative impacts from resettlement more severe on women than on men.

Differential Impacts

Dhagamwar (2003) has shown how women are not necessarily affected by displacement the same way in all cases everywhere as they are not a homogeneous group. Impacts vary from one group of women to another because of differences in their social and economic backgrounds. Studies have shown that while the status of women in most societies is lower than men, women in tribal societies enjoy a higher status than their 'high-caste' counterparts.

Even within the same socioeconomic group and even within the same household, the needs of young girls and boys and the impact on their lives due to relocation can be different. Their needs will be similar, in some ways, but quite different in other ways. For example, both groups will need schools and Anganwadis, but schools without toilets have a greater impact on retention of girls in schools than it does on boys.

The tribal people and those from the lower castes depend a lot on common property resources, and therefore women in these communities play a significant role in maintaining and managing these resources—land, forest, fodder or water. However, at resettlement sites women find themselves further alienated from their production-

based identities, and this hurts them immensely. Any assessment therefore must not only identify the displacement impacts on women, but also the differential impacts on different groups of women.

Displacement Impacts that Typically Affect Women

Resettlement studies have documented a wide range of social impacts that adversely affect women in particular. Specifically, some of these impacts that hurt women include the following.

Land Ownership and Compensation

Although women seldom owned land and property, they had access to and consequently some control over them. They have always been involved in practically most agricultural operations: sowing, weeding and even harvesting and threshing. With lands gone, women not only lose the traditional control over the land and other property; they also lose the legal entitlement. The male biases and state policies have excluded women from owning land and resources that they were traditionally dependent upon. The policy for those displaced by the Tehri Dam is notably discriminatory. Ganguly Thukral (1996: 1501) reports that if a woman is a *khatedar* (titleholder) and she with her husband is jointly entitled to only one plot of land, the compensation amount goes to the husband. This affects harshly particularly single women, unmarried, deserted, divorced or widowed.

This policy bias also denies compensation to women, as entitlement to compensation is determined on the basis of ownership of land. Conventionally, land titles are mostly in the name of men who are invariably seen as the heads of families. As noted by Mehta and Srinivasan (2000: 31), 'In the context of resettlement, one of most glaring instances of gender inequity has been the issue of compensation. As men are treated as heads of households, compensation, either in cash or land, invariably awarded to men. Women are not considered to be farmers or homeowners... Similarly, policy often gives land to major sons, but major daughters are excluded from such provisions'.

Common Property Resources

Common property resources (CPRs)—products that grow wild in the forests or those 'freely' available in villages and backyards—provide women income-earning, income-augmenting and income-saving opportunities, especially to women from tribal and rural areas. Women lose access to these common property resources in

most displacement situations (Dewan 2008). This happened, for example, when families moved to resettlement colonies established for them by the Sardar Sarovar Project in Gujarat. They had no access there to the forests and rivers, from which they had always benefited in villages where they previously lived. In Kohadia villages of Korba, an industrial town in Madhya Pradesh, the women found that with no forests nearby, they had to depend on the markets for fuel, which put enormous financial burden on families already impoverished due to involuntary resettlement. They also found it difficult to maintain cattle due to the lack of grazing lands, and in the circumstances, these families had no option but to sell them off (Ganguly Thukral 1996).

Previously, women could earn some money by selling CPR products such as fodder, firewood and milk. But such resources either do not exist or are too far from places where they now live. With income opportunities gone with resettlement at new sites, they also lose their economic freedom and become totally dependent on men for money even for their daily household expenses. Men are often reluctant to meet even this basic family obligation in this regard, preferring to squander away money on drinking, smoking and such other wasteful ways, leaving on women the entire burden to feed the family (Pandey 1998). This, in turn, led to increase in family discords, for which the Paraja women put the blame squarely on the Upper Kolab Hydroelectric Project in Orissa (Patnaik 2000: 146).

Livelihood Opportunities

Livelihoods are usually lost due to resettlement. Often this happens due to the flawed resettlement planning due to which displaced people are moved to places where there are no income-earning opportunities. In times of financial difficulties, women are forced to migrate to unfamiliar places for seasonal work, sometimes even for longer period in search of employment. They soon confront innumerable problems. In the labour market, women invariably lose in competition with men. If they are lucky to find employment on construction projects, they get very low wages, compared to men (Shankaran 2009: 239). When industries resort to job cuts, the women are the first to go, while men are retained. Meanwhile, long absence from homes loosens the family bonds, leading rapidly to the complete break-up of once well-knit families.

Sociocultural Impacts

The sociocultural impacts of displacement on women are no less significant. In Orissa, the marriage market for unmarried girls suddenly shrank due to displacement from the mining projects. Many people found it difficult to meet the rising demand for dowry from the compensation amount, as they also needed it for their

resettlement (Pandey 1998). As women lose income from gathering and selling firewood and other minor forest products at the relocated site, and as they also do not get any share in the compensation amount for loss of land, they obviously cannot contribute to the household budget. As a result, their say in family matters drastically declines, with negative consequences on their social status overall (Mahapatra 1999). In the Talcher Super Thermal Power Project area, the moment people received compensation amount, they hastily married off their daughters even when they were below the marriageable age, and dowry rates gone up well above their normal limit (Pandey and Rout 2004: 33).

Breakdown of Community/Social Networks

The breakdown of community and social networks is also one of the severest adverse impacts of displacement. For women such networks mean a lot as they depend on them a great deal, much more than do men. They depend on such networks for help in many matters, such as taking care of children. These network ties are snapped due to resettlement, mainly because displaced communities are not relocated as a social entity at one place but dispersed randomly in groups to places too far removed for anyone to be able to retain old contacts.

In Uttarakhand, women traditionally played a major role in all spheres of life and were treated as the backbone of the family and the society, reports Bisht (2011) citing from his ethnographic study of the Tehri Dam Project. This meant a lot of hard work, though. Now at resettlement sites, the drudgery has eased somewhat due to the availability of hand pumps to draw water and such other amenities, but this not has necessarily been a boon for women. This gain has been more than offset by the loss of opportunities they previously had to gather at several common meeting points to meet and discuss with other women matters of common concern to them. Before displacement, women enjoyed considerable freedom to manage the household affairs, even agricultural activities outside the home. Not anymore. Now, they play a much-diminished role. In the agricultural sector, for example, they are mere onlookers. While men carry out or oversee agricultural activities in the field, their role has been reduced to only supporting them, such as serving tea and refreshments, whenever asked. The fact is that resettlement has largely resulted in women's marginalisation.

Increase in Domestic Violence

Many social evils creep in among relocated people. From the day they receive the compensation amount, men start gambling and drinking recklessly, much more than ever before, and in the process lose money fast on other things they think are only meant for their fun, oblivious of their family obligations. Srinivasan (1996: 10)

found that drunkenness has emerged as one of the major problems among those displaced in Hazariganj, Bihar (now renamed Jharkhand). This causes tensions in the family, even violence, with women at the receiving end of violence. The rise in domestic violence has also been reported in resettlement areas of Hazaribagh.

Health and Nutrition

A majority of those whose health and nutrition are negatively impacted due to displacement are women and children, as was found to be the case in the Upper Krishna Project, Bolani Iron Ore mines and the Jawaharlal Nehru Port (Pandey and Rout 2004). The spread of disease has often been found to be associated with dam construction, from dramatic increases of parasitic agents and vectors emanating from water impoundments and canals (Kedia 2008). Studies in Uttar Pradesh found that villages closest to canals in Merrut had "six times more malaria cases in the month of June and nine times in October as compared to villages in Gurgaon district which were away from Canals" (Bhatia 1991: 31–32). In Jharkhand, mortality and morbidity increased among women displaced by the Subarnarekha Multipurpose Project, with the number of ailing mothers doubling from 76 to 158 (Pandey and Rout 2004).

The lack of sanitation facilities is a major problem that affects displaced women in particular. Houses in resettlement colonies are built with no thought given to the needs of women for toilet facilities. Ganguly Thukral (1996) found that women in Kohadiya, Singrauli, faced daily embarrassment on this score, as there were no toilets, no forests and no fields. This problem made their lives not only physically uncomfortable, but also vulnerable to physical and sexual harassment. As this is a problem that concerns women in particular, it never gets attention

Undernutrition, especially among women and children, is one of the most significant fallouts of displacement, maintains Dewan (2008: 133). In the Rajasthan Canal region, the rise of undernutrition was found to have increased significantly, especially among children (Srinivasan 1996). In Gujarat, a significant drop in per capita intake of calories in several resettled villages of the Sardar Sarovar Dam Project was also noted. In cases of shortages, common among resettlers, it is the housewife and girls who are the 'last and least to eat'.

Education

Access to education deceases due to resettlement at a new place for children, especially for girls. Children are forced to drop out, girls more often than boys, because they are encouraged to work not only at home but also outside to earn whatever little they can to supplement the much reduced family income. The lack of access to education is also due to inability of the schools to find teachers, especially female teachers, willing to work in resettlement colonies.

Impacts Arising from Flawed Laws and Policies

Gender biases have always been present in laws and policies. Many adverse impacts on women have their roots in these biases. The laws on property and its inheritance, for example, have traditionally been patently discriminatory against women. One glaring example is the payment of compensation for acquisition of land. In most projects the compensation amount still continues to be credited into the accounts of men who, as is well documented, do not share it with their spouses.

Similar biases exist in resettlement policies as well. A typical case, much cited in resettlement literature, is the Narmada Water Dispute Tribunal Award (NWDTA), which governs resettlement of people displaced by the Sardar Sarovar Project in Madhya Pradesh, Gujarat and Maharashtra (Ganguly Thukral 1996). The NWDTA provides that every major son (18 years old and above) is to be treated as a separate family for purposes of resettlement assistance. However, it does not provide any such provision for the major daughters. NWDTA leaves this decision to the discretion of the three states if they would wish to provide the same benefits for the major daughters as well. As a result, the three states under NWDTA have different provisions for unmarried daughters. The Madhya Pradesh resettlement policy for people affected by the Sardar Sarovar Project doesn't provide any resettlement to women, while the Gujarat package doesn't recognise any resettlement assistance for major unmarried daughters. The Gujarat package entitles only widows after 1980 for compensatory benefits, but excludes the widows before 1980 from such benefits. However, the Maharashtra government, previously reluctant to include daughters under its resettlement package, later amended its resettlement policy considering major daughters and major sons for the same resettlement policy under pressure from civil society,

The most important law that needs examination is 'The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013' which provides SIA as a preceding mechanism of any land acquisition process. Once again, the Act fails to specifically address the need for women to be part of the SIA process. In other words, we again have a gender neutral or gender-blind Act. It does not specifically include any provision for women, namely, (i) no clarity in the SIA study, who will be doing it; (ii) how will public consultation be organised; and (iii) no specific provision for including women in the seven-member evaluator committee of the SIA study.

In recent years resettlement policies have begun to address gender concerns to a limited extent, though. For example, the National Resettlement and Rehabilitation Policy (NRRP) 2007 does address women's concerns. It defines a family as project-affected families consisting of such persons, his or her spouse, minor sons, unmarried daughters, minor brothers or unmarried sisters, father, mother and other members residing with him and dependent on him for their livelihood and includes a 'nuclear family' consisting of a person, his or her spouse and minor. This policy also contains some positive provisions on consultation and participation both of men and women. For the first time, the 2007 Policy has introduced the SIA provision. Under this provision, SIA is to be compulsorily carried out for projects that

cause displacement, a progressive step. It is a different matter though that the promised guidelines on conducting SIA have not been issued till today.

Focusing Gender Issues in Impact Assessment Process

The gender focus must be consciously built into the entire process of assessment itself and not left to the discretion or good intentions of those sponsoring or conducting social impact assessment. Commenting on the generally prevailing short-comings in social impact assessments in relation to gender concerns, Mathur (2009: 175) noted: 'most social impact assessments, devoid of any meaningful gender-segregated analysis of the impacts and potential problems, are ritualistic, at best'. This surely calls for urgent steps to alter the way the SIA is conducted, if gender issues are to be brought into focus, and not relegated to the background.

Elaborate international guidelines on conducting social impact assessments already exist (IOCGP 1994; ADB 1994; Mathur 2011). There is need, however, to put greater emphasis on gender aspects in general guidelines for assessing social impacts on women to reflect the true ground realities specifically on the lines, as indicated below.

Gender-Disaggregated Data

Often projects commence without accurate data even on the number of people that they are going to affect, let alone gender-disaggregated data. Morse and Berger (1992) found this to be the case in the high-profile Narmada's Sardar Sarovar Project, with the result that the needs of affected women got left out completely from the project preparation process.

Gender-disaggregated data in a readily usable form is generally not available. One reliable source is the government census reports, but they tend to get outdated and require updating for the purposes of SIA studies. The collection of gender-disaggregated data should therefore be the starting point of a social impact assessment process. The gathering of gender-disaggregated data requires the following information:

- · Number and age of affected women
- · Number of headed households and single women
- Information on women's land ownership and property status
- Household division of labour, women's livelihood sources and women's contribution to family income

Gender-specific data for each household, include (a) women's involvement in work, (b) women's dependence on livestock, home garden and forest use, (c) women's skills and (d) girls and boys going to school.

Gender-Sensitive Assessment Tools

Social assessments are carried out using a variety of social science research tools, both quantitative and qualitative. Surveys of various kinds and meetings with the affected people are among the most common assessment tools in use. The socioeconomic surveys provide the baseline information on income and the adverse impact that displacement will have on the livelihoods and the entire way of displaced women's lives. This information is essential for purposes of planning resettlement and later for monitoring it as well.

Social surveys to identify social impacts generally fail to identify impacts on women that are clearly negative. Experience has shown that such quantitative surveys alone are insufficient for the purpose. Other qualitative methods should necessarily be brought into the assessment methodology, such as key informant interviews and focus group discussions. They can often be more effective in understanding the women's concerns. Essentially participative, these tools are also more gender inclusive.

Interviews can be held with key representatives of different women's groups or even with selected informants alone in their personal capacity. Focus groups can be invaluable in providing information on possible negative impacts. However, in larger groups the dominant views of some persons tend to drown the feeble voices of those less articulate. Discussions are more productive when held in small groups, organised separately for women from different strata of society, caste, age and other such categories.

While organising small-group discussions, particular care should be taken to keep in view the convenience of women for time, day or even season and also the place of meeting. It must be recognised that there is a gendered aspect to women's time. They may be available to talk to the assessment team only during a certain time of the day, on a particular festival day or even during an entire harvesting season (for women in rural areas).

Women in Impact Assessment Teams

While social impact assessment reports prepared by trained and experienced SIA practitioners are unlikely to be biased, more employment of women on such assignments is being increasingly recommended, also to ensure a gender balance in the assessment team. This rests on the premise that women can easily collect inside information on household issues, which a man will not able to find out.

Some development agencies have already taken steps to increasingly associate women in social impact assessment and resettlement planning processes. In 2000, the Asian Development Bank inducted a gender specialist into the consultant team that was contracted to prepare a resettlement plan for the Calcutta Environment Improvement Project (CEIP). The purpose was to ensure that gender concerns were

identified and integrated into the resettlement plan from the start. Her major input consisted of holding consultations with different vulnerable groups of women, each with its own interests and needs. These inputs were fully integrated into the CEIP resettlement plan (Mathur 2009: 184).

However, to assume that only women can act in a gender-sensitive manner is not correct. Men can be equally gender sensitive. As Roche (2009: 63) pointed out, the consultant's attitude and approach are equally critical to the task (being a woman may be a necessary but not sufficient condition).

Consultation and Participation

Although the need for participation of women is highlighted in most development policy documents, such lofty intentions do not get translated into action often enough. Mehta (2000: 278) found that in villages affected by the Sardar Sarovar Project, 'women were rarely consulted by officials or by male members in decision-making processes concerning the land. Their participation was next to nothing. They were not even consulted about decisions concerning food, water, wood or hand-pumps. Men, in fact, admitted that had women been consulted and involved in the process of site selection, many of the hardships in the new sites would have been averted'. Participation of women is minimal even in SIA processes specifically designed to determine and address their concerns. SIAs will not be able to accurately identify all impacts unless women from different socioeconomic groups participate in SIA processes. ADB (2003) has even prepared a checklist to guide SIA teams in maximising participation of women (see Box 7.1).

Use Qualified and Independent SIA Consultants

Only trained and qualified practitioners should be engaged for doing assessments, as they alone will get the best results. They will know what information to look for, straightway get on with the job and come up with a fair assessment of possible social impacts. With their training and experience, they will be best able to identify the full range of impacts on women, ensuring that no major adverse social impact goes undetected.

Experience has shown that there is a huge potential for biases in SIA. One reason is that SIAs deal with human situations, where social impacts are not quantifiable. But a major reason is the pressure on SIA teams from project developers to produce a favourable report minimising adverse aspects of the project as such a report helps in getting project clearances. It is therefore all the more important that SIA practitioners be independent experts, not part of the agency requiring it. Otherwise, there

Box 7.1: Ensuring Participation of Women

- Ensure representation and presence of women from different socioeconomic groups in all meetings.
- Ensure that meetings/consultations are organised at a time when women find it convenient to attend, so that maximum participation can be ensured.
- Take care to ensure that the venue for the meetings is based on discussions with the women so they can feel free and uninhabited in their discussions.
- Consider female facilitators, or work through women's groups or networks—formal or informal.
- Involve women in the identification of affected persons.
- Consider separate meetings for women.
- Ensure women's involvement in preparation and review of resettlement plans.
- It is important that women's association are vested with authority, both within their communities and within wider regional and state processes.
 This will pre-empt situations where women are mere tokens in the decisionmaking processes
- Ensure women's involvement and participation in implementation and monitoring.
- Ensure documentation of the participatory exercise.

Source: ADB (2000: 6)

is always the possibility of some SIA practitioners producing reports that downplay the negative impacts to secure faster clearances for projects of their sponsors.

Budget for SIA

Conducting SIA with a gender focus involves certain costs. These will mainly be on hiring a gender specialist and a couple of field assistants, at least one of whom should be a female. The tasks of this assessment team will be to carry out socioeconomic and related surveys in the field, hold interviews with the key informants, organise meetings with groups of women from every segment of the population in different localities spread over the entire project area and finally produce a report on its findings.

Experience has shown that project developers seldom provide enough resources on conducting surveys and meetings with various women's groups or even on consultant inputs. Their sole purpose is to obtain some kind of a report as part of the paperwork that is required to get the project cleared. Otherwise, such reports defeat the very purpose of doing a gender-focused SIA that identifies the social risks to women and the measures to address them.

Monitoring Mechanism for SIA

It is not enough to do a gender-focused SIA. Often, SIA is undertaken to meet the processing requirements of funding agencies or else as a public relations exercise. A mechanism is required to closely monitor that the SIA findings are fully incorporated into the processes of resettlement planning and implementation. Without such a mechanism gender concerns will remain a matter of little or no concern in resettlement, as has often been the case.

Training for Impact Assessment

Identifying the social impacts of displacement is not a job that anybody can do. This requires certain skills. NGOs are often brought in for collecting information on social impacts. Many of them have very little training in assessment. Experience has shown that data so collected then fails to take account of critical gender-specific impacts, and subsequently this inadequacy makes it difficult to plan and monitor resettlement activities. Resettlement planning requires data on social impacts that are reliable and accurate. This underlines the need to provide training to the assessment team in basic social science skills of data collection for assessment purposes.

In conclusion, it is important to emphasise that while improvements in the way SIA is done with a gender focus will definitely be helpful, that by itself may not be enough. Gender concerns in social impact assessment will likely remain inadequately addressed 'unless rights and equity concerns are identified, confronted and tackled' (ADB 2003: 1).

References

ADB (1994) Handbook on resettlement: A guide to good practice. Asian Development Bank,

ADB (2000) Gender checklist: resettlement. Asian Development Bank, Manila

ADB (2003) Gender checklist resettlement. Asian Development Bank, Manila

Bhatia JC (1991) The Narmada valley project. In: Ghosh B (ed) Health implications of public policy: case studies, modules, methodologies. Indian Institute of Management, Bangalore

Bisht TC (2011) Resettlement in the Tehri dam project: an ethnographic profile. In: Mathur HM (ed) Resettling displaced people: policy and practice in India. Routledge, New Delhi/London

Cernea MM (1996) Understanding and preventing impoverishment from displacement. In: McDowell C (ed) Understanding impoverishment: the consequences of development-induced displacement. Berghahn Books, Providence RI/Oxford

Cernea MM (1998) Impoverishment or social justice: a model for resettlement planning. In: Mathur HM, Marsden D (eds) Development projects and impoverishment risks: resettling project-affected people in India. Oxford University Press, New Delhi

Dewan R (2008) Development projects and displaced women. In: Mathur HM (ed) India social development report 2008: development and displacement. Oxford University Press, New Delhi

- Dhagamwar V (2003) Industrial development and displacement: the people of Korba. Sage, New Delhi
- Ganguly Thukral E (1996) Development, displacement and rehabilitation: locating gender. Econ Polit Week 31(24):1500–1503
- ICOGP (Interorganizational Committee on Guidelines and Principles for Social Impact Assessment) (1994) Guidelines and principles for social impact assessment in the USA. Impact Assess Project Appraisal 21(3):231–250
- Kedia S (2008) Nutrition and health impacts of involuntary resettlement. In: Mathur HM (ed) India social development report 2008: development and displacement. Oxford University Press, New Delhi
- Mahapatra LK (1999) Resettlement, impoverishment and reconstruction in India: development or the displaced. Vikas Publishing House, New Delhi
- Mathur HM (2009) Gender biases in resettlement planning. In: Mehta L (ed) Displaced by development: confronting marginalisation and gender injustice. Sage, New Delhi
- Mathur HM (2011) Social impact assessment: a tool for planning better resettlement. Social Change 41(1):97–128
- Mehta L (2000) Women facing submergence: displacement and resistance in the Narmada valley. In: Damodaran V, Unnithan-Kumar M (eds) Post colonial India: policies and cultures. Manohar, New Delhi
- Mehta L (ed) (2009) Displaced by development: confronting marginalisation and gender injustice. Sage, New Delhi
- Mehta, L, Bina S (2000) Balancing pains and gains: a perspective paper on gender and large dams. Thematic Rev 1(1) Social Impacts (prepared as an Input to World Commission on Dams, Cape Town)
- Morse B, Berger TR (1992) Sardar Sarovar: the report of the Independent Commission. Resources Future International (RFC), Ottawa
- Patnaik SM (2000) Understanding involuntary resettlement: an anthropological perspective. East Anthropol 53(1 and 2):141–159. Jan and June 2000
- Pandey B (1998) Displaced development: impact of opencast mining on women. Friedrich Elbert Stuftung, New Delhi
- Pandey B, Rout BK (2004) Development-induced displacement in India: impact on women. National Commission on Women, New Delhi
- Picciotto R, van Wicklin W, Rice E (eds) (2001) Confrontations and crises in upper Krishna. In: Involuntary resettlement: comparative perspectives. Transaction Publishers, New Brunswick/London, pp 23–39
- Roche C (2009) Impact assessments for development agencies: learning to value change. Oxfam, Oxford
- Shankaran D (2009) Like a white flag the gendered dimensions of the Orissa state policy on resettlement and rehabilitation. In: Mehta L (ed) l displace women: confronting marginalisation and gender injustice. Sage, New Delhi
- Srinivasan B (ed) (1996) In defense of the future: women testify against the tyranny of displacement. Vikas Adhyan Kendra and Swashraya, Mumbai/Baroda

Chapter 8 Displaced by Development: Assessing Social and Cultural Impacts on Affected Tribal Communities

Felix Padel

Abstract The impact of development projects has been overwhelmingly disastrous for the tribal people. Because the areas they live in generally happen to be rich in natural resources, they often get forcibly displaced from their lands to make way for building dams, mining and other projects, paid little or no compensation, relocated to environments completely different from their own and then left there to fend for themselves. Tribal culture breaks down under this onslaught. Still, social and cultural impacts of starting a new development project seldom receive due attention. Tribal culture is deeply attached to land, and for outsiders it is difficult to understand this emotional link, and this is a handicap in conducting an objective SIA. This chapter concludes with some suggestions on doing assessment of the development impact on tribal cultures. In this regard, the most emphasised recommendation is to listen to a wide spectrum of people's voices, even uncomfortable ones, and then prepare a report on this basis. This will better reflect their perspective on the impacts of development on their lives, a perspective that is often missing from most SIA studies.

Keywords Investment-induced displacement • Ecocide • People's voices • Divided communities • Resource curse • Cultural genocide • Traditional tribal communities

There are certain social and cultural repercussions to starting a new development project, especially where tribal people are concerned. But such impacts are seldom taken into account in the planning process (WCD 2000). When social impact assessments (SIAs) are carried out, the tendency is to downplay, even deny, the likelihood of harmful social impacts resulting from development. On the other hand, what SIAs emphasise are development's beneficial aspects, mainly economic, which as studies have repeatedly shown, do not percolate down to the tribal people (Rath 2006; Blaser et al. 2004; Mahapatra 1991).

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The key point is that SIA is simply not carried out in a way that is straightforward, uninfluenced by the external pressures. It is now widely known how shoddily even environmental impact assessments (EIAs) are often done, with huge bias (Choudhury 2014). The basic reason for the appalling distortions in carrying out assessments is the pressure from investors to give reports of environmental impacts that will be favourable to projects, facilitating their clearance, in other words, a tendency to vastly minimise negative impacts (CSE 2008, 2011). If that is the case with EIAs, involving more easily quantifiable scientific data, the potential for such lapses in SIA, where social and cultural impacts are not identifiable and measurable, can be far greater.

Among the negative impacts usually left out from SIA, since they are uncomfortable or embarrassing and hard to get hard data on, include: corruption, prostitution, illegal liquor stores and the wider question of various kinds of mafias that operate in and around areas where new projects are coming up. A culture needs to be promoted, rather than suppressed, of writing frankly about these aspects, which usually—nearly always—have a momentous impact on displaced people.

If SIAs are to predict impending probable adverse impacts of proposed projects, it will be necessary first to understand what development has meant to tribal people, how it tends to destroy tribal culture and why tribal people now fiercely resist development. Above all, it will be essential to understand the distinct social and cultural features of tribal society.

Adivasi (tribal) identity is bound up with land that they and their forefathers have cultivated, often over many generations. The experience of being uprooted is extremely difficult for many nontribal people to comprehend, because most of us have not had a multi-generation link with a piece of land that we and our parents and grandparents have worked and cared for by hand. This lack of comprehension of tribal culture and society is a handicap in carrying out a proper SIA.

Displacement Impacts on Tribal Culture

Development projects have displaced a disproportionately large tribal people from their lands, their homes, their livelihoods and their communities to make way for projects. Most have barely been compensated or resettled. About 30 years ago, a working group on development of scheduled tribes set up by the Government of India is estimated that while tribal people constitute barely 8 % of India's total population, approximately 50 % of those displaced are tribal people (Government of India 1984: 2). There is nothing to suggest any improvement in the situation since.

Tribal people are also the group most negatively affected by displacement, because their culture and identity are rooted in the soil. A subsistence economy is one of the defining features of traditional tribal communities. Since displacement usually destroys it, this means that every aspect of their social structure is changed or damaged. Often, even more painful than the poverty these projects reduce them

to is the erosion of people's cultural identity, values and traditions, which invariably accompanies their separation from the land that they and their forefathers cultivated over many years.

The devastating economic impacts are evident wherever people have been resettled. According to international standards on involuntary resettlement, if a project really constitutes 'development', then everybody should be better off. In practice, however, it is clear to everyone, and easy to demonstrate, that most of India's 60 million displaced people are not better off at all. Even most World Bank studies tend to agree that displacement usually causes a massive drop in tribal people's quality of life. They not only get a lot poorer, they also experience cultural genocide (Padel and Das 2008, 2011).

In popular usage now, 'culture' often means just 'the pretty bits', exemplified by tribal or classical dances. But its original meaning, from Latin *cultus*, refers to cultivation of the soil as well as the traditions of a society. In other words, tribal people's economic and political systems are fundamental to their culture, and when dispossessed of their land, these systems are effectively destroyed. This is why Adivasis often say they would rather die than leave their land. Losing their land brings the death of all they value: the sacredness of nature, respect for elders' knowledge, ritual contact with the ancestors, growing their own food on family land and making their own houses and tools, away by corporate values, which emphasise money and financial power.

Anthropologist Sahlins (1972) showed how—against mainstream stereotypes regarding primitive society as impoverished and in a daily struggle for existence—hunter-gatherer society is 'the original affluent society', since a hunting-gathering economy normally guarantees a lot of leisure time. This is also true of Adivasi economics: hard seasonal work coexists with elaborate system of nonmonetary exchange (including labour exchange, marriages) and seasonal festivals and a highly developed culture of songs and dance. Adivasi economy is attuned to ecology, based on long-term *sustainability*—a culture attuned to cultivation practices and associated cults of nature-based spirits.

This contrasts with mainstream ideas, from economics, that tribal society and subsistence farming are 'uneconomic'—this concept has a long history back to the eighteenth century, when it was used to justify the highland clearances in Scotland and to encourage Rajas throughout India to rapidly increase the revenue from their land, which often resulted in the first forced dispossession of tribal farmers, in Orissa and other states (Padel and Das 2010, 2011).

In other words, Adivasi culture is based on principles of long-term sustainability, not short-term gain. Far from being 'primitive' (which is how anthropologists usually saw them in the colonial era, when the subject of anthropology was still very primitive), tribal societies are extremely highly developed, especially in terms of knowing how to live from their natural environment without damaging or overexploiting it. When they are displaced—few nontribal people seem to understand as yet—this process often annihilates centuries of development and does not usually bring much in terms of real development to replace this.

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Cultural Genocide: The Disastrous Impact of Development on Displaced Communities

The process of displacing communities is rarely studied in depth by sociologists, anthropologists and other researchers. One of the first social impacts of any project that displaces people is to divide communities between pro- and anti-project groups and between rich and poor, with the former often instigated against protests by anti-project groups against their land being taken. Often, differences are exploited even by a company trying to force people off their land, e.g. between Adivasis and Dalits (backward caste groups), or between those with and without *patta* (title), or between those who have accepted compensation and those who haven't.

In many ways, the original social structure gets torn apart:

Socially because the community gets changed during resettlement, with some families going away and people from other communities coming in; this in turn affects the kinship structure.

Physically because the traditional social structure was embedded in the structure of houses—internally as well as externally, in the placing of houses in relation to each other—and gets undermined by contractor-designed houses that ignore 'sacred space' within homes and change the physical proximity to neighbours.

Politically and economically, displaced people find themselves in a transformed environment, no longer in real control of their labour and their natural environment, but dependent on a corporate hierarchy for jobs and favours.

The real cost of imposing development on tribal people amounts to cultural genocide. Cultural genocide is the proper term for what happens to many displaced tribal communities, because displacement associated with development destroys the social structure of tribal society directly (Padel and Das 2008). A basic anthropological analysis shows what happens to a tribal community's social system. Tribal culture exists through relationships ordered in a carefully maintained underlying social structure, which traditional anthropology specialises in analysing. Each part of this social structure is torn apart by displacement:

- The economic system, along with the whole tradition of cultivation, is completely
 destroyed with people's removal from their land and the termination of their
 existence as farmers.
- The *kinship system* is fractured by displacement from villages, where social relations follow the pattern of a village's traditional layout, and spatial distance from kin in neighbouring villages. In every area where a project causes displacement, there is a split in long-standing relationships and tension between those who accept compensation and move and those who remain opposed.
- The religious system is undermined by removal of sacred village sites as well as
 the mining of venerated mountains. As a woman from Kinari village said to us
 days after being moved to Vedanta Nagar colony to make way for the Lanjigarh
 refinery, after seeing bulldozers flatten her village and its central earth shrine,
 'Even our gods are destroyed'. Losing her land means she can never grow her

own food again, so the whole *system of values* attached to the customary way people have supported themselves is undermined.

- The *material culture*, through which people make most of what they need, is destroyed as soon as the houses people built from local earth and wood are knocked down and replaced with a concrete house.
- Above all the *power structure* is transformed. From being in control of their area and its resources, people find themselves at the bottom of extremely hierarchical structures of power and authority. Traditional tribal society is remarkably egalitarian, and women have a higher status than in much of mainstream society, which they lose when new, corporate forms of domination invade their area. In many ways women have even more to lose than men, which is why they are often at the forefront of campaigns against displacing projects.

Development Projects or People-Displacing Projects?

An estimated 60 million people have been moved off their land and their villages erased in 66 years of independence, in the name of development. If about 50 % of these are tribal people, this means that as many as a quarter of India's tribal population have already been displaced. Has standard of living of these people 'developed'? For farming communities, especially tribal people, even World Bank studies show that displacement nearly always leads to a massive drop in living standards (World Bank 1994).

Many thousands more tribal people are threatened with displacement right now. Witnessing what has happened to communities already displaced, tribal people, and other vulnerable groups facing displacement, are therefore doing everything possible to avoid displacement and often ask: 'How can you call these projects 'development'?' 'What does 'development' mean?' Often displaced peoples say that 'development projects' have caused irreparable damage to their communities and ecosystems. With such different views about what development is and what raises or lowers people's standard of living, how to assess social impacts objectively?

The feedback from project-affected persons, though placed at the top of new resettlement policies, is rarely promoted in practice. When they express themselves frankly, their fury and despair at the betrayal of everything that was promised is shocking to experience. For example, Bhagaban Majhi, from Kucheipadar in Kashipur, Odisha, is an Adivasi leader opposing the Utkal Alumina project on tribal land. The answer he demands from the government to his basic question is:

What do you mean by 'Development'? (Agya, Unnoti Boile Kono?) We have sought an explanation from the Government about people who have already been displaced in the name of development. How many have been properly rehabilitated? You have not provided them with jobs; you have not rehabilitated them at all. How can you again displace more people? Where will you relocate them and what jobs will you give them? You tell us first. The Government has failed to answer our questions. Our fundamental question is: how can we survive if our lands are taken away from us? We are tribal farmers. We are earthworms [matiro poko]. Like fishes that die when taken out of water, a cultivator dies when his land is taken away from him. So we won't leave our land. We want permanent development. (Das and Das 2005)

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For most displaced people and communities resisting displacement, 'development project' is an inappropriate term that adds insult to injury. 'Development-induced displacement' for them is a misnomer. Where there is no dispute is that financial investment is a prime facilitator for any major development/displacement project. In other words, the process needs to be understood as investment-induced displacement in line with what Adivasis often say: 'we're being flooded out by money', and 'we cannot eat money'.

'Flooding us out with money' encapsulates Adivasis' perception of the whole process of what's displacing them. This needs to be counterpoised with positive views of foreign direct investment (FDI) as benefiting India's economy. The reality is that a lot of the investment continues to build up a bubble of unrepayable debt and contributes to the impoverishment of already poor communities (Padel et al. 2013).

Tribal People's Perception of Development

For tribal people, big dams are nearly always anti-development in as far as they interrupt or undermine rural groups' own trajectories and histories of development. Among the many basic problems with dams highlighted by the WCD (2000) and numerous other studies include:

- Mass displacement and impoverishment of communities
- · Nearly always cost far more than planned
- · Nearly always less hydropower and less irrigation than promised
- Siltation and salination much rapider, and flood control much less, than advertised

Most mining projects are also 'anti-development' for a majority of affected Adivasis, since they take away the land and damage the environment these people subsisted from. This is the case even when companies make them shareholders and offer huge amounts of money for 'tribal' or 'local development' as compensation. These sums, as witnessed, for example, by Vedanta's corporate social responsibility (CSR) projects at Lanjigarh in Odisha, are not under democratic control and spread corruption, speeding up land-grabs and marginalising tribal groups that previously enjoyed a large measure of control over their local environment and landscape. In fact, it needs to be more widely recognised that 'tribal development' often attracts the worst scams and most rampant corruption (Sainath 1996).

The logical fallacy in this term, 'tribal development', consists in an inability to understand that tribal societies have their own history of development, usually in a very different direction from mainstream/western models of industrialisation-based trajectories of development. In many ways, tribal societies are extremely highly developed, much more highly developed than mainstream society, e.g. in their use of natural resources, based on a system of long-term sustainability, in systems of law that aim at reconciliation rather than accentuating divisions, in knowledge of

the forest and cultivation and in elaborate cultures of dance and song. These highly developed systems are effectively destroyed by displacement.

Along with a human civilisation, an ecosystem also gets destroyed or diminished by mining and dam projects, destruction of a whole environment that rural communities have preserved and live alongside very lightly. This is the process referred to as ecocide, presently under consideration at the United Nations (UN) as a crime against humanity and observable in many of India's intensively mined areas.

'Anti-development' is a phrase often used about local people protesting against displacement projects. But when these projects destroy highly developed natural systems and the systems of cultivation and community that developed over centuries in relation to these natural systems, 'anti-development' encapsulates tribal people's experience of these projects. Quoting Bhagaban Majhi again: 'Is it development to mine millions of years old mountains just for profits for a few officials for a few years? We want permanent development, for our children and grandchildren....' (Das and Das 2005).

Understanding Movements Against Displacement

The tribal people recognise the enormity of what is at stake, which is why, right now, in so many places, communities are resisting being displaced with everything they have—nonviolently at first, seeing the powers against them are often extremely strong and violent—but if the basic injustice remains unresolved and they are dispossessed without adequate compensation, people's frustration and resentment can become a major cause of recruitment to the Maoist cause.

Women are usually at the forefront of all these movements, very visibly, because they often realise what is at stake better than men, less tempted by promises of short-term profit and more aware in general of the needs of future generations, because they carry life inside them, in their wombs, giving them a direct continuity with the future. Adivasis often say 'You're offering me a job, and also maybe for one of my children. But our land promises jobs for many generations to come. Can you promise jobs for my grandchildren, and their grandchildren?'

The 'Resource Curse' applies not just to resource-rich countries, but also to resource-rich regions within countries, as shown in great detail in a CSE report (CSE 2008): India's mining and metal-producing regions are socially the country's most impoverished, not the most developed. Displacement is a major cause of this impoverishment. 'Resource War' is one of the worst aspects of the 'Resource Curse', intensifying patterns of exploitation and dispossession, as financial investments sacrifice lives and ecosystems for the sake of quick profits.

The Maoist conflict in many ways is a 'false-flag' war—Maoists and mainstream ideologies are similar: both are materialistic and sacrifice countless lives for their goals. Maoists may oppose memorandum of understandings (MoUs) with mining companies opportunistically, to consolidate support from local Adivasis opposing mining projects, but we shall never get a critique of the mining industry from

Maoists—Stalin and Mao imposed industrialisation more ruthlessly than anyone, and part of the history of who Mao was is 'The Great Leap Forward' in 1958–1960, when he imposed steel production as ruthlessly as this has ever been done.

What needs to be understood is that the injustice of dispossessing Adivasis and the atrocities against them by the police, serve as a recruitment tool for the Maoists and that the whole Maoist conflict diverts attention from the primary conflict, between communities rooted in their land and resources and vested interests wishing to displace them and gain control over these resources.

At the heart of these conflicts over resources is the polarisation on one side of IMF/mainstream economists, banks, corporations, business community and believers in mainstream development models and, on the other, affected communities, environmentalists and people's movements—an environmentalism of the poor (Martinez-Alier 2002).

SIAs will, inevitably, often be carried out in areas where affected communities are in various stages of evolving grassroots movements, which may at times make them suspicious of social scientists employed to assess social impacts. Again, this means that rather than exclude mention of these movements, pretending that they do not exist, SIAs need to take account of the movements, bringing them within the frame of analysis and interacting as freely with movement leaders as with project authorities, for example.

Suggested Guidelines for Social Impact Assessment

The assessment of social impacts cannot be reduced to measurement: quality of life has many dimensions. How can one understand this reality? Each of us has an area of expertise, but to comprehend what is happening, one should opt for a multidisciplinary approach. In anthropology, understanding comes from assimilating the viewpoints of the people concerned, as expressed, in their own words (ASI (undated); ASI 2011). Yet few of us listen to what the Adivasis have to say. People's voices have tended to be suppressed, rather than sought out and highlighted, even though bringing in these voices is advocated (Padel 2012). Adivasis are nearly always written about and their situation defined, by nontribals. A recent book conveys a major opening out of perspectives that would greatly benefit the framework of SIA analysis (Dungdung 2013).

SIAs need to include a wide spectrum of people's voices, quoting what they are saying, even when this is uncomfortable, and bringing out their perspective about the development process in an open and holistic manner. It needs to be borne in mind that many displaced people will be afraid to express their real feelings in front of project authorities, out of well-justified fear that they may be penalised, so if necessary, depending on circumstances, they need to be given an option of making statements anonymously.

Often what affected people say is extremely challenging and uncomfortable—a different reality from the discourse in corporate social responsibility (CSR) reports,

paid for by corporate public relations (PR), which tend to paint an unrealistically rosy picture, without independent verification, quoting resettled Adivasis saying lovely things about their new life (Tata Steel 2013). These statements are made in the context of the corporate hierarchy, with officials making clear the kind of things they want to hear and to publish.

How displacement may affect communities needs to be implicit in how SIAs are commissioned and carried out. Objectivity is needed in avoiding pressure to incorporate the view wished for by company officials overseeing the project that underplay negative impacts. At the same time, SIA needs to incorporate the subjectivity of the people who are impacted. Without incorporating their detailed understanding, including feelings, about what may change their lives, there can be no proper assessment of social impacts.

Carrying out SIAs therefore needs to be done with an awareness of these rival discourses, in an atmosphere where villagers do not feel intimidated, asking: what are their real views? How to allow them to express these without fear or censorship? An integral part of assessing social Impacts should be to allow people to express their own understanding of impacts, without censoring their sense of frustration, injustice or anger.

A lot of social science jargon, and jargon used in official reports, is extremely abstract and alienating. This could not contrast more with the way that tribal people talk and think, which tends to be vivid and direct. The use of a very alien language to assess social impacts needs to be minimised, since it compounds tribal people's sense of alienation.

Distortion in social impact assessment involves top-down pressures on researchers, coming ultimately from corporations/investors, to write a 'favourable' assessment, making it appear that impacts would be slight when a more neutral or objective approach would find they would be momentous or even disastrous. This is usually masked when the report is written in pseudo-objective language. It must also involve a watertight separation between project authorities ('vested interests') and funding for the SIA.

SIAs should be conceived and written up in a way that is holistic, honest and straightforward. Ideally, as is now recommended among many schools of anthropology, an SIA report should be able to be read, and translated, to the people involved. It should include their perceptions, and the finished product should make sense to them.

SIAs need to especially identify impacts on women, children and old people. As for old people, SIAs need to pay special attention to what they say, since they are repositories of traditional and historical knowledge and prime witnesses to how the quality of life has changed and the livelihood systems they grew up in have changed. For example, people displaced by the Upper Indravati dams testify that old people often died within weeks of removal, out of emotional devastation as well as lack of food and care. Those who remember the days when the community grew its own food feel distraught they cannot show their children this past well-being and recreate it for them (Sahu 2010).

Negative aspects should not be glossed over, such as bribes, mafia, goondas, repression, prostitution and exploitation. Otherwise social impact assessment will fail to reflect reality.

Development projects are being carried out without the prior consent of the affected communities. A major demand of tribal people facing development projects is to be able to have a say about whether and how the project should proceed. In effect this demand is provided in Free Prior Informed Consent (FPIC). However, the practical implementation is often very short of the ideal. Public hearings often involve high levels of intimidation (CSE 2008, 2011). The indigenous voice continues to be manipulated and ignored in the face of industry. When industry interests clash with local interests, the former continues to prevail.

Finally, the SIA process is meaningless unless evaluation and monitoring studies are carried out during the implementation process so that the forecasts can be monitored and when necessary corrective actions taken.

References

- ASI (2011) Module: social impact assessment. Anthropol Survey India 60(2):216–249, July–December 2011
- ASI (undated) Social impact assessment: a module (draft). Anthropological Survey of India, Kolkata
- Blaser M, Feit HA, McRae G (eds) (2004). In the way of development: indigenous peoples, life projects and globalization. Zed Books in Association with IDRC, London/New York
- Choudhury M (2014) Environment in an emerging economy: the case of environmental impact assessment follow-up in India. In: Nusser M (ed) Large dams in Asia: contested environments between technological hydroscapes and social resistance. Springer, Dordrecht
- CSE (2008) Rich land, poor people: is sustainable mining possible? Centre for Science and Environment, New Delhi
- CSE (2011) Forest and environment clearances: problems for economic growth or problems for environmental protection? Centre for Science and Environment, New Delhi. http://www.cseindia.org/userfiles/EIA_forest_clearances.pdf. Accessed Jun 2013
- Das A, Das S (2005) Matiro Poko, Company Lok. (Earth Worm, Company Man), a documentary film about movements against mining in Odisha in Odia and Kuwi with English subtitles & commentary, from sdasorisa@gmail.com
- Dungdung G (2013) Whose country is it anyway? untold stories of the indigenous peoples of India. Aadivani. Kolkata
- GOI (1984) Report of the working group on development of scheduled tribes during seventh fiveyear plan (1985–90). Government of India (Ministry of Home Affairs), New Delhi
- Mahapatra LK (1991) Development for whom? depriving the displaced tribal. Soc Action 41(3):271–287
- Martinez-Alier J (2002) The environmentalism of the poor: a study of ecological conflicts and valuation. Edward Elgar, Cheltenham
- Padel F (2012) Adivasi voices in an age of investment-induced displacement. The Tribal Tribune (E-journal) 4(2). Jan 2012 Bhubaneswar
- Padel F, Das S (2008) Cultural genocide: the real impact of development-induced displacement. In: Mathur HM (ed) India: social development report 2008 development and displacement. Oxford University Press/Council for Social Development, New Delhi

- Padel F, Das S (2010) Cultural genocide and the rhetoric of unstainable mining in East India. Contempo South Asia 18(3):333–341
- Padel F, Das S (2011) Out of this Earth: East India adivasis and the aluminioum. New Delhi Orient Blackswan, Cartel
- Padel F, Dandekar A, Unni J (2013) Ecology, economy: quest for a socially informed connection. Orient BlackSwan, New Delhi
- Rath GC (ed) (2006) Tribal development in India: the contemporary debate. Sage, New Delhi Sahlins M (1972) Stone age economics. Aldine-Atherton, Chicago
- Sahu Subrat Kumar (2010) DAM-aged a documentary film about the upper Indravati Dams and Reservoirs in Odia with English subtitles and commentary, Odisha, from subrat69@gmail.com
- Sainath P (1996) Everybody loves a good drought: stories from India's poorest districts. Penguin, New Delhi/London
- Tata Steel (2013) Kalinganagar and tata steel: rebuilding lives, rekindling hopes: community care at http://kalinganagar.tatasteelindia.com/community-care/periphery-development.asp. Accessed Jun 2013
- WCD (2000) Dams and development: a new framework for decision-making. Earthscan Publications, London/Sterling, VA
- World Bank (1994) Resettlement and development: the bankwide review of projects involving involuntary resettlement. The World Bank (Environment Department), Washington, DC

Part III Social Impact Assessment Experiences in other Asian countries

This part includes four chapters on recent experiences with SIA in six Asian countries, which include Bangladesh, China, Laos, Nepal, Pakistan and Sri Lanka. The first chapter presents an account of several significant initiatives that have recently been taken place in China, a detailed account of which is not easily accessible outside China. The next chapter discusses challenges in conducting assessments and the planning of resettlement, and provides useful lessons learned from preparing a dam project in Laos. The third chapter provides a comprehensive account of the ways the social impact concerns are identified and incorporated into resettlement planning processes, from four different infrastructure projects in Bangladesh, Nepal, Pakistan and Sri Lanka. The fourth and the final chapter in this part describes efforts made to mitigate adverse impacts of a transport project through an income-generating programme in Sri Lanka, and its not so encouraging performance.

Chapter 9 Social Impact Assessment in China and its Overseas Investments: Some Recent Developments

Susanna Price

Abstract In China, SIA dimension in development has recently emerged in response to growing protests against displacement. This chapter provides a comprehensive overview on these new developments. Initially, planning for rapid development focused mainly on technical, economic and financial aspects, with social and environmental aspects remaining into the background. Gradually, things began to change. In 1989, environment emerged as an additional input into the process of development planning. While formal SIA does not exist in China as yet, key development agencies have begun moving in this direction. And for certain kinds of projects SIA has now become a formal requirement. In addition to focusing on SIA experience in China, this overview also looks at the impacts of it growing investment projects in Africa and other countries in Asia and Latin America. The Chinese companies are not particularly known for integrating social and environmental concerns in investment projects abroad. Efforts are currently continuing to improve the situation both in overseas projects and also in projects at home. But still there is a long way to go.

Keywords Social stability risk assessment • Development-forced displacement and resettlement • Chinese companies • Overseas investment projects • Green credits • Corporate social responsibility • Asian Infrastructure and Investment Bank

This chapter offers an analysis of several new initiatives in social assessment and social impact assessment (SIA)¹ in the People's Republic of China—and, briefly,

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¹The difference between social assessment (a term used by international financial institutions for social analysis conducted in borrower countries) and SIA (the term used in western practice generally in association with environmental impact assessment (EIA)) is explained under the section

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draws some parallels with developments in Chinese aid and investment operations globally. Both China's national and international investments privilege project investments, a very visible—and sometimes controversial—arena for economic transformation, often with social costs that market-based approaches do not necessarily themselves resolve. There is as yet no comprehensive, legally independent, nationwide regulatory framework for social assessment or SIA to address social risks and opportunities (Tang et al. 2008; Ren 2013; Gransow 2014) nor, similarly, a systematic, full SIA requirement for China's international aid and investment projects around the globe. Key Chinese agencies have, however, recently taken significant steps in that direction both nationally and internationally (Price and Robinson 2015). This paper examines the prospects for delivering on these new requirements, focusing in particular on forms of social assessment for land acquisition and transfer.

Development-forced displacement is one of the most significant impacts of China's infrastructure building—whether at home or abroad—raising fundamental risks of growing poverty, inequality, food insecurity and social instability. China has significantly enhanced its regulatory framework for compensation and resettlement nationally (McDowell and Morrell 2010; Wilmsen 2011). The national approach to resettlement is still largely based upon cash compensation for lost or damaged assets—yet compensation alone is necessary, but rarely sufficient, for rehabilitation when land also represents security, insurance, subsistence, livelihood or cultural identity (Yang 2012). Integrating SIA into resettlement planning in China would, it has been argued, increase the understanding of social risks and vulnerabilities faced by people affected and expand the options on addressing them (Ferguson and Zhu 2015; Gransow 2014). A 2007 official requirement for social assessment and resettlement plans at the feasibility stage for selected projects opens up opportunity for a systematic analysis that sets the basis for better rehabilitation for those displaced. In addition, as will be discussed, participatory social assessment or SIA in resettlement planning would support the full implementation of the relevant laws and sector guidelines.

In order to sustain the pace of economic growth, China has encouraged its transnational firms to 'go out, go global' since 2001—and, more recently, has encouraged such firms to engage with international norms and standards for environmental and social sustainability. In addition, China's long-standing aid program, which has financed projects in developing countries since the 1950s, has been recently boosted in resources.

Taking both a national and an international perspective, this chapter addresses several key questions. How did these new initiatives arise, and what do they promote? How well will they address emerging social problems, focusing particularly on development-forced displacement? Can they be coordinated and implemented across China's territory given the huge regional diversity; the shift to a market-oriented economic system with strong economic growth drivers, especially at the

below entitled "New Approaches to Social Assessment". Chinese practitioners use various terms for these approaches.

local level; and internationally given varying conditions and regulatory regimes? And to what extent do they mesh with international developments in forms of social assessment and SIA, for example, as addressed by international financial institutions, the Equator Principles and the International Association of Impact Assessment (IAIA) Principles of 2003? The next section begins to address these questions by setting out new initiatives at both national and international levels.

New Initiatives for SIA (National)

Social Assessment

National Development and Reform Commission (NDRC²), a macroeconomic management agency under the State Council, recognised social assessment as an integral part of feasibility study for investment projects and endorsed guidelines to that effect in 2002 for trial and in 2007 for use in certain nationally approved projects.

The 2002 trial *Guideline for Investment Project Feasibility Study* (Compiling Group 2002) (the *Guideline*) proposed internationally recognised methods and standards for systematic project assessment in market research and methods for comparing alternative investments; technical, financial and economic analysis; risk analysis; institutional analysis; and environmental analysis. Significantly, it contained a chapter on social assessment as an essential part of project investment analysis.

This chapter represents a clear and comprehensive statement of the potential for project-based 'social assessment' in the Chinese context. The *Guideline*'s social assessment chapter is structured into three parts: the role and scope of social assessment, its major components and procedures and techniques. Essential elements include a social impact analysis, an analysis of the mutual adaptability between the project and its regional social context and a social risk analysis.³ It requires particular

²In 2002, when the Guideline was issued, the National Development and Reform Commission (NDRC) was named State Development Planning Commission (SDPC).

³The Guideline sets out procedures for an initial social screening, followed then by a detailed social assessment in the feasibility study stage. It addresses eight key effects that might arise from the project: on local residents' income and jobs; on their standard of living and quality of life; on local residents' employment; on losses that might require compensation; on vulnerable groups such as women, children and the handicapped; on local culture, education, public health and other objectives of social development; on the level of local infrastructure and social services; and on the customs and religious beliefs of local ethnic minorities. The likely match between a project and its social context is then assessed, through a study of the attitudes of key interest groups and local organisations towards the project, on which basis a participatory method is selected to support project success and widen the benefits. The *Guideline* calls for review of prospects for utilising locally available technology and assessment of the match between local culture and the project design, in interest of sustainable projects. Social risk analysis then focuses upon social factors that might represent a possible source of social, ethnic or religious conflict and the design of measures

attention in social assessment for investment projects expecting long-term social impact, complex social factors, notable social benefits, prominent social conflicts or major social risks. This entails, ideally, social assessment for projects with potential social costs such as might arise from conservation land closures; workforce or tariff restructuring; construction of infrastructure; and acquisition of agricultural or other lands and resettlement, for example, from transportation, water conservancy, industry, mining and oil field projects. It also entails social assessment to maximise positive impacts and public benefits, for example, in poverty reduction projects that aim to target social security, cultural education, public health, livelihood development or agricultural support for people in poverty or vulnerability. The *Guideline* was to be tested; there is no publicly available assessment of the tested outcomes.

NDRC's 2007 Project Application Report format for certain state-approved projects includes both land acquisition and resettlement planning and social impact analysis. Compared with the 2002 *Guideline*, the 2007 format includes a scaled-down social impact identification; 'social adaptability' analysis designed to improve 'mutual adaptability' between the project and its social, institutional and environmental context; and identification of social risks and their countermeasures. Sector-specific guidelines are understood to be in preparation.

Social Stability Risk Assessment

In 2012 NDRC's Interim Measures (2012) and subsequent Report Requirements on Social Stability Risk Assessment of Major Capital Projects (2013) (社会稳定风险评估) stipulate that projects needing approval by the NDRC or State Council must conduct social stability risk assessment and public consultation to determine the likelihood of generating social unrest. Projects with medium to high risk of social instability are to be rejected. The social stability risk assessment comprises a small part of the feasibility study package and is reviewed by the NDRC.

Social Impact Assessment

Environmental impact assessment (EIA) in China did not address social issues until recently. China's early EIAs, conducted under the Environmental Protection Law of 1979, focused upon biophysical analysis, with little attention to livelihoods, social structures, settlement patterns or community dynamics other than through air, noise, vibration and electromagnetic impacts (Ip 1990). The 2003 EIA Law enhanced the

to avoid, reduce or mitigate those risks. Both quantitative and qualitative techniques are recommended for data collection and analysis and special attention accorded to identify opportunities for women, with approaches and techniques applying flexibly to different circumstances. The *Guideline* integrates public participation into the process of project design and implementation. Mobilising the understanding, support and cooperation of local stakeholders is considered necessary to enhance transparency of the planning process, to 'democratise decision-making' (Compiling Group 2002: 93), to increase acceptability for local people and to enhance prospects for project sustainability. Participation is also presented as a risk-reducing strategy—'generally, the more the public participate the lower the risk' (Compiling Group 2002: 94). Fully implemented, this was envisaged as reducing social risks and costs of project investments, widening participation in investment planning and so maximising potential benefits and increasing transparency of government procedures.

requirement for public consultation, while a *Stipulation on Public Participation in the EIA Process (Trial)*, issued in 2006, specified procedures and requirements on disclosure and public consultation of simplified EIA and SEA but did not specify how participation would be arranged and legally defended or social issues formally addressed (Tang et al. 2008). The Decree on Public Disclosure of Environmental Information, effective from 2008, stipulated that the Environmental Protection Bureaus (EPBs) disclose to the public the EIA review status and conclusions.

In 2011 the Ministry of Environment (MEP)'s Technical Guidance for Public Consultation in EIA (2011) was disclosed for consultation, while a MEP Environmental Impact Assessment Technical Guideline: Overview (HJ2.1-2011) Sector 7, 8 (2012), to be regulated through the EIA framework, strengthens requirements for stakeholder engagement 'upfront'. For the first time in the EIA framework, this Technical Guideline required some SIA for projects with construction impacts. This step was to be implemented initially as a pilot, while an SIA Guideline was prepared. The SIA covers key social issues (defined as resettlement, cultural heritage, public health and community infrastructure), establishes a socioeconomic baseline and prediction of impacts and calls for mitigation of adverse social impacts.

New Initiatives for SIA (International)

Internationally, safeguards, including resettlement, are assuming higher visibility in the changing global aid and investment architecture, as the World Bank reviews its safeguard policies and as new multilateral development banks (MDBs) emerge. Chinese companies had avoided adopting international environmental and social norms and standards, perceiving them as difficult to apply in the residual projects in challenging locations that had been left to Chinese business. This is now changing, as Chinese firms endeavour to secure access to more mature markets where such standards attract greater scrutiny—requiring greater transparency, together with environmental and social risk management and sustainability strategies. Such strategies take on new importance as a means of combating the often negative perceptions of Chinese firms globally.

In international investments, encouraged by the government, some Chinese banks and companies are taking an interest in corporate social responsibility (CSR), such as the Equator Principles and Green Credits. Sinohydro, a leading reservoir builder, has adopted the World Bank's safeguard policies as its minimum resettlement and environmental standard; IFC's Performance Standards on community relations on consultation, participation and access to information policies; and Free Prior Informed Consent (FPIC) and the UN Declaration on the Rights of Indigenous Peoples. Challenges in embedding such initiatives in core practice include full organisational buy-in, budgeting, independent reporting, accountability and stakeholder engagement.

Safeguards have assumed a new prominence with the expansion of bank lending from China into the developing world. Lending from China's Export–Import

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Bank, together with other Chinese banks, is now dwarfing lending from the World Bank. This will only increase with the lending planned from China's newly formed Asian Infrastructure Investment Bank (AIIB) (October 2014). While highly placed Chinese officials have assured publicly that AIIB will follow multilateral rules and procedures, there is some uncertainty about what this means for involuntary resettlement and Indigenous Peoples' safeguards specifically. Noting recently that some IFIs are now reviewing their safeguard policies and 'reviewing some of the bureaucratic, unrealistic and irrelevant policies', a key official stated that AIIB will avoid making such mistakes 'to reduce operations cost and increase efficiency' (Xinhua 2014⁴).

China's aid program focuses on tied, noncash financing for projects, with little policy conditionality, through 'free assistance' (grants—无偿援助) and interest-free loans mostly for construction of social infrastructure. Preferential loans and credit lines finance productive infrastructure projects. Social and environmental risk management approaches for these aid projects globally have not yet emerged publicly.

Transformation and Resurgent Social Spaces: Reform Process

We turn now to the context for these developments. At its beginnings in 1978/1979, China's reform proceeded gradually and experimentally, initially targeting only economic growth, deliberately setting aside social and equity objectives. Social analysis or social appraisal, although adopted by international institutions as integral to project investment planning to assess social acceptability, benefits and risks,⁵ was not considered a priority. Pioneers of SIA practice in China encountered what they perceived as fundamental differences in assumptions, values and planning modes—SIA, as internationally practiced, was not readily applicable in the Chinese context (Ip 1990; Tang et al. 2008).

Meanwhile, China's rapid and far-reaching economic transformation from a command to a market-oriented economy; from a rural, agricultural society to an urban, industrial society; and from a non-World Trade Organization (WTO) nation to a WTO nation with significant international presence had wrought massive institutional and social transformation. Significant changes have included, among others, administrative and fiscal decentralisation allowing local governments control over developments within their jurisdictions; the expansion of non-state firms that witnessed, initially, bourgeoning township/village enterprises and then the growth of private sector developments; and the dual-track price system and the household responsibility systems (HRS) which are credited with massively reducing rural poverty (World Bank and CDRC 2013).

Significant changes have occurred in all aspects of life, work and networking—signalling fundamental realignments in relationships between state, market and

⁴http://news.xinhuanet.com/english/china/2014-10/24/c_133740339.htm

⁵Cernea 2015.

society, raising new questions of social space and identity. Spatial transformations accompany massive land conversions for development purposes, especially in cityscapes and their margins. China's urbanising shift has attracted significant attention, with estimates of China's urban population size expanding from 172 million in 1978 to 691 million in 2011 (up from 18 % to 51 % of the total population). Total urban built-up area expanded 260 % during 1984–2005, 'with an estimated total of 6,866 development zones with a planned area of 38,600 km2 – an area larger than the total urban built-up area of existing cities and towns estimated at 31,500 km2' (Lin et al. 2014: 3).

Current Social Issues

Today, some social impacts arising from rapid economic growth may be summarised. Income inequality has increased despite overall raised material consumption, as the development trajectory favoured coastal provinces, urban households and the dominant ethnicity. According to the World Bank website, almost 99 million people were still living below the national poverty line of RMB 2,300 per year at the end of 2012. This means China has the second largest number of poor in the world after India. An emerging gender gap in ownership and control of assets and incomes penalises women (Sargeson 2012).

Unemployment and underemployment pose challenges in both urban and rural areas. Increased pressure falls on land and water resources, as China, with only 8 % of global arable land, has to feed 20 % of the world's population (Ash et al. 2012). Population growth, combined with widespread expropriation of agricultural land, increasing incomes and changing consumption patterns (e.g. more meat in the daily diet), exacerbates these pressures (CCICED 2013). Localised environmental and social costs occur around certain, often large-scale, projects.

Loss of farmland, especially at the rural–urban interface, at terms disadvantageous to rural dwellers, raises risks of lost livelihoods, security, subsistence and identity for land-losing farmers and, nationally, risks to food security. By one recent estimate, 88 million rural dwellers were displaced in this manner from 1990 to 2008, with another 50 million likely to be displaced in 2009–2030 (Sargeson 2013: 1068). This is in addition to people displaced by other kinds of developments, for example, urban displacement and projects located in more remote sites such as reservoirs.

Rapid pace of urbanisation, accompanied by environmental degradation through ambient air and water quality, poses challenges to sustainable urban development in those seven of the world's ten most polluted cities located in China (Liu et al. 2014).⁶ Environmental degradation resulting from rapid development harms people's health, including through contamination of food and medicine.

⁶The 'country to city policy' of the early 1980s led to the growth of China's cities from less than 250 in 1982 to more than 650 in 1997.

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Health problems resulting from pollution face gaps in service provision, health services generally being exacerbated by population growth and the ageing of the population.

Lower-income groups especially in rural areas lack access to health services, education and social security.

The legal framework and property rights are still evolving, leaving ambiguities (Ash et al. 2012: 38).

Public trust in government and enterprises is reportedly low partly due to poor quality or lack of access to information such as official environmental and social reports (CCICED 2013: 15). Also cited are the absence of an independent judiciary, an independent anti-corruption agency, press freedom, and democratic processes, weaknesses in social security and effective labour relations (Knight 2013: 25).

Despite China's remarkably rapid growth, the average life satisfaction has not risen over two decades—reflecting concerns about relative and absolute income as well as the profound socioeconomic changes that have accompanied the growth of the economy (Knight 2013: 25).

The rapid pace of development has raised a deeper sense of social unease, instability and alienation, described by some researchers as 'anomie'. The sense of anomie arises from growing differences and differentiation in social status, organisation, role and power structures and in income- and educational-level structures. Researchers have found that structural differentiation in society is proceeding faster than structural and norm integration (Li et al. 2010).

Complaints are escalating, converging on the subjects of illegal land seizures and relocations, labour disputes, environmental pollution, inequality and corruption. Groups marginalised in the development process and increasingly likely to complain include surplus farm workers and unemployed or underemployed urban workers and, with intensity of land acquisition for development projects, displaced households. Middle-class households appear, reportedly, more inclined to complain about environmental degradation that directly impacts their children's lives and health prospects.

China's leaders now recognise many of these issues. With the demise of central planning, China's five-year economic plan was transformed and reinvigorated and, having been renamed 'economic and social development plan' in 1986, remains central to public policy directions, coordination and oversight, including in sensitive spheres such as environment policy and land management.⁷ The 12th plan built upon the 11th five-year plan (2006–2010) which had expressed a shift from growth maximising to greater sustainability in a 'harmonious society' (和谐社会), including reduced regional and sectoral income inequality and increased demand. These aims have proved more difficult to achieve, although most of the other technical

⁷Heilemann and Melton (2013: 583) set out the basic purpose as to achieve 'strategic policy coordination (prioritizing and coordinating state policies from an anticipatory, long-term, cross-sectoral perspective); resource mobilization (mobilizing and pooling limited resources to bring about structural changes identified by policy makers as necessary to achieve sustained economic and social development); and macroeconomic control (controlling the level and growth of principal economic variables to achieve a predetermined set of development objectives, prevent severe cyclical fluctuations, and contain the effects of external shocks).'

targets were met. Preservation of arable land has been a key concern through the 11th and 12th five-year plans, with a binding target for no cumulative change in arable land included in the 12th plan. The next section canvasses new approaches to addressing some of these issues.

New Approaches to Social Assessment

China has drawn on several models for local trial within its own unique framework for planning. Local initiatives are credited, with the initial testing of the highly successful Household Responsibility System. Later (1995–2000) examples included locally initiated experiments with new governance ideas aimed at reducing inequality by sending county- and township-level staff from poorer inland provinces to private sector work in China's booming coastal cities.⁸

A small group of social specialists began exploring ways in which social assessments could be conducted in China from the 1990s (Wang and Marsden 1993; Gransow and Price 2007; CIECC 2004; Price and Robinson 2015). Public and private sector agencies were also gaining familiarity with international models. These may be characterised broadly as international financial institution (IFI) approaches to social assessment and standard SIA approaches. Both approaches are discussed below.

International Financial Institution (IFI) Approaches

In 1993 the international financial institutions (IFIs) received special permission to conduct participatory social assessments around project zones of intended impact in China, as a basis for planning, management and monitoring those projects. This included, principally, the World Bank, the Asian Development Bank (ADB) and the International Finance Corporation (IFC), which had all begun project lending in China. Their approaches had much in common and their shared model for social assessment had certain specific characteristics.

Firstly, IFIs developed special approaches that worked in the context of borrower loans in the absence of an overall national regulatory framework for SIA. The IFIs generally had adopted 'social analysis' as an integral element in the project appraisal,

⁸The success of this scheme, however, was limited by the institutional inertia faced by cadres on their return (Lee and He 2014).

⁹ Joining the World Bank in 1980, the People's Republic of China (PRC), over 30 years to 2010, has received \$47.4 billion in loans and credits and over 320 projects and, with 71 ongoing projects, is one of the largest country portfolios. Since joining ADB in 1986, the PRC has received a total of \$26.33 billion in public sector loans and \$3.54 billion in private sector operations, making it ADB's second largest borrower. China is IFC's third-largest portfolio country. Since 1985, IFC has invested about \$6 billion in more than 200 projects. In 2012, IFC raised \$650 million in total commitments for 20 projects.

giving it the same status as economic, financial, technical and environmental analysis in preparing investments (Cernea 2015). IFIs extended 'social analysis' (conducted in-house) or 'social assessment' (conducted in borrower societies) to the entire project cycle—and beyond that, to macro-, sector and subsector analysis. Yet, rather than integrating this analysis as a subset of EIA, as was the case with most 'standard' SIA conducted globally, the IFIs treated social analysis as a separate but interlinkable process of equal status with EIA, conducted by social specialists.

Secondly, IFIs had set up stand-alone social safeguard policies for involuntary resettlement and Indigenous Peoples that utilised forms of social analysis during preparation of plans, together with their implementation, and completion (World Bank 2004; McDowell and Morrell, 2010; Price 2015). After efforts to avoid and reduce displacement, the detailed preparatory socioeconomic survey, census and social risk assessment work for unavoidable displacement—sometimes also termed SIA—is conducted by social development and resettlement planners, again separately but in parallel with EIA, as a basis for preparing time-bound and costed plans. The aim is to ensure no displaced or indigenous person would be worse off as a result of a project and to enable monitoring and evaluation to ascertain whether this objective has been met for all affected households (Ferguson and Zhu 2015).

Thirdly, the IFIs were actively exploring ways in which social and poverty analysis could be mutually reinforcing. Possibilities included the ADB's practice of project-based Initial Poverty and Social Analysis (IPSA), an early participative scoping to flag key poverty and social issues including gender, vulnerabilities, participative strategies as well as the social safeguards. The IPSA would be followed by integrated design measures or plans, to be followed through into implementation, and subject to monitoring and evaluation (ibid). Poverty and social analysis (the World Bank's PSIA) could be used in country and sector strategy planning before even projects were selected, as an aid to their selection.

Fourthly, IFIs were beginning to explore forms of management for their clients for social issues that would develop into management systems to apply throughout the project cycle, especially for private sector projects. These forms include long-term programs of integrated 'stakeholder engagement' (IFC 2007) and the establishment and maintenance through the project life of Environmental and Social Management System (ESMS) as a framework for social risk management (IFC 2011).

IFI-financed projects in China represent a small proportion of the total projects implemented in China, but over several decades some thousands of local Chinese researchers, specialists, consultants and official staff at all levels have been engaged in work to meet IFI standards in project preparation, management and monitoring. Projects have, in general, been a vehicle for exchange of ideas on the interface between local and international practices.

The International Principles for SIA of the International Association for Impact Assessments

Meanwhile, 'standard' SIA concepts and practices were changing as wider application into new global spaces took SIA beyond its early focus on predicting and protecting personal and property rights in advance of project approval. The International Principles for SIA of the International Association of Impact Assessments (Vanclay 2003) set out the core values and guiding principles to situate SIA within the context of EIA more generally. The principles, which may be applied within or independent of a regulatory framework, may be summarised as processes of analysing, monitoring and managing the intended and unintended social consequences, both positive and negative, of planned interventions (policies, programs, plans, projects) and any social change processes invoked by those interventions. The objectives are ambitious—to bring about a more sustainable and equitable biophysical and human environment. SIA has, in this sense, evolved beyond being a 'tool to prevent and mitigate the negative impacts of development to one that upholds ethical values such as the protection of human rights, improvement in social equity, institutional capacity building, empowerment and social inclusion' (Tang et al. 2008).

SIA for Resettlement Planning

The next section addresses the specific question of social assessment and SIA for resettlement planning, identifying where these methods and approaches may fill particular gaps.

Social Risks in Development-Forced Displacement and Resettlement (DFDR)

Development-forced displacement carries a number of risks for people affected—presenting not only opportunity but necessity, for forms of participative social assessment and mitigation. In China those risks play out in the context of a unique landownership system in which land is owned by the state or by rural collectives (including land for agriculture, housing and settlement). Land has, for rural people in China, traditionally been a source of subsistence and livelihood, as well as social security, continuity and cultural identity. The government-initiated framework for resettlement has been steadily evolving in light of experience of people displaced, but beyond NDRC's 2007 format and several important reservoir regulations

¹⁰ In more detail, the aims are promoting more ecologically, socioculturally and economically sustainable and equitable environment; proactively seeking better development outcomes for communities; contributing to adaptive management of policies, programs, plans and projects; building on local knowledge using participatory process; considering second, higher-order and cumulative impacts; reflexive and evaluative; predictive of likely outcomes and mitigative where these may be negative; fostering an open, accountable, fair and equitable process that defends human rights; promoting empowerment and gender equality; poverty reducing; and livelihood reconstructing.

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discussed below, there is as yet no regulatory requirement for comprehensive social assessment or SIA in resettlement planning. There is little regulatory requirement for resettlement plans or for forms of assistance to those affected beyond monetary payments¹¹, while high legal and court costs limit the effectiveness of grievance redress measures (ADB 2007).

IFI approaches to DFDR require participation, socioeconomic survey, census, livelihood restoration and social risk assessment as a standard part of resettlement planning and as a basis for subsequent social monitoring. While good practice models¹² exist in China, such practices do not extend to all projects financed through other sources (ADB 2007; Wilmsen 2011). This section highlights specific points where social assessment or SIA is potentially of particular value in the Chinese context, ¹³ firstly on the issue of rural to urban land conversion, then on several other types of projects with significant DFDR, namely, urban and reservoir projects.

Rural to urban land conversion underpins the massive urbanising shift in China that has seen the urban population grow from less than one fifth pre-reform to more than half of the total population today. Land politics increasingly dominates urban revenue generation strategies and drives the rapid conversion of rural land into urban land, especially around city peripheries. Following the centralisation of taxation in 1994, an increasing proportion of local government revenue has, of necessity, come from such land conversion, reaching 60 % in 2012 (Tang et al. 2012).

Recognising the social risks of displacement, the State Council in 2010 issued an *Urgent Notice to Improve the Land Acquisition and Resettlement Management and Guarantee the Legitimate Rights of Affected Persons.* This Notice has meant longer project lead times to ensure that procedures are followed—but the increased attention does not yet necessarily mean the conduct of full SIA. The preoccupation with monetary compensation, determined solely on the basis of physical assets, not household vulnerability (Ferguson and Zhu 2015), may be structurally insufficient to prevent impoverishment in all cases (ADB 2007). There is little resettlement planning or livelihood assistance, while 'people's right to know, participate, or appeal is frequently not respected' (Wang 2012: 10). Monetary compensation acts to transfer risk management to land-losing farmers and their families. It is frequently reduced in transaction because of the actions of local cadres acting as middlemen in land conversions (Yuen 2014; Dollar 2007; ADB 2007).

¹¹ See, for example, ADB 2007. However, some provinces now organise for compensation and resettlement subsidy funds to be used to finance a social security safety net including pension, unemployment insurance and medical insurance (ibid).

¹²Good practice models financed by IFIs in China include, for example, Yantan, Shuikou and Xiaolangdi Reservoir Projects, financed by the World Bank.

¹³General information on China's evolving resettlement planning may be gleaned from ADB 2007, Wilmsen 2011, McDowell and Morrell 2010 and Ferguson and Zhu 2015.

¹⁴ It is estimated that urban governments expropriated more than 4.2 million ha of rural land between 1990 and 2008 (Lin 2009), profiting from the conversion and leasing of this land, the deed taxes, urban construction and maintenance taxes, property taxes, land value-added taxes, urban land-use taxes and farmland occupation taxes (Sargeson 2013: 1068).

This raises a number of questions. Why is the definition of the 'public interest' so wide?¹⁵ To what extent does the rural land development benefit favour urban governments and private developers at the expense of rural producers?¹⁶ Are displaced rural collective members, especially the less educated, elderly or infirm, more vulnerable today than in the past, because there are now few forms of livelihood assistance and social security assistance accompanying the cash compensation?

Despite the State Council Instructions of Documents 28 (2004) and 32 (2006) that land-losing villagers must be left 'no worse off', one government study found that 62 % of displaced peasants were worse off after land conversion (Dollar 2007). The way in which agricultural land has been converted to urban land, whereby its agricultural value for compensation is inevitably lower¹⁷ than its subsequent valuation as commercial land, the sale price being negotiated in an escalating land market, may have contributed unnecessarily to increasing urban–rural inequality (ibid). Dynamic industries and lineage/kinship organisations in more developed areas help to reduce impoverishment for land-losing farmers—but these conditions are rarely present in China's inland, less-developed western region. Women appear particularly vulnerable to impoverishment in the process of compensation as village committees, patrilineal households and local government authorities utilise gender categories to resolve distributional problems and differentially compensate men for assets (Sargeson 2012; ADB 2007).

That this process has been contentious is well documented, with social conflict over land conversion especially marked on the urban–rural interface (Lin 2009; Hsing 2010). Certain local-level initiatives are appearing to address these problems, but they have been little tested sociologically. Guangzhou and Nanhai pioneered shareholding systems designed to convert the villages' collective assets—mainly income generated from leasing collective land—into shares, with permanent dividends derived from land rent, while local officials in Changping, near Beijing, went

¹⁵Both the Chinese Constitution and the 1998 Land Administration Law require that rural land-takings be for purposes of the public interest. ADB (2007) found that nearly one quarter of all rural land acquisitions were, in fact, for private commercial uses (2000–2001 in 16 provinces).

¹⁶ See, for example, World Bank and CDRC (2013: 134), which contend that 'China's land tenure system remains biased toward urban development at a time when the rural–urban income gap has widened to levels rarely observed in other countries.... The persistent duality of rural and urban land systems needs to be managed and ultimately phased out'.

¹⁷Land was nationalised in the PRC in the 1950s. The Land Administration Law of 1998 reflects the socialist principle that land only has use value, so compensation for agricultural land is based on Annual Average Output Value (AAOV) of the land over the previous 3 years, usually at 6 to 10 times AAOV, with potential to 30 times the average value of agricultural output from the land over the previous three years (Article 47). A resettlement subsidy is, in addition, set at 4–6 times AAOV. However, ADB (2007) found that sum of land compensation and resettlement subsidy was, in general, less than 20 % of the price at which the government sold the use rights to the same land to developers and that the resettlement subsidy was tied to the size of land, not the number of people to be resettled.

¹⁸Rural dwellers are also compensated for assets on the land including crops, structures, graves and businesses at replacement cost. ADB (2007) found a number of inconsistencies in this process.

a step further to create a shareholding cooperative, owning and clarifying the status of village land, that acted independently of village cadres (Po 2011). In Xiamen the city government now shares a portion of land development profit with the rural collectives; Anhui Province allows a trial of farmers selling the land directly to the market; meanwhile Chongqing and Chengdu are pioneering a 'land ticket' as a type of derivative that makes rural land tradable in the stock market (Yuen 2014).

There is scope to understand better the social dynamics, constraints and opportunities inherent in these approaches, potentially through participatory social assessment or SIA. This is especially so given new understandings and willingness among some provincial and urban governments to avoid social unrest through enhancing the compensation that appears currently disadvantageous to rural collective members.

Resettlement in other Contexts

The Land Management Law does not cover urban resettlement, already located on state land, nor large- or medium-sized water conservancy or hydroelectric projects, regulations for which are prescribed separately by the State Council. This section highlights several social issues arising from urban and reservoir projects.

The Management Regulations for Urban Building Removal 2001, administered by the Ministry of Construction and implemented by urban authorities, sets procedures for urban house demolition, compensation and relocation. The State Council (2011) approved the new Housing Expropriation Regulation, now administered by the Ministry of Housing. This Regulation requires strengthened arrangements for consultation, disclosure and dispute resolution before expropriation, measures for low-income and disadvantaged groups, and provides more flexible packages, including housing exchange, with compensation to be paid before displacement (Gransow 2014). While it requires governments to conduct a 'social stability risk evaluation report'(社会稳定风险评估报告), this report appears more focussed on risks to smooth project implementation than on risks to people displaced (ibid). There is no requirement for full social assessment or SIA and no means of monitoring whether or not people displaced have improved their housing or livelihoods and restored their socioeconomic networks (Ferguson and Zhu 2015). While the 2011 Regulation also strengthens the consultation requirements, it still focuses on cash compensation, negotiations with individual households and options for resettlement housing. SIA could contribute more in-depth strategies and approaches, such as community hearings to discuss project design alternatives to avoid or minimise social impacts—for example, in cohesive, well-established urban neighbourhoods in heritage areas—and to discuss a wide range of livelihood reconstruction strategies (ibid; Gransow 2014).

China recognised early, after several failed reservoir projects, that reservoir-affected communities suffer particularly intensive displacement impacts. Three main innovations have resulted for this sector. First, the Chinese government, recognising the still-unresolved problems of several early reservoir resettlements, was possibly the first government to establish a 'remaining problems fund' for retrospectively helping poorly resettled households and communities improve their living standards decades after their removal (Wilmsen 2011). SIA could help to determine the extent to which such people affected had been finally rehabilitated.

Second, the State Council's sector-specific Regulation for Medium- and Large-Scale Water Resource Projects, approved in 1991 and revised in 2006, is administered by the Ministry of Water Resources which has the most significant experience among Chinese ministries with social assessment/SIA for resettlement planning and monitoring.¹⁹ An approved resettlement plan in this sector is the precondition for approval of the feasibility study report (Ferguson and Zhu 2015) and requires investigation of the socioeconomic conditions as a planning basis for local government, inventory of the land acquisition and demolition impacts, estimation of resettlement costs and plans for relocation and restoration of livelihoods (ibid). Full social assessment/SIA would enhance these requirements and provide a more comprehensive basis for monitoring of outcomes among the people affected. In general, however, the Ministry of Water Resources tends to approve minimum compensation standards without additional financial support from the local government (ADB 2007). SIA could also strengthen the long-term social monitoring and evaluation the Regulation requires. So far, this monitoring is still internal—it is not conducted by a fully independent third party. Importantly, as Wilmsen (2011) explains, the Regulations required that resettlement be treated as a development opportunity, identifying a range of support measures beyond monetary compensation. But delivery is hampered by limited participation of those affected; absence of risk management strategies for the most vulnerable; ineffective grievance resolution mechanisms; and limited monitoring, evaluation and accountability (ibid).

Third, in terms of benefit sharing with affected people, China pioneered legal frameworks for revenue sharing in 1981. By 1991 the State Council issued a regulation that allocates \$0.00056/kilowatt-hour (approximately 1 % of revenues) for the first 5–10 years after completion of resettlement to a reservoir maintenance fund. The fund is used to compensate or restore the means of livelihood for people affected by the reservoir and to maintain reservoir structures, drinking water, irrigation and transportation used by those relocated. This arrangement potentially helps ease the

¹⁹Other significant reservoir resettlement regulations include the Regulations on Residents-Resettlement for the Yangtze River Three Gorges Project Construction, adopted at the 35th Executive Meeting of the State Council on 15 February 2001, promulgated by Decree No. 299 of the State Council of the People's Republic of China on 21 February 2001 and effective as of 1 March 2001.

pressure to raise funds before project implementation. Project revenues support the recurring resettlement costs of economic rehabilitation and community development programs (World Bank 2004). However, implementation has been uneven and insufficiently directed so as to benefit affected communities (Wilmsen 2011). SIA could be used to help translate benefit sharing into more workable types of assistance that meet the articulated needs of those displaced.

Potential Contribution of SIA to Resettlement Planning

In short, SIA and social assessment potentially contribute to DFDR in multiple ways: in facilitating a more comprehensive and inclusive assessment of alternatives that avoid or minimise displacement impacts; in underpinning participation measures and grievance redress arrangements; in identifying the socioeconomic conditions of people affected; in planning a range of livelihood and social security options, depending on need; for highlighting special measures for those people at risk; to underpin the calculation of the resettlement subsidy based on numbers of people affected; to test innovative new models for rehabilitation in different settings; and as a basis for monitoring and evaluation, including corrective actions where people affected experience difficulties.

Implementing SIA

Several state agencies have now issued requirements for forms of social assessment or SIA for major and/or state-approved projects. This raises questions on the framework for coordination and implementation for these initiatives, including responsibilities and local regulations for initiating, approving, disclosing, involving public participation in and enforcing SIA and the coverage for locally initiated, non-major, non-state-approved projects.

The growing complexity of China's social arena, characterised by the creation of 'new social spaces' (Ong and Zhang 2008), presents both challenges and opportunities. Central planning continues in a new form. However, the state's power to intervene in the market and society is now filtered through multi-agent interactions, due to the rising power of local government, the fragmentation arising from competition between departments exercising state power and the growing demand for legal services from the market and from society (Li and Cheng 2013). In addition, an expanded organisational sphere and social space encompasses various new organisations performing services, representing social interests and conveying those interests into the policymaking process—but remaining as loose organisations rather than professional bodies.

How do these factors play out at the important level of local government? Under Zhang Zemin aggregate economic and revenue growth became the most important indicator of success for local government cadres—this is still in effect the case. Problems may arise when local government cadres face multiple competing objectives and targets arising from the plan as well as from market forces and needs for revenue growth. Studies of the role of local government cadre reveal the pressures they face, as they juggle 'multiple identities as policy implementers, revenue collectors, market players and political campaigners' (Smith 2013: 1046). Heilmann and Melton (2013: 614–5) found the planning system to be dynamic and able to adjust to new requirements—such as reducing the importance of growth in cadre performance evaluations and increasing the importance of environmental protection, social welfare and public services—but only if the number of priority objectives remains limited 'or if the objectives themselves do not conflict with the other incentives agents face' (ibid).

Social objectives have proved to be of lower priority, elusive and more difficult to address than economic and technical targets at the local level. The result of these competing pressures on local government cadres is that 'China's efforts at development planning have so far displayed a pronounced weakness in pursuing redistributive goals and improving the development potential of disadvantaged population groups' (ibid). If targets run the risk of reducing business, revenue and employment interests in a jurisdiction, local governments may have tended to resort to manipulating the data (ibid). This is captured in a popular Chinese saying: 'From above there are imposed policies, and from below there are evading strategies' (shang you zhengce, xia you duice) (Zhou 2010: 48). Generally, national planners are most effective in realising national objectives through administrative action locally when government programs align career incentives for cadres with market opportunities.

For example, a recent analysis by Ren (2013) confirmed that less than frequent exploration of project alternatives means that EIA's role in optimising project decision-making is as yet unrealised. While the 2011 updated General Technical Guidelines requires all EIAs to consider project alternatives, in fact this may be restricted to a few technical options (variations of project site, alignment, size, production process, environmental impacts and carrying capacity of local environment). Strategic alternatives, such as 'without project' or 'delay the project', are not mentioned in any of the Technical Guidelines (ibid). This obviously has implications for displacement and resettlement—better use of SIA can help to formulate alternatives that may ensure avoidance of displacement effects.

Local government incentives and drivers revolve around economic growth, facilitating investment and fiscal revenue increase, not environmental protection or social impact. Local cadres are rarely held responsible for any social and environmental adverse impacts (World Bank and CDRC 2013). Realising SIA systematically across China's numerous local government units and planning terrains poses new challenges, as set out below.

Administrative

SIA entails a switch from hierarchical to more transparent planning and management, built upon understanding of the underlying participative mode. This includes motivational work to ensure SIA becomes more than a formality but is viewed as a key means for stakeholder engagement. Sufficient time and resources are needed. Legal and civil society representatives could perform a more integrated role. It may be useful to consider establishing an independent set of local offices to conduct this work. Introducing property taxes and reforming the process of land acquisition would also help reduce the reliance on land transfers for local government revenue generation (World Bank and CDRC 2013).

Management Processes

Timely information disclosure, with sufficient lead times and in a place and manner for maximum participation, would facilitate early public input to broad planning strategies and specific projects. Decision-making mechanisms contextualised to Chinese modalities are still emerging. Meanwhile, training and support mechanisms for SIA specialists are still uncertain, and the number of skilled SIA practitioners is still limited. Public experience with participative planning modes is also limited.

In short, realising recent regulations requiring forms of social assessment and SIA in project planning and management poses certain challenges across China. In the penultimate section below, we turn to the sometimes similar challenges of realising SIA in China's growing international presence.

SIA: Going Global?

Investment Projects Abroad

China's increasing attention to the social impacts of investment projects nationally parallels a growing concern with forms of SIA in China's international operations, where there is increasing interaction with international standards that include forms of SIA in both public and private sector projects. Yet there are several structural barriers to speedy adoption of SIA in planning and managing projects, which remain a key modality for China's aid and financing operations.²⁰

To take aid first, China's policies for development financing differ from those of traditional donors in several important respects that have implications for conducting SIA. First, China favours noncash financing for projects without attachment of policy conditionality, which might otherwise include the conduct of SIA (Mwase and Yang 2012). Second, China evaluates its assistance on the basis of cost competitiveness and completion time, so projects tend to have shorter approval times with

²⁰ China has grown its technical assistance grants at an annual rate of 25–30 %, reaching the annual amount of US\$67 billion, with about 40 % of these combined flows going to sub-Saharan Africa and about 60 % being directed to the development of economic infrastructure (World Bank 2013).

less scope for local consultation processes, feasibility studies and social and environmental safeguards (ibid). Third, China often extends credit lines in a special account where funds are channelled directly to firms (often of Chinese origin) contracted for projects, rather than to entities of the recipient country, reducing prospects for local interaction and partnerships. Chinese aid often complements foreign direct investment (FDI) as part of a 'package', with multiyear financing including grants, loans and lines of credit with various participants (ibid). In China's development assistance, systematic social and environmental safeguards have yet to emerge.

In investment financing, some firms are adopting CSR policy statements. Since 2001 China has encouraged its transnational firms and state-owned enterprises (SOEs)s to 'go out, go global' to sustain the pace of economic growth domestically through securing global market access (and familiarity with international distribution channels), securing natural resources, technological upgrading and establishing brands (Long et al. 2009). The 12th Five-Year Plan for Economic and Social Development expresses the aim to transform Chinese firms into leaders and drivers of global growth and also mentions CSR (Cisse et al. 2014).

China's rapidly growing role as an international financier, engineer and builder, especially in large infrastructure developments, is often played out in the ecologically and socially sensitive projects left over from earlier developers (Cisse et al. 2014; International Rivers 2012). There are claims (ibid) that China selects residual projects in sensitive locations with significant social and environmental costs, including forced population displacement, that could not attract financing elsewhere (such as Merowe Dam in Sudan, Gibe III in Ethiopia, bauxite mining in the Vietnamese central highlands and Bakun Dam in Malaysia). While China's Ministry of Foreign Affairs requires its financiers to follow local laws and regulations, in fact those standards may be significantly lower than international norms as expressed, for example, in 'soft law' environmental and social standards such as the Equator Principles.

Additionally, lack of knowledge of those country laws, business customs and market conditions; lack of effective risk management systems, mechanisms for addressing customer preferences and complaints; lack of research and development experience; and absence of longer-term profit focus may all compound the risks for Chinese businesses operating abroad (Long et al. 2009). Moreover, few of China's global operators have a strong track record in stakeholder engagement, managing and utilising SIA findings, working with nongovernment organisations or consulting with representatives of civil society.

In an effort to turn around some resultant negative perceptions of Chinese firms globally, the government recently stepped up efforts to encourage greater social and environmental risk management. Key documents issued in the recent past include a new Guide for Chinese Contractors (Ministry of Commerce 2012), Green Credit Guidelines in the Banking Sector (2012) (China Daily 2012) and Guidelines on Environmental Protection in Foreign Investment and Co-operation (MOFCOM and MEP) (2013) (see below).

To take these, in turn, the Guide on Social Responsibility for Chinese International Contractors (Ministry of Commerce 2012), issued by China International

Contractors Association, is the first standard for voluntary social responsibility of China's international project contracting industry. It presents specific work requirements for 'enterprises to perform their social responsibilities' highlighting seven issues: safety, employee development, owners' equity, supply chain management, fair competition, environmental protection and community development. The Guide refers to standard international practices such as the United Nations Global Compact and ISO 26000.

The China Banking Regulatory Commission's 2012 'Green Credit Guidelines' foster environmental and social risk management in both domestic and overseas lending by requiring banks to 'evaluate, classify and rate the environmental and social risks inherent in their clients' businesses and take the results as a key reference in their ratings and access to credit' (China Daily 2012).

Finally, the Notification on Guidelines for Environmental Protection in Foreign Investment and Cooperation (2013) was issued jointly by the Ministries of Commerce and of Environmental Protection. While primarily directed towards environmental issues, the Guidelines extend to encompass certain social responsibilities, representing an important first step towards social risk management and SIA (Leung et al. 2013).

Several institutions with high international profiles are moving to create comprehensive CSR policy statements. In the banking sector, Exim Bank, which finances export credits for Chinese businesses to establish overseas operations in the energy, mining and industrial sectors, has adopted 'Guidelines for Environmental and Social Impact Assessments of the China Export and Import Bank's (China EXIM Bank) Loan Projects'. China's largest overseas hydropower company, Sinohydro, in 2011 announced it would adopt the World Bank's safeguard policies as its minimum standard regarding resettlement and environmental issues. This works together with IFC's Performance Standards on community relations, consultation, participation and access to information policies, including the principle of Free, Prior and Informed Consent (FPIC). Most recently, with the establishment of China's first multilateral bank, the AIIB, the question of applicable safeguard standards arises, together with the level of public accountability for them.

Conclusion

China's social policy terrain is undoubtedly expanding based on national experience and through intersection globally with international standards and civil society in new spaces. In both national and international arenas, however, specific frameworks, methods, guidelines, mechanisms, resources and capacities for social assessment and/or SIA await further development and consolidation. Internationally, the challenges may be summarised as follows: first, understanding of the regulatory and legal environment in host countries; second, supervisory and coordination challenges among Chinese ministries; third, articulation of SIA objectives; fourth, implementation with appropriate organisational structures and sufficient

coordination of resources, costs and time for social risk management and SIA; and, last, engagement with civil society and people affected. China's activities overseas in this sense parallel domestic development: concrete steps in policy formulation which await the challenge of publicly verifiable realisation in practice.

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References

- Ash R, Porter R, Summers T (2012) China, the EU and China's 12th 5-year program. Europe, China Research and Advice Network, London
- Asian Development Bank (2007) Capacity building for resettlement risk management: People's Republic of China. Asian Development Bank, Manila
- Cernea M (2015) Landmarks in development: the introduction of social analysis. In: Price S, Robinson K (eds) Making a difference? Social assessment policy and praxis and its emergence in China. Berghahn Books, New York
- China Council for International Cooperation on Environment and Development (CCICED) (2013)
 China's environmental protection and social development CCICED task force summary report
 CCICED 2013 annual general meeting November 13–15, 2013
- China Daily (2012) Green-credit guideline for banks issued. http://www.chinadaily.com.cn/business/2012-02/25/content_14691629.htm. Accessed 20 Sept 2014
- China International Engineering Consulting Corporation, Compiling Group (2002) Guideline of investment project feasibility study. Electric Power Press, Beijing
- China International Engineering Consulting Corporation, Compiling Group (CIECC) (2004) Manual on social assessment in investment projects in China Planning Press, Beijing
- Cisse D, Grimm S, Nolke A (2014) State-directed multi-national enterprises and transnational governance: Chinese investments in Africa, corporate responsibility and sustainability norms. Centre for Chinese Studies, University of Stellenbosch
- Dollar D (2007) Poverty, inequality and social disparities during China's economic reform. World Bank Country Director, Beijing
- Ferguson S, Zhu W (2015) Improving social impact assessment and participatory planning to identify and manage involuntary resettlement risks in the People's Republic of China. In: Price S, Robinson K (eds) Making a difference? Social assessment policy and praxis and its emergence in China. Berghahn Books, New York
- Gransow B (2014) "Reclaiming the neighbourhood urban redevelopment, citizen activism and conflicts of recognition in Guangzhou City" in a special focus on "Contested urban spaces whose right to the city?" *China Perspectives* (Hong Kong) No 2/2014
- Gransow B, Price S (eds) (2007) Turning risks into opportunities: social assessment manual for investment projects in China. China International Engineering Company Research Series, Beijing
- Heilmann S, Melton O (2013) The reinvention of development planning in China, 1993–2012.
 Mod Chin 39:580
- Hsing Y-T (2010) The great urban transformation: politics of land and property in China. Oxford University Press, Oxford
- International Rivers (2012) The new great wall. A guide to China's overseas dam industry. Online report.http://www.internationalrivers.org/files/attached-files/intlrivers_newgreatwalls_2012.pdf

- International Finance Corporation (2007) Handbook on stakeholder engagement: a good practice handbook for companies doing business in emerging markets, Washington, DC. http://www.org/ifcext/enviro.nsf/AttachmentsByTitle/p_StakeholderEngagement_Full/%24FILE/IFC_StakeholderEngagement.pdf. Retrieved 2 Sept 2011
- International Finance Corporation (2011) Update of IFC's policy and performance standards on environmental and social sustainability, and access to information policy. http://www1.ifc.org/wps/wcm/connect/fca42a0049800aaaaba2fb336b93d75f/Board-Paper-IFC_SustainabilityFramework-2012.pdf?MOD=AJPERES. Retrieved 10 Mar 2012
- Ip DF-K (1990) Difficulties in implementing social impact assessment in China: methodological considerations. Environ Impact Assess Rev 10:113–122
- Knight N (2013) The economic causes and consequences of social instability in China. Chin Econ Rev 25:17–26
- Lee C, He X (2014) The land issue: power struggles between the central government and local authorities. Dev Chang 45(2):329–352
- Leung D, Zhao Y, Ballesteros A, Hu T (2013) Environmental and social policies in overseas investments: progress and challenges for China. (Report) World Resources Institute, Washington, DC. http://pdf.wri.org/environmental_and_social_policies_in_overseas_investments_china.pdf
- Li X, Cheng J (2013) Structural constraints on legal change: Chinese lawyers in the interaction between the state, the market and society. Soc Sci Chin 34(1):58–77
- Li H et al (2010) Structural strains during the process of social change. Soc Sci Chin 3:50-68
- Lin GCS (2009) Developing China: land, politics and social conditions. Routledge, London/New York
- Lin GS et al (2014) Strategizing urbanism in the era of neoliberalization: state power reshuffling, land development and municipal finance in urbanizing China. Urban Stud 20(10):1–21
- Liu H et al (2014) Analysis of sustainable urban development approaches in China. Habitat Int 41(2014):24e32
- Long G, Zadek S, Wickerham J (2009) Advancing sustainable competitiveness of China's Transnational Corporations. Accountability, DRC, International Institute for Sustainable Development, London
- McDowell C, Morrell G (2010) Non-conflict displacement: challenges for the 21st century. Berghahn Books, Oxford
- Ministry of Commerce (2012) The first guidance on social responsibility of China's international project contracting industry. MOC, Beijing. english.mofcom.gov.cn/aarticle/newsrelease/significantnews/201209/20120908367021.html. Accessed 14 Sept 2014
- Ministry of Commerce (MOFCOM), Ministry of Environment (MEP) (2013) Notification of the Ministry of Commerce and the Ministry of Environmental Protection on issuing the guidelines for environmental protection in foreign investment and cooperation. Shang He Han [2013] No. 74. Date of Issuance: February 18, 2013. http://english.mofcom.gov.cn/article/policyrelease/bbb/201303/20130300043226.shtml. Accessed 2 Feb 2014
- Mwase N, Yang Y (2012) BRICs' philosophies for development financing and their implications for LICs. IMF, Washington D.C.
- Ong A, Zhang L (2008) Introduction: privatizing China: powers of the self, socialism from afar. In: Zhang L, Ong A (eds) Privatizing China: socialism from afar. Cornell University Press, Ithaca/London, pp 1–19
- Po L (2011) Property rights reforms and changing grassroots governance in China's urban–rural peripheries: the case of changing district in Beijing. Urban Stud 48(3):509–528
- Price S (2015) Introduction. In: Price S, Robinson K (eds) Making a difference? Social assessment policy and praxis and its emergence in China. Berghahn Books, New York.
- Price S, Robinson K (eds) (2015) Making a difference? Social assessment policy and praxis and its emergence in China. Berghahn Books, New York
- Ren X (2013) Implementation of environmental impact assessment in China. J Environ Assess Policy Manag 15(3):1350009 (20 pages)

- Sargeson S (2012) Why women own less, and why it matters more in rural China's urban transformation. Chin Perspect 4(2012):35–42
- Sargeson S (2013) Violence as development: land expropriation and China's urbanization. J Peasant Stud 40(6):1063–1085
- Smith G (2013) Measurement, promotions and patterns of behavior in Chinese local government. J Peasant Stud 40(6):1027–1050
- Tang B, Wong S, Lau MC (2008) Social impact assessment and public participation in China: a case study of land requisition in Guizhou. Environ Impact Assess Rev 28(2007):57–72
- Tang Y, Mason R, Sun P (2012) Interest distribution in the process of coordination of urban and rural construction land in China. Habitat Int 36:388–395
- Vanclay F (2003) International principles for social impact assessment. Impact Assess Project Appraisal 21(1):5–11
- Wang B (2012) Legal framework and implementation practices for land acquisition and resettlement in the People's Republic of China'. Country safeguard systems regional workshop proceedings towards common approaches and better results, 18–19 Apr 2012. ADB, Manila
- Wang C, Marsden D (1993) Social analysis for investment projects. Research Paper No. 3. Overseas Development Administration, Beijing
- Wilmsen B (2011) Progress, problems, and prospects of dam-induced displacement and resettlement in China. Chin Inf 25:139
- World Bank (2004). Involuntary resettlement sourcebook: planning and implementation in development projects. Washington, DC. http://www4.worldbank.org/afr/ssatp/Resources/HTML/Gender-RG/Source%20%20documents%5CTool%20Kits%20&%20Guides%5CDesigning%20Projects/TLPRO10%20invol%20resettlementsourcebookWB.pdf. Retrieved 7 Feb 2012
- World Bank (2013) Financing for development post 2015. World Bank, Washington, DC
- World Bank and Development Research Centre of the State Council of the PRC (2013) China 2030: building a modest, harmonious and creative society. World Bank, Washington DC
- Xinhua (2014) AIIB to set up high-standard, feasible safeguard policies, says Chinese finance minister. Report published on 24 October. Yang Yi (ed.). http://news.xinhuanet.com/english/china/2014-10/24/c 133740339.htm. Accessed 5 Jan 2015
- Yang Y-F (2012) Basic land security and livelihood: a study of basic compensation and social security policy for land expropriated peasants in China. Public Adm Dev 32:385–401
- Yuen S (2014) China's new rural land reform? Assessment and prospects. Chin Perspect 1:61–65 Zhou X (2010) The institutional logic of collusion among local governments in China. Mod Chin 36:47

Chapter 10 Doing a Dam in Laos: Challenges in Handling Impact Assessment and Mitigation Planning

Teresa Serra

Abstract In Laos, social and environmental impacts that the building of the Nam Theun (NT2) Hydroelectric dam caused was massive and required the resettlement of 6,200 people. Since this was a World Bank-supported project, impact assessment and mitigation planning had to be of a higher standard. But to do this was no easy task. The gathering of the required information and preparing a detailed mitigation plan in consultation with all affected people turned out to be a huge challenge. The government, the power company and the others concerned found the World Bank requirements too stringent and hard to meet. On the other hand, the civil society groups wanted analyses to be even more comprehensive to be able to identify all impacts. Many useful lessons in doing a comprehensive SIA and rebuilding the lives of the affected people were learnt. The Bank also learnt that it should spell out its impact and mitigation planning requirements right at the commencement of a project to avoid problems later.

Keywords Social and environmental issues • Laos • Large infrastructure operations • Downstream issues • Regional development • Indigenous peoples • Nam Theun Hydroelectric Project

This chapter describes experiences gained and lessons learned from preparing the social and environmental and resettlement planning aspects of the Nam Theun Hydroelectric Project (NT2) in the Lao People's Democratic Republic. These aspects were the subject of intense due diligence during project preparation.

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Social and Environmental Issues

NT2 presented a unique opportunity for refining the World Bank's approach to environmental and social safeguards in large infrastructure operations with widespread regional and cumulative impacts. Impact assessment and mitigation planning therefore had to be comprehensive in scope and faced five important challenges:

- Managing environmental and social impacts spread over six zones: the Nakai plateau (where the reservoir would be formed), the NT2 watershed (comprising the Nakai Nam Theun National Protected Area and two corridors linking it to other national protected areas), the downstream areas of the Nam Theun and Xe Bang Fai basins, other project-impacted lands (needed for construction camps, quarries, roads and transmission lines) and the Mekong River (with transboundary implications)
- Resettlement of about 6,200 people living on the plateau, of which the most seriously affected were ethnic minority villagers with limited ability to cope with displacement and changes in livelihood patterns
- Impacts on the livelihoods of watershed and downstream households, totalling some 70,000 people, which, though not displaced, were also affected in varying degrees by the project and, in many cases, required adequate support to transition to alternative productive activities
- Uncertainty affecting project impacts in some cases, which meant that decisionmaking and mitigation planning had to rely on the use of adaptive approaches and contingency measures to address unanticipated impacts
- Numerous operational/institutional opportunities and constraints posed by the public-private nature of NT2, requiring that appropriate balance be found with regard to the pursuit of project efficiency, regional development and national capacity building, in the short and longer term

World Bank Safeguard Policies and Sectoral Best Practice

The project triggered all ten of the World Bank's safeguard policies (Box 10.1).

The Bank faced several challenges in applying these policies and in promoting the adoption of sectoral best practice. The Lao government, the Nam Theun 2 Power Company (NTPC) and other stakeholders saw the World Bank as continuously expanding both the geographical scope and the thematic coverage of the studies called for. The developer claimed that, by increasing demands for environmental and social analyses, the World Bank was 'shifting goalposts' without clearly defining an acceptable set of requirements. In contrast, tensions also arose because other (usually external) stakeholders believed that the environmental and social analyses were not sufficiently comprehensive and that some critical potential problems or groups of people who would be affected by the project were ignored. Different stakeholders' expectations and challenges came to the fore in the drafting and revi-

Box 10.1: The World Bank's Environmental and Social Safeguard Policies

The World Bank's environmental and social safeguard policies are a cornerstone of its support to sustainable poverty reduction. The objective of these ten policies is to prevent and mitigate undue harm to people and their environment in the development process. The policies provide guidelines for World Bank and borrower staffs in identifying, preparing and implementing programmes and projects in the following areas:

- Environmental Assessment (Operational Policy [OP] 4.01): It is the World Bank's umbrella policy used to identify, avoid and mitigate the potential negative impacts associated with Bank investment operations, with the purpose of improving decision-making while ensuring that project options under consideration are sound and sustainable and that potentially affected people have been properly consulted.
- Involuntary Resettlement (OP 4.12): Involuntary resettlement should be avoidable or minimised where feasible. Where displacement is unavoidable, resettlement plans should be developed and executed as development programmes with the objective to ensure that the population displaced by a project benefits from the project including affected persons' consultation and participation in planning and implementing resettlement to improve their livelihoods and standards of living, at least restoring them to predisplacement levels, in real terms.
- Indigenous Peoples (Operational Directive [OD] 4.20): In force and applicable during NT2 Project processing, the objectives of this policy are (i) to ensure that Indigenous Peoples benefit from development projects and (ii) avoid or mitigate potentially adverse effects on Indigenous Peoples caused by Bank-financed or assisted activities. The policy requires special action where Bank investments affect Indigenous Peoples.
- Natural Habitats (OP 4.04): The Bank does not support projects that involve the significant conversion of critical natural habitat. Bank-financed projects are sited on land already converted when feasible. If noncritical natural habitats would be significantly converted, acceptable mitigation measures are included in project design including obligation to take into account the views and roles of affected groups (NGOs, communities) in project design/implementation, minimising habitat loss and establishing and maintaining ecologically similar protected areas with adequate institutional capacity of the implementing organisation.
- Pest Management (OP 4.09): The Bank supports controlling pests primarily through environmental methods and/or control of disease vectors.
 Pesticide uses are assessed in the context of the project's environmental assessment against the following criteria, among others: they must have

Box 10.1 (continued)

(i) negligible adverse health effects and (ii) minimal effect on nontarget species and environment.

- Cultural Property (Operational Policy Note [OPN] 11.03): In force and applicable during NT2 Project processing, the Bank's general policy is to assist in preservation and to avoid elimination of cultural properties. More specifically, the objectives of the OPN are (i) to avoid any significant damage to nonreplicable cultural property, (ii) assist only those projects that are sited or designed so as to prevent such damage and (iii) assist in the protection and enhancement of cultural properties encountered in Bankfinanced projects.
- Forests (OP 4.36): The objective of this policy is to assist borrowers to harness the potential of the forest to reduce poverty in a sustainable manner, integrate forests effectively into sustainable economic development and protect the vital local and global environmental services and values of forests. The Bank does not finance projects that would involve significant conversion or degradation of critical forest areas or related critical natural habitats.
- Safety of Dams (OP 4.37): It requires the technical review of designs by independent dam safety professionals and calls on the borrower to adopt and implement dam safety measures throughout the project cycle.
- Projects on International Waterways (OP 7.50): It requires that the proposed project not affect the efficient utilisation and protection of international waterways. It requires the borrower to notify the other riparian of the proposed project and its details. Riparian are expected, within the existing legal arrangements for the international waterways, where they are in place or otherwise to provide their views on the proposed project to the borrower, which will inform the Bank accordingly. The World Bank may appoint a panel of experts to review any objection from riparian before deciding on financing the proposed project.
- Projects in Disputed Areas (OP 7.60): It requires the World Bank, early in the project processing cycle, to ensure that countries involved in a dispute over an area where the proposed project is to be implemented have no objection to the proposed project.

Public consultation is required for the first seven of these policies. In addition, the World Bank requires public disclosure of information about proposed projects and their impacts, in English and local languages, at its public information centres and at project sites or at sites that are easily accessible to interested parties.

Source: (World Bank 2011, pp. 53–54)

sions of the documentation required to address the environmental and social aspects of the project, including the Environmental Assessment and Management Plan (EAMP), the Social Development Plan (SDP) and the Social and Environment Management Framework and First Operational Plan (SEMFOP) for the Nam Theun watershed.

Project Impact Zones

The adverse social and environmental impacts of the NT2 project resulted from the impoundment of the Nam Theun River to form a 450 km² seasonally variable reservoir; the interbasin transfer of water from the Nam Theun River to the Xe Bang Fai River, with associated changes in flow patterns and aquatic ecology; and the construction of project ancillary works. This section looks at the impacts on each of the six areas affected by the project.

The Nakai Plateau About 60 % of the Nakai plateau was covered by forest of variable quality, ranging from undisturbed to highly disturbed. A natural habitat accounting assessment identified the forest types that would be lost to inundation. Although this area had been under pressure for many years, it still contained animal species that were important from a conservation perspective, including the Asian elephant, the white-winged duck and several other bird species. There were significant tracts of contiguous forest area, especially on the northeast side of the plateau, near the dam. The major environmental impacts of the project on the plateau are related to natural habitat loss and its implications for wildlife conservation. The EAMP called for this loss (along with impacts on natural habitats in other project-affected areas) to be mitigated and compensated through direct interventions, such as wildlife and reservoir management programmes on the plateau, as well as by protection of the NT2 watershed. In addition, the EAMP included financial support for surveys, species-focused programmes and environmental education.

The communities on the Nakai plateau included five main ethnolinguistic groups: Brou (40 %), Tai Bo (40 %), Upland Tai (11 %), Vietic (6 %) and Sek (1 %). The communities were dependent on swidden (shifting cultivation) farming, hunting and gathering of timber and nontimber forest products, fishing, livestock and wage income. Only 17 % of the families could produce sufficient rice for the year, and 50 % suffered rice deficiency during more than 6 months per year. Average household income (both cash and imputed) was \$450 per year, well below the national poverty line of \$800 per year. Agricultural production was constrained by poor soils, adverse weather conditions, lack of modern farming techniques, and lack of access to markets. Most households had no electricity, access to clean water was limited, and paved roads were unavailable. Social conditions were similarly precarious: more than 60 % of the population had no schooling, and the average distance to the nearest health facility was 11 km, usually travelled on foot.

The project required the relocation of about 17 villages, comprising about 6,200 people, predominantly ethnic minorities. The Resettlement Action Plan (RAP) detailed in the SDP, developed with the participation of the affected population, aimed to improve the lives of displaced villagers through livelihood programmes that included community forestry, reservoir fisheries, household gardens, irrigated rice farming and livestock husbandry. NTPC committed to raising the average income of resettler households, by the start of year 5 after relocation, to the greater of the then national poverty line or an alternative income threshold equivalent to \$800 (at June 2002 values). Both the government and NTPC also committed to an ambitious 'best endeavour' target, by year 9 after relocation, of raising the average income of villages in the NT2 resettlement area to the greater of the then national average rural income level or an alternative threshold equivalent of \$1,200 (at June 2002 values).

In addition to the livelihood programmes, the RAP provided land, housing, infrastructure (e.g. water supply, sanitation, electricity, roads) and social services (e.g. health and education). It also included measures to assist ethnic minorities and other especially vulnerable households in culturally appropriate ways (Box 3.2). Measures were incorporated to address numerous specific concerns (e.g. that the demand for the output of the newly introduced crops would be limited or that the rotting of biomass in the flooded area could severely reduce fish populations). The relocation and livelihood programmes were frontloaded to allow opportunity to assess the adaptation of the resettled people to new conditions and to adjust the programmes as needed early on.

Box 10.2: Addressing Gender Issues

Addressing gender issues was an integral part of the NT2 project design. A gender assessment found that women and girls, particularly those from certain marginalised ethnic groups and those living within disadvantaged households, had limited access to education, off-farm employment, production markets, cash assets and sociopolitical empowerment. The assessment concluded that these groups faced greater risks in the resettlement process and would require continual and intense attention and support.

A Gender Strategy and Action Plan was developed and incorporated within the SDP. Actions included identification of gender-specific impacts and issues; gender-sensitive and participatory planning, monitoring and mitigation mechanisms; promotion of gender-balanced community institutions; gender-sensitive opportunities for income generation and skills development, training and off-farm work opportunities; and community education on alcoholism, spouse abuse and sexually transmitted infections, including HIV.

Source: World Bank (2011, p. 57)

The Nam Theun Watershed The NT2 watershed comprising the Nakai Nam Theun National Protected Area and two adjoining corridors is an area of national and international importance for biodiversity. It is known for the quality and diversity of ecological habitats, which includes populations of many rare, endangered and vulnerable species. Because the watershed is contiguous with areas of international conservation status on the Vietnamese side of the border, it presented both important opportunities and challenges.

Conservation in Lao PDR has suffered from a range of problems, including insufficient funding, weak technical capacity and limited emphasis on enforcement. Indicative of the conservation challenge is the fact that during the 1990s, commercial logging took place in the Nakai plateau, at times extending into the national protected area. Preparation of the NT2 project caused the government to enforce a logging ban in the area. As an offset for biodiversity losses on the plateau and other project lands, the NT2 project established a watershed conservation programme to be implemented by the government and to which NTPC will be providing \$31.5 million over a 30-year period.

About 5,800 people—90 % of them members of indigenous Brou, Phong, Kri and Sek groups—lived in 35 villages within the Nam Theun watershed. In addition, the peripheral impact zone adjacent to the watershed (north, south and west of the protected area) consisted of 54 villages with a total estimated population of about 22,500 and household income levels well below the national poverty line. Most villages practised shifting cultivation and collected nontimber forest products, including wildlife. They had limited access to infrastructure and social services, including health care.

The NT2 project would not displace these populations, but conservation plans for the watershed would limit their access to natural resources. Communities and individuals would be adversely affected by improved enforcement of existing regulations, such as those concerning wildlife hunting, as well as by the introduction of new land and resource use patterns that in some cases could impose spatial and temporal resource access restrictions.

Under the SEMFOP, protection and conservation objectives were reconciled with the development aspirations of watershed populations, ensuring that they benefited from and supported the programme. It was foreseen that they would ultimately benefit from enhanced land and resource use rights, improved livelihoods through natural resource management activities and improved access to basic services such as water supply and sanitation, health facilities and schools. Natural resource use arrangements would be agreed upon with the affected villages, and adverse impacts would be compensated for through livelihood and community development activities. Measures would be taken to address these issues through a participatory village planning process involving all groups.

The Xe Bang Fai Basin The Xe Bang Fai provided water for irrigation, fishing and household use to some 100,000 people. The water quality was good, with adequate dissolved oxygen and low levels of turbidity. After the start of commercial operation, NT2 was expected to have a significant impact on aquatic habitats and fisheries

through flow changes (including doubling the average annual flow and changing the variability in weekly and seasonal flows), increased erosion and changes in water quality. In addition, the potential for flooding would increase. Measures to reduce these impacts included specially designed aeration structures and a regulating pond. To prevent poor water quality and manage extreme variations in water flows, the EAMP called for biomass reduction on the plateau before filling the reservoir, intake of water from the reservoir allowing a mix of low and high levels of dissolved oxygen and operating rules that would reduce (or stop) generation during periods of inundation of the Xe Bang Fai floodplain.

Before NT2, the communities in the Xe Bang Fai floodplain were largely dependent on paddy rice cultivation, livestock rearing, fishing and wage income. Average household income was about \$660 per year, and although noticeably better off than plateau and watershed residents, about 40 % of the population lived below the national poverty line. Most of the population was from the Lao ethnic group, but the communities also included ethnic minorities (mostly Brou).

As a result of changes in the siting of the downstream channel, resettlement of households along the Xe Bang Fai was avoided. However, after the start of commercial operations, the changes in the river's flow regime and water quality, noted above, will reduce the productivity of fisheries and inundate physical assets, such as water supply systems, irrigation pumps, river crossings, riverbank gardens and other productive lands. These changes could directly affect as many as 40,000 people on the main course of the Xe Bang Fai (with the impacts becoming milder towards the confluence with the Mekong); another 30,000 people living near or along tributaries to the Xe Bang Fai could also be adversely affected to varying degrees, through reduced access to river fisheries.

In addition to the measures foreseen in the EAMP, the SDP included provisions for asset replacement and restoration of livelihoods, developed in consultation with potentially affected communities. River bank protection and the possible construction of dikes in the lower segment of the river were also foreseen. Baselines for fish productivity and catch were established, and alternative models for restoration of protein and income losses were detailed during the first 2 years of project implementation. Continued monitoring of the downstream hydrology; piloting, assessment and adjustment of proposed alternatives; and consultations with villagers proceeded during the construction period. The project called for 50 % of the downstream programmes to have been implemented by commercial operation, and this threshold has been surpassed.

The Nam Theun Basin The river banks along the Nam Theun River are not inhabited between the Nakai Dam and the Theun Hinboun Dam, located 50 km downstream. However, some villages, located nearby on Nam Theun tributaries, used the river for fishing to varying degrees. The area also has value as a wildlife habitat, as it forms part of the Nakai Nam Theun–Phou Hin Poun Corridor. The NT2 dam would significantly reduce water flows in the area, changing fish habitats, some

riparian vegetation and potentially the use of the area by wildlife. Fisheries and the environment were already under pressure from other causes, including the interruption of fish migration routes by the Theun Hinboun Dam, pollution from mining activities and inappropriate fishing techniques (blast fishing). Under worstcase scenarios, the impact of the NT2 project on village fish catch was estimated at 1.035 % in some tributaries and as much as 60 % in the main course.

Mitigation measures foreseen in the EAMP included outlet structures to reduce water quality impacts and a fish species monitoring programme. Provisions were also made for a guaranteed riparian flow regime and in-stream landscaping. Consultations were held with all 40 potentially impacted villages before and during the implementation period. A livelihood restoration programme, similar to that proposed for the Xe Bang Fai, was developed for the affected communities.

Other Project Lands Additional project impacts are related to the construction of the powerhouse, dam and ancillary works, including transmission lines, roads, quarries and work camps, most of them located in populated areas or areas with degraded habitats. Baseline environmental conditions in these areas, such as air and water quality, were all very good. During the construction period, NT2 could potentially have adverse impacts on water quality and was expected to cause erosion, dust, noise and vegetation clearing, as well as pressure on biodiversity due to the presence of a large worker population. Minimisation of such impacts was addressed through the Head Contractor's Environmental Management and Monitoring Plan. Compensation for land acquisition, resettlement of about 90 households and impacts on livelihoods in these areas were provided for through resettlement action plans and resettlement frameworks in the SDP.

The Mekong River The NT2 project will result in changes to the seasonal flows of the Mekong River. These changes are particularly significant between the confluence of the Nam Kading and the Xe Bang Fai rivers, where a reduction in average water levels of 7 cm during the wet season and 2,329 cm in the dry season is expected. Flows below the confluence of the Xe Bang Fai will also be affected, but they will be attenuated as one moves further downstream. The social, economic and ecological impacts of these changes are likely to be insignificant.

Potential cumulative impacts of NT2 and other developments (such as other hydropower projects, transport and irrigation projects and urbanisation) likely to occur in the Mekong region were examined through the assessment of 5- and 20-year scenarios. NT2 accounts for less than 15 % of the impacts on Mekong flows in the 5-year scenario and less than 6 % of the impacts in the 20-year scenario. The assessment concluded that NT2 would have no significant impact on the Mekong sediment balance, an insignificant negative impact on floodplain and Tonle Sap fisheries in Cambodia and a positive but insignificant impact through reduced flood incidents, improved irrigation and reduced salt water intrusion in the Mekong delta in Vietnam.

Lessons Learned

Lessons were learned in a variety of areas. A first set of lessons concerns substantive design issues, such as overall problem identification and response and the definition of approaches, frameworks and plans to avoid, mitigate or compensate for negative occurrences while taking advantage of positive opportunities to promote development. Four themes are highlighted here: defining project boundaries, restoring incomes and livelihoods, balancing biodiversity conservation and local development and addressing downstream risks.

The NT2 experience also sheds light, through a second set of lessons, on related cross-cutting and process issues, such as dealing with uncertainty, addressing institutional challenges, developing suitable consultation and communication strategies and developing effective monitoring, evaluation and oversight mechanisms in the context of inevitable tensions and competing private and public sector objectives.

Substantive Design Issues

Defining Project Boundaries Defining project boundaries—where the term refers not merely to geographical boundaries but also to project objectives, costs and institutional responsibilities—turned out to be a vexing issue. The government, the World Bank and the Bank's development partners saw NT2 in a broader development framework. Beyond ensuring power generation and increased export revenues for Lao PDR, it was hoped that the project's revenues would contribute to poverty reduction, that project benefits would be shared within the project's area of influence, that local capacity would be strengthened in the management of environmental and social issues and that approaches would be generated that might be replicated in future projects. NT2 should not become an 'enclave'—the fate of many other large-scale projects in poor economies. For their part, the private developers were understandably concerned with the commercial aspects of the operation, leading to an inherent tension between the government, the World Bank and the Bank's partners on the one hand and developers on the other.

The World Bank clearly recognised that the hydropower development project itself could contribute to, but could not be expected to solve, broader development or capacity issues. It therefore sought to address the poverty reduction, regional development and broader social/environmental objectives through three other complementary instruments. 1 However, in the context of the environmental and social issues of the NT2 project itself, the World Bank insisted that all impacts resulting from the hydropower project needed to be addressed by the developers and mitigation programmes paid for within the project's budget. This was the source of frequent discussion. In the absence of agreement, the developers felt that the World Bank was continually expanding boundaries, calling for the design of additional assessments, the establishment of more comprehensive programmes and the

expansion of the environmental and social budget—moves it viewed as shifting the goalposts as the project moved ahead.

A few key lessons stand out:

- Proposals for large hydroelectric projects need to be developed in the context of the country's power sector strategy. Strategic social/environmental assessment should be undertaken in advance of site-specific project development so as to minimise the potential impacts and/or maximise the benefits of power sector expansion. The project should be seen as contributing to poverty alleviation and economic development of the region in which it is implemented. These aspects are not normally relevant to a developer's commercial interests; rather, they are matters of public interest and thus government functions. 2
- Because in large, complex projects, the area in which impacts are felt, and thus
 the geographical boundaries for environmental and social analytical work, tends
 to extend beyond the area in which construction activities take place, definition
 of the project's 'area of influence' should be the object of agreement with project
 proponents early on.
- Early screening and scoping of environmental and social issues through stakeholder consultation process is advisable and consistent with World Bank policies. Similarly, cumulative impact analysis should be conducted early to better understand the broader geographic context of the proposed project.
- Although early agreement among stakeholders on project boundaries and the
 approach to be taken to project preparation can prevent protracted disagreements
 later on, in large, complex projects, it is inevitable that the scope and nature of
 the issues to be addressed will change as engineering designs and environmental
 and social assessments become available.

Fortunately, on NT2 all parties agreed early on to include the Nakai Nam Theun National Protected Area as an offset for biodiversity impacts and thus as an integral part of the project area. There was also early broad agreement on the approach to resettlement and livelihood restoration. These early agreements allowed action on the assessments and plans to be undertaken and clarified the division of responsibilities needed to meet commitments in the case of the plateau and the watershed. In contrast, for the downstream areas, the nature, size and range of impacts, including the number of people likely to be affected, and the approach for mitigation remained uncertain as late as 2004.

Ensuring Income Restoration and Livelihood Enhancement, with Special Attention to Highly Vulnerable Groups The NT2 resettlement programme was designed to both mitigate and compensate for the effects of the project, by replacing lost assets and improving living conditions for affected communities. The SDP was broad, covering housing, infrastructure, public health, education, community development, income generation, livelihood restoration and other issues in line with World Bank policy and international best practice in hydropower development over the past few decades.

A few distinguishing features are worth noting in the NT2 project. First, the people affected by the project were among the poorest and most vulnerable in Lao PDR, making the creation of new patterns of livelihood as well as restoration of lost incomes especially challenging. For this reason, a menu of alternative and complementary livelihood programmes (including new forms of agricultural production, fishing, forestry and harvesting of nontimber forest products) was prepared, piloted and adjusted as the project moved ahead.

Second, because the affected communities were considered Indigenous Peoples, the World Bank's safeguard policies called for preparation of an Ethnic Minorities Development Plan (EMDP)—which, in the case of NT2, was included within the SDP—and placed specific requirements for culturally appropriate consultation and the design of mitigation/compensation programmes. The developers and the government viewed these safeguards as requirements added late in the process. The government was also concerned about the extent to which the affected communities should be entitled to special treatment based on ethnicity. Early consultations were nonetheless effective in identifying cultural practices and preferences that informed the design of relocation sites, village layout and housing solutions.

Third, the developer committed early on to achieve a clear income restoration target. However, uncertainty with respect to key elements of the livelihood package—such as the productivity of reservoir fisheries and the stability of markets for agricultural commodities and timber, as well as the speed of transition to new activities on the part of resettlers—resulted in difficulty in solidifying plans upfront, increasing the reliance on adaptive management and the importance of monitoring and evaluation programmes as implementation ensued.

Considerable efforts have been made to restore livelihoods and improve income generation, but the task has been challenging; only time will tell how effective the proposed programmes are. Two key lessons emerge for future projects:

- Resettlement of rural communities inevitably entails greater risk and uncertainty
 than the resettlement of urban communities. Such initiatives thus require early
 piloting, front-loading of programmes, adaptive management and longer implementation timeframes. NT2 also highlights the critical role of consultation and of
 monitoring and evaluation, discussed below.
- Proposed income targets (and other binding commitments) need to be carefully
 assessed for realism and based on solid socioeconomic analysis of local conditions, trends and comparative experience. Although the World Bank should seek
 clear commitments, it should play a strong role in avoiding unrealistic
 promises.

Balancing Biodiversity Conservation, Protection of Wildlife Habitats and Local Development Objectives Early on, the opportunity was identified to protect the Nakai Nam Theun National Protected Area and two adjoining corridors—a regionally significant biodiversity conservation area nearly ten times the size of the inundation area—as an offset to the loss of natural habitats arising from the project and as protection of the project watershed, ensuring longevity of the reservoir. Threats to the proposed conservation area were considerable. Moreover, the large numbers

of workers and work camp followers expected to migrate to the area to build NT2 posed additional threats.

The offset programme consisted of a partnership between NTPC and the government, with long-term financing, innovative institutional arrangements and a strong capacity-building programme. A long-term vision of the protected area was prepared before the start of project implementation, with the objective of ensuring integrity of the area while improving living standards and opportunities for residents of the protected area and surrounding villages. Establishment and strengthening of the Watershed Management and Protection Authority (WMPA) consisted of a long-term technical assistance programme in which short-term gaps in diagnostics, planning and enforcement were addressed through external consultancies. The WMPA hired a highly credible international NGO to assist it. A participatory planning process was promoted that established and fostered adherence to new land and resource use patterns and regulations, designed alternative livelihood options to replace activities that were incompatible with conservation and provided improved access to basic services.

Also early on, the World Bank recognised the need for special purpose wildlife conservation programmes. Potential impacts on several important species and significant habitats became a high-visibility issue. However, the assessment and mitigation of project impacts was hampered by lack of adequate baseline data, which forced decisions to be made under difficult circumstances. NTPC conducted detailed and groundbreaking (certainly in the Lao context) fish/freshwater biodiversity surveys in the plateau, watershed and downstream areas and developed a detailed wildlife programme for the plateau. Contracts were awarded to well-reputed NGOs to establish baselines and design programmes for the management of wildlife on the plateau.

To address issues that could undermine the sustainability of the protected area but lay beyond the scope of the NT2 project, the World Bank and the government took parallel action, including a comprehensive programme of capacity building and investment in biodiversity conservation in other parts of the country through the Lao Environment and Social Project. In addition, the government reached an agreement with Vietnam on cooperation to control illegal transboundary wildlife trade and logging.

Here again, three early lessons emerge:

- Conservation plans need careful and deep socialisation, even among the people
 assigned to execute and support them, and implementation costs require a realistic assessment. Early agreement on objectives, approaches, division of responsibilities and notional budgets with stakeholders, particularly private developers, is
 critical. Without such agreement, innovative and highly desirable conservation
 plans—such as those achieved in NT2—can cause dissension and delays.
- Wildlife surveys should be conducted early on, because scientifically significant
 and culturally important habitats and species likely to be affected by the project
 need early attention. Given the nature of wildlife conservation work, programmes
 should be designed with generous timeframes and adaptive management
 approaches, often extending well beyond the construction period.

 Government commitment to the long-term vision and effective coordination across sectoral and district authorities to design and implement programmes is essential, as is strong but gradual capacity building for the core management authority. In the long run, success in addressing transboundary issues will also be critical.

Addressing Downstream Risks Examination of downstream issues has often received limited attention during hydropower planning in the past. As a result, they have been the source of much grievance once projects become operational. In the case of NT2, they presented a vivid example of decision-making under uncertainty. Because the level of baseline information was highly variable in quality and reliability and the methodologies for predicting long-term impacts complex, there were many disagreements between the World Bank and the developers. Initially, the developers favoured a 'wait and see' approach, based on field monitoring and response to problems as they emerged, to be addressed through a modest contingency allocation (\$4 million). The World Bank favoured a more proactive approach, based on past hydropower development experience and the potential risks, admittedly of varying degrees, to an estimated population of 70,000 people. 3 The World Bank's view was eventually adopted.

Because some types of impacts would predominantly occur only after the start of commercial operations, downstream programmes were agreed to at the prefeasibility level before project approval and detailed during the project construction period. They were designed to be flexible, pilot a menu of solutions and accommodate changes in stakeholder concerns and experience during project implementation. The base budget included an allocation of \$16 million for the downstream programme. In addition, a budget of \$20 million was allocated for breach of concession agreement obligations and unanticipated impacts, including for the downstream area. A set of other innovative instruments were also foreseen to address project contingencies, as discussed below.

Two key lessons emerge from this experience:

- Downstream impacts are a key aspect of project boundary definition and should
 be discussed early on. Despite uncertainties, depending on the potential impacts
 of a project, provision to address such impacts should be made within the project's base budget as well as within the contingency budget.
- Planning needs to be flexible. It should offer a menu of alternatives and allow for
 piloting, assessment and adjustment. In rural contexts in which livelihoods need
 to be re-established, extended timeframes and corresponding budgets are needed
 to ensure support to affected people.

Cross-Cutting and Process Issues

Addressing Uncertainty Through Budgets and Other Legal Instruments There was considerable disagreement between the World Bank and the developer regarding the likelihood and the extent of certain impacts, especially, as noted above, in the

downstream areas. This led to a prolonged debate about what mitigation costs should be included as part of the project's base budget. NTPC was reluctant to treat some impacts as foreseeable and thus necessitating the design of mitigation and compensation measures that could be included in appraised plans. It proposed instead what the World Bank considered a modest contingency budget. As discussed, the World Bank favoured a proactive approach, with the design of adaptive management programmes and inclusion of corresponding budgets upfront. It also argued for a significantly higher contingency budget.

Based on the evidence provided by various studies and advice given by the Environmental and Social Panel of Experts, the International Advisory Group and the World Bank, the developer ultimately agreed to increase both the base and contingency environmental and social programme budgets. As a result, the concession agreement contains clear financial provisions to ensure that environmental and social obligations are met. The base budget considers two types of activities: (a) those limited by scope, such as resettlement and livelihood restoration, which must be completed regardless of cost, until such time as the objectives of the activity are achieved (or endorsed by the Environmental and Social Panel of Experts) and (b) those limited by cost, where higher degrees of uncertainty exist and the precise scope of work cannot be established upfront. The concession agreement also covers a range of contingencies through the use of letters of credit, performance bonds and various forms of insurance. A total of \$20 million was allocated to address unanticipated impacts and breach of concession agreement obligations; an additional \$200 million was foreseen for delay-related contingencies.

Important lessons emerged from this aspect of the project:

- Foreseeable environmental and social project impacts should be addressed through mitigation and compensation programmes, and their costs reflected fully in the project's base budget. Financial provisions should recognise that although some programmes can be fully designed upfront, others can only be detailed (and are subject to revision) during implementation.
- A project of the scale and complexity of NT2 can be expected to generate unanticipated environmental and social impacts for which appropriate contingency allocations need to be made.
- Care needs to be taken not to attribute to the project programmes that cannot legitimately be linked to project impacts and are more appropriately dealt with through other instruments and agents (e.g. national, regional or local governments).

Establishing Realistic and Responsive Institutional Arrangements At the start of the project, Lao PDR had limited technical capacity in the management of environmental and social programmes. For its part, NTPC was reluctant to accept major direct responsibilities for implementing these programmes, which it considered outside its core area of competence. The concession agreement was effectively used to reach common understandings, assigning detailed and differentiated legal responsibilities and obligations to both the government and the developers for

implementing environmental and social safeguard measures. Three new government units were established to help the government carry out its responsibilities and obligations—the Resettlement Management Unit (RMU), the Environmental Management Unit (EMU) and the WMPA. The government's RMU and EMU were mirrored by counterpart offices within NTPC. Operational NGOs and international consultants were also involved in various aspects of the environmental and social programmes, filling short-term capacity gaps and providing specialised services. At the community level, local institutions (such as village development committees, village forestry associations and fisher groups) are being strengthened to deal with plateau, watershed and downstream issues.

Because institutional strengthening takes time, it is too early to judge the success of the arrangements created for the NT2 project. Some lessons have already emerged, however:

- Where the government does not have the necessary capacity, the World Bank has a role to play in building capacity and providing advice. The appropriate locus for the environmental and social safeguard functions needs to be defined; capacity, roles and responsibilities of agencies realistically assessed and assigned; and strengthening programmes designed and implemented. While the project can constitute an important vehicle for capacity building, other instruments may need to be deployed, as was the case in Lao PDR.
- Flexibility to adapt institutional arrangements to evolving circumstances and experience is needed during implementation. Staffing should balance peak demand during implementation and post-implementation requirements. Funding should be provided without straining the availability of grant resources and the government's absorptive capacity.
- Early and clear agreement with developers on their environmental and social responsibilities is critical: private sector developers do not necessarily share the government's objectives, and they often consider implementation of environmental and social programmes outside their area of competence, despite evolving best practice. However, responsibility for addressing the project's impacts, achieving plan and programme objectives, ensuring compliance with the project's policies and guidelines and assuming the costs thereof must rest in full with the developer, regardless of arrangements it may choose to establish for delivery of mitigation and compensation programmes (for instance, through third parties).

Engaging in Participatory Consultation and Transparent Communications Throughout the Project Cycle These activities are essential to the effective management of environmental and social programmes in a complex project such as NT2. However, they pose special challenges in a context such as Lao PDR. At the start of the project in the 1990s, community representatives and NGOs complained that communications were one-way flows of information and were often misunderstood by local communities. Affected people, they claimed, were not given development alternatives but simply informed of their resettlement entitlements, with little opportunity to express concerns.

Beginning in 1997, training in consultation skills, the assumption of a more prominent role by the government and the public release of key studies improved consultation processes. Over time, given delays in project preparation, there were complaints of 'consultation overload' at the local level.

Consultation efforts undertaken in 2004–2005 addressed earlier criticisms, striving for more balanced, meaningful exchanges of information. Specialists were mobilised to improve the design of the process, develop appropriate materials to support discussions of issues and options, train facilitators and carry out consultations in all plateau villages and a representative number of watershed and downstream communities. Despite these efforts, criticism of and debate over the adequacy of consultation remain.

NT2 attracted an enormous amount of international attention, generating comments and questions from numerous sources and countries. The World Bank and its partners assisted the government and developers in establishing a transparent communication strategy, which included dedicated websites, periodic updates on frequently asked questions and national and international consultations the year before NT2 was presented to the World Bank's Board. During implementation, a similarly transparent approach has been pursued. National and international NGOs have access to the project site, and annual stakeholder workshops are held. NT2 ultimately represents a groundbreaking initiative with respect to consultation and communications in the Lao PDR.

The main lessons that emerge are as follows:

- Consultation and communication strategies need to be defined early and pursued
 throughout the project cycle. For safeguards, the first challenge that needs to be
 addressed is the scoping process—determining how to obtain stakeholder views
 on the project's area of influence, critical topics for study and appropriate roles
 for national and international civil society organisations and NGOs. Consultations
 with affected people should proceed during the design and implementation
 phases, to ensure that arrangements are adequate and responsive to local needs as
 they become increasingly detailed and operationalised.
- The roles of the government and the developer in consultations with affected peoples and external stakeholders with diffuse interests should be clearly defined. It is essential that the project be 'owned', and thus consultations be led, by project proponents and not their consultants.
- Consultation needs to be meaningful. Specialised input may be necessary to
 design methodologies sensitive to social, linguistic and ethnic differences.
 External monitoring can play an important role in assessing the credibility and
 effectiveness of the consultation process in a context of scepticism of the
 process.

Engaging in Internal and External Project Monitoring Hydropower projects are highly complex and involve considerable risk, especially when implemented in a political and economic context such as Lao PDR. Because baseline information and key assessments are often lacking and take time to establish, it is not possible to identify all programmes upfront. Because mitigation and compensation measures

are meant to address communities with differing degrees of coping and adaptation capacities, adaptive management becomes a strategic necessity. Flexibility to adapt to new information is essential

In this context, both internal and external monitoring and evaluation and the advice of respected independent outside experts can be invaluable. International stakeholders demand open, transparent, independent mechanisms to monitor project performance and report on the results of large-scale infrastructure projects that are perceived as high risk, but not all parties agree on what this entails. For NT2, several layers of external monitoring were put in place. These included (a) the Environmental and Social Panel of Experts, the Dam Safety Review Panel and the Government Engineer, to provide expert advice to the government overall; (b) independent monitoring agencies, to oversee and advise on the activities of the government units; and (c) the Lenders' Technical Advisor and the International Advisory Group, to advise financiers on implementation progress.

Four key lessons emerge from this aspect of the NT2 experience:

- Monitoring and evaluation commitments need to be long term. In the case of NT2, the Environmental and Social Panel of Experts will be active for the full concession period; the Lenders' Technical Advisor will be in place for 17 years.
- Entirely independent monitoring—that is, monitoring that does not rely on any of the project-implementing parties for funding—cannot be the basis for regular monitoring and evaluation.
- Although the layers of external monitoring put in place for NT2 proved useful in providing critical advice to developers and gaining acceptance for programmes by other partners, the developer had legitimate concerns that too many monitoring bodies, with overlapping responsibilities, have been established.
- Structuring monitoring roles by function (i.e. regular data collection, data verification, oversight and advisory) rather than by lines of reporting (e.g. to the developer, the government, the international financial institutions) may reduce duplication of efforts and help ensure that internal and external monitoring are complementary rather than parallel activities.

Chapter 11 Incorporating Social Impact Dimensions in Project Planning: Examples from Bangladesh, Nepal, Pakistan and Sri Lanka

Mohammad Zaman and Sunil Gonnetilleke

Abstract This chapter presents a comprehensive overview on how social impact dimensions have been integrated and addressed in four large infrastructure development projects. These are the Jamuna Multipurpose Bridge Project (Bangladesh), Kali Gandaki 'A' Hydropower Project (Nepal), the Ghazi–Barotha Hydropower Project (Pakistan) and the Southern Transport Development Project (Sri Lanka). The preparation of these projects involved the use of secondary data and analyses of social evaluation findings, coupled with the consultants' first-hand work experience. The case studies represent the 'first-generation' projects funded by multilaterals, following the adoption of safeguard policies. The results or outcomes as reported in this chapter appear 'mixed' but definitely positive to addressing social impact concerns in development projects. Thus, the cross-cultural and comparative studies of the 'test cases' provide some useful 'learning' experiences for future project design and sustainable resettlement.

Keywords Risk assessment methods and practices • Infrastructure development projects • Cross-cultural survey and analysis • Case studies – Bangladesh, Nepal, Pakistan and Sri Lanka • Sustainability of resettlement

This chapter presents a review of social data collection and its use at project preparation stage and the gaps and problems encountered during implementation and how these were remedied to address adverse social impacts in the case of four large infrastructure development projects in the South Asia region. All four projects were

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externally funded by bilateral and multilateral agencies like the Japan International Cooperation Agency (JICA), the Asian Development Bank (ADB) and the World Bank (WB) and apparently involved close attention to social dimension issues during project design stage. The projects include (a) the Jamuna Multipurpose Bridge Project in Bangladesh, (b) Kali Gandaki 'A' Hydropower Project in Nepal, (c) Ghazi-Barotha Hydropower Project in Pakistan and (d) Southern Transport Development Project in Sri Lanka.

The construction of these megaprojects was not viewed purely as engineering feats. The social dimensions of development were also critically considered at the planning stage. Individual project designs addressed social and resettlement needs arising out of land acquisition and population displacements caused by the projects, including provisions for livelihood restoration and social development. Furthermore, the projects were viewed as 'major' investments at that time and expected to bring in huge economic and social benefits within the country contexts. As such, at project appraisals, it was generally understood that the projects would enhance the general well-being of the people, particularly those affected and disadvantaged by the projects. The projects' documents such as the Resettlement Action Plans (RAPs) described project impacts and mitigation measures, assigned institutional responsibilities for implementation and mechanisms for local participation and project monitoring and evaluations. However, at project implementation stages, social data gaps were identified at varied levels in all four projects requiring additional data collection and studies for establishing, among others, principles and modalities for compensation and relocation, resulting in local disputes and significant delays in some instances in project implementation.

Social impact assessments and data collection represent 'an effort to increase knowledge before, during, and after development projects and to incorporate target population into the planning and active stages of the project' (Derman and Whiteford 1985:1). Thus it follows that the integration of social impact assessment is critical to project planning and successes. We argue that the rush in social data collection and preparations of action plans to meet project preparatory deadlines often ignores social 'sensitivity' required to understand local sociocultural context and organisations (beyond the scope of survey/census data for impact assessments), issues of social and caste stratification, social ranking, ethnicity, conflicts, division of labour and gender roles and inheritance, particularly as they relate to local laws, traditions and customs. Social impact assessment is not always done adequately due to limited time and inputs for social experts/specialists during project preparation. At the same time, our case studies reveal lack of sociological knowledge and understanding of sociocultural implications and consequences of infrastructure development programmes by project staff and executing agencies.

We draw our conclusions from available project documents and reviews, secondary data and analyses of social evaluation and/or ex post evaluation findings of the selected projects, coupled with our own first-hand work experience in the project case studies. The empirical evidence and analysis of data presented demonstrate that due attention to social variables as well as in-depth understanding of the local social structure promotes stakeholders' participation and enhances successes in

project implementation. These cross-cultural survey and analyses of development impact assessment provide some 'learning' experiences useful for future project design and implementation.

Some clarifications are in order for selecting the four case studies from four different countries in the region. The four projects were planned and implemented around the same timeline – between 1995 and 2005 – over a 10-year period under more or less historically similar legal and policy environments. The present authors either reviewed project documents or were involved as social/resettlement specialists in the projects at various stages in the project cycle. As a result, we have gained 'inside' knowledge and understanding of the social/resettlement processes and outcomes, which would not have been possible, otherwise. Finally, as specialists, we have also worked as a team in one of the study projects and also in other major projects in Bangladesh and Pakistan. This has allowed us to intimately share and discuss critical issues related to social data collection, planning and implementation of safeguard issues across South Asia. Finally, as a book chapter, we could only report very briefly on individual case studies when each case study without doubt deserves a book-length treatment. More in-depth discussion is definitely required; however, for now, it is left to future studies.

Social Data and Analysis During Project Development: The 'Standard' Menu

In this section, we briefly present what has come to be known as the 'standard' menu for social data collection and analysis during project development. This narrative hopefully will help the readers to a journey through the case studies presented later in the chapter. Needless to say that many scholars have written over the last 30 some years on the need to integrate community social-anthropological knowledge into project planning and development process. However, the most recent and resourceful from applied and development perspectives are Chambers (1985), Mathur (1990), Cernea (1991b) and Pottier (1993).

Cernea's (1991b) *Putting People First* and the various chapters in the book trace the evolution of this emerging approach and finally recognise its 'centrality' in project analysis. The social analysis in project design, now considered essential for project planning, requires services of trained applied social scientists, preferably sociologists and anthropologists, for developing any design for 'purposive social action' (Cernea 1991a:12). This can be done by involving concerned communities and beneficiaries in all project phases – from planning to implementation to monitoring and evaluation. Thus, the need to analyse social factors continues through the project cycle.

The project cycle begins with project identification, which requires initial social assessment (ISA), primarily dedicated to (i) understanding project scope and potential impacts, (ii) identification of major population groups and (iii) initial estimates of likely consequences of project intervention. Typically, such assess-

ments are conducted by field visits to project site, transect and group walk, rapid rural appraisal, direct observations and review of available secondary data. At this preliminary stage, detailed social data on project impacts are not necessary; however, the main risks must be identified to the extent that necessary and detailed data gathering through surveys/census and analysis are conducted during the much longer and more in-depth preparatory or project feasibility study period. The analvsis conducted during this stage to identify and incorporate social dimensions is called social analysis. Clearly, this is the most important stage for planned social action against any adverse impacts, including plan for involuntary resettlement, involving both the displaced and host populations. The social analysis, therefore, must consider a wide range of critical issues: (i) the groups adversely affected (including ethnic/indigenous people) by the project as well as project beneficiaries; (ii) land tenure, ownership, inheritance and customary ownership; (iii) local social organisations and institutions for project implementation; (iv) gender roles and issues; (v) consultation strategies for community engagements and role in project delivery; (vi) targeting groups and resettlement/service delivery mechanisms and (vii) a participatory framework for the monitoring and evaluation of project benefits.

These arrangements are further reviewed and agreed during project appraisal, including review of the readiness for implementation of social plans and institutional framework involving non-government organisations (NGOs) and community-based organisations (CBOs). In large, complex and sensitive projects, provisions are commonly found for 'expert' committees such as panel of experts (POE), task force or advisory committees to ensure better compliance of social and environmental safeguards and accountability in project implementation.

The scope and content of social analysis may differ significantly between projects – for instance, the social analysis of a rural road project will be different than highways/expressways or a bridge project and a hydropower project. Rural roads are meant to provide remote rural communities access to transportation and markets. Therefore, it is important to understand their needs and demands, particularly looking at local economies due to multiplier effects of rural road connectivity. Highways present varied resettlement and rehabilitation scenarios arising out of improvements and upgrading of state roads/highways involving widening and/or major works on new alignments/bypasses, encroachments within corridors, roads and RoW management and safety issues on highways (see Zaman 2002; Aggarwal and Zaman 2008). In cases of fixed links or bridges over major rivers as well as hydropower projects, the overall scope of social analysis becomes even more demanding, additionally taking into consideration upstream and downstream impacts on communities and livelihood sources, river training works, issues of access to riverbank by bank line communities, impacts on fishery and fishing communities and other indirect and associated impacts over a longer period of time. In sum, the identification of these social dimension issues, the collection of relevant social-anthropological and cultural data and the understanding of the dynamics in view of project interventions provide the basis for social engineering and social action planning for mitigation and development.

Case Studies: Planning Contexts and Outcomes

Four case studies are presented in this section. The case studies briefly describe the project planning phase, the processes and the implementation outcomes with a particular focus on survey data collection and analysis, resettlement operations, restoration of livelihoods and community life in post-resettlement period with due attention to project-specific contexts. The experiences derived from the case studies are reviewed and compared in the next section.

(1) Bangladesh: Jamuna Multipurpose Bridge Project

Project Profiles and Background The Jamuna Multipurpose Bridge Project¹ was a US\$800 million, multi-donor (WB, ADB and JICA) and high-profile infrastructure project in Bangladesh. The 4.8-km-long road-cum-rail bridge built over the Jamuna River was opened in June 1998. It thus established a strategic link between the eastern and western halves of Bangladesh with uninterrupted traffic by road and rail, facilitated transmission of electricity and natural gas and, finally, promoted interregional trade within and beyond the borders of the country.

A feasibility study for a fixed river crossing was undertaken as early as in 1969, followed by a JICA-funded rail-cum-road bridge study in 1972. In both cases, the internal rate of return (IRR) was found too low for further project processing. In 1982, the government of Bangladesh (GOB) commissioned a study by Rendel Palmer & Tritton (RPT) to determine the feasibility of transferring natural gas to the western part of the country crossing Jamuna River. RPT study found that an independent gas interconnector was not economically viable, and as a result, GOB asked for an engineering feasibility combining the concept of a multipurpose bridge. In 1984, GOB established the Jamuna Multipurpose Bridge Authority (JMBA) to undertake necessary steps for planning and design and for securing funds for construction of the project. A phase II feasibility study was undertaken by RPT in 1987 to establish the location and finalise design, river training and other preparatory works, including preparation of bid documents, bid evaluation and other necessary support and services to JMBA. In brief, the process was completed in mid-1990s with a site selected south of Sirajganj connecting Bhuapur on the east bank and Sirajganj on its west bank.²

Safeguard Planning Experience At project design stage, RPT prepared a Resettlement Action Plan (RAP), which was found unsatisfactory on two grounds:

¹ It was later renamed Bangabandhu Bridge Project after Bangabandhu Sheikh Mujibur Rahman, the father of the nation.

²This paragraph has been summarized from the *Report of the Task Forces on Bangladesh Development Strategies for the 1990s, Vol. 3 Developing the Infrastructure – The Jamuna Bridge* (Dhaka: University Press Limited, 1991).

(i) the impact assessment of the project was too narrowly conceived, and (ii) the RAP thus prepared also failed to meet WB OD4.30 *Involuntary Resettlement*³ requirements. As advised by WB, JMBA hired a local NGO – the Bangladesh Rural Advancement Committee (BRAC) – to conduct a fresh survey and census of the project-affected persons and communities. The primary objectives were to (i) ascertain the numbers of directly and indirectly affected persons, (ii) determine the loss of land by the affected households and the amount of residual (after acquisition) land, (iii) identify tenurial arrangements and occupational background of the affected families, (iv) assess the adequacy of land compensation policies and the impacts of cash compensation and (v) determine choices and/or options for resettlement of the displaced families.⁴

JMBA acquired close to 3,000 ha of land for the construction of the Jamuna Bridge and other associated facilities, including two large resettlement sites (Bhuapur/east resettlement site and Sirajganj/west resettlement site). The BRAC survey identified a total of 11,948 households (estimated 80,000 persons) directly and indirectly affected by the project. Of this, 6,042 households (51 %) were directly affected and lost their agricultural lands, homestead structures and/or other immoveable properties while the remaining 5,906 (49 %) were indirectly affected. The indirectly affected include tenant cultivators, farm workers, non-farm workers (those employed in local business/industries), squatters and uthulis ('free users' of land for homesteads, typical in the Jamuna floodplain). Farm workers, squatters and uthulis constitute the large majority (4,637 or 79 %) of the indirectly affected households. A revised Resettlement Action Plan (RRAP) was prepared, taking into account the WB policy requirements. The RRAP recognised the inadequacy of GOB Acquisition and Requisition of Immovable Property Ordinance II (1982) and made some project-specific changes in compensation policy and benefits to cover all categories of affected families. The RRAP thus established a matrix of 14 categories of losses eligible for compensation by the project. 8 The preparation of RRAP was a comprehensive exercise and set an example for the need to improve the legal framework of the country for project-induced displacement. The RRAP not only identified procedures for land acquisition, types of losses, compensation at replacement costs, income and livelihood restoration, training needs for vulnerable/female

³OD 4.30 was later replaced by 4.12 Involuntary Resettlement Policy.

⁴BRAC, Jamuna Multipurpose Bridge: Survey of Residual Land and Project-Affected Persons (Dhaka: BRAC 1993).

⁵This includes additional 700 ha acquired during implementation required for closing the west channel of the river and east and west bridge-end facilities.

⁶For detailed analysis of the BRAC survey data from displacement and resettlement perspectives, see Zaman (1996).

⁷World Bank took the lead on behalf of the co-financiers; others did not have any involuntary policy guidelines at that point in time.

⁸ JMBA, Revised Resettlement Action Plan (October 1993).

headed households, provision for resettlement site development with basic civic amenities and benefits for 'host' communities but also set out guidelines for appeals, grievances and consultation with the affected communities and involvement of NGOs for implementation of RRAP and its various programmes. In sum, the RRAP was to ensure that project-affected households are resettled and rehabilitated in a satisfactory manner, including adequate compensation and resettlement with particular attention to the needs of the poorest and vulnerable groups in the resettlement process. Community participation and involvement of host communities in planning and implementing resettlement was an important principle of the RRAP. The RRAP cost was budget for \$41 million (5.12 % of the total project costs), which was entirely funded by the government of Bangladesh. The RRAP also made provision for establishing a separate resettlement unit (RU) within JMBA led by a project director with full administrative power and a separate budget line for RRAP implementation and monitoring. It also contained provision for independent post-evaluation after project implementation. Additionally, the cofinanciers established an independent review panel (IRP) and a panel of experts (POE) for the monitoring and evaluation of social and resettlement safeguards in the project.

RRAP Implementation: An Overview The implementation of RRAP was not an easy task. This was the first major 'development-oriented' resettlement project in the country and a 'test' case for WB Involuntary Resettlement operational guidelines. As the project executing agency (EA), JMBA through the RU went into RRAP implementation full gear with the opening of a fully staffed RU field office at the project site in Bhuapur and hired the Rural Development Movement (RDM) – a local NGO from Sirajganj – to assist in the implementation of resettlement activities. RDM opened two field offices – one each in Bhuapur and Sirajganj. The implementing NGO recruited village resettlement workers (VRWs) from the project-affected villages to facilitate in the implementation of the plan and to maintain close contacts with the communities for conducting information campaign as well as assisting the affected families with relocation and resettlement. RDM also devised a management information system (MIS) to monitor the progress in compensation payment and delivery of other entitlements in accordance with 'losses' as per the entitlement person (EP) files and ID cards of individual households.

In terms of the compensation standards outlined in the RRAP, affected persons were eligible for full or partial losses of physical and non-physical assets including land, homes, trees, crops, perennials, buildings/structures, transition costs and temporary loss of employment. The deputy commissioners (DCs) of Tangail and Sirajganj District paid cash compensation under the law (CCL), which was lower than the market rate due to valuation methods outlined in the 1982 ordinance. JMBA provided additional cash grants, called maximum allowable replacement value (MARV), to support purchase of replacement homestead and farmlands, including costs for stamp and registration of the newly purchased property. The MARV was indexed three times over the project implementation period (1994–2000) to reflect the changing market value of the land in the project area.

During implementation, the number of affected households increased from 11.948 to 16.000 (105.000 persons)⁹ due to identification of new households as project affected and/or further updating and verification of existing households numbers as per BRAC surveys.¹⁰ Of the 16,000 households affected, only 3,600 required relocation and resettlement; the rest lost agricultural land only without physical displacement. The RRAP provided options to affected households for (i) self-location (affected families were allowed to relocate to existing villages of their own choices) and (ii) relocation at project-sponsored resettlement sites on the east and west banks. The strategy for self-relocation was based on the localised migration and resettlement typically practised by the floodplain inhabitants in response to recurrent floods and erosion disasters in the project area (for more, see Zaman 1986, 1991). Nearly two-thirds of the 3,600 households opted for self-relocation and moved to some 45 existing villages on both sides of the Jamuna River. The selfrelocated families also received compensation for lost assets, house construction grants, shifting allowance, compensation for loss of employment/workdays and MARV for replacement land. The choice of individual destination was reportedly influenced by availability of land in the village or within its vicinity, marital and other kinship relation and support from the host villagers. The host villages have been provided with civic and social infrastructure amenities – for example, schools, mosques/temple, access roads, tube wells for pure drinking water and sanitary latrines – to support the increased carrying capacity of the host communities. This has helped integration of resettlers socially and economically into host communities.

Over 1,600 families moved to the two resettlement sites. The Bhuapur or east resettlement site (ERS) was developed first by phases (e.g. ERS 1, 2 and 3) while Sirajganj or west resettlement site (WRS) took time as it was raised by dredge spoils from the river during river training works. The resettlement sites have been provided with all civic and social infrastructures such as access roads, piped water supply, drainage system, electricity, community centres, schools and hospital/clinics. Three types of house plots were made available in all sites. Individual families received house plots, based on the size of their previous homestead lands, at a nominal price. The poor and vulnerable families, including *uthulis*, received smaller plots free of costs. The plots allocated were registered in the name of both husband and wife with conditions that they won't be allowed to dispose it off within the first 10 years. Resettlers built their own houses with salvaged materials from their demolished houses and used new and better materials in the construction of their new homes. Thus, the newly built structures at the resettlement sites are better built

⁹ABD, Special Evaluation Study on the Policy Impact of Involuntary Resettlement, Manila: September 2000.

¹⁰Over a dozen additional studies were undertaken during the implementation phase – some of these include: survey to update data and/or to identify eligible EPs for income generation training and micro-credit, land market survey for maximum allowable replacement value (MARV), verification of land purchase by the EPs, and survey of erosion victims who opted for plots at resettlement sites after the 1995 flood.

and, in most cases, improved compared to pre-project standards. With new civic amenities at the resettlement sites, the overall quality of life has improved significantly. A separate NGO named DORP (Development Organisation for Rural Poor) was hired for income generation training and microcredit programmes.

The affected households or their representatives participated in the relocation and rehabilitation processes, including decisions related to the compensation rate (by providing information during the market survey for MARV and as members of GRC), and selection of resettlement sites and community infrastructures. During project implementation, efforts were made to scale down displacement by adopting various measures such as (i) the realignment of approach roads, (ii) adjustments in the east guide bund and (iii), as noted earlier, the use of dredge spoils for WRS development. To minimise adverse impacts of land acquisition, about 210 ha of acquired land in the east bank were returned to the original owners. Aside from RRAP, JMBA implemented two other major environmental and social programmes, namely, environmental management action plan (EMAP) and erosion- and floodaffected persons programme (EFAPP). The EFAPP was prepared in view of request for inspection¹¹ to the WB for violating its own policies and procedures with regard to safeguarding the project-affected people. The EFAPP made provisions for compensation for char (mid-channel island) villagers for induced and incremental flood and erosion losses due to construction of the bridge for a period of 3 years. One significant feature of the Jamuna Bridge Project is the involvements of many NGOs, including some of the leading ones, like the BRAC, Grameen Bank and Gonoshasthaya Kendra, in implementing programmes such as health and hygiene, fisheries mitigation and fish culture, wildlife protection, tree plantation/social afforestation, training and microcredit for income generation and payment of compensation for incremental flood and erosion losses in the char villages. The EA and the project cofinanciers have closely followed the implementation by biannual 'milestone' meetings.

Assessments and Outcomes The outcomes of the Jamuna experience have been evaluated by a host of agencies, including cofinanciers, independent reviewers, nongovernment organisations and the executing agency JMBA. At least over a dozen ex post assessments are available now (e.g. Bank 2000; World Bank 2000; Kranti Associates 2001; Ghosh et al. 2010). The overall resettlement implementation performance has been ranked high with appreciation for site development, civic amenities, host area facilities and host resettlers' integration. Those affected, regardless of titles, have been paid compensation and assisted in relocation and resettlement with special attention to women and other vulnerable groups such as landless, squatters and *uthulis*. In sum, the resettlers are generally satisfied with the resettlement management of the project. However, there are areas where weaknesses were identi-

¹¹The Requester, the Jamuna Char Integrated Development Project (JCDP), expressed concern over the construction of the bridge, and induced impacts up and downstream from the bridge site. JMBA prepared a long response along with EFAPP. The Inspection Panel reviewed the Request and the response and finally found that the Request was not based on valid grounds. See World Bank, *Request for Inspection – Bangladesh: Jamuna Bridge Project* (Credit 2569-BD), 1996.

fied – for example, (i) project impact assessments and initial resettlement planning were weak; (ii) income restoration was not adequately addressed as nearly one-third of those interviewed for various evaluations reported that their overall economic situation has not improved in post-resettlement period. Some studies reported that the civic amenities provided by the project in resettlement sites and host villages were not of good quality and the maintenance have remained very poor, raising the issues of sustainability of resettlement programmes.

Resettlement management was a 'separate project' within the Jamuna Bridge Project. As a result, resettlement received special treatment and 'priority' in project implementation stage. Therefore, despite being first of its kind, the Jamuna experience established many 'good practice' examples in resettlement management. These include (i) socioeconomic survey and project impact assessments by NGOs. (ii) information campaign and public consultation, (iii) inclusive entitlement policy covering all categories of affected people, (iv) special attention to women and vulnerable groups, (v) civic amenities in resettlement sites and host villages, (vi) strong and innovative resettlement implementation organisation involving NGOs and grassroots resettlement workers, (vii) multiple programmes for training and income restoration, (viii) effective supervision and monitoring using MIS and (ix) attention to post-construction mitigation impacts. Thus, the Jamuna resettlement programme has evolved as a 'model' in the country. Since the completion of the Jamuna Bridge Project, the resettlement model and practices have been used in practically all major projects, including the Padma Multipurpose Bridge Project. Further, it has also influenced policy development in the country.¹²

(2) Nepal: Kali Gandaki 'A' Hydropower Project

Project Profiles and History The Kali Gandaki Hydropower Project (144/mw), the largest in the country, is located in central Nepal, about 180 km west of the capital, Kathmandu. The primary objective of the project was to help meet the increasing demand for electricity in Nepal. An initial project study was completed in 1979 and a detailed feasibility in 1992. Further detailed engineering design and related studies were conducted under the Kali Gandaki 'A' Associates (KGA) and finalised in 1996. ADB approved¹³ the project in July 1996 and jointly financed the project with the Japanese OECF (Organisation for Economic Cooperation Fund, later merged with JICA). At appraisal, the project cost was estimated at \$453 million. The key project components included (i) civil works involving a 44-m-high concrete gravity diversion dam, tunnels, hydraulic steelwork, power stations and other

¹²The Jamuna "model" provided the basis for the development of the "National Policy on Involuntary Resettlement and Rehabilitation" 2010 (Draft prepared under ADB PPTA), Ministry of Land, GOB.

¹³ ADB's *Involuntary Resettlement Policy* (1995) was in place at the time of project preparation and approval; however, the Indigenous People's Policy of the Bank was approved in 1998.

associated facilities; (ii) two 132-kv transmission lines, totalling 106 km; and (iii) access road to the dam site. The project also provided construction and project management services, including two panels of experts (one for technical and safety and the other for environmental and social) and the Kali Gandaki Environmental Monitoring Unit (KGEMU). The Nepal Electricity Authority (NEA) was the project executing agency (EA). The project was completed in December 2003 with a two-and-a-half-year delay due to substantial administrative difficulties, including disputes and controversies related to social and environmental management issues involving resettlement, income losses and loss of livelihood sources by the affected persons and communities. This even continued after the completion of the project.

Social Assessments at Planning Phase Two critical issues at project preparatory stage were (i) identification of project impacts and a data base and (ii) consultation with affected persons and communities. The social assessments were carried out at different stages for different project components over a period of time. For instance, as per the acquisition, compensation and rehabilitation plan (ACRP), land for the construction of access road was acquired in 1992 and 1993, long before project approval by ADB. A total of 200 ha of land was acquired for the key facilities – i.e. access road, dam and powerhouse – located in and around nine villages. Measures to minimise impact were adopted resulting in only 617 families being affected (PAFs), including 125 relocated, against an estimated 1,033 PAFs reported in the summary environmental impact assessment (SEIA). A few seriously project-affected families (SPAFs) were to be identified for additional support to establish their livelihoods.

A second ACRP was prepared for transmission lines, requiring 53 ha of privately owned land affecting 284 families, of which 50 households were relocated due to construction of facilities and transmission lines. Further, it turned out during implementation that a group of Bote people, who are indigenous fishermen, were completely left out during the initial impact assessment of the project. An assessment was undertaken during project implementation in which 17 PAFs were identified (7 in Andhi Khola riverbank and 10 families on the contractor Impregilo workshop site). These marginalised Bote people have been recognised as a vulnerable group requiring special attention for housing and livelihood restoration.¹⁴

Public consultation in the project started as early as 1990s. The first widely attended public meeting was held at the project site in 1994. A consultation and disclosure meeting was held in Kathmandu in 1995, followed by two major consultation meetings at project site in March and June of 1996, just before the project approval. Project information centres (PICs) were established in Kathmandu (January 1996) and at the project site (February 1996). The PIC at Kathmandu was later moved to NEA premise in March 1996 to provide easier access to the public. Also, full-time NEA officers were posted at the PIC to attend to request for information. The EA also established village advisory groups (VAGs) in each affected vil-

¹⁴ See K.K. Upadhyaya, The Bote Minority Group: project Impacts and mitigation activities (undated), a study conducted as per POE-E&S recommendations.

lage to facilitate negotiations and claims for compensation and resettlement. The VAGs were essentially vehicle of communication between the affected families/communities and the project executing agency. Focused group discussions with women in the affected villages revealed a significant number of women-headed households, because many working-age males were employed outside the project area as construction workers and/or in the military service. NEA, with the assistance of affected communities, compiled an inventory of those interested to work in project construction for employment by the contractors with provisions for preferences in employment to benefit from the project and to restore incomes.

Resettlement Management and Implementation The social and resettlement management in Kali Gandaki Hydropower faced many difficulties during implementation. These include (i) lack of consultation with PAFs during project construction, (ii) inadequate support to PAFs and SPAFs requiring relocation and reconstruction of their houses and (iii) concern over livelihood sustainability, particularly by the SPAFs and vulnerable Bote community people. These concerns surfaced in various reports, including those prepared by the POE-Environment and Social (POE-E&S) over the project period. A BBC World Service Programme claimed that the project had a 'double impact' – loss of original source of livelihoods and lack of promised job in the project. 15 This claim, however, was not entirely true. The construction of access road in 1994 provided employment opportunities for about 200 labourers from the project area. Prior to building this road, the only way to travel was hiking from the project area. The opening of the access road paved the way for motorised travel to and from the local townships, promoting new businesses and development opportunities. During project construction period, a significant number of local labourers – about 4,500 persons¹⁶ – were employed by the project. The massive construction project initially brought in money and improved lifestyles, but there was very little employment opportunities in post-project period to sustain it. The project provided some facilities and support to the PAFs on a 'goodwill' basis such as renovation of the local temple, community water supply and a school for the Bote children. About 3,000 households near the project have received electricity as part of NEA rural electrification program.

In June 2003, WAFED (Water and Energy Users' Federation – Nepal), a national network of NGOs and activists, sent a long list of grievances to the ADB demanding a complete review of ADB policy compliance in the case of the Kali Gandaki Project (and Melamchi Water Supply Project) and to undertake necessary remedial measures. Most of the issues listed in the complaint to ADB were not new but rather long standing due to lack of attention by the project management and the EA

¹⁵BBC World Service's One Planet program ran a story on the plight of the affected persons, dated 25 June 2003.

¹⁶ Project Completion Report – Kali Gandaki "A" Hydropower Project, Annex 13. ADB, Manila April 2004.

and were clearly identified and discussed in the eighth and final POE-E&S report¹⁷ in January 2002. These issues include (i) ownership titles on house plots and houses to 7 Bote families at Andhimuhan location (Of the 17 families displaced/affected by the project, only 7 families were resettled. The affected Bote families were poorest of the poor); (ii) construction of 10 Bote houses at Impregilo workshop site (by April 2002) and purchase of land by NEA, titles on houses and land through NEA; (iii) preferential authorisation by NEA for reservoir transportation to Bote families for boat transportation for their sustained income sources; (iv) resettlement implications of Setibeni Bazar and Shaligram Holy Stone due to induced flooding by raising water level in post-construction period; and (v) completion of land acquisition and compensation payment for the segment of 13 towers at Pokhara transmission line.

In view of the WAFED complaints, ADB undertook a mission in September 2003 to discuss all outstanding project implementation issues with a particular attention to social and resettlement management. In the meantime, during the mission, WAFED and Kali Gandaki 'A' Concerned Group filed a lawsuit on 16 September 2003 in the Supreme Court of Nepal alleging corruption and financial irregularities such as overpayment by NEA to the contractor Impregilo by five billion Nepali rupees (NRs) without NEA Board approval compared to the signed original contract value of NRs seven billion. (This was later found as legitimate payments; otherwise Impregilo could have threatened suspension of construction activities.) Following the mission, ADB extended the loan closure at the request of NEA to December 2013 with conditions to address the outstanding social and resettlement issues. Thus, the Kali Gandaki Hydropower resettlement planning and implementation were characterised by lack of a complete database, inadequate relocation and resettlement support, poor implementation records and dispute and controversies between the affected communities and the NEA.

Summary and Overview Over the project period, the number of PAFs increased to 1,468 with still some unaccounted for from the transmission line land acquisition and relocation. It is evident that the initial social and risk assessments were poorly done without a baseline and impoverishment analysis associated with loss of productive assets and sources of livelihood. As a result, the resettlement, housing and livelihoods of the affected Bote people and some SPAFs remained unfinished even at project completion. The inadequate assessment as well as weak implementation resulted in prolonged disputes with the affected communities and civil society groups. The Kali Gandaki experience led to a serious discussion perhaps for the first time in Nepal to address the policy needs for involuntary resettlement in development projects. In 2005, a draft National Policy on Land Acquisition, Compensation and Resettlement in Development Projects was prepared under ADB technical assistance. The policy still awaits approval by the Nepalese government.

¹⁷ Environmental and Social Advisory Panel of Experts Report No. 8, January 2002. NEA, Kathmandu.

(3) Pakistan: Ghazi-Barotha Hydropower Project

Background and History The Ghazi-Barotha Hydropower Project (1,450/mw) is a major run-of-river power project designed to meet the acute power shortage in Pakistan in an environmentally sustainable and socially acceptable manner, with minimal environmental and resettlement impacts. The project was approved in 1996 and was financed by WB, ADB, JICA, German KfW, Islamic Development Bank (IDB) and European Investment Bank (EIB). However, the project implementation work was delayed by about 4 years due to problems in determining land prices and other resettlement benefits. Based on donors' agreement, WB funded and looked after the social/resettlement aspects of the project.

The key components of the project included (i) a barrage near Ghazi village 7 km downstream of Tarbela Dam located on the Indus River; (ii) a 52-km-long concrete-lined power channel (with a width of 58.4 m) designed to divert water from the barrage from Ghazi to Barotha; (iii) a power complex and associated accessories; (iv) 340 km of 500-kV power transmission lines; (v) consulting services for project implementation, supervision and management; (vi) technical POE; and (vii) environment and resettlement panel (ERP). The project cost at appraisal was US\$2.2 billion. The land areas covered by various project components fall under the jurisdiction of Punjab and North-West Frontier Province (NWFP, now renamed Khyber Pakhtunkhwa or KP). The construction of the project took 10 years and was completed in 2004. The Pakistan Water and Power Development Authority (WAPDA) was the project executing agency.

Project Design, Impact Assessments and Stakeholder Consultation The project design was prepared on the heels of massive displacement of people by the Mangla and Tarbela Dams in the 1960s and 1970s. In view of the challenges faced with the displaces from Tarbela, the initial assessments in the Ghazi-Barotha Project considered four to five alternative sites for the barrage, power complex and transmission lines to reduce land acquisition and project impacts. For instance, the most economical alignment for the power channel would have resulted in the physical displacement of 40,000 people from some 54 villages. However, despite technically more complex and financially less attractive as an option, the channel was finally aligned around existing villages to less densely populated areas to reduce physical dislocation and relocation requirements to approximately 1,000 people or 130 households. The modified channel added an additional \$50 million to the project costs. Design modifications also reduced the impacts on archaeological sites and graveyards. The design ultimately was much more socially and environmentally responsible. However, those economically affected by acquisition of some 4,300 ha of land mainly for the power channel and other facilities remained undetermined until land acquisition processes were complete.

At the preparatory stage, three major NGOs – for example, IUCN Pakistan, WWF Pakistan and Sungi, a local NGO – were involved and held extensive consul-

tations with local stakeholders. ¹⁸ The ERP consisting of local and international experts provided oversights during project preparation and continued to function later into the implementation. The ERP gained acceptance and legitimacy and their recommendations were considered to enhance the quality of project operations. Stakeholders' consultations and inputs concerning social, resettlement and environmental issues improved the quality of project documents dealing with the specific aspects. Further, project information centres (PICs) were established for information dissemination and grievance redresses. PIC staff (sociologists and gender specialists) had ongoing consultations with affected persons and communities. The interactions by the PIC staff enhanced their understanding of the project and at the same time allowed greater participation by the affected communities. A newsletter was published by PIC staff every 6 months to update project activities.

Land Acquisition and RAP Implementation The project had to deal with the 'unfinished' resettlement work from the Tarbela Dam Project as a requirement by the World Bank. Thus, a more careful approach was taken in the Ghazi-Barotha Project to avoid repeat of large-scale displacement similar to that of Tarbela. The project established a dedicated organisation named the Ghazi-Barotha Taraqiati Idara (GBTI) to facilitate the process of land acquisition. Despite being a project entity, GBTI enjoyed an independent status with its own board consisting of 13 members, six of whom were community representatives, including three women. The primary role of GBTI was to plan integrated economic and social development plan for the affected communities. It was also tasked with an advocacy role on land acquisition and compensation issues. A GBTI staff member was one of five members of the Land Valuation Committee (LVC) created under the project RAP for determining fair market value for lands acquired for the project. Other members included two representatives from the community, one local government official and one WAPDA official.

Once the land acquisition was in progress, land speculation turned out to be a real obstruction in project implementation as the total cost of land, which was expected to be around two billion rupees, skyrocketed to eight billion rupees. The valuation became highly politicised as the local government officials were trying to get as high a price as possible. GBTI took a strong position and went around all affected communities and asked the landowners for more reasonable rates in order for the project to proceed. Thus, ultimately GBTI became an arbiter in the acquisition process, and with confidence of the people behind GBTI, they were able to negotiate land price down to 4.5 billion rupees. This was still higher than the original estimates but low enough to eventually move the project into the construction phase. Over 4,000 families were affected economically by loss of agricultural land.

¹⁸Resettlement in the Pakistan Ghazi-Barotha Hydropower Project, undated.

¹⁹ Tarbela 4th Extension–Action Plan for Resolution of Pending Resettlement Cases of Tarbela and Ghazi-Barotha Projects (Revision B), Mott MacDonald, 2011.

²⁰ Resettlement in the Pakistan Ghazi-Barotha Hydropower Project, cited earlier.

Three resettlement 'villages' (near Ghazi town, Feroze Banda village and Barotha village) were constructed by WAPDA. The 'model' villages were provided with all basic amenities (i.e. water supply, sewerage system, roads, electric supply, primary schools for boys and girls, mosque, dispensary) by WAPDA so that the standard of living of the resettlers increases in post-resettlement period. Many affected farm families, however, preferred to remain closer to their 'original' villages despite improved amenities at the model villages. GBTI was responsible for resettlement implementation. In post-resettlement period, GBTI promoted area development plan (e.g. physical infrastructure and technology development, social sector services, gender mainstreaming, microfinance enterprise development, human resources development, disaster responses, etc.) with special focus on the project-affected villages in post-relocation period. Women groups have enthusiastically taken up opportunities being offered by GBTI, with around 1,645 of them involved in various social development programmes. Close to 64 % of the total credit disbursed has been taken up by women.²¹ GBTI activities are still ongoing beyond the project life with funding from external sources such as poverty reduction and social development programmes and local government and rural development agencies.

Summary Despite a long and turbulent history of land acquisition and resettlement, the Ghazi-Barotha Project ultimately managed resettlement fairly satisfactorily. GBTI played a strong role in consultation, social mobilisation and project resettlement implementation. Furthermore, the Ghazi-Barotha demonstrated that a highly consultative process at project planning and through implementation can yield benefits to the project and also those affected by the project. As a sustainable approach to resettlement, the project focused on restoring the productive capacity of the affected households and supported their livelihoods and the social and economic upliftment of the region. To date, GBTI has undertaken many new initiatives in microcredit financing, health and social development to assist thousands of residents in the project area. GBTI is still functioning almost a decade after the completion of the power project. This surely sets a 'model' for other projects.

(4) Sri Lanka: Southern Transport Development Project

Background and Project Objectives The Southern Transport Development Project (STDP) consists of (i) the construction of a 128-km new southern expressway linking Colombo, the capital city, with Galle, the capital of the southern province, and the port city of Matara and (ii) road safety improvements to assist the government of Sri Lanka (GOSL) in dealing with increasing road traffic accidents in the country. It was a \$300 million project, funded jointly by ADB and JBIC

²¹ Nida Khan, Ghazi-Barotha Taraqiati Idara – Resettling the Displaced, *The Daily News* (Pakistan), 18 June 2012.

(now JICA). While JICA provided funding for the 67-km northern section of the expressway, ADB financed the 61-km southern section. The Swedish International Development Agency (SIDA) provided finances for consulting services for the road safety component, and the Nordic Development Fund (NDF) financed consulting services and equipment supply under the road safety component and project management consulting services. As a major investment project, STDP was expected to spur economic development in the southern region. Additionally, the project included poverty reduction as its secondary objective. ADB loan for the project was approved in November 1999 with an expected completion date for 2005. The project construction work started in 2002 and the expressway was opened to the public in November 2011. The project experienced significant delays, due to land acquisition and compensation issues, including a request for review by the ADB Compliance Review Panel (CRP).²²

STDP Planning History, SIA and Community Consultation In the late 1980s, when STDP was first conceived, varying traces or alignments for the 128-km highway were studied by the Road Development Authority (RDA), the executing agency of the project. In 1993, RDA commissioned another study that included examining four possible alignments for an expressway project without a mandatory environmental impact assessment (EIA) study of the alignments. Consequently, there were objections from local NGOs and criticisms by community groups on non-compliance with environmental requirements and lack of consultation and community inputs in project preparation, which compelled RDA to engage the University of Moratuwa in 1994 to prepare an EIA for what came to be known as the 'original' trace (OT) for the planned expressway. In 1996, the consultant appointed by the ADB came up with an alternative design to the original RDA trace, which later came to be known as the ADB trace. However, at the EIA stage, both RDA and the ADB trace were combined and the new trace was known as the combined trace (CT). In October 1997, ADB consultants identified the CT as the preferred trace or alignment. The CT followed the OT for about 60 % of its length and avoided a number of sensitive wetlands and watersheds as well as densely populated townships and urban areas. The final trace (FT) was designed to accommodate the conditions of approval specified by the Central Environmental Authority, which included moving the CT towards the OT.

The SIA carried out by the University of Colombo in March 1999 also considered the CT and was based on information gathered from questionnaires and surveys on directly affected people along an 80-m-wide RoW measured from the centre line of the CT. The estimates of the numbers of project-affected persons were based on detailed assessments of population densities, based on a representative sample, along the alignment instead of the standard census of all affected households and inventory of losses (IOL). An updated SIA conducted in November 2000 noted that approximately 40 km of the ADB section alignment and 15 km of the JBIC section

²²ADB 2005 Final Report to the Board of Directors on CRP Request No. 2004/1 on the Southern Transport Development Project in Sri Lanka (ADB Loan No. 1711-SRI[SF]) June 2005.

alignment were changed. As a result, the 1999 survey findings were, therefore, not applicable for 41% of the final alignment.

The changes in the alignment, lack of appropriate consultation with the affected communities and exclusion of a large segment of the alignment from household inventory survey eventually led to dissatisfaction and opposition to the project. There was a long period of ad hoc as well as organised oppositions and protests against the proposed expressway during the project planning phase with the focus on the unapproved changes in the final route of the expressway. The land acquisition for project was also challenged in the Sri Lanka courts, culminating in a Supreme Court ruling (January 2004) that the affected people had a right to be heard and compensation should be paid to the affected people. The implementation of the project, too, was delayed due to strong opposition from both project-affected people and national and international environmental/advocacy groups, due to environmental and social safeguard violations at project planning stages.

Resettlement Planning and Management A draft RP was prepared based on the University of Colombo survey for project processing and approval. Prior to project implementation, the RP was revised and updated into the resettlement implementation plan (RIP).²³ The acquisition of land and other property from 10,707 lots for the construction of the expressway resulted in the physical displacement of close to 1,400 households and an estimated 7,000 persons. About 38 % were relocated at 32 project-sponsored resettlement sites of varying sizes with basic amenities; the remaining physically displaced households (62 %) opted for self-relocation. In addition, another 6,000 families were indirectly affected and needed some form of compensation and assistance due to project impacts.

Typically, the history of resettlement and compensation in Sri Lanka is one of disappointment and frustration with examples of claims remaining unsettled for decades. However, in STDP, the land compensation was considered both prompt and generous, which undoubtedly encouraged project-affected people to move and resettle during the project implementation. Indeed, the problem with compensation was greatly alleviated through the establishment of land acquisition and resettlement committees (LARCs) in 2003. The LARCs, albeit a belated solution for compensation issues, were intended to speed up the process and generally resulted in awards being higher than that required under standard legislation. If agreement could not be reached at the LARCs, affected people could appeal to a higher committee or separately to the grievance redress committees (GRCs). This resulted in much larger awards than might have ever been seen before. Consequently, despite vehement opposition to the project due to land compensation issues at the planning stage, many people offered their land during the implementation realising the very

²³The loan covenants required submission of a satisfactory Resettlement Implementation Plan (RIP) as a condition for loan effectiveness.

generous compensation rates. Thus, the project ushered in a new approach for involuntary resettlement in Sri Lanka.

The income and livelihood restoration record was not as good as compensation and resettlement. The RP had provisions for training programmes for skill development for people who lost employment opportunities such as share cropping in the rice field, wage work in small tea and rubber plantation and small businesses. The income restoration programme was launched only in November 2004, with discussions of needs with various groups of affected people. However, some of the recommended important actions, such as more extensive employment of APs by the contractor, launch of training courses and, most importantly, the completion of a full income restoration plan that would trigger the mobilisation of institutional resources to implement programmes in the communities, had not been carried out.

CRP Review and Assessments: A Summary STDP planning and implementation was riddled with controversies, which started with selection of alignment, flawed and incomplete SIA, lack of consultation and court cases and finally the request in June 2004 by the Joint Organisation of the Affected Communities on the Colombo Matara Highway for a review by the ADB Compliance Review Panel. The complaint raised a number of issues, many of which focused on a lack of communication between the client, funders and the project-affected persons. The complaint enabled the project-affected people to have the parallel process of both consultation and compliance review by CRP. These issues and problems brought to the notice of the CRP were the cause for the protests and opposing action of the affected communities, which were at times hostile. In addition to inadequate compensation, the CRP review listed weaknesses in other areas with regard to planning and implementation. These include (i) lack of gender analysis, (ii) inadequacy and delay in compensation payments at the early stage of project implementation, (iii) weak income and livelihood restoration plan, (iv) an increase in the number of displaced families during implementation and (v) lack of disclosure of RIP at the community level. In addition to CRP, STDP, especially its resettlement program, was subject to several evaluations by ADB and a host of other agencies, including independent reviewers.²⁴ The general conclusion of many of the evaluations is that most of the resettled community had constructed better houses sometimes running up to several-fold increases from the value of their acquired houses. The compensation rates eventually paid were well appreciated though the income restoration and resettlement site management was rated not up to acceptable levels as the civic amenities provided at the project in resettlement sites were not satisfactory. However, as a first major experience in Sri Lanka, STDP established some benchmark for future projects.

²⁴ Independent Review by Centre for Poverty Analysis (CEPA) under ADB TA 4748 SRI) Independent External Monitoring and Resettlement Activities of the Southern Transport Development Project.

A Review and Comparative Assessment of Four Projects

It may be noted that the four case studies used in this chapter belong to the 'first generation' of projects funded by multilaterals following the adoption of the safeguard policies by WB and ADB, requiring systematic approaches to impact assessments and data collection for project preparatory work. In many respects, the four case studies were also 'test cases' in their own right in respective countries covering the first 10 years of resettlement operations as we understand today. From this perspective, the results or outcomes appear mixed but definitely positive as a 'learning' experience. Such major undertaking on social assessment and resettlement aspects was nearly non-existent in the four countries prior to the projects under review. In all four countries, new and/or renewed attention to project-induced displacement is clearly evident from policy development and institution building. This surely represents progress in recognising the need to address social resettlement in development projects. Indeed, resettlement has become a commonly used word in the development discourses in the four countries. And, this is no small achievement. In this section, we briefly highlight on the comparative experience of the four projects focusing on five key aspects – (i) ISA and risk assessment, (ii) estimates of impacts at preparatory stage, (iii) land acquisition at planning and implementation, (iv) additional surveys and studies at implementation and (v) sustainability of resettlement as a development enterprise. The 'lessoned learned' will be discussed in the next section.

Identification of impacts and potential risks is an essential first step in preparing mitigation measures and resettlement plan. Although the selected projects conducted social surveys for a baseline, the quality of risk assessment varied significantly. The initial social impact assessment in the case of STDP was flawed and inadequate. In the case of Kali Gandaki Project in Nepal, which significantly affected farming households as well as fishing Bote communities, it had inadequate assessments at project preparation. Second, there was no assessment of vulnerability of the affected land owners/cultivators in Ghazi-Barotha either at planning or implementation. In STDP, there was no gender analysis of the project impacts. In general, the impact assessments were typically limited to identification of affected households for the purpose of compensation for lost assets and rarely for restoration of income and livelihoods. In other words, a thorough assessment of risks involving land acquisition, loss of income and livelihoods and resettlement was lacking in nearly all cases. Third, project impacts in terms of number of affected families or households identified during project preparation significantly changed at implementation. Table 11.1 provides data related to land acquisition and number of affected households in the four projects at planning and implementation stages.

In Jamuna Bridge Project, the number of affected households took a sharp rise from 11, 948 to 16,000 at implementation. In Ghazi-Barotha, the number of physically displaced families was only 130, but the project economically displaced over 4,000 agricultural households, which were not considered in the initial assessment. This was due to narrow definition of affected persons as being physically 'displaced'

	LA/ha at			No. of	No. of affected	
	project	LA/ha at	%	affected HHs	HHs at	%
Project	planning	implementation	change	at preparation	implementation	change
Jamuna	3,000	3,700	23	11,948	16,000	40
Multipurpose						
Bridge Project						
Kali Gandaki	200	253	26	617	683	11
'A' Hydropower						
Project						
Ghazi-Barotha	4,300	5,261	22	130	X	X
Hydropower						
Project						
Southern	10,271	10,707 plots	4	1,338	1,400	5
Transport	plots	_				
Development						
Project						

Table 11.1 Comparative data on LA and affected households at planning and implementation

and not those economically affected by loss of agricultural land to the project. The sharp rise in Jamuna Bridge Project was due to additional acquisition of nearly 700 ha of land and household level verification of BRAC survey during implementation. Fourth, this implies that land acquisition and resettlement impacts at implementation are almost always higher than estimates done during preparation. This is clearly demonstrated in case of all four projects – and over 20 % in Jamuna, Kali Gandaki and Ghazi-Barotha Projects. In Kali Gandaki, land acquisition and resettlement continued even after project completion. Thus, lack of and/or inaccurate impact data results in EA inability with regard to preparedness for resettlement, including shortfall of funds and other resources, to adequately address required solutions.

Many reasons can be cited for this higher or larger number of affected persons at implementation. The most important one is what is often called 'quick and dirty' survey for impact assessment at project preparation when project components and/ or right of ways are not well defined. The STDP is a case in point. As a result, project-affected people were not fully covered. The numbers can also increase due to fresh acquisition of land during implementation as was in the case of the Jamuna Bridge Project. The numbers can also increase in situations when inadequate policies are revised to cover new categories of affected persons. Finally, implementation delays associated with land acquisition and disputes may eventually lead to higher numbers of affected persons. The STDPs in Sri Lanka and Ghazi-Barotha in Pakistan are perfect examples. The higher number can be also often aided by 'new-comers' to the project sites to get benefits of the project. Finally, as evident from the case studies, sustainable resettlement and livelihoods are still major issues. The Ghazi-Barotha provides the lone example for a sustainable approach even beyond project period while other projects such as STDP and Jamuna and Kali Gandaki

Projects did not succeed adequately in restoring income for affected households. There is a need to refine and restate the focus of policy objectives in favour of improved livelihood and income in post-resettlement period.

Conclusions: Lessons Learned for Future Projects

The broader conclusion of this comparative study is that project impact assessments and approaches to social design for development are gaining recognitions in development projects. The project case studies demonstrate by and large more of a 'learning-by-doing' experience for the executing agencies. The projects were, as noted earlier, the 'first-generation' test cases in each country without any previous experience for 'social design' in development projects. In all cases, the approach initially was under-designed to deal with the challenges of displacement and loss of livelihoods during project implementation. This was primarily due to inadequate attention to social impacts and risk assessments at planning stage. Therefore, the first lesson out of the selected projects' experiences is that more attention should be paid for proper and more innovative and socially informed design for development projects. This would require conducting early, detailed surveys of who and what are affected and in what ways. In other words, identify the precise scope and extent of impacts and risks associated with housing, settlement, livelihood, food security, employment/income, health and hygiene as well as access to new opportunities to be created by the project. A good social/resettlement design should always tap into the development potential in the general project area and build upon the variety of opportunities such as employment, businesses and supplies and shops and small enterprises, taking into account the patterns of demand and supply of commodities in the project area. Second, despite good social design or plan, project impact assessment should be considered an ongoing task throughout the project implementation period, requiring updating and/or new surveys and assessments. In project context, social and resettlement issues are always very dynamic and therefore require adaptive approach to changing project demands at implementation. This is particularly critical in the context of project construction and/or post-construction impacts as demonstrated in the case of the Jamuna Bridge and Kali Gandaki Projects. In sum, impact assessment is a like a continuum over the project period. Third, large and complex projects are typically vulnerable to disputes and challenges, largely due to lack of attention to details such as community consultation in project development and social and resettlement management. All four projects in this comparative study had to face major disputes and controversies, including requests for review and inspection, causing significant delays in some instances in project implementation. Therefore, timely and appropriate consultation should be an integral part of the social design for project development. Fourth, in identifying adverse social impacts, attention must be paid to temporary, indirect or secondary impacts, based on detailed surveys and consultation with the affected people and communities; otherwise, these likely impacts will be missed in social and resettlement planning. Finally, further improvements in social impact planning and practices are required and must be incorporated in project planning upstream. Unless this is done, any project social design will suffer during implementation causing miseries to those who are affected by large infrastructure projects.

References

Aggarwal S, Zaman M (2008) Displacement and resettlement in road sector projects. In: Mathur HM (ed) India social development report 2008: development and displacement. Oxford University Press, New Delhi

Asian Development Bank (2000) Special evaluation study on the policy impact of involuntary resettlement. ADB, Manila

Cernea M (1991a) Knowledge from social science for development policies and projects. In: Cernea M (ed) Putting people first. World Bank, Washington, DC

Cernea M (ed) (1991b) Putting people first: sociological variables in rural development, 2nd edn. World Bank, Washington, DC

Chambers E (1985) Applied anthropology: a practical guide. Waveland Press, Prospect Heights Derman S, Whiteford S (eds) (1985) Social impact assessment and development planning in the Third World, Westview Press, Boulder

Ghosh SC et al (2010) Revisiting Jamuna Bridge resettlement areas: exploring livelihoods status of the affected people. BRAC University, Dhaka

Kranti Associates (2001) JMBA – draft final evaluation report. Dhaka, July 2001

Mathur HM (ed) (1990) The human dimension of development: perspectives from anthropology. Concept Publishing Company, New Delhi

Pottier J (ed) (1993) Practicing development: social science perspectives. Routledge, London

World Bank (2000) Jamuna bridge project: implementation completion report. World Bank, Washington, DC

Zaman MQ (1986) The role of social relations in the response to riverbank erosion hazards and population displacement in Bangladesh. In: Oliver-Smith A (ed) Natural disasters and cultural responses (Studies in Third World Societies, Publication No 36). College of William and Mary, Williamsburg

Zaman MQ (1991) Social structure and process in char land settlement in the Brahmaputra-Jamuna floodplain. Man 26(4):673–690

Zaman MQ (1996) Development and displacement in Bangladesh: towards a resettlement policy. Asian Survey XXXVI(7):691–703

Zaman M (2002) Integrating social issues in road projects: examples from South Asian experience – final report. ADB, Manila

Chapter 12 Rebuilding Livelihoods: The IncomeGenerating Strategy for the People Affected by a Transport Project in Sri Lanka

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Abstract The income restoration of the displaced people was a major objective of the Southern Transport Development Project (STDP) in Sri Lanka. This was the first project in Sri Lanka where social impact assessment was carried out. It was expected that SIA would lead to improved income restoration planning and better development outcomes, including better outcomes for its income restoration programme. SIA, however, turned out to be done poorly. Another SIA was then carried out, but this also followed the same flawed methodology as the earlier one. In the event, a project launched with a very laudable objective of rebuilding livelihoods of the STDP displaced people did not succeed as planned.

Keywords Southern transport development project • Sri Lanka • Inventory of losses • Income restoration programme • Squatters • Encroachers • Vulnerable groups

Infrastructure development projects trigger harmful impacts on persons who lose property, income sources and livelihoods. Such impacts are either full or partial and permanent or temporary. Regardless of the intensity of the impacts, project-affected persons (PAPs) undergo traumatic life experiences characterised by homelessness, food insecurity, social disarticulation and marginalisation, unless comprehensive mitigation measures are introduced early in the project cycle to avoid or at least to minimise them.

When a government acquires private property for a public purpose, the focus is on the value of the property, not on persons affected by acquisition. Project authorities pay compensation (property value) or provide alternative land to PAPs, leaving the restoration of income sources and livelihoods for them to handle. This approach to development interventions does not recognise the need for a pre-project social impact assessment to understand the PAPs' socioeconomic conditions, social networks and their perceptions.

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Social Impact Assessment

When international development agencies (IDAs) developed resettlement safeguard policies in the 1990s, social impact assessment (SIA) became a vital component of resettlement planning. The objective of resettlement planning was to avoid or at least minimise harmful socioeconomic impacts of development interventions. For this, it became necessary to identify future consequences of a current or proposed action on affected individuals, their economic organisation and social system. During the past 20 years, SIA has developed as a robust analytical tool of socioeconomic conditions of PAPs that focuses on a broad range of potential social and economic consequences of a proposed project. 'The field is showing increasing consensus on a number of earlier controversies, e.g., on the need for SIAs to cross the usual disciplinary boundaries and to develop original data where "available" data are not sufficient' (Freudenburg 1986:451).

Through an SIA, the project owner could identify individuals and groups who may be affected by the project. Based on the findings of SIA, the project owner could plan mitigation measures to address such impacts. It also helps identify differentially or disproportionately affected persons because of their disadvantaged or vulnerable status. If such individuals or groups are found in the project area, the project owner could implement special measures so that they are not disadvantaged in sharing development project benefits and opportunities. During project implementation, SIA helps the project owner to benchmark and assess how well PAPs are coping with project risks including impoverishment risks that have been triggered by the loss of income sources and livelihoods.

This chapter presents a case study of a mega-infrastructure project in Sri Lanka—the Southern Transport Development Project (STDP)—to demonstrate how an SIA could help identify potential harmful impacts of a project on PAPs and monitor how well the mitigation measures have performed. It also focuses on the link between SIA and income restoration of PAPs. The income restoration programme (IRP) of STDP was selected as the case study for this chapter because it was the first project in Sri Lanka where an SIA was conducted with follow-up studies to facilitate IRP. Moreover, IRP provides a longitudinal data covering a decade from 2002 to 2012.

The Southern Transport Development Project

The project constructed a controlled-access expressway from Kottawa town in the Western Province to Matara City in the Southern Province, covering a distance of 128-km. It affected more than 5,000 households. The Asian Development Bank (ADB), the Japan Bank of International Corporation (JBIC), the Nordic Development Fund (NDF), the Swedish International Development Agency (SNDF) and the Government of Sri Lanka (GOSL) financed the project.

At STDP, key impetus to conduct an SIA as a part of resettlement planning came from the National Involuntary Resettlement Policy of 2001. It required each devel-

opment project in Sri Lanka to conduct an SIA to assess socioeconomic conditions of its potential PAPs in order to identify potential resettlement impacts on them and what actions are to be taken to avoid or minimise them. Moreover, ADB assisted STDP in conducting the SIA and planning a resettlement programme, based on SIA to ensure that potential PAPs would not be impoverished, but benefited from the project. The project acquired 2,350 acres (951 ha) of land for the expressway affecting 5,700 households with 21,000 persons. The acquisition of land affected 1,315 residential houses and 151 commercial buildings.

Project Planning

Two SIAs (known as 'inventory of losses') were conducted. The first inventory of losses (IoL) was conducted in 1999. In 2000, the trace of the proposed expressway went through some design changes. As a result, in 2002, a supplementary IoL was conducted. Both IoLs recorded details of land plots to be acquired, land use patterns, land owners and users, businesses affected, household composition, income and education levels of PAPs, their income sources and livelihoods, annual household income and expenditure and housing conditions.

The data collected through IoLs were analysed and used in formulating the resettlement implementation plan (RIP). Collected data were fed into a management information system (MIS), a computer programme, instituted by the Roads Development Authority (RDA), the executive agency of the project (EA). Although the data collected through LoLs were generally satisfactory, there were some gaps and repetition in individual data sheets. It took several years to enter the data into MIS. Database has not been updated regularly, and it is not a user-friendly source of project information.

Resettlement officers (ROs) and resettlement assistants (RAs) of the project helped build a parallel vast data base to MIS on each affected person and household at the Land Acquisition and Rehabilitation Committees (LARCs), established at the divisional level on the direction of the Cabinet of Ministers. The LARC negotiated compensation and rehabilitation packages with PAPs regardless of their land tenure status. The PAP list included titled owners, squatters, encroachers, sharecroppers, wage workers and leaseholders. If there was a disagreement between LARC and a PAP, the latter could appeal against the LARC decision to the Super-LARC at the Ministry of Highways and Roads, chaired by the Secretary to the Ministry.

Resettlement Packages

Based on IOLs, the project formulated a comprehensive compensation and resettlement package for each PAP. The project paid cash compensation to each PAP who lost titled land and structures at their replacement cost. Cash compensation for structures on the acquired land was paid without any deduction for depreciation,

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and the owner was allowed to collect salvaged materials free of charge. In addition, each physically displaced household received a grant of SLR 50,000 to find a temporary accommodation until the resettlement site is ready, together with a shifting allowance of SLR 1,500. An ex gratia payment of 25 % of the total cash compensation was paid to a physically displaced household if it vacated the acquired premises and building before the stipulated date. A physically displaced household was given a plot of land at a resettlement site after deducting a nominal sum as land value from the cash compensation paid for the lost land. In addition, water, electricity and other facilities were also provided at resettlement sites to quicken the resettlement process. If a physically displaced household opted to self-relocate, it received SLR 100,000 as an ex gratia incentive payment in lieu of a land plot at a resettlement site.

The IoLs identified 244 affected households as landless, squatter households. A displaced squatter household received cash compensation for the lost structures and a 1/16 to 1/8 acre of land plot at a resettlement site. It also received transport assistance and help in salvaging items from the demolished structures. These households fell into the category called 'vulnerable' households and were entitled to a special assistance package including income restoration assistance. A relocation allowance of SLR 10,000 and livelihood grant of SLR 15,000 were also given to each physically displaced squatter household. A sharecropper or a wage labourer who lost her employment received cash compensation of SLR 15,000 (Perera 2014).

Income Restoration Programme

The IoLs identified 1,430 (25 %) households as 'poor' among 5,683 project-affected households (PAHs). The poverty threshold of a PAH was determined based on the 2002 official poverty line¹ (OPL) which was LKR 1,423 per person (Department of Census and Statistics 2008). SIAs found that in most households, at least two adults were gainfully employed contributing to household's common purse. On this basis, RIP categorised a household with less than SLR 3,000 household income a month as a poor household.

The RIP outlined the key activities of the IRP and limited its scope to the poor and vulnerable PAHs. The vulnerable and severely affected households received assistance to restore and improve their income sources and livelihoods. For their benefit, a customised income restoration programme was initiated. One household member got the opportunity to receive skills training under the income restoration programme (IRP). In addition, STDP conducted a special programme to inform them about project impacts, risks and resettlement options. The project advised them about saving schemes and cash management. It assessed current economic activities in project area and their potential for development for the benefit of PAPs. It facilitated small-scale income-generating schemes and assisted vulnerable and severely affected households to access poverty alleviation and credit schemes. They

¹Minimum amount of money one person needs to meet his/her basic needs.

were given priority access to project construction-related employment opportunities. Special agricultural extension facilities were provided to them to develop and cultivate their land.

The IRP was implemented in three phases. The first phase (2003–2005) was known as the 'Community Welfare Programme' administered by the Project Management Unit (PMU) of STDP. The second phase of IRP was led by an NGO called Sarvodaya Economic Enterprise Development Services Ltd (SEEDS) from 2005 to 2008. The third phase was run by the PMU of the STDP (2008–2011).

The Income Restoration Programme of STDP: Phase I

The IRP supported PAHs at resettled sites who constituted one-third of the physically displaced poor households. Until 2004, activities of IRP were limited to the distribution of plants and seeds among resettlers and training of 84 PAPs in computers, driving, dress making and beauty culture at vocational training centres. The project assisted several vulnerable and severely affected households to construct their houses at resettlement sites. SLR 06 million out of SLR 60 million of IRP budget was spent on the housing programme.

In Phase I, the implementation of IRP was poor and erratic. RDA failed to link IRP with land acquisition, a key requirement of RIP. The PMU did not consider income restoration of the poor as a priority project activity during the first 3 years of the project (2002–2005). This was mainly due to several project-specific difficulties. The main difficulty was the delays in land acquisition arising from landowners' resistance to the project. Second, ROs and RAs focused their attention more on compensation and LARC issues than on IRP. They believed a comprehensive compensation package was essential for a PAH to sustain its living standards until a robust IRP was implemented. Third, project authorities did not have the institutional capacity to prepare a comprehensive IRP or to implement an IRP. The RIP, particularly its IRP component, was a novel experiment for the project staff. Fourth, it was difficult to obtain sufficient funds from the Treasury to pay compensation and to start a robust IRP.

The Income Restoration Programme: Phase II

In 2005, PMU outsourced IRP implementation to SEEDS. SEEDS conducted a socioeconomic survey at resettlement sites and among those self-relocated and identified 1,557 households as poor. It focused on five areas to support the poor PAHs: development of a 'Housing Society' at each resettlement site as a mutually supportive action group; development of micro-finance programmes; incomegenerating programmes, self-employment opportunities; home gardening; and food processing training.

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The development of the IRP and its implementation delayed, and as a result, 507 (33 %) PAPs dropped out from the programme shrinking the number of participating PAPs from 1557 to 1050. SEEDS launched a few training programmes such as sewing, computer operation, food production and compost making to resuscitate IRP. But PAPs, especially the youth, found that SEEDS was not helpful in improving their income sources and livelihoods. They noted that regional economic development could help them more than SEEDS could to find employment.

The IRP of SEEDS did not focus on PAP needs. The main source of income of the majority of poor households was agriculture. The IRP did not take into consideration the skills that poor households already possessed or wanted to improve. It lacked a clear vision and how to link different phases of the resettlement process with income restoration at the household level. Instead, it selected programmes without checking their relevance to livelihoods of PAPs. If SEEDS provided training on cinnamon peeling, tea plucking and rubber tapping, it could have become more relevant and useful to PAPs in finding employment.

SEEDS encountered difficulties in finding self-relocated households and entering PAPs' socioeconomic data into MIS. It did not receive support and encouragement from the project authorities in planning and implementing the IRP. Moreover, SEEDS did not have working definitions of 'poor household' and 'vulnerable household', which, in turn, resulted in the failure of identifying such households who deserved special assistance of IRP. SEEDS lacked experience in managing a large-scale income restoration programme. In early 2008, the project terminated the IRP contract of SEEDS.

The Income Restoration Programme: Phase III

The PMU reinterviewed 940 poor PAHs registered in MIS. An IRP specialist analysed the data to recommend on how to strengthen the IRP. The specialist used monthly income of LKR 3,000 per household, adopted in RIP (2002), in determining whether or not the project had restored household income level to the preproject income level. The expert concluded that except for only 22 households, all other poor PAHs had at least managed to restore their income levels to their preproject level; therefore, only those 22 households needed IRP assistance (PMU – STDP 2008).

The above conclusion is misleading, as it does not reflect the revisions in the official poverty line (OPL) between 2002 and 2008. In 2008, the OPL was LKR 2,845; in 2002, it was LKR 1,423. The RIP in 2002 considered a household with a monthly income below LKR 3,000 as 'poor' on the basis that at least two adults contributed to household income (LKR 1,423×2=LKR 2,846, rounding off to LKR 3,000). In 2008, the poverty threshold of a household therefore should be LKR

²World Bank's IR Policy is thorough as it emphasises income 'in real terms' which is missing in ADB's IR policy of 1995.

2,845×2=5,690 (rounding off to LKR 6,000). Accordingly, 20 % of PAPs are still poor (Table 12.2). The expert also failed to check how many PAHs had monthly household income over LKR 6,000 to ascertain whether the project contributed to improve household income levels. In fact, improvement of income levels of vulnerable and severely affected households is a key safeguard principle enshrined in RIP.

Measuring Project Impacts

ADB, in 2010, conducted a sample survey of 100 poor households identified in IoLs as poor to examine how STDP had impacted on their income sources and livelihoods.³ The survey identified skilled and unskilled nonagricultural labour and agricultural labour as the main sources of employment. It also found that 15 % of heads of households were unemployed (Table 12.1). The category of 'other' in the table includes old household heads (11), chronically ill household heads (2) and underemployed household heads (6). If these two categories – 'unemployed' and 'other' – were taken together, they constituted one-third (34 %) of poor households. Some of them were indeed vulnerable households who needed not only income restoration but also income improvement. This significantly contradicts the 2008 household survey findings discussed above.

However, as Table 12.2 shows after 8 years of physical displacement and resettlement, 87 % of households displayed a significant improvement in household incomes compared with their pre-project income levels. However, if 2010 poverty threshold of LKR 7,000 per household is applied, 22 % of households could still be considered as 'poor'. Restoration of household income of 78 % poor households in 8 years is a remarkable project achievement as resettlement literature shows that the majority of resettlers fail to restore their income and livelihoods until the second generation (Scudder2005).

Three factors have contributed to improve household incomes: investment of cash compensation in small-scale enterprises; regional economic development triggered by the expressway and its linkages with remote areas; and the entry of young PAPs into labour market with better education and skill levels. Because of better educational qualifications, desire for mobility and computer literacy, they found employment and earn better incomes than their parents who remained as small farmers, sharecroppers and small businessmen. As Table 12.3 shows, monthly income level of 70 % of PAHs was above LKR 10,000, and 24 % of households earned more than LKR 25,000 a month each.

The household income levels broadly matched the household expenditure patterns. Nineteen percent of households spent less than LKR 5,000 a month on average. Fifty percent spent more than LKR 10,000 a month on average. This

³Dr Karunathileke coordinated the collection and analysis of the data.

⁴Official Poverty Line in September 2010 was SLR 3,141. Applying the RIP formula of two adults per household employed, the poverty threshold is about SLR 7,000.

Table 12.1 Primary occupation of head of household (N=100)

Occupation	No. of households
Agricultural labourer	11
Nonagricultural labourer (skilled)	13
Nonagricultural labourer (unskilled)	15
Weaver	1
Businessman	4
Road vendor	1
Government servant/executive	1
Government servant/nonexecutive	3
Private sector/nonexecutive	4
Housewife	7
Pensioner	6
Unemployed	15
Other	19
Total	100

Source: ADB sample survey 2010

Table 12.2 Household income patterns in 2010 (N=100)

Household income patterns	No. of households
Below 1,000	5
1,001–1,500	0
1,501–3,000	8
3,001–5,000	5
5,001-7,000	4
7,001–10,000	8
10,001–15,000	23
15,001–25,000	23
25,001–40,000	17
Over 40,000	7
Total	100

Source: ADB sample survey 2010

Table 12.3 Household expenditure patterns in 2010 (N=100)

	2010
Expenditure category (LKR)	No. of households
Below 1,000	4
1,001–1,500	2
1,501–3,000	6
3,001–5,000	7
5,001–7,000	11
7,001–10,000	20
Over 10,000	50
Total	100

Source: ADB sample survey 2010

	2002a	2010
	No. of	No. of
Type of structure	households	households
Thatched simple hut	11	5
Mud/brick/tiled roof	28	5
Cement/brick or cement block/tiled roof or asbestos roof	54	71
Cement/brick or cement block/GI sheet roof	4	9
Cement/brick or cement block/concrete roof	3	5
Tiled/brick or cement block/tiled roof or asbestos roof	_	4
Other	_	1
Total	100	100

Table 12.4 Housing condition in 2002 and 2010 (N=100)

Source: ADB sample survey 2010

indicates that while some poor households remained poor, the majority become nonpoor and richer. The latter's conspicuous consumption patterns is an indicator of their wealth.

Prior to displacement, about 40 % of poor households lived in poorly built small houses (Table 12.4). Sixty five percent of poor households spent cash compensation first on constructing a new, roomy house with electricity and water connection. Seventeen percent spent cash compensation to buy homesteads to build better houses. Type of roofing is a good indicator of improvement of housing conditions. In 2002, 40 % of households lived in thatched and mud houses: in 2010, only 10 % of them lived in such houses.

The number of households with electricity doubled between 2002 and 2010. About 80 % of households owned electrical goods and vehicles in 2010. Ninety eight percent of households had easy access to bazaars and public facilities.

Sine Quo Non of Mitigating Adverse Project Impacts

A comprehensive SIA is needed to ascertain potential social impacts of the project and to build a comprehensive social database. If the project is likely to generate resettlement impacts, a resettlement implementation plan with a robust income restoration programme, based on the SIA database (together with an adequate budget and a robust institutional setup), is essential to mitigate such impacts on PAPs and PAHs. Most of these key ingredients, especially an adequate budget and a strong institutional setup, were largely absent in STDP. As a result, IRP of STDP was doomed to be a failure from its beginning.

^aBased on recall

(a) Socioeconomic Database

STDP built up an inventory of losses, focusing on 'land plots' acquired. Surveying and valuation of such land plots were done with great precision, but without identifying unaffected land, private savings, employment skills and social support networks among PAPs (Gamaathige 2014). Plot-level information failed to provide a sound database for income restoration planning. Unless database is complete, it is difficult to resolve land disputes, determine resettlement packages and update resettlement implementation plans and IRPs to reflect the changing ground realities. Moreover, it is necessary to coordinate the collection of such data by various agencies using different methodologies. Ad hoc methodologies of data collection and contradictory databases could confuse project managers and evaluators. The difficulty in ascertaining the actual number of 'poor' households in STDP is a good example. Careful formulation of a comprehensive scope of SIA is an essential part of project planning. Whenever a database generated by an SIA is found inadequate, it is necessary to conduct a supplementary SIA. Although SIA conducted a supplementary SIA, it followed the same flawed methodology and definitions. The MIS of STDP remains incomplete and unfriendly towards its users. Errors in data entry and data categorisation and difficulties in selecting data sets and their retrieval still hamper its usefulness.

(b) Measurement of Poverty

RIP used haphazard methods to identify and categorise poor households affected by STDP. It failed to develop a consolidated poverty threshold based on the 'official poverty line' (OPL). Although OPL is revised several times a year, the project continued to apply the 2002 OPL to evaluate income restoration efforts among PAHs. In fact, OPL had more than doubled between 2002 and 2011, and this was not considered in surveys during project implementation. The absurd conclusion that more than 98 % of PAHs managed to cross the poverty threshold when 20 % of PAHs remained as poor is an outcome of this weakness.

(c) Definition of Key Concepts

Key concepts such as 'poor', 'severely affected' and 'vulnerable' households are to be defined scientifically by paying attention to multi-facetedness of such social phenomena. Depending on one variable such as visible income is risky. 'Vulnerable households' are a subset of 'poor household' set. Neither RIP nor IRP did make this distinction. As a result, the key resettlement principle of improving in addition to restoring the incomes of the poor and vulnerable households was not considered as necessary in IRP.

(d) Pragmatic Resettlement Plan

The RIP of STDP is in two volumes with lots of data and information and summaries of resettlement policies, land laws and regulations. But it suffered from the dearth of key data on socioeconomic conditions of PAPs and PAHs because of the incomplete SIAs. As discussed earlier, this created problems in identifying the poor and vulnerable households for IRP.

Although STDP was planned to build two-lane expressway, land was acquired for six-lane expressway. The rationale for this was not discussed in the RIP.⁵ Limited consultations and ad hoc sharing of project information with PAPs thwarted getting their support for the project, in general, and for RIP, in particular. A Sinhala translation of RIP was not available until 2007 – 5 years after the inception of the project. Poor disclosure of plans and inadequate consultations on RIP triggered agitation among PAPs which evolved into protracted court cases and into an investigation by the Accountability Mechanism of ADB on safeguard policy application to the project. These processes delayed project implementation and escalated project costs. The time gap between acquisition of land and vesting of such land in RDA sometimes delayed over several years, although acquired under 'urgency laws'. These delays cost a large sum of money to the government as interest accrued for delayed compensation.

Although RIP presented a comprehensive compensation and rehabilitation package that met international resettlement best practices, resettlement planners incorporated the 'urgency clause' (Section 38 (A) of Land Acquisition Act of 1950 into RIP. It curtailed meaningful discussions and consultations with PAPs and damaged project reputation. PAPs felt that they were cheated. A robust RIP should be flexible and formulated in consultations with PAPs using a comprehensive database collected through a comprehensive SIA.

(e) Institutional Support

A resettlement programme needs qualified, experienced professionals to plan resettlement programmes and manage them. This is especially important when thousands of persons are physically displaced as in case of STDP. The trauma, hopelessness, vulnerability and impoverishment associated with displacement will not go away unless carefully planned curative and mitigation programmes are implemented and maintained over several years. A robust institutional setup is a necessary condition of any resettlement programme.

The absence of experienced resettlement staff to implement RIP was a major weakness of STDP. Most project staff thought that the payment of cash compensation for the acquired property was the end of the resettlement process. Fortunately,

⁵ In 2006, an addendum to RIP was formulated to add two more lanes to the expressway.

ADB trained several RO and RAs to educate PAPs about the project. They also helped PAPs to negotiate compensation packages, especially resettlement assistance (LARC) packages. They carried the institutional memory of land acquisition process, compensation payment, LARC negotiations, resettlement process and income restoration and improvement. Abrupt termination of their services left the project in an institutional memory vacuum. The project owners should have retained them throughout the project implementation phase enabling the qualitative and quantitative assessment of the recovery of households from poverty and vulnerability. Their accumulated experience in resettlement implementation could have been an asset for IRP and also for future development projects.

The project management initially focused exclusively on land acquisition and compensation issues, leaving income restoration and improvement to be addressed later. Cases filed at the Court of Appeal and the Supreme Court regarding land acquisition and environmental issues and the lodging of several complaints with the ADB's Accountability Mechanism about the violation of ADB's policy safeguards distracted and delayed the project implementation process. Project implementing officials, resettlement officers and resettlement assistants spent a significant portion of their time on collecting additional data, writing reports and answering queries raised by court cases and the Accountability Mechanism. These challenges and accusations generated a sense of overwhelming threat to the resettlement programme, especially to land acquisition and compensation activities. Physical construction activities of the project came to a standstill escalating project construction costs as well as land compensation costs. In this context, income restoration and improvement received minor importance in project administration.

(f) Counselling for PAPs

Many households did not participate in IRP activities soon after their displacement because of the psychological trauma they underwent as a result of physical displacement. Their nostalgia for their lost assets, lands, social networks and income sources prevented them from rebuilding communities at new resettlement sites or merging with host communities in the vicinity. Moreover, because of their uprooted status in the community, they did not want to take risks or to search employment outside the project areas.

Those PAPs remained in their original villages too had day-to-day issues of noise and dust pollution and the exposure to outsiders who moved into the area as construction workers, heavy vehicle operators, contractors and suppliers. At the same time, PAPs' heavy dependency on project authorities has created a dependency syndrome, which had been detrimental to the development of their entrepreneurship and social integration with their host communities.

References

- Department of Census and Statistics (2008) Household income and expenditure survey: 2006/07. Government Printer, Colombo
- Freudenburg WR (1986) Social impact assessment. Annu Rev Sociol 12:451-478
- Gamaathige A (2014) Income restoration and livelihood development: impoverishment risk or a development opportunity. In: Perera J (ed) Lose to gain: is involuntary resettlement a development opportunity? Asian Development Bank, Manila
- Government of Sri Lanka (2001) National involuntary resettlement policy. Ministry of Lands and Land Development, Colombo
- Perera, J (2014) Displacement-induced impoverishment: the role of a sustainable income restoration and improvement strategy in livelihood rehabilitation, *Soc Change*, 44 (3):333-354
- PMU-STDP (2008) Inception report: income/livelihood restoration programme, Project Management Unit, Southern Transport Development Project, Colombo
- Scudder T (2005) The future of large dams: dealing with social, environmental, institutional and political costs. Earthscan, London

Part IV Mitigating Adverse Social Impacts

Chapter 13 Resettlement Planning: Reversing Displacement Impacts of Development Projects

Hari Mohan Mathur

Abstract People, when displaced, often lose almost everything, from livelihoods to kinship ties, even their identity. Resettlement policies now require that a resettlement action plan (RAP) be prepared to rebuild their shattered lives. This chapter describes the basic steps involved in preparing a resettlement action plan, which is based on an assessment of a project's social impacts. The basic measures spelt out in the resettlement plan to address negative project impacts include relocation, compensation, measures to at least restore living standards, an adequately equipped implementation agency, provision of budget enough for implementing all planned activities, a responsive and easily accessible grievance redress mechanism, and a monitoring and evaluation system essential to tracking the progress of resettlement plan implementation, especially to seeing whether or not it is successful in rebuilding livelihoods of those displaced by development projects – a most desirable but often the most elusive resettlement objective.

Keywords Components of a Resettlement Action Plan • Participatory approaches • Resettlement policies • Entitlement matrix • Resettlement assistance • On-site relocation • Monitoring and evaluation

Until recently, systematic resettlement planning was largely unknown. Development agencies addressed resettlement issues as they arose in an ad hoc manner, through promulgation of instructions that were specific to the project causing displacement. In Rajasthan, for example, resettlement norms were issued separately for each dam project during 1960s and 1970s (Mathur 1997). Gradually, sector-specific policies applicable to all projects within a particular sector began replacing the project-specific instructions. A good example is the Orissa Resettlement and Rehabilitation

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of Project-Affected Persons Policy 1994, applicable to all water resource projects in Orissa (GoO 1994). There was no uniformity either in project-specific instructions or sector-specific policies, which varied from project to project and sector to sector. In the circumstances, governments often treated the affected people differently in the same state, unintentionally pursuing discriminatory practices, which were completely irrational.

Resettlement planning, in fact, is fairly new. It has significantly improved, especially since 1980. The World Bank around that time took a major step to make the planning and financing of resettlement an integral part of the preparation of the main project that causes the resettlement (Cernea 1988:21). 'Today, the major costs that development projects impose on individuals and communities through expropriation of land and other assets are far more likely to be identified, and plans are more likely to be formulated to avoid or mitigate these costs' (World Bank 2004:xxv).

When population displacement is on a large scale, involuntary resettlement policies of the World Bank, International Finance Corporation (IFC), Asian Development Bank (ADB), Organisation for Economic Cooperation and Development (OECD) and other international financial organisations require the preparation of a Resettlement Action Plan (RAP). This is also now a requirement under the resettlement policies of several governments around the world. In India, this is now legally mandated (GoI 2013).

The Objective and Process of Resettlement Planning

The main objective of a resettlement plan is to ensure that those who lose land, livelihood and other resources are assisted in improving or at least regaining their former level of living at no cost to themselves. In fact, resettlement 'should result in measurable improvements in the economic conditions and social well being of affected people and communities' (IFC 2002:11). The mechanisms to achieve this policy goal include:

- Compensation for lost assets and loss of livelihood and income
- Assistance for relocation, including provision of relocation sites with appropriate facilities and services
- Assistance for resettlement that generally improves or at least restores the social and economic base of those relocated

Resettlement planning must begin at the earliest stages of project preparation. The plan is based on the findings of a social impact assessment (SIA), which mainly involves census data, socioeconomic survey data, study visits to the field, and discussions with the affected people and other stakeholders, including the concerned officials.

Preparing a resettlement plan requires data that must be dependable and accurate. Resettlement plans can only be as good as the information on which they are

based (World Bank 1994:5, 3). As experience has shown, 'Poor preparation of resettlement plans is the single most important reason for failure of resettlement components in development projects. Poor preparation leads to delays, increased costs, foregone benefits, which negatively impact human communities affected and subvert the development objectives of civil works projects. In particularly difficult instances, poor resettlement preparation leads to unwelcome political backlash, unintentional environmental degradation, and the unanticipated creation of "development refugees" (Partridge 1993:351).

Resettlement plans rely on both secondary and primary data. The main sources of secondary data include government census, government land records, research papers produced in universities, NGO documents, etc. The existing data from secondary sources cannot however be a substitute for project-specific surveys. In fact, project planners should collect up-to-date relevant information directly from their own surveys of various kinds including census, land acquisition, socioeconomic survey and also consultations with the affected people.

The time required to prepare a Resettlement Action Plan (RAP) depends on the size of the resettlement problem. A project involving a small number of people may require about 4–6 weeks of consultation input. For the preparation of a large, complex project, the time requirement could be as long as 2 years. The content and level of detail of resettlement plan vary with circumstances, especially the magnitude of resettlement.

Components of a Resettlement Action Plan

A Resettlement Action Plan is a document specifying the procedures it will follow and the actions it will take to properly resettle and compensate affected people and communities. It is the commitment to the affected people that it will meet its obligations arising from involuntary resettlement (IFC 2002).

The resettlement plan (a) assesses the full range of adverse project impacts, including the loss of land and immovable property and assets, (b) enunciates principles and guidelines to mitigate the losses, (c) categorises the potentially affected persons by loss and to define for each category the specific entitlements to compensation and assistance, (d) outlines the measures to facilitate relocation and ensure income restoration and (e) specifies the responsibilities for managing resettlement and monitoring its progress.

The resettlement plan is divided into several distinct components. It begins with an executive summary, which describes the key aspects of the resettlement plan and then describes other components sequentially. The following is the generally recommended outline for a Resettlement Action Plan (Box 13.1):

Box 13.1: Outline of a Resettlement Action Plan

- Introduction to the Project
- · Land Acquisition and Resettlement Impacts
- Census and Socioeconomic Profile of the Affected People
- Information Dissemination, Consultation, Participatory Approaches
- Disclosure Requirements
- Grievance Redress Mechanism
- · Policy and Legal Framework
- Entitlements
- Relocation
- Income Restoration
- Resettlement Budget and Financing Plan
- Implementation Schedule
- Institutional Framework for Resettlement
- Monitoring and Evaluation
- Annexes

1 Introduction to the Project

Begin with a brief description of the project. There is no need to provide too many technical details. The plan must contain description of project components that are likely to cause displacement and resettlement. Describe the broad features of the project, such as its aims and its impacts, positive as well as negative.

2 Minimising Displacement/Resettlement

Describe efforts made to avoid or minimise displacement. Much of the physical displacement can be avoided or reduced by careful planning. In densely populated cities, for example, simply shifting project alignments or siting criteria can avoid densely populated areas without much difference to the project's technical performance. Minimising displacement is likely to reduce overall project costs and make project implementation a lot less troublesome.

The Vadodra-Halol road project, Gujarat, provides a good example of minimising displacement in highway projects. In this case, the authorities through a process of careful project designing succeeded in reducing the impact of displacement significantly. Box 13.2 has the details.

Box 13.2: Minimising Displacement: The Case of the Vadodra-Halol Road Project

The original project was to widen the existing road width along the entire 33-km stretch between Vadodra and Halol. The environmental and social impact assessment noted that the project in its original form would lead to the resettlement and rehabilitation of about 300 project-affected families, having residential and/or commercial structures within the proposed right of way. A systematic analysis of various alternatives including social and environmental aspects was carried out, concurrent with the project design. The project alignment was then changed by introducing bypasses at critical locations. The modified alignment was found to be more cost-effective as well as more acceptable to the people. The extent of resettlement and rehabilitation was thereby reduced to only 10 project-affected families.

Source: Modak and Biswas (1999:262)

3 Land Acquisition and Project Impacts

The land acquisition survey should be undertaken as early as possible so that the planners have sufficient time to prepare the resettlement plan. Where a social impact assessment is being conducted, the land acquisition assessment can also be incorporated as one of its elements (See Chap. 2 in this book).

A land acquisition survey is required to identify landowners who will lose land and the amount of land they will lose. It is easier for the acquisition survey to collect this information where accurate land records exist. This data, accurate and complete, is the basis for preparing a compensation package for those losing land. The survey, therefore, covers landowners with titles, as they alone are legally entitled to receive compensation for the acquisition of their lands. Generally, nontitled persons (e.g. tenants, sharecroppers, squatters) are not included in this survey. The survey is usually based on the existing government land records.

The loss of common property must be separately recorded, including loss from (a) common property resources, (b) public structures, (c) cultural property and (d) infrastructure.

Typically, the losses for project area people due to land acquisition and other physical assets include the following: (a) loss of homestead/agricultural land, (b) loss of residential/business structure, (c) loss of business, (d) loss of employment/income and (f) loss of community assets. A detailed survey must be undertaken to account for each household, enterprise or community affected by land acquisition and physical assets as well as the loss of livelihood and income resulting from displacement.

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4 Census and Socioeconomic Surveys

The census of project-affected people and preparation of an inventory of their losses is a key step in the process of plan preparation. It provides a complete inventory of all affected persons and their assets. It needs to be undertaken as soon as possible to:

- Establish eligibility for entitlements
- Prevent fraudulent claims for compensation made by people who are often lured into the area once the project is announced
- Use it as database for purposes of project monitoring

A census covers all affected persons in the project area irrespective of entitlement or ownership. Typically, the household is used as the unit for purposes of data collection. Data needs to be disaggregated by caste, tribe, gender and other social categories, as required.

The census and inventory of assets can be done separately. As each requires visits to all affected households, however, doing them together is generally more efficient (World Bank 2004:210).

In addition to land acquisition survey and a census, a socioeconomic survey also needs to be undertaken as part of the resettlement plan preparation. Socioeconomic surveys often involve both quantitative (statistical) and qualitative (consultative) methods. The socioeconomic survey is carried out on a sample of affected people, usually through a household questionnaire. This provides data on the likely impact of land acquisition on the local economy, economic institutions, land-use patterns, tenancy and sharecropping, occupation and employment patterns, income and economic interdependence between households, poverty levels, local social organisation and authority structure, women's economic activities and income. The socioeconomic survey also provides details of potential project impact on the poor, indigenous people, ethnic minorities and other vulnerable groups, including women, and any special measures needed to restore fully, or enhance, their economic and social base.

The survey needs to be carried out by a team of trained professionals. Roche (2009:63) suggests that care must also be taken to ensure a gender balance on the survey team, or to involve at least one woman. The benefits of this are well known; women can elicit sensitive information in individual interviews related to child spacing, household relations and female income, which would be difficult, if not impossible, for a man to find out.

The plan should also take into consideration the impacts of displacement on host communities and address those concerns as well.

5 Information Dissemination, Consultation, Participatory Approaches and Disclosure Requirements

The plan should list mechanisms for disseminating information to, consultation with, and participation of displaced people or their representatives in resettlement planning and implementation. In general, consultation needs to be much more

structured and systematic in projects involving community relocation or income restoration programmes. The resettlement plan schedule in such projects should allow adequate time for consultation with affected persons.

The process of consultations with the affected people and sharing with them information relevant to their concerns should not be limited during the planning phase, but it should also continue during the implementation, monitoring and evaluation phases as well.

Sharing Information

Information sharing is the starting point of the participation process. Often, opposition to a project arises due to the lack of information about the project among affected people. Project management must function in an open and transparent manner, sharing with the affected people information on all aspects of the project such as planning design, lands to be acquired, compensation package, relocation sites, new income opportunities and grievance procedures.

Consulting with Affected People

Some areas in which consultation with and participation of the affected people is essential include:

- (a) Disseminating information to affected people about impacts and entitlements
- (b) Conducting the socioeconomic surveys and verifying survey results
- (c) Selecting and designing resettlement sites
- (d) Designing and implementing income restoration programmes
- (e) Preparing the resettlement implementation schedule
- (f) Establishing grievance redress mechanisms
- (g) Monitoring implementation

Methods of Stimulating Participation

Methods that have been found helpful in stimulating a participatory approach in resettlement planning and management include:

- Information campaigns, for example, using media, posters or information leaflets, and public meeting
- Focus groups involving key stakeholders, for example, local business or village leaders, women, the poor and people experiencing particular kinds of losses
- Group formation and development, providing a forum to support identified AP groups, during the process of planning and implementation
- Interviews with people affected on a household basis to seek their agreement on their specific entitlements
- Formation of various committees of stakeholder groups for planning, implementation and monitoring purposes

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• Development of mechanisms for grievance redress and publicising these mechanisms widely

• Introduction of a social preparation phase (ADB 1998:41)

Disclosure Requirements

The resettlement plan should be disclosed and made publicly available. NGOs can be involved in these tasks, including disseminating information, relocation of affected people to new sites and programmes of income restoration. NGOs and representative of the affected people should be involved in advisory as well as decision-making level committees.

6 Grievance Redress

Where resettlement planning and implementation is done with the involvement of the affected people, there remains virtually no scope for complaints. Yet, there may be groups or individuals who feel that their problems have not been adequately addressed. The plan should provide for establishing a process of grievance redress.

The mechanisms for grievance redress should be built on the existing mechanisms for conflict resolution, where available, provided that resulting pressures on the existing mechanisms do not crowd out grievances submitted by the affected people. The affected people should be fully represented in any mechanism that is put in place. As far as possible, the effort should be to settle disputes through mediation, not through resort to law courts with their dilatory methods. But when mediation fails, law must be allowed to take its course.

Grievance redress systems are generally of two kinds: (1) formal courts where people aggrieved by decisions of project authorities including decisions on quantum of compensation for land acquisition can go in appeal and (2) locally constituted grievance redress committees that look into all other complaints except legal issues.

The resettlement plan should describe the entire process of registering complaint, time required in its disposal and mechanisms for approaching higher authorities including courts. Grievance mechanisms should provide a two- or three-stage process for redress of complaints, with clearly specified provisions of appeal. Procedures should be clearly specified and disseminated among the affected population.

7 Policy and Legal Framework

Until recently, there was neither a policy nor a law relating to resettlement in India, but things have now changed. In 2013, the government of India took a major step and promulgated 'the Right to Fair Compensation, Land Acquisition and

Rehabilitation and Resettlement Act 2013', and this is the new policy and law governing all land acquisition and resettlement activities associated with development projects (GoI 2013).

This new law and all other such relevant laws and customs that apply to land acquisition and involuntary resettlement must be reviewed and a summary of the review provided in the plan document. In addition, the plan should describe the nature of compensation admissible under the law and the methods for assessing compensation values and the timing for compensation payment; the applicable legal and administrative procedures, including the time required to go through these procedures; procedures for land titling and registration; and laws and rules relating to resettlement implementation agencies and also land compensation, land use and environment.

Often, resettlement policies of the World Bank, ADB, IFC and other international development agencies differ in some respects from the policies of the borrowing countries, including India. The problem arises when borrowing countries resent and oppose the forced imposition of international policies, taking it as an infringement of their sovereignty. Such problems are not insolvable, and project-specific mechanisms can address them, but they need to be handled with great care. While displaced people definitely deserve to get the package that is more beneficial for them, sensitivities of the host government also need to be kept in view.

8 Eligibility Criteria and Units of Entitlements

Generally land ownership and severity of impact are used to determine eligibility for resettlement entitlements. Land ownership includes title, customary and traditional rights, as well as formal and informal contractual rights. The severity of impact may range from minor to severe, depending on loss of land or resources (World Bank 2004:35).

The 'unit of entitlement' could be the individual, the family or household or the community that is eligible to receive compensation or resettlement assistance. Generally, the unit of entitlement is the household, and this is also the unit for the collection of data on loss and impact assessment. The losses are determined through census and socioeconomic survey, which use household as the unit for data collection.

The essential elements of an entitlement policy include the following:

- Compensation at replacement cost
- A 'land for land' option for displaced farmers
- Entitlements for lost community property, including that customarily claimed by indigenous groups
- Provision of allowances or other forms of transitional support and transfer arrangements

The plan should describe the eligibility criteria and entitlement for all categories of loss, including the compensation and resettlement assistance rates.

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9 Entitlement Matrix

The entitlement matrix is based on categories of project-affected persons according to their losses and their entitlement benefits. It lists the type of losses, together with the definition of an entitled person and his/her entitlement benefits.

The cut-off date for persons entitled to compensation under the land acquisition laws is the date on which the notification declaring the intention to acquire land is issued. For others, the cut-off date for entitlement to resettlement assistance benefits is the date on which the census/socioeconomic surveys are completed. Persons moving into the project area after the cut-off date will not be eligible for compensation or assistance.

An example of entitlement matrix is given in the following table (Table 13.1). This is reproduced from the draft resettlement plan of an ADB-funded project 'Secondary Towns Integrated Flood Protection Project II' in Bangladesh.

Table 13.1 Entitlement matrix

Sl No	Nature of loss	Entitled person	Entitlements (Compensation and/or assistance)
1	Loss of agricultural land/fish pond	Legal ownership titleholder at the time notice u/s 3 issued under the land acquisition law	Replacement land or cash compensation Premium (50 %) Additional grant to cover replacement cost Stamp Duty and Registration Fees for land to be purchased
2	Loss of access to cultivable agricultural land/fish pond by tenant/sharecropper	Tenant and sharecroppers under contract	Compensation for crops at Tk 200/dec Compensation for fish at Tk 300/dec
3	Loss tress/standing crops/fishes	Persons with legal ownership titles at the time notice u/s 3 served under the land acquisition law	Compensation at the replacement value for trees Additional grant to cover replacement value Compensation for fruits for fruits bearing tress at 30 % of tree value APs allowed to take away trees and crops
4	Loss of homestead/ business (commercial) land	Legal ownership titleholder at the time notice u/s 3 served under the land acquisition law	Replacement land or cash compensation Premium (50 %) Additional grant to cover replacement cost Stamp Duty and Registration Fees for to be land purchased

(continued)

Table 13.1 (continued)

S1 No	Nature of loss	Entitled person	Entitlements (Compensation and/or assistance)
5	Loss of residential/ business structure by owner	Legal owner of the structure at the time notice u/s 3 served under land acquisition law	Cash compensation for structure at replacement value Additional grant to cover replacement value One-time grant to transfer structure to new location Tk 5000 and reconstruction grant Tk 2500 Owner allowed to take salvageable material Additional assistance for female-headed household
6	Loss of access to residential/business structure (rented or leased)	Tenants renting/ leasing the structure	One-time cash grant to transfer structure to new location Tk 5000 and reconstruction grant Tk 2500
7	Loss of residential structure by squatter	Head of household squatting on government land	Compensation for lost structure to owner at replacement value One-time shifting grant Tk 5000 and reconstruction grant Tk 2500
8	Loss of business due to dislocation	Owner/operator of business	Business restoration grant Tk 8000 to large and Tk 5000 to small owner Business restoration grant Tk 8000 for large and Tk 5000 for small renter/ squatter
9	Loss of income, employment/work opportunity full-time/ part-time	Workers of affected businesses	One-time cash grant Tk 3000 per wage loser Additional Tk 1000 for female-headed household
10	Loss of community facilities/common property resources	Community at relocation site	Reconstruction/improvement of community facilities/common property resource Compensation at replacement value for structures Transfer grant Tk 5000 Reconstruction grant Tk 2500
11	Loss to host community	Host village/area	Provision of additional civic amenities

10 Valuation of and Compensation for Lost Assets

The methodology used in valuing losses must be clearly described. Valuation of lost assets must be done at their replacement cost. Supplementary measures to achieve replacement of lost assets must be described.

Compensation is facilitated by:

• Paying special attention to the adequacy of the legal arrangements concerning land title, registration and site occupation

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 Publicising among the affected people the laws and regulations on valuation and compensation

- Establishing criteria for determining the resettlement eligibility of affected households (extent of loss)
- · Developing mechanisms to prevent illegal encroachers

Some types of losses (access to public services, clientele, common natural resources) are difficult to value and compensate. These, however, need to be replaced. Mechanisms to do this must be described.

11 Compensation and Resettlement Assistance

The loss of a productive asset, such as land, houses or trees, implies two types of losses: (1) a loss of wealth and (2) a loss of income. Compensation needs to be provided on both counts.

The compensation for losing ownership should ideally be fixed at the market price of the asset at the time of paying compensation, so that the affected person can replace the lost asset with something comparable from the market, with or without the assistance of project management. Similarly, compensation for losing potential income from the asset should be fixed at the total loss of income over a period of time, reasonably assumed to be required to overcome the dislocation caused by land acquisition. Such a period will differ from asset to asset and will generally vary between 6 months to a year and more in some special cases.

When ownership and possession of property vest in the same person, he/she is entitled to both types of compensation. However, when these are separated, as in the case of share cropped land or a rented shop, the compensation for possession/ use right has to be shared according to the conditions underlying such possession/ use arrangements. In order to avoid manipulations in the assessment and payment of compensation, it is necessary to follow a firm cut-off date to ascertain entitlement of the right people (Davidson et al. 1993).

The following actions that will ward off the risks of impoverishment to relocated people are included in this part:

- (a) Transition arrangements made for resettlement. These may include construction allowance, employment in the main project, income maintenance, etc.
- (b) Measures for land-based strategies for people from rural areas, in particular.
- (c) Measures for non-land-based strategies particularly for people from towns and cities.
- (d) Safety nets for indigenous people, aged, female-headed households, etc.

Land Acquisition and Transfer Provide details regarding new land identified and available for displaced agriculturists. Indicate time requirement for acquisition of land for resettlement and transfer of land in the name of the resettler.

12 Relocation

Relocation is painful not only for those who are subjected to it; relocation is also a daunting task for those responsible for managing it. 'No relocation' option should therefore be fully explored, but it is not always possible to avoid relocation. However, the need for relocation can be reduced. A project designed by careful engineering can often minimize the need for relocation, for example, by changing the alignment of a road.

If relocation cannot be avoided altogether, the affected people generally have the following options:

- (a) On-site relocation: The Plan should permit the affected people to occupy nearby vacant land, provided their number is small and vacant government land is available This is the most preferred option, as this allows them to stay in familiar surroundings and causes the least disruption.
- (b) *Self-relocation*: Some people prefer to manage their relocation themselves. This enables them to settle at a place of their choice, often closer to their kinsmen, or to a place where they think offers better income earning opportunities than in 'resettlement colonies developed by project authorities. These people also require less support in regaining the loss due to displacement.
- (c) Relocation to project selected site: For most people, this usually is the least preferred but most common option. While all relocated people get compensation or assistance, this will vary depending on the option selected. People who opt for on-site relocation require the least assistance. Those who opt for selfrelocation deserve a better package. People who go to the project-selected site require most assistance.

Site Selection and Site Preparation The selection of the resettlement site is a critical factor in relocation planning. Yet, as WCD (2000:107) pointed out, 'Resettlement sites are often selected without reference to the availability of livelihood opportunities, or preference of the displaced persons themselves'. Most failures in relocation stem from poor relocation, and there is no way to overcome this deficiency at a later stage.

The plan should describe the site selection process in detail. It should provide detailed procedure for preparing relocation sites, especially if agricultural development is concerned. The following issues need consideration:

- Process of consultation with the affected people and host communities regarding site selection.
- Studies to determine the suitability of the selected sites, especially for agriculture.
 In determining site suitability, the preferences of host communities should also be taken into account.
- Impact of commuting distances for urban resettlers.
- · Layout and design of housing and other structures.
- Prospects for, and impacts of, cultural integration in projects involving tribal peoples.
- Sharing of public infrastructure and community facilities with host communities.

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• Participation of the affected people in selection and design of sites.

Relocation Assistance and Schedule All affected people should be assisted in relocation, including in transportation to the new place. All entitlements such as compensation for land, structures, shifting costs and income restoration assistance should be paid before the relocation process starts.

The details of physical movement to the relocation site should be clearly spelt out in the plan. It should indicate the dates and times when the movement will begin, the arrangements for transportation of people and their belongings to the site and arrangements for temporary shelter, food, water, medical care and waste management on the way to and on arrival at the selected site. Describe special provisions made for vulnerable groups.

The plan should ensure that the affected people do not stay back once compensation and assistance have been disbursed. Construction work proceeds smoothly only when people are not in its way. For the affected people themselves, it is better that they move before heavy construction equipment and construction workers appear on the scene. The construction activity can be a source of much nuisance, causing noise, pollution and disturbance to normal life.

Housing, Infrastructure and Social Services The provisions made for housing, water supply, feeder roads, schools, health services, etc. at the resettlement site should be described in the plan. The infrastructure and social services at the resettlement site should not be at a level lower than those that exited in original villages.

Integration with Host Communities Effects of the affected people's induction on the host population need to be given due consideration. The planning process should take into account the development needs not only of the affected people but also of the hosts. The economic, social and cultural integration of the affected people with the host population cannot be achieved by ignoring their interests, though.

13 Income Restoration

The plan should identify measures to improve or at least restore incomes after resettlement. Generally, the following approaches have been followed to ensure income restoration: (a) cash-based approaches, (b) land-based approaches, (c) job-based approaches and (d) enterprise-based approaches (Mathur 1999).

- (a) Cash-based Approaches: Theoretically, cash should help people to move fast onto the recovery track. With cash in hand, the possibilities for undertaking productive investment are enormous. In practice, cash compensation alone as an income restoration measure often fails to benefit the affected people for a variety of reasons (Cernea and Mathur 2008).
- (b) Land-based Approaches: This involves replacing the lost land with new land at some other place. Rural people usually do well when they get land, especially land in newly irrigated areas, as no occupational change is required. But land

scarcity is a major hurdle in finding land to help restore incomes lost due to displacement.

- (c) Job-based Approaches: The effectiveness of this approach to income restoration is beyond doubt. People who get jobs in lieu of lost land are able to reestablish themselves remarkably well, in virtually no time. But jobs, too, have become a scarce commodity.
- (d) Enterprise-based Approaches: As land and jobs cannot be found, enterprise-based approaches are being promoted as an income restoration option. But this involves a change in occupation. The change from being a farmer to a manager running his own enterprise is likely to be too drastic for many affected people.

New income-generating activities identified in the plan should match with the occupational preferences of the affected people. Close consultation with the affected people alone can help in designing a realistic income restoration plan.

14 Resettlement Costs and Budget

Projects tend to underestimate the actual costs of resettlement planning and implementation. The costs on land acquisition, compensation for lost assets and physical displacement should be estimated carefully and included in the resettlement plan budget. Resettlement costs should be itemised by categories of impact, entitlement and other resettlement expenditures including training, project management and monitoring. The results should be presented in a tabular form that illustrates expenditures over the life of the project.

The budget should clearly describe the sources of funding and the flow of funds. This is to ensure that resettlement activities are not interrupted at any point of time due to unavailability of funds especially when they are needed the most.

Adequate provisions must be made for physical and price contingencies. Specific mechanisms for adjusting the given cost estimates by the inflation factor should be described.

Typically, the resettlement budget preparation involves the following costs:

- (a) Compensation costs:
 - · Compensation for land, buildings and other properties acquired
 - Cost of replacement land
- (b) Relocation costs:
 - Cost of moving and transport
 - · Cost of residential land at new sites
 - Cost of replacement housing
 - Cost of site and infrastructure development
 - · Cost of subsistence package
 - Cost of community development and welfare activities

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(c) Income restoration costs:

- Cost estimates for economic rehabilitation programmes (training, start-up capital to start small businesses, etc.)
- Cost of public services on a continuing basis (education, health, extension, etc.)
- Cost on environmental improvement programmes (forestry, grazing lands, soil conservation)

(d) Administrative costs:

- Cost on operational staff (managerial, technical)
- · Cost on support staff
- Cost on physical facilities
- · Cost on transport/vehicles
- · Cost on training
- · Cost on monitoring and evaluation

(e) Preparation costs:

- Technical assistance costs
- Cost of census and socioeconomic surveys of affected people
- · Cost of preparation on replacement land

The budget provided in the resettlement plan must be adequate, especially budget for activities meant to generate alternative means of income generation for the affected people.

15 Implementation Schedule

During the project implementation phase, resettlement activities should be coordinated with the likely timing of civil works. The implementation schedules should therefore be finalised only after the finalisation of detailed engineering designs. Where possible, some activities could be implemented in parallel in order to speed up the overall progress of the Project. The guiding principles for the implementation schedule are as follows:

- (a) Acquisition of land, houses and other assets must be completed within the preparatory stage of the engineering construction plan and before the beginning of relevant civil engineering works.
- (b) It must be ensured that before relocation all affected persons have been (i) consulted about the project, its impacts and mitigation plans, (ii) received compensation/assistance entitlements and (iii) provided with the means to reestablish their livelihoods. No person is asked to move before the completion of these activities.

The affected people should be given adequate notice, counselling and assistance (as stipulated in the resettlement policy and the entitlement matrix worked out for

the project) to ensure that they give up their assets and move on to new sites well before the start of civil construction works. Such a step will save them from undue hardship. Otherwise, the sudden appearance of contractors on the scene with their heavy equipment and workforce can be quite intimidating to the people already under stress.

Keeping in view the above, the resettlement plan should specifically provide a month-wise schedule of activities to be undertaken as part of implementation. It should also provide a step-by-step description of implementation arrangements, including agencies responsible for each step.

A Sample Resettlement Plan Implementation Schedule is given below in Table 13.2. This is reproduced from an ADB project 'Draft Resettlement Plan Nuwara-Eliya Badulla Highway (A005) under Sri Lanka: National Highway Sector Project'.

Table 13.2 A sample resettlement plan implementation schedule

Activity		2007		2008			2009				2010		
	2	3	4	1	2	3	4	1	2	3	4	1	2
Recruitment of resettlement staff													
Conduct of Census, SES, and data analysis	Ι.												
Preparation of Resettlement Plan and submission to MOL and ADB for approval													
Land acquisition process													
Compensation payment for priority sections													
Compensation payment													
LARC	\vdash												
Relocation of houses, shops and businesses													
Clearing the ROW													
Issue notice for commencement of civil works													
Income Restoration	\vdash												
Management Information System													
Grievance Redress													
Internal Monitoring													
External Monitoring													

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16 Institutional Framework for Resettlement

Projects are often not well equipped to address the problems of resettlement. Even well-prepared resettlement plans fail due to the lack of adequate institutional capacity. The assessment of the existing institutional capacity needs to be undertaken right in the beginning, and based on that study, the arrangements worked out to ensure that the plan does not encounter obstacles during the implementation phase on this score.

The resettlement plan must provide for the creation of a separate entity with the responsibility for planning, implementation and monitoring of resettlement activities. The staff in this unit must include social scientists with experience in resettlement and social development. There must be provision in the plan for staff training and development, if required. In conducting training for resettlement staff, especially staff at the project level, emphasis should be on income generation schemes for the affected people and their participation in all stages of the resettlement process.

The plan must identify and describe details of roles and responsibilities of all organisations, including NGOs that will be responsible for resettlement of each and every activity (such as land acquisition, disbursing of compensation and assistance, income restoration and so on).

Clearly, the task of resettlement cannot be carried out by the resettlement agency alone, acting in isolation all on its own. It needs to coordinate with various divisions within the project, such as engineering, environment, finance, personnel and law. The resettlement agency also needs to coordinate with many other ministries/departments outside the Project. These may include ministries/departments with responsibility for agriculture, small-scale industry, health and education, community development, housing and poverty alleviation programmes. A strong coordination mechanism must be in place to deal with the issues that arise in harmonising activities of several independent agencies. It is important that there be adequate representation of project-affected people in various official committees set up for coordination purposes.

The Role of Nongovernment Organisations The role of nongovernment organisations (NGOs) in providing support to official agencies can be crucial to resettlement effort, and this should be clearly described in the plan document. The NGO involvement in resettlement operations can be helpful in a number of areas, including the following:

- Gathering and sharing information with the affected people, avoiding potential problems that arise in an information vacuum
- Eliciting participation of people in all resettlement activities
- Strengthening local organisations and community self-reliance
- Delivering services to hard-to-reach communities that are more efficient as they can be more cost-effective than those of the official agencies
- Planning and implementation of income generation schemes

The selection of NGOs should be done keeping in view their strengths in assisting project-affected populations. Generally, the criteria used in selecting NGOs include the following: (a) NGOs should be either local groups, from the project area itself, or organisations with prior work experience in the area; (b) NGOs should

have good track record in planning and implementing programmes in such areas as poverty alleviation, income generation, participation, gender issues and community organisation; (c) NGOs should have staff with both technical and social skills appropriate to the task and should have both male and female workers; (d) NGOs should be registered with the government and have a sound financial status; and (e) NGOs should have no political or religious affiliation.

17 Monitoring and Evaluation

Monitoring and evaluation (M&E) is of critical importance to the management of resettlement operations. Monitoring provides periodic checks to ascertain whether resettlement activities are moving according to the plan and a channel for the resettlers to make known their needs and their reactions to the way the resettlement is being carried out. Evaluation, on the other hand, is an exercise usually undertaken towards the end of the project to assess whether the plan achieved its intended goals and whether any lessons can be drawn for preparing better plans in the future.

The monitoring and evaluation system aims:

- To ensure that RAP is being implemented as per schedule
- To ensure timely management action if there appears to be any failure in the system due to management lapses
- To ensure necessary corrective action at policy level, if the system failure is due to design faults (e.g. wrong assumptions)
- To build up a benchmark database for the purpose of evaluation, both during course and ex post facto evaluation

The M&E plan should clearly describe the following aspects:

- · Selection of performance indicators
- · Internal monitoring formats
- · Methodology for monitoring
- · Organisational responsibility
- Process and schedule of reporting and feedback into decision-making processes
- Follow-up on outstanding issues identified through monitoring

Arrangements for monitoring, both internal and external, should be specified in the resettlement plan.

Internal Monitoring Internal monitoring is an important responsibility of the project management. The plan should provide details of the monitoring and reporting framework for resettlement activities. Monitoring is done against the activities, entitlements, timeframe and budget and costs, as set out in the resettlement plan.

External Monitoring In addition to internal monitoring, projects require external (or independent) monitoring to provide an objective periodic assessment of resettlement implementation and impacts, to verify internal monitoring and to suggest adjustment of delivery mechanisms and procedures. To function effectively, the

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external monitoring organisation should be independent of the agencies involved in resettlement.

An important function of external monitoring is verification of internal reports, including checking the delivery of the following:

- · Payment of compensation including its levels and timing
- · Land readjustment
- · Preparation and adequacy of resettlement sites
- House construction
- · Provision of employment, its adequacy and income levels
- Training
- Rehabilitation of vulnerable groups
- Infrastructure repair, relocation or replacement
- Enterprise relocation, compensation and its adequacy and transition allowances

The involvement of affected people and host population in monitoring helps resolve many problems that arise almost daily during the project implementation phase. The plan should provide for participation of affected people and NGOs in monitoring, not symbolically but in substantive ways. They should be associated in all stages of the M&E process, including determination of monitoring indicators.

Resettlement Planning is an Ongoing Process

Finally, it is important to remember that the Resettlement Action Plan is not a static or immutable document. If not adjusted to changing circumstances, even the most carefully designed plans fail to achieve their objectives. As the World Bank (2004:xxviii–xxix) cautioned:

Rigid adherence to plans prepared before implementation may be ineffective or even counterproductive as unanticipated changes occur in the project environment or planning assumptions or estimates prove erroneous. To achieve positive, practical results on the ground, as Bank experience clearly demonstrates, resettlement monitoring and supervision are critical. Both are needed for assessing the extent to which the plans are being implemented effectively and for signaling when the plan itself is out of step with changing circumstances.

Annexes to the Plan Document

- (a) List of all affected persons
- (b) Copies of census and survey instruments, interview formats and any other research tools
- (c) Information on all public consultation including announcements and schedules of public meetings, meeting minutes and list of attendees
- (d) Examples of formats to be used in monitoring and reporting on RAP implementation

References

- ADB (1998) Handbook on resettlement: a guide to good practice. Asian Development Bank, Manila
- Cernea MM (1988) Involuntary resettlement in development projects: policy guidelines in World Bank-financed projects, vol 80, World Bank technical paper. The World Bank, Washington, DC
- Cernea MM, Mathur HM (2008) Can compensation prevent impoverishment: reforming resettlement through investments and benefit-sharing. New Delhi: Oxford University Press
- Davidson F et al (1993) Relocation and resettlement manual: a guide to managing and planning resettlement. IHUD, Rotterdam
- GoI (2013) The right to fair compensation and transparency in land acquisition, rehabilitation and resettlement act 2013. Government of India, Ministry of Rural Development, New Delhi
- Government of Orissa (1994) The Orissa resettlement and rehabilitation of project-affected persons policy 1994. Government of Orissa (Department of Water Resources), Bhubaneswar
- IFC (2002) Handbook for preparing a Resettlement Action Plan. International Finance Corporation (Environment and Social Development Department), Washington, DC
- Mathur HM (1997) Managing projects that involve involuntary resettlement: case studies from Rajasthan India. The World Bank (Economic Development Institute), Washington, DC
- Mathur HM (1999) Restoring incomes and livelihoods of project-affected people: issues in resettlement planning. Scand J Dev Altern Area Stud 18(4):51–75
- Modak P, Biswas AK (1999) Conducting environmental impact assessment for developing countries. Oxford University Press/United Nations University, New Delhi/Tokyo/New York/Paris
- Partridge WL (1993) Successful involuntary resettlement: lessons from the Costa Rican Arenal Hydroelectric Project. In: Cernea MM, Guggenheim SE (eds) Anthropological approaches to resettlement: policy, practice, and theory. Westview Press, Boulder/San Francisco/Oxford
- Roche C (2009) Impact assessment for development agencies: learning to vale change. Oxfam, Oxford WCD (2000) Dams and development: a new framework for decision-making. Earthscan Publications, London/Sterling
- World Bank (1994) Resettlement and development: the bankwide review of projects involving resettlement 1986–1993. The World Bank/Environment Department, Washington, DC
- World Bank (2004) Involuntary resettlement sourcebook: planning and implementation in development projects. The World Bank, Washington, DC

Appendix: Model Terms of Reference for Social Impact Assessment and Preparation of Resettlement Plan

Project Background

1. Description of project:

- 2. In order to assess the potential socio-economic impact of the project, consultants are invited to submit technical and financial proposals for the following two components:
 - (a) Conduct a social assessment (SA) of the project
 - (b) Prepare social safeguard instruments such as Resettlement Action Plans (RAP), Ethnic Minority or Indigenous Population Development Plan (IPDP), Cultural Property Management Plan (CPMP), Environmental and Social Management Framework (ESMF,) as necessary, for roads selected for improvement/upgradation and maintenance.

3. Component One: Social Assessment

To ensure that the benefits of the proposed infrastructure development are distributed equitably, to the extent possible, and that no segment of the population is adversely affected, a SA will be carried out. This should precede the feasibility and detailed design stages of the project and should be carried out contemporaneously with the pre-feasibility of the project. While the SA is proposed to be undertaken during initial stages of project preparation, however, social impacts will continue throughout, namely, feasibility and detailed project report (DPR) stage as needed. The following provides objectives, scope, activities and outputs to complete the SA process:

4. Objectives of SA

SA is an approach for incorporating social analyses and participatory processes into project design and implementation. The study aims to improve decision-making that enhances social benefits and mitigate adverse social impacts in the

process of developing projects for road improvement/upgradation and maintenance. The specific objectives of the SA are

- (a) To carry out a socio-economic, cultural and political/institutional analysis to identify potential social impacts of the proposed development of the key transport corridors
- (b) To identify principal stakeholders and develop consultation framework for participatory implementation
- (c) To screen social development issues along all corridors and scope SAI activities for feasibility and design stage
- (d) To ensure that results of the SA provide inputs to the monitoring of project impacts during implementation and to the evaluation of project outcomes at completion
- (e) To provide inputs to the project design at the feasibility and detailed design stage including specific recommendations in selection of design alternatives (identification of areas that may require adjustments in project designs) and preparing social policy framework

5. Scope of SA

The SA should be selective and strategic. The SA should begin with identification of people and communities, including ethnic minorities and indigenous groups, that would be affected by the project and define operationally relevant social issues that may affect project design, delivery and outcomes. A checklist of activities along with outputs for pre-feasibility and feasibility are provided in Annex I. The annex also includes the activities to be carried out for the inception report. The scope of the proposed SA at the two stages is as follows:

Stage I: Pre-Feasibility Stage:

- (a) Identify key social issues relevant to the project objectives and specify the project's social development objectives
- (b) Provide a macro-level socio-economic profile of the population and available infrastructure facilities for services (disaggregated by gender; ethnicity; vulnerable groups, especially indigenous minorities, youth and aged; economic aspects; etc.) in the project influence area to identify potential positive impacts towards reducing poverty and adverse impacts of the project on affected communities
- (c) Identify key stakeholders who are directly affected, positively or negatively, and carry out stakeholder analysis to determine their role to achieve social development outcomes
- (d) To inform, consult and carry out dialogues with stakeholders on matters regarding project design alternatives, identification of priorities and selection of project roads and provide specific recommendations to avoid/ minimize high social risks (e.g. activities where it is not advisable to proceed) and also develop a consultation framework for participatory implementation

(e) Identify and analyze the performance of formal and informal institutions that have stakes in the project to influence social development outcomes

Stage II: Feasibility Stage:

- (a) To inform, consult and carry out dialogues with stakeholders on matters relating to project alternatives and implementation of social mitigation measures and provide specific recommendations on project roads with high social risks, including identification of high-risk areas such as congested sections, presence of significant common property or indigenous community that may require adjustment in project design
- (b) Determine magnitude of adverse social impacts and identify safeguard instruments as required based on the principles laid down in the safeguard policies of the Bank and countries' laws and regulations (Annex II)
- (c) Assess the capacity of institutions and mechanism for implementing safeguard instruments and recommend capacity building
- (d) Develop monitoring and evaluation mechanism to assess social development outcomes during completion
- (e) Prepare draft resettlement and rehabilitation policy framework with preliminary budget impacts

6. SA Methods and Tools

- (a) For socio-economic, cultural and political/institutional analysis, combine multiple tools and employ a variety of methods for collecting and analyzing data, including both quantitative and qualitative methods (expert and key informant interviews, focus group discussions, beneficiary assessments, rapid and participatory rural appraisal, gender analysis).
- (b) Develop interview schedules, field survey instruments and checklist for data collection and discussions.
- (c) Screen and prioritize social issues through different techniques such as ranking and composite index.
- (d) For determining the magnitude of impact and analysis of alternatives, develop strip map and indicate all information on structures, utilities and abutting land use that is likely to be affected within the project impact zone.
- (e) The selection of SA methodology should emphasize consultation and participation of project-affected persons (PAPs) and project implementing and executing agencies at the state, district and village level. The discussions with the relevant government officials, other institutions and organizations in the civil society should be participatory and broad based, leading to the identification, selection and agreement of projects.

7. Outputs

The expected outcome of this task would be in the form of a Social Assessment Report during pre-feasibility and Social Impact Assessment report during feasibility including

- (a) Findings of analysis and consultation framework for projects
- (b) Outline of safeguard instruments as required
- (c) Recommendation for adjustments in designs during feasibility and detailed design stage
- (d) Draft resettlement policy framework during feasibility

8. Component Two: Prepare Social Safeguard Instruments

The proposed upgradation and maintenance works for selected project roads may cause involuntary resettlement, disturb indigenous communities/ethnic minorities and impact on cultural properties of significance. All Bank-assisted projects involving such adverse impacts require that safeguard instruments be prepared before appraisal of the project. A checklist of activities along with outputs for the required instruments is provided in Annex III

9. Objectives of Social Safeguard Instruments

Safeguard instruments must be prepared to meet the following objectives:

- (a) Involuntary resettlement should be avoided where feasible, or minimized, exploring all viable alternative project designs.
- (b) Where it is not feasible to avoid resettlement, resettlement activities should be conceived and executed as sustainable development programmes, providing sufficient investment resources to enable the persons displaced by the project to share in project benefits. Displaced persons should be meaningfully consulted and should have opportunities to participate in planning and implementing resettlement programmes.
- (c) Affected and displaced persons should be assisted in their efforts to improve their livelihoods and standards of living or at least to restore them, in real terms, to pre-displacement levels or to levels prevailing prior to the beginning of project implementation, whichever is higher.
- (d) Development process should foster full respect for the dignity, human rights and cultural uniqueness of indigenous people, more specifically, ensure that indigenous peoples do not suffer adverse effects during the development process and receive culturally compatible social and economic benefits.
- (e) It should assist in the preservation of cultural property, avoid significant damage to nonreplicable cultural property and assist in enhancement of cultural properties encountered. It should identify and develop preventive measures to avoid/reduce sexually transmitted diseases.

10. Scope of Work

The social impact assessment will cover the directly affected people in affected populations to formulate development strategies in order to assist in determining project impacts on the social, economic, cultural and livelihood activities of affected communities. This will establish a social baseline against which changes resulting from the intervention can be measured in the future.

(a) A census and socio-economic survey including a detailed inventory of affected assets would, however, need to be carried out for all PAPs to estab-

- lish a cut-off date, loss of fixed assets such as structures and trees and livelihood or access to community resources as a result of project implementation.
- (b) It should assess local tenure and property rights arrangements, which may include usufruct or customary rights to the land or other resources taken for the project including common property resources, and develop realistic land acquisition plans on the basis of revenue record.
- (c) One important aspect is to prepare an inventory of affected assets to identify the affected structures that have land available in the vicinity to enable minor shifting without any damage to the building material and those that will be displaced from present locations and need to be relocated elsewhere.
- (d) The assessment will incorporate all R&R measures necessary to ensure compensation for assets acquired at replacement cost, assistance to facilitate shifting of structures out of the corridor and mitigation measures of loss of livelihood or reduction in incomes for PAPs. RAP is intended to be an action-oriented and time-bound document. As such it should be as precise and affirmative as possible, to facilitate approval by project authorities and the WB. Clarifying the parameters of the RAP during the early stages will ensure that the RAP is a document focused on practical steps for implementation of R&R measures.
- (e) Those who are affected, including indigenous peoples/ethnic minorities, would receive social and economic benefits in harmony with their cultural preferences and decided in consultation with affected communities.

11. Methods and Tools

- (a) Conduct census and baseline survey with the help of interview schedules and prepare linear maps at appropriate scales showing each affected property to identify all project-affected households and assets
- (b) Conduct land surveys in project area with the assistance of revenue personnel for preparing land plan schedules
- (c) Conduct focus group discussions to discuss adjustment in designs
- (d) Conduct consultations with affected people and district-level workshops with communities and executing organizations to finalize the implementation mechanism and for informed decision-making
- (e) Develop a database for project-affected households to enable monitoring

12. Output

The following shall be the outputs based on magnitude and extent of impact:

- (a) Resettlement Action Plan (RAP) including an action plan on HIV/AIDS
- (b) Indigenous people's development plan (IPDP), if required
- (c) Cultural property management plan (CPMP), if required

13. Deliverables for the Stages of Preparation

- (a) Inception report with methodology, personnel, work plan, time schedule, modification to TOR along with presentation—within 1 month of mobilization
- (b) Social Assessment Report—within 1 month
- (c) SIA and R&R policy with entitlement matrix to provide different types of assistance to all categories of affected and displaced people with the monetary values wherever feasible; documentation of public consultation on the entitlement framework—4 months
- (d) Detailed Resettlement Action Plan (RAP) including the LA plan and action plans for cultural property and/or indigenous people if affected—7 months (the time required will depend upon extent of impact and land acquisition)

14. Qualifications and Experience

The consulting team will consist of senior staff (number will depend on the magnitude of the project) with the experience and qualifications to undertake the social impact assessment and resettlement planning, including

- (a) Advanced degree in social sciences (anthropology/sociology/social work/economics), public administration or management.
- (b) Experience of doing fieldwork, preferably among project-affected people, including Rapid Rural Appraisal, household census interviews and land use surveys
- (c) Experience in land acquisition
- (d) Experience in Indian transport sector, especially resettlement and rehabilitation planning
- (e) Experience with Indian scheduled tribes and other vulnerable groups desirable
- (f) Experience in data analysis, both quantitative and qualitative (essential)
- (g) Ability to manage and train local survey teams (essential)

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