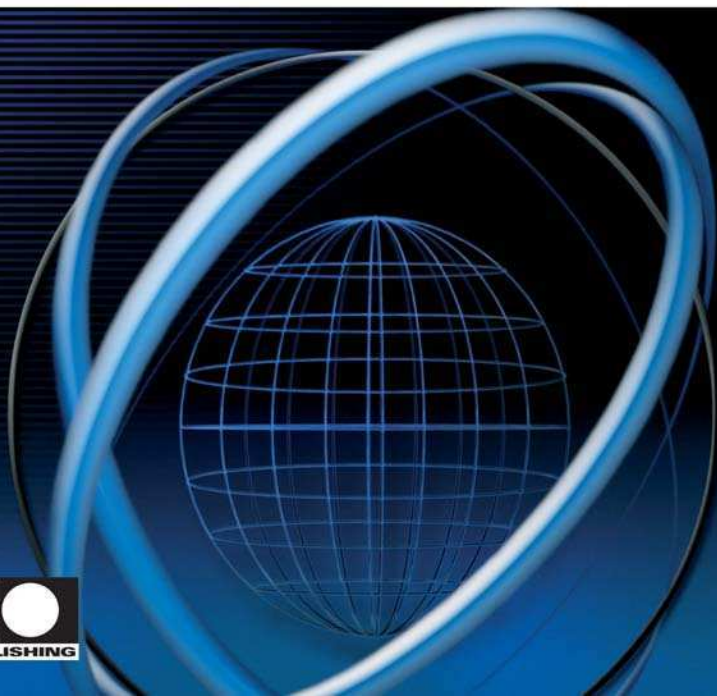


The Development Dimension



# Coherence of Agricultural and Rural Development Policies

Edited by  
Dimitris Diakosavvas



OECD



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The Development Dimension

# Coherence of Agricultural and Rural Development Policies



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## Foreword

The Committee for Agriculture at its December 2004 meeting agreed to hold a Workshop on the *Coherence of Agricultural and Rural Development Policies* to be undertaken in co-operation with the Territorial Development Policy Committee, through its Working Party on Territorial Policy in Rural Areas. The Workshop, which was hosted by the Ministry of Agriculture of the Slovak Republic, was held from 24-26 October 2005 in Bratislava.

The aim of the Workshop was to review the role of agricultural policy in rural development and the impact of rural development policies on agricultural performance, drawing on country experiences. Participants at the Workshop were invited to:

- review the latest evidence on the economic, social and environmental role of the agri-food sector in rural communities and the contribution of rural development to the sustainability of the agri-food sector;
- in OECD countries;
- discuss the role and impact of agricultural policies on rural development and of rural development policies on agriculture, through sharing country experiences; and
- draw conclusions for consideration by OECD countries and the relevant bodies in the OECD.

The Workshop attracted over eighty participants from across the OECD area, and a wide spectrum of country experiences was presented. Participants represented agricultural and rural development interests from governments, research institutions and academia. The Workshop was opened by the State Secretary of the Ministry of Agriculture of the Slovak Republic, Mr Ján Golian, and closed by the Minister of Agriculture of the Slovak Republic, Mr Zsolt Simon. It provided a valuable opportunity for an interactive dialogue among participants. The OECD is indebted to the Slovak authorities for hosting a successful Workshop and to all those who provided and presented papers, acted as discussants and panellists, and contributed to the general discussions.

In this collection of papers, the reader will find a wealth of material relating to the key issues in the interface between agriculture and rural development, policy design and practice, and challenges for the future. We hope that it will contribute to improving the performance of agricultural and rural development policies in OECD countries.

Stefan Tangermann  
Director  
Directorate for Food, Agriculture  
and Fisheries

Odile Sallard  
Director  
Directorate for Public Governance  
and Territorial Development

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## ACKNOWLEDGEMENTS

These proceedings bring together papers from the OECD Workshop on the Coherence of Agricultural and Rural Development Policies, held in Bratislava from 24-26 October 2005. The Workshop was organised by the OECD in close collaboration with the Slovak Ministry of Agriculture.

The Secretariat wishes to express its sincere thanks to the Minister of Agriculture, Mr Zsolt Simon, and the Slovak authorities, for the hospitality and the excellent organisation by the staff of the Slovak Ministry of Agriculture.

Dimitris Diakosavvas, of the OECD's Directorate for Food, Agriculture and Fisheries, was responsible for the overall co-ordination and organisation of the Workshop, with the co-operation of Nicola Crosta, of the OECD's Public Governance and Territorial Development Directorate. Gejza Blaas, Eva Kolesarova, Denisa Medvedova and Martin Szentivány co-ordinated Slovak input.

The Secretariat would also like to thank all those who provided papers and acted as chairs, discussants and panelists, and contributed to the success of the discussions. Dimitris Diakosavvas edited the papers; Theresa Poincet prepared them for publication.

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## *Table of Contents*

Foreword.....	3
Acknowledgements.....	4
<i>Preface by Mr Zsolt Simon, Minister of Agriculture of the Slovak Republic.....</i>	<i>11</i>

### **Part I.**

#### **POLICY COHERENCE BETWEEN AGRICULTURE AND RURAL DEVELOPMENT: OVERVIEW AND COMMENTS**

<i>Summary of the Main Outcomes.....</i>	<i>15</i>
--	-----------

#### *Comments from the OECD Secretariat*

<b>Stefan Tangermann</b> , <i>Director, Directorate for Food, Agriculture and Fisheries.....</i>	<i>19</i>
<b>Odile Sallard</b> , <i>Director, Directorate for Public Governance and Territorial Development.....</i>	<i>22</i>

#### *Comments from Experts*

##### **Trends and Linkages in the Agro-food Sector in Rural Areas: Empirical Evidence**

##### **Peter Midmore**

<i>Professor of Applied Economics, School of Management and Business, The University of Wales, Aberystwyth, United Kingdom.....</i>	<i>25</i>
---	-----------

##### **Agricultural Policies and Rural Development**

##### **David Freshwater**

<i>Professor, Department of Agricultural Economics, University of Kentucky, United States.....</i>	<i>29</i>
--	-----------

##### **Kenneth J. Thomson**

<i>Emeritus Professor, University of Aberdeen, United Kingdom.....</i>	<i>33</i>
--	-----------

##### **Rural Development Policies and Agriculture**

##### **Thomas Dax**

<i>Deputy-Director, Federal Institute for Less-favoured and Mountainous Areas, Vienna.....</i>	<i>37</i>
--	-----------

##### **Sabrina Lucatelli**

<i>Ministry of Economy and Finance, Department for Development and Cohesion Policies, Rome.....</i>	<i>43</i>
---	-----------



**Part II.  
SETTING THE SCENE**

<b>Chapter 1. Trends in Agricultural and Rural Development Policies in OECD Countries</b>	49
<i>OECD Secretariat</i> .....	

<b>Chapter 2. Linkages between the Agro-Food Sector and the Rural Economy</b>	73
<i>Maureen Kilkenny,</i>	
<i>Associate Professor, Department of Resource Economics, University of Nevada, United States</i> .....	

**Part III.  
TRENDS AND LINKAGES IN THE AGRO-FOOD SECTOR IN RURAL AREAS:  
EMPIRICAL EVIDENCE**

<b>Chapter 3. The Demographic Overlap of Agriculture and Rural Economy: Implications for the Coherence of Agricultural and Rural Policies</b>	95
<i>Ray D. Bollman, Statistics Canada, Ottawa</i> .....	

<b>Chapter 4. New Evidence on the Contribution of Swiss Agriculture to the Settlement of Rural Areas</b>	113
<i>Vinzenz Jung, Swiss Federal Office for Agriculture, Berne</i> .....	

<b>Chapter 5. The Contribution of Agriculture to Rural Development in France: What Role for Public Action in Supporting Joint Production of Public Goods Required for the Development of Rural Areas?</b>	121
<i>Dominique Vollet, Cemagref, Clermont-Ferrand, France</i> .....	

<b>Chapter 6. Agro-food Linkages in Rural Areas: An Empirical Evaluation of Integrated Development Programmes</b>	141
<i>Konstantinos Mattas, Department of Agricultural Economics, Aristotle University of Thessaloniki, Greece;</i>	
<i>Efstratios Loizou, Department of Agricultural Products Marketing and Quality Control, Technological Education Institute of Western Macedonia – Florina Branch, Greece;</i>	
<i>Vangelis Tzouvelekas, University of Crete, Greece</i> .....	

<b>Chapter 7. Rural/Urban Impacts of CAP Measures in Greece: An Inter-regional Social Accounting Matrix (SAM) Approach</b>	153
<i>Demetrios Psaltopoulos, Assistant Professor, Department of Economics, University of Patras, Greece;</i>	
<i>Evkokia Balamou, Department of Economics, Patras;</i>	
<i>Kenneth J. Thomson, Emeritus Professor, University of Aberdeen, United Kingdom</i> .....	

**Part IV.**  
**AGRICULTURAL POLICIES AND RURAL DEVELOPMENT:**  
**COUNTRY EXPERIENCES**

<b>Chapter 8. Using Agricultural Policy to Promote Rural Development: Contrasting the Approach of the European Union and the United States</b> <i>Nancy Cochrane; Mary Anne Normile; Tim Wojan, Economic Research Service, U.S. Department of Agriculture, Washington, D.C.</i> .....	173
<b>Chapter 9. A Central Role for Agricultural Entrepreneurs in the Dutch Countryside</b> <i>Barto Piersma, Chief of the Division for Economical Structural Policies, Department of Rural Affairs, Ministry of Agriculture, Nature and Food Quality, The Hague</i> .....	191
<b>Chapter 10. Agricultural Policies and Rural Development without Subsidies: New Zealand</b> <i>William Smith, School of Geography and Environmental Science, The University of Auckland, New Zealand</i> .....	205
<b>Chapter 11. Impact of Agricultural Policy on Rural Development in the Northern Periphery of the EU: The Case of Finland</b> <i>Hilkka Vihinen, MTT Economic Research, Helsinki</i> .....	217
<b>Chapter 12. Links between Agricultural Production and Rural Development: The Norwegian Experience</b> <i>Frode Lyssandtrae, Advisor, Ministry of Agriculture, Oslo</i> .....	231
<b>Chapter 13. Interactions between Agricultural Policy and Multifunctionality of Czech Agriculture</b> <i>Tomáš Doucha and. Dušan Vaněk, Research Institute of Agricultural Economics, Prague</i> .....	239

**Part V.**  
**THE SECOND PILLAR OF THE EUROPEAN UNION'S**  
**COMMON AGRICULTURAL POLICY: COUNTRY EXPERIENCES**

<b>Chapter 14. The Second Pillar of the CAP: Insights from the Mid-term Evaluation of the Rural Development Regulation in France</b> <i>Bruno Vindel, Sub-Director for Evaluation, Prospective and Studies, Ministry of Agriculture, Food, Fisheries and Rural Affairs, Paris</i> .....	251
<b>Chapter 15. Impacts of Rural Development Policy on Agriculture: The Austrian Experience</b> <i>Ignaz Knöbl, Head, Division II 6, Co-ordination of Rural Development, Federal Ministry of Agriculture, Forestry, Environment and Water Management, Vienna</i> .....	269
<b>Chapter 16. Evaluating Structural, Territorial and Institutional Impacts of Rural Development Policies in Italy: Some Lessons for the Future Programming Period (2007-2013)</b> <i>Francesco Mantino, National Institute of Agricultural Economics (INEA), Rome</i> .....	281

**Chapter 17. Impacts of Agricultural Policy on Rural Development in Belgium:  
Case Study of the Flemish Region**

*Koen Carels (Agricultural Policy Analysis); Patricia De Clerq (RDP Management);  
Dirk Van Gijsegheem, Flemish Agriculture Administration, Brussels, Belgium .....291*

**Chapter 18. Setting-up of Young Farmers and Farm Modernisation as a Fundamental  
Element of Rural Development: The Spanish Case**

*Eva Blanco, Ministerio de Agricultura, Pesca y Alimentacion, Dirección General de Desarrollo  
Rural, Madrid .....303*

**Part VI.  
RURAL DEVELOPMENT POLICIES AND AGRICULTURE:  
COUNTRY EXPERIENCES**

**Chapter 19. Collaborative Governance Frameworks and Processes to Enhance Coherence  
between Agricultural and Rural Development Policies:**

**Lessons Learned from the Canadian Rural Partnership (1996-2005)**

*Ian Matheson, Director, Rural Policy and Strategic Development, Rural Secretariat,  
Agriculture and Agri-Food Canada, Ottawa.....313*

**Chapter 20. Active Regions – Shaping Rural Futures:  
A Model for New Rural Development in Germany**

*Dirk Schubert, nova-Institut GmbH, and the Federal Ministry of Consumer Protection,  
Food and Agriculture (BMVEL), Bonn.....333*

**Chapter 21. The New Trend of Rural Development Policies in Japan**

*Yukiya Saika, Director, Rural Policy Co-ordination Office, Ministry of Agriculture, Forestry  
and Fisheries, Tokyo.....353*

**Chapter 22. Rural Development Policies and Activities in Turkey**

*Enver Aksoy, Planning and Project Section, Turkish Ministry of Agriculture, Ankara .....361*

**Chapter 23. Mutual Effects between Mexican Agricultural and Rural Development Policies**

*Leticia Deschamps Solórzano, General Director, INCA Rural, Mexico .....377*

**Chapter 24. The Need for Government Intervention in Agriculture  
to Reflect the Wider Outcomes of Policy for Rural Communities**

*Richard Wakeford, Head of the Environment and Rural Affairs Department of the Scottish  
Executive, United Kingdom .....395*

**Chapter 25. Rural Traditional Theme Village Development as a Rural Tourism  
Development Programme for Preserving Rural Amenity, Korea:  
Case Study of Darengeui Village**

*Duk-Byeong Park, Rural Resource Development Institute, Seoul.....405*

## *Preface*

***Mr Zsolt Simon***  
***Minister of Agriculture of the Slovak Republic***

I am delighted that Delegates and leading experts from a wide range of OECD countries gathered in Bratislava to present their views and experiences at the OECD Workshop on the Coherence of Agricultural and Rural Development Policies. The great interest in this topic is proven by the participation of 20 OECD countries and by the ensuing discussion.

The active interest in this subject is understandable given that agricultural policies are changing and the importance of rural development policies is growing in all OECD countries. The trend of agricultural policies is irreversible: the importance of price support is decreasing and the share of budgetary payments – more or less decoupled from production – is growing. This trend is the result of a search for more effective agricultural policies and of pressure by the World Trade Organization to reform domestic policies and further liberalise agricultural markets. Thanks to these developments, the significance of rural development policies interacting with traditional agricultural policies is growing in OECD countries.

According to the OECD, almost 50% of the population of the Slovak Republic lives in predominantly rural areas, which form almost 60% of our landscape. It is in our interest to maintain the settlement of these areas, to support viable activities and maintain a culturally and environmentally balanced landscape. Therefore, we believe that the countryside should be supported from public funds, whether by means of agricultural or rural development policies. Slovakia, however, as well as other member countries of the OECD, has an interest in addressing the issue of the effective support of agriculture and rural development. Together with other OECD countries, we want to achieve the effective use of limited public funds for real improvement of life in the countryside.

The OECD has been monitoring and evaluating the development of agricultural policies of its member countries for two decades, and this work has garnered international recognition over the years. The OECD analysis focuses on the impact of policy measures on agricultural production, trade, farm income, land-use and environment. I can say that these analyses have had a direct impact on the reform of domestic agrarian policies and the reform of international trade.

This Workshop, however, has proved that there remain areas to which the OECD could dedicate more attention. The OECD could more systematically follow and analyse the development of rural development policies, as it does annually with the development of agricultural policies. This would help governments address questions such as:

- How do these policies affect the income of farmers and the rural population, and what are their impacts on the employment and living standards in rural areas? How do these policies impact on the rural landscape and what is their impact on the environment?
- Are these policies truly effective in the transmission of income to farming or rural households? What are the transaction costs?
- Ultimately, what is the mutual coherence of agricultural and rural development policies? Do they pull in the same direction or are their effects contradictory?

The presentations in this publication offer very interesting, but only partial, answers to these questions. I believe that the OECD will focus further on these topics in its work. I am convinced that the OECD has the ability to contribute towards a better understanding of the development of rural policies, and to formulate relevant recommendations for its member countries.

## **Part I.**

# **Policy Coherence between Agriculture and Rural Development: Overview and Comments**

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## Summary of the Main Outcomes

### Key issues

The aims of the Workshop were to review the role of agricultural policy in rural development and rural development policies on agricultural performance through country experiences. The key issues that the Workshop was invited to consider were:

- **Agricultural policies:** *given that agricultural policies are sector-specific, how far can agriculture and agricultural policies contribute to the economic performance of rural areas? To what extent are governments adapting agricultural policies to target rural development objectives?*
- **Rural development policies:** *given that rural development policies are multisectoral and territorial, to what extent can such policies contribute to the economic performance of rural areas and, in particular, of agriculture? To what extent are governments adapting rural development policies to target the use of resources – especially land and labour – in agriculture?*
- **Policy coherence:** *what are the most effective national and local co-ordination mechanisms to enhance coherence between agricultural and rural development policies? How far can improvements in governance tackle the institutional and market failures in rural areas? What methodologies and indicators are used for monitoring and evaluating the coherence of sectoral and territorial policy?*
- **Knowledge gaps and the role of OECD:** *where are the major conceptual, analytical and data gaps that hinder the evaluation of agricultural and rural development policies in contributing to the welfare of rural areas? What might be the role of the OECD in co-ordinating information (acting as a clearing house) and in undertaking policy analysis and evaluations in the interface between agriculture and rural development?*

### Main outcomes

Agriculture has been evolving in all countries, with a loss of employment and a smaller share of rural income coming from agriculture. Moreover, a significant share of agricultural production, including high value and speciality products, takes place in peri-urban areas. The Workshop acknowledged that more clarity is needed on rural development measures aimed at “development” and those aimed at “management”. It was also recognised that the goals of agricultural and rural policies are different, but the degree of overlap, particularly with farming being the dominant user and manager of land, means that coherence is essential. Overall, the Workshop concluded that rural development policy needs to be more than just an arm of agricultural support; and agricultural policy needs to reflect the wider contribution to rural development that



agriculture can make. In practice, rural development also needs to embrace other sectoral policies such as transport, education and training and regional policy. Rural development should be primarily about facilitating the viability of rural areas, enhancing the well-being of local people and good management of land in which agriculture and forestry have a role to play. A critical question is the identification of conditions in which policy intervention is likely to enhance dynamic competitiveness of the rural area.

There was considerable discussion about the well-being of farm households and their business strategies. There is a need to explore the concept of the farmer (and often landowner) as entrepreneur. Knowledge of farm-business strategies is crucial in the understanding of pluri-activity and its role in rural development. Rural development policy also needs to better reflect the labour-market effects of different kinds of food production – some of which may generate significant local value added business opportunities, while others may be essentially bulk commodities earning income from distant markets. Equally, there may be a difference in the impact of investment by farmers in different agricultural systems, with larger farmers tending to buy supplies and machinery in more distant locations, meaning that less of their spending circulates in the rural economy locally.

Policies need to be better targeted to objectives. Governments need to be clear in articulating their objectives and manage programmes with a clear view on the outcomes to be achieved by intervention – whether by regulation, spending or taxing. Governments are concerned for the future of *farmers*, as part of rural and peri-urban societies, or for the future of *farming* (because of its economic, environmental and cultural contribution to rural communities and landscapes), from the rural development perspective, horizontal co-ordination is also important in making the most efficient use of public funds. Despite the shift of policy goals from commodity production to land-based schemes, farm household incomes and rural social well-being, there were still significant subsidy payments, largely administered by Agriculture Ministries, albeit often under the title of “rural development”.

Participants also identified several issues and research requirements that need to be addressed in defining best policy approaches, including the following areas:

- analysing in more depth the *linkages* between agriculture and rural development in the context of diversity across OECD countries in terms of distance from markets, population density and land management;
- examining the extent to which different *agricultural policies* contribute to rural development, particularly non-commodity specific and targeted policies;
- investigating the extent to which *structural policies* in agriculture, through their impact on competitiveness in the food chain, can affect the broader economic and social viability of rural areas;
- analysing the extent to which *non-agricultural development* in rural areas can improve the economic and social well-being of farm households;
- *monitoring and evaluating policies* – including the spatial distribution of financial transfers – in a rigorous way with appropriate disaggregated data, and the clear identification of policy objectives;

- identifying the respective *role of policies and market approaches*, and the appropriate governance and institutional structures; and
- defining the *approaches* that might *improve* the *coherence* between agriculture and rural development policies.

The extent and diversity of the areas identified is clearly indicative of the need to strengthen the conceptual base of both agricultural and rural development policy-making, with a clear focus on a few selected issues of strategic importance for rural communities. Both case studies and thematic reports could also be useful to promote knowledge-sharing and a deeper understanding of ways to promote the well being of people, the viability of the local economy and the best use of space in rural areas.

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## Comments from the OECD Secretariat

### *Comments by Stefan Tangermann<sup>1</sup>*

Let me share with you some of the thoughts that I take away from this Workshop. First of all, the presentations made and the ensuing discussions would appear to suggest that there are both areas of consensus and open questions relating to the coherence of agricultural and rural development policies. The open questions for which there is ongoing debate principally stem from differences in national background, policy perspectives and definitions.

#### Areas of broad consensus

- ***“Rural” is not synonymous with agriculture; neither is “agriculture” synonymous with “rural”:*** for most rural regions, including some remote rural areas, agriculture’s share in employment and income is small and declining.
- ***But agriculture can also contribute mainly through the provision of rural, land-based amenities:*** agriculture is more than just the production of food and fibre – it is also associated with the provision of countryside amenities, and with positive and negative *environmental* outcomes, in particular through its dependence on land and water resources. Although agriculture's direct economic contribution to job creation in rural areas is small and declining, its importance is greater when its indirect effects are taken into account (*e.g.* agri-tourism, up-stream and down-stream linkages, and management of land).
- ***Rural development is more than the creation of jobs:*** it is generally recognised that rural areas are diversified and need to be competitive. This is a dynamic process: people move to where jobs are, and jobs move to where people like to be. Overall, rural development is important to farmers, and cultural factors and an entrepreneurial spirit play an important role in realising the potential of the agricultural sector in rural areas.
- ***There is a growing emphasis on the importance of rural development, including in agricultural policy circles:*** in many countries agricultural policies and Ministries of Agriculture are still the *main* channels through which rural development policies are pursued, yet rural development policy objectives are much more wide-ranging than is the case with agricultural policies.
- ***Countries can learn from each other.*** the wide spectrum of different country experiences presented in the Workshop reflects the evolving diversity and increasing heterogeneity of situations characterising rural areas across OECD

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1. Director, Directorate for Food, Agriculture and Fisheries, OECD Secretariat, Paris.

countries. Such experiences can provide useful lessons in defining best policy approaches and practices.

## Open questions

- **Definition of “rural”:** the OECD has established a definition of “rural”, in terms of population density and distance from major urban centres. Rural areas can be further characterised according to *various* additional criteria stemming from different aspects of rurality – geographical, social, economic and cultural, resulting in different geographic coverage, with important policy implications.
- **Definition of “rural development policy”:** rural development has a large number of connotations and the term “rural development policy” is frequently used to refer to a wide variety of government interventions; many policies labelled rural development are actually focused on *other* issues. For example, “rural development policy” is often used interchangeably with regional policy; or “rural development policy” is used in relation to traditional agricultural policies and environmental policy. Moreover, there is a lack of clarity concerning rural development policy measures aimed at “development” and those aimed at “management”.
- **Actual contribution of rural development policy to agriculture:** rural development policy tends to be measured in terms of job creation and output. However, its effects are much wider, *encompassing* issues relating to land use and values, amenities and demographic effects. Moreover, rural development policies could play a significant role in facilitating agricultural adjustment and enhancing factor mobility by stimulating employment opportunities in other non-agricultural sectors. Pluri-activity and part-time farming are considered to be a typical solution to adjustment, particularly in the context of policy *reform*. There are differences across countries in the role importance and two-way linkages between agriculture and rural development, in particular in the context of diversity across OECD countries in terms of distance from markets, population density and land management.
- **Examining the extent to which different agricultural policies contribute to rural development:** agricultural policies in OECD countries are evolving and there has been a shift from traditional market price support and output-related measures towards sector-wide, non-commodity-specific policies that are more targeted to rural development and environmental *objectives*. The implications of these policy changes for rural development warrant more *rigorous* analysis and assessment. A deeper understanding of the ways in which farm families and business interact at the local level would also be valuable in the design of agricultural policy.
- **Role of government versus markets:** there are different views regarding the respective role of policies and market approaches, and the appropriate level of governance and institutional structures.
- **Desirable degree of coherence between agricultural and rural development policies:** there is great interest in understanding the extent to which OECD member countries’ agricultural policies are *coherent* with rural development policies and with broader, economy-wide policies, but it is too early to draw firm conclusions as to the extent of policy coherence.

## Implications for OECD work

Delegates of the OECD Committee for Agriculture (COAG) in December 2004 sought enlightenment on agricultural policy contributions to rural development and they were right. This Workshop has identified several issues and research requirements that need to be addressed in developing appropriate agricultural and rural development policies. It is timely for the COAG to work on those open questions, outlined above, relating to the role of agriculture on rural development. In particular, we need to learn more about what agricultural policies can, and cannot, contribute to broad-based rural development. The large number and diversity of situations across OECD countries is clearly indicative of the need to strengthen the conceptual and empirical base of policy making and could provide a sound basis for further work in this area both within the OECD and in member countries. There is a need do more work on this area such as monitoring and evaluation of policies – including the distribution of transfers – which should be undertaken rigorously and which will require appropriate disaggregated data, and the clear identification of policy objectives.

The OECD could play an important role in developing a framework for analysis and could contribute to the identification of appropriate policy practice by monitoring and evaluating developments in sectoral and cross-sectoral policy approaches to rural development, including market-based approaches. I should emphasise that it is important that the Committee for Agriculture and the Territorial Development Policy Committee (TDPC) should continue to collaborate and to make sure that there is full coherence and no duplication within the OECD. For example, COAG's experience, competence and proven track record in conceptual work particularly in measuring transfers resulting from agricultural policies and analysing their socio-economic and environmental impacts could very usefully complement TPDC's work on rural development.

### *Comments by Odile Sallard<sup>2</sup>*

The issue we are discussing in this Workshop is high on the political agenda of OECD member countries. Governments are rightly concerned about the coherence of agricultural and rural development policy for at least *two reasons*:

*Firstly*, “rural” is important. Rural areas represent about 85% of the land of OECD countries and are home to more than a quarter of their total population. Moreover, evidence in the work carried out by the OECD shows that rural areas contain important resources that, when duly exploited, can contribute to overall economic growth.

*Secondly*, looking at agriculture is also important. Data shows that this sector of the economy is not particularly significant in terms of the direct income or jobs it creates: it should be noted that less than 9% of jobs in OECD rural areas is in agriculture and that this share is declining in almost every country. However, there are *three elements* that should not be overlooked, which suggests that discussing the role of agriculture and agricultural policy today is important.

- The first one is represented by need for policymakers to better understand the *linkages between agriculture and rural economies*. As discussed at the beginning of this workshop, these linkages can be direct or indirect, complementary or competitive. In all cases, they cannot be neglected when valuing the role that agriculture plays in some rural areas. I say “some” rural areas and this leads me to the second element of my reasoning.
- A key factor to be considered is the great *diversity in the role that agriculture plays* across OECD rural areas: if on the one hand agriculture is not a particularly important sector in most OECD Countries, in many regions it still is (I am thinking here of parts of Greece, Spain or my home country, France, to name a few);
- The third element that suggests a careful look at agriculture and agricultural policy is straightforward: it concerns the *large amount of public resources* that go into agriculture support across OECD countries. This is viewed by many as a system which sooner or later will need to be substantially revised and will thus require alternatives so that our rural areas may find future development patterns that are not based on subsidies.

The importance of the subject of this workshop is reflected by the work that the OECD has been doing in recent years. I am referring, for example, to the Working Party on Policies for Rural Development that, since the mid-1990s, has been engaged in discussing ways to achieve coherent rural policies at both the national and sub-national levels.

I would like to comment on some of the conclusions that result from this work and whose relevance has been confirmed by most interventions over the last three days. These conclusions concur to highlight the limits of agricultural policy to reflect the diversity of rural areas and the need for a paradigm shift in public policy and governance for rural development. Let me underline that this shift should imply that coherence is needed

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2. Director, Directorate for Public Governance and Territorial Development, OECD Secretariat, Paris.

among *all* policies directed to rural areas, including those that are *labelled* as “rural development policy” and “agricultural policy” but also other sectoral and territorial policies that impact on rural regions. I will make three points that I consider unavoidable in this discussion.

1. The argument has been made during this workshop that ***agriculture policy has a modest impact on the future viability of rural areas***. *On the one side*, agricultural policy doesn't influence significantly rural development *in quantitative terms*. And this because 1) a large portion of its resources do not actually go to rural areas (as Mr Bollman recalled, only half of support due to agriculture policy is actually delivered to predominantly rural regions); and 2) because those resources that go to rural areas target only a very small portion of the rural population. *On the other side*, agricultural policy primarily focuses on one of the many assets of rural areas. Successful rural regions benefit from tourism, and a thriving service sector, harness new communication technologies, support clusters of small firms, and safeguard their natural environments. For these and other reasons discussed during this Workshop, traditional sectoral approaches to rural development are increasingly ineffective.
2. ***A one-size-fits-all approach to rural policy doesn't exist. The heterogeneity of rural areas' challenges and potentials call for tailor-made policies***. There is a need for a new focus on *places* rather than *sectors* and thus for integrated policies that respond to different situations, different needs and opportunities that change from one geographical area to another but also over time. Moreover, a “modern” rural policy needs to respond to wider interests. Here I am referring to the legitimate interest that a wide spectrum of rural, but also non-rural, citizens have in rural areas. These interests are increasingly pushing for a wider appreciation of the resources that rural areas offer in terms of economic development, energy production, recreation and environment. These are all assets whose valorisation is in the interest of farmers that today rely largely on off-farm jobs and that are thus also potential beneficiaries of non-farm rural policy. But how to achieve these goals? Who has the knowledge and skills to produce a paradigm shift in policies directed to rural areas?
3. ***In the complex framework we are discussing governance is key***. Translating the will for an integrated policy approach to rural areas into practice is not straightforward. I would like to say a few words here on the key challenges that governments in OECD countries face in the process of design and delivery of rural policy. Integrated rural policy is strongly knowledge-based. And the knowledge on what can be done in rural areas, and how it can be done is shared by different actors (both public and private) at different levels. A challenge is how to involve all these actors in cooperative games that help rural regions identify their potentials and exploit them. Innovative frameworks need to be set up to ensure vertical co-ordination across government levels but also horizontal co-ordination at both the central and local levels. Moreover, effective indicators and evaluation system need to be set up as well as incentive mechanisms to make sure that these co-operative frameworks can work. Innovative practices have been reviewed recently by the OECD and include the *Micro regions Strategy* in Mexico, the *Canadian Rural Partnerships* or the *ACTIVE REGIONS* programme in Germany, just to name a few. In this context, we understand that the question should not be put in terms of “agriculture *versus* rural policy”, but rather the question is ***what place can agriculture occupy within rural development?*** How can different sectoral policies be integrated into a coherent cross-sectoral framework?



Clearly, this Workshop and the excellent interventions we have heard contributed to highlight how timely and important it is to bring more coherence in the policies directed at rural development. I believe the OECD can play a role in promoting this policy dialogue and in feeding it with solid analysis and data. This has been so far the objective of the OECD Working Party on Policies for Rural Development which, thanks to a unique territorial database and a well established methodology, develops thematic reports, Rural Policy Reviews at both national and sub-national levels, cases studies and an annual Rural Policy Forum. I can assure you that we are fully committed to work closely with other OECD relevant Committees so to assist governments in this delicate but promising transition towards more coherent and effective policies for rural areas.

## Trends and Linkages in the Agro-food Sector in Rural Areas: Empirical Evidence

*Comments by Peter Midmore<sup>1</sup>*

Multifunctionality of agriculture is easy to identify as a conceptual device for the reconfiguration of policy, but as the four papers in this section show in their individual ways, there are some serious limitations and problems where its practical implementation is concerned.

In analytical terms, monofunctionality was simpler and more tractable. Agricultural markets, at least in relative terms, are spatially integrated, homogenous, and few in number. That has helped to advance the development of a series of quantitative tools which, over several decades, have produced useful results. In contrast, rural development (just one of the dimensions of multifunctionality) has complex and extensive dimensions, that sometimes enter the market domain but, more often than not, permeate the social, political and cultural as well; it is also more broadly influenced by historical, romantic and moral conceptions of a proper or good life that deserves support. It is not therefore surprising that (although assuredly through no fault of the authors) this complexity highlights the limited potential of quantitative tools applied to various aspects of multifunctionality.

This is drawn out clearly by the first two papers. Using broadly the same assumptions, Bollman shows firstly that farming is not necessarily rural, and that in the rural context scant evidence is displayed of the importance of farming, at least as far as employment goes. Jung, conversely, demonstrates that agriculture is critical for the continued viability of a significant number of rural communities. Each paper, from the premises on which it is founded, comes to a correct but diametrically opposite conclusion, which at least reveals that what is “rural” varies according to context, and to ground any definition of it in apparently commonsense criteria leaves out some important issues. Hirst (1998) has lamented the lagoons of ink wasted by sociologists and anthropologists in attempting to distil the essence of rurality, particularly because being “a long way from anywhere” and “not many people around” are insufficient as proxies for something which is also partly a psychological criterion. Consequently, demographic and economic changes which affect the character of an area do not immediately or perfectly induce a reaction in the way inhabitants perceive themselves, or the way in which they think about things.

That also means that a major assumption (implicit in the paper by Jung, explicit in Bollman), that rural development can be equated with employment creation, needs to be further explored. Their workmanlike approach contends that employment growth may not

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1. Professor of Applied Economics, School of Management and Business, The University of Wales, Aberystwyth.

be sufficient as a means of ensuring development, but it is certainly at least a prior necessity. Nevertheless, it is at least plausible to suggest that the relationship might be the other way around, that development is a precondition for the creation and nurturing of rural jobs. Although the paper by Vollet does not explicitly mention social capital, the rural milieu in which farms provide a basis for the residential and recreational functions of the countryside clearly falls into the category originally conceived by Puttnam (1993). Therefore, any necessary dialogue between the political positions represented, respectively, in the papers by Bollman and Jung should not stop at a polite agreement to differ because of the conflicting contexts and analytical approaches; it should transcend these differences to see on what basis an agreement on rural, and then development, could be applied at both ends of the spectrum.

The perspective shifts in the second pair of papers from spatial to economic independence, and both throw up some important and interesting issues. The conventional discourse of regional economics had more or less relegated economic base multipliers to the status of a footnote to the more elaborate general equilibrium approaches which have become possible with increasing computer power. Vollet, however (through a considerable volume of work: *e.g.* Vollet, 2002; Vollet and Bousset, 1998), has done much to rehabilitate the approach as a practical tool of analysis. His paper shows that, in the context of multifunctionality, it is flexible enough to show that the new consumption-space functions of the countryside are doubly valuable, supporting greater service provision and employment than more traditional production-space uses. Mattas, *et al.* also provide, in a manner exemplary of the EU's manual of policy evaluation (European Commission, 1999), the employment and income impacts of an integrated approach to agriculture and rural development. Both papers take modest steps towards an extension of conventional analysis to grapple with the more complex matters hinted at in the early part of this discussion.

In principle their separate approaches are worthwhile, but raise four specific matters of practical relevance. First, they are based on historical data, and at the level of spatial disaggregation that is required, such data are usually available in less detail and only some time later than those provided at greater territorial scales; further disaggregation can otherwise only be achieved with substantially increased costs. Second, approaches are based on static (or comparative static) views which necessarily neglect dynamic change processes, and the latter are often much more interesting to observe and learn from. Third, in a manner similar to the 'benefit transfer' problem experienced by environmental valuers (see, for example, Ready, *et al.*, 2004), the results are highly specific to their context; although they may be intuitively generalised to make policy recommendations, little confidence can be placed on their being accurately scaled up for these purposes. Finally, the overwhelming tendency of such approaches is to guide attention towards export-led approaches for development, when at a local level, action to block economic leakages may be of similar or even greater effectiveness.

Summary and consolidation of these comments leads to some important insights. Together, the four papers indicate the magnitude of the challenge involved in developing an evidence base for rural development policy which can be as extensive and accurate as that which already exists for agricultural policy. Partly, that requires a subtle shift in understanding to include the importance of a sense of identity among rural people, and the mutual recognition of the contributions made by different groups of stakeholders. It also has to come to terms with the implications of fine-grained targeting of support frameworks and the criteria which might guide it. On that final point, a concluding note of caution is necessary. Geographical Information Systems now have the capacity to

represent a huge variety of spatially referenced databases. The mosaics they produce are undoubtedly very pretty, and if stared at hard enough may allow some kind of picture to be discerned. But such increasingly esoteric modes of analysis may lead away from rural development policies focused on popular engagement and local self-determination which could emerge from authentic multifunctionality of agriculture.

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## Agricultural Policies and Rural Development

*Comments by David Freshwater<sup>1</sup>*

There are numerous opportunities for co-ordination between agricultural and rural policy but these opportunities have been neglected, often because of the way the two issues have been defined. One of the main impediments has been the effort to show that rural is more than agriculture. This has been a lesson that has taken a long time to be accepted, especially by agricultural interests. However, it is now well understood in almost all countries and by almost all policy makers. But in the process of drawing the distinction between agriculture and rural there has been a tendency to forget that agriculture and rural have a large overlap. This overlap comes from farming being the dominant land-use in almost all rural areas and from farming being a significant form of economic activity in a large number of rural areas, even when it is not the main occupation of the local population.

The way rural has been interpreted within OECD countries has also added to the separation. If rural is defined only in terms of more remote areas, essentially those that are more than an hour from urban centres, then: large amounts of the rural countryside, large amounts of rural economic activity, and the majority of the rural population, are ignored. Certainly the problems of more remote rural areas, those that are defined by low density of socio-economic relations and considerable distance from markets, are an important topic for rural research and policy. But equally important are the issues in the urban-rural fringe, where distance is not a defining characteristic, but low density occurs and pressure for the conversion of land and activities from typically rural to typically urban is intense.

The urban-rural fringe is important for both agricultural and rural policy. For agriculture the crucial issue is land conversion. In more remote areas the land may be converted from agriculture through abandonment if the extensive margin is reduced, but at the fringe, land is converted from farming to residential and commercial activities. Unlike at the extensive margin, where land can be re-converted if conditions warrant, land that is paved is unlikely to ever return to farming. This irreversibility makes the conversion decision more significant.

Analysis of the urban conversion is important for several types of reason. The first is to assess conversion questions and how the process unfolds. One aspect of this issue is the validity of claims, primarily by environmental advocates, that farmland has to be protected for food security reasons, since much of the land being lost is highly productive. At times this claim of food security is muddled by parallel efforts to limit production methods to those deemed environmentally friendly. A second aspect is to study how different countries manage the conversion process to ensure orderly

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1. Professor, Department of Agricultural Economics, University of Kentucky.

development and to understand who benefits and loses from these various land-management practices. Included in this type of study would be policies that protect the right to farm and which may artificially impede land-use adjustment. This is a vital issue for the rural population adjacent to urban centres, many of whom have most of their wealth tied up in land holdings.

A third reason for agricultural policy analysts to examine the fringe is because a significant share of farm production takes place within a 60-kilometre ring of cities. This includes a large share of high-value row crop production, significant dairy production and a large share of speciality products. Conversion may have some impacts on supply levels for some commodities. In addition there are some unique areas in close proximity to urban centres where exceedingly high-value agriculture takes place. For these commodities their current location is unique, making the survival of the industry in its current form problematic if urban pressures become too intense. Examples of this high-value agriculture are: thoroughbred horses near Lexington, Kentucky, grapes and wines in the Côte d'Or of Burgundy, and the flowers produced in the “glass city” of Amsterdam.

An interesting policy question is: how does the current system of farm payments affect the spatial distribution of agriculture? Do high levels of support for specific commodities cause them to continue to be produced on land that has real opportunity costs? If commodity payments are capitalised into land values, the market price of farmland will be higher than it should be and this will tend to slow the conversion of farmland to other uses. Thus, high levels of support may slow urban sprawl, but at what cost?

A second important class of issues for agriculture is that it is in the fringe areas that the non-commodity outputs of farming are the most valuable. Multifunctionality is largely an urban-fringe issue for agriculture. Most of the public good outputs of farming, whether positive or negative, require the presence of non-farmers to be significant. The amenity value of green fields with cattle grazing upon them requires people in close proximity to see the cows. The problem of odour associated with spreading manure requires non-farm neighbours who complain. Thus the fringe is the place where the mix of commodity and non-commodity outputs is most controversial. The resulting shift in the relative value of commodity and non-commodity outputs can lead to policies that restrict farming activities through regulations, and it can lead to policies that start to pay farmers for the production of non-commodity outputs. Thus the fringe is the place where alternative agricultural policies have their greatest influence.

Finally, in most countries agriculture on the urban fringe is important because it is the aspect of farming that is most visible to the urban population. As demographic change makes the urban and suburban populations dominant and as these populations lose any direct knowledge of agriculture, how they perceive agriculture in the fringe will be how they perceive agriculture in general. To the extent that citizens have a favourable impression of how farming takes place in the fringe, they are more likely to support agricultural policies that reward farmers. If the public has a more negative impression, it is more likely to support policies that restrict farmers' decisions.

For rural development analysts the fringe is important because it is the place where an alternative question of rural viability is important. In more remote areas rural communities die because the population leaves when economic opportunity disappears. In the fringe area rural communities die because they are absorbed into an expanding urban environment. In both circumstances, rural communities die. Surely it is an interesting

question to determine if there are ways for rural communities to survive at the fringe. Otherwise the solution to rural development problems is to wait for urbanisation. Related to this issue is the changing value of rural land at the fringe and the question of how a growing urban population manages its expansion in terms of: density of land-use, enlargement of transportation systems, and the provision of infrastructure. This question covers regional and urban issues, but it is also a part of rural policy.

For both rural and agricultural policy the issue of pluri-activity, or part-time farming, is an increasingly significant issue. Part-time farms draw their income from both agricultural and non-agricultural sources and in order to achieve a viable level of household income, this typically requires that both income sources be reasonably stable. But, we know very little about how the underlying family labour and capital allocation decisions are made. We know little about the life-cycle processes involved in these decisions. However, we do know that an increasing share of farmers report off-farm income, and that off-farm income accounts for a growing share of total farm household income in most OECD countries. Other important issues that deserve further investigation are:

- the types of off-farm activity that are most commonly associated with various off-farm occupations;
- the scale of farm activity that is associated with types of off-farm employment and *vice versa*;
- the spatial distribution of various combinations of farm and off-farm activity as distance from an urban centre increases;
- how does off-farm income compare to government stabilisation programmes in terms of effectiveness in buffering farm household income against shocks? and
- does the presence of a significant number of farm families make a region more attractive as a location for other types of industry (manufacturing or tourism), *i.e.* how does the presence of farm families alter the perceived quality of the local labourforce or the value of other aspects of the locality?

Because there is a growing focus on entrepreneurship as a central rural development strategy, especially in more remote rural areas, there is another aspect of farming that has to be considered. In many remote rural areas farmers are the largest class of small business owners. These farmers also typically have considerable amounts of wealth, although it is tied up in farmland. A crucial factor in the success of rural entrepreneurship policy may be the ability to convince farmers that they can be entrepreneurs, either in agriculturally related enterprises or in independent new firms. Farmers are a potentially attractive group because they already possess many of the skills required to operate a small business and because they have the assets to start another business. But because these assets are “locked up” in farmland it may be necessary to find innovative ways to allow farmers to borrow against their net worth if these strategies are to succeed. In rural areas in the fringe entrepreneurial activity may be even more prevalent because of the much larger range of economic opportunities associated with a bigger and more diversified local economy.

It is clear that a large share of agricultural support currently goes to farmers who live in regions that are not remote. This can be interpreted as showing that farm policy is not rural development policy. However, I think this is the wrong interpretation. The problem is not with agricultural policy in this instance. The real problem is a definition of rural



that excludes a huge territory from consideration, simply because it is perceived as being too close to an urban centre to be admissible. We need a broader definition of rural that is based upon density and on land-use patterns. From this broader focus we may then say that the problems of remote and adjacent rural places are both often about a fear of disappearing, but for different reasons.

Ignoring the urban fringe inevitably marginalises rural policy. Both the majority of the rural population (exurbanites) and the majority of the urban population (suburbanites) live where the fringe is important. This means it is perhaps the most visible issue in rural development to most politicians as well as the public. It is where rural and urban meet. It is also where agriculture is both most important, albeit not necessarily for commodity production, and most threatened. Unfortunately neither agricultural policy nor rural policy has paid much attention to the fringe. Agriculture has focused on the supply of commodities, with little concern for the spatial dimension of production. Rural policy has largely ignored land in proximity to urban areas because it wasn't rural enough to worry about. Both of these approaches have ill-served public policy, since they have left a knowledge vacuum regarding a major policy challenge that affects agricultural production and rural people.

## Agricultural Policies and Rural Development

*Comments by Kenneth J. Thomson<sup>1</sup>*

The phrase “rural development policies” is now used – for convenience and/or rhetorical reasons – to cover a wide variety of state interventions. Most of these may be grouped as follows:<sup>2</sup>

- aids to farm development, including modernisation, restructuring (*e.g.* new land-holding patterns, conversion to organic production status) and (on-farm) diversification, with investment, both “hard” (*e.g.* land and machinery investment) and “soft” (*e.g.* farmer training, support for farmer cooperatives)
- other farm interventions, such as those concerning animal welfare, or food safety and health
- agri-environmental payments and regulation (direct, or “cross compliance”), *e.g.* for farming practices considered “friendly” in terms of soil, water, air, wildlife, landscape, etc.
- aids to non-agricultural development in rural areas, *e.g.* investment in public infrastructure and services, and grants and other assistance to non-farm rural enterprises, generally or selectively, *e.g.* tourism.

Clearly, the motivations, objectives and often methods are different between and perhaps within these groups, and a single approach to analysis cannot hope to cover them all. Nevertheless, all these “rural development policies” relate to “agricultural policies”, with the latter taken to cover the traditional or mainstream measures taken by most governments to support and stabilise markets for farm products (and sometimes inputs), and thus, or directly, farm incomes.

One of these “agricultural-rural” relationships is clearly one of *substitution*. Given the increasing costs of “traditional” agricultural policies, both budgetary and otherwise – *e.g.* over-intensification, trade disruption, the loss of small farms – governments seek alternative ways of sustaining rural households and economies under threat from market and social forces. It cannot be expected that such substitution is perfect. Those helped most by price or income support are not always the likely main recipients of rural development aid. They may not be able to take up assistance from one or other of the above groups of policy measures, because, for example, they do not possess adequate co-funding reserves, or because environmental concerns do not apply to their land.

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1. Emeritus Professor, University of Aberdeen, United Kingdom.
  2. Other groupings are of course possible, for example, into economic, environmental and social, or into “development” and “support”.

Another aspect of the relationship between agricultural policy and rural policy is often *budgetary*; ministries of agriculture usually have at least partial responsibility for the wider rural economy and environment, and so must allocate their more or less fixed budgets between the two areas, and of course between the four above groups of rural development policies. The EU budget argument over the Common Agricultural Policy (CAP) is a particularly clear example of this, with even a formal mechanism (“modulation”) for re-allocation. More widely, however, making budgetary decisions between “agricultural” and “rural development” policies is hampered not only by the usual institutional problems of “new” demands competing with long-established uses of public funds, but also by the variability of many market support costs, although disaster relief (often termed “rural development”) may also upset budgetary calculations.

More clarity might be brought to the analysis of both agricultural and rural policies if the economic distinction were maintained between “investment” on the one hand and “production” (or “consumption”) on the other. Some agricultural and rural policy measures are clearly targeted at “*development*”, defined as generally desired changes in the structures and processes of farming or in the wider rural economy. Current expenditure is incurred for new machinery, re-organisation, establishment, training, etc., with the expectation that over future years improved productivity will result, as measured by lower inputs and/or higher outputs – often non-marketed in the case of much environmental activity. In principle, the usual techniques of investment appraisal can be applied, although with the standard problems and *caveats* (e.g. limited funds, social time preferences, a mix of market and non-market costs and benefits) regarding the use of these techniques for policy purposes, as opposed to their use in an industry context.

In contrast, continued (usually annual) payments for maintaining certain practices or lifestyles is in principle a simpler form of government intervention, carried out in “support” of farming or other rural activities, whose level can presumably be monitored and assessed, at and after, the start of the scheme. Naturally, varying market earnings, inflation, and changing standards of living among non-farming households complicate farm income support, and payments for environmental services not only involve these problems (if based on compensation for farming income foregone) but also the valuation of the environmental asset maintained or service provided.

As between the two, “development” measures seem inherently riskier: the investment may not pay off, for any of a number of reasons, and thus be difficult to assess before and after public expenditure. In contrast, continuous support would seem easier to administer, at least after an initial period. However, agri-environmental support involves particularly high transaction costs<sup>3</sup>, as well as tricky valuation issues. Development measures seem easier to modify: they usually have a limited budget or lifetime, and allow adjustment of aid rates. In contrast, once an annual support payment system is set up, the usual rent-seeking activity by beneficiaries makes it hard to remove. Joint funding – sometimes a mix of higher- and lower-level government expenditure alongside private investment – characterises development policy, while farm support policy has traditionally required rather limited eligibility or co-commitment requirements.

A further aspect of the relationship between agricultural and rural policies is the degree or nature of policy *integration* between the two, or between these and other

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3. See the European Court of Auditors report “The Verification of Agri-Environment Expenditure” ([www.eca.eu.int/audit\\_reports/special\\_reports/docs/2005/rs03\\_05en.pdf](http://www.eca.eu.int/audit_reports/special_reports/docs/2005/rs03_05en.pdf)), where it is suggested that the difficulty of verification may be such as to prevent public payment (para. 119).

government policies such as those for the environment in general, for transport, housing, etc. Like “rural development”, “integration” is a term more often used than analysed, although efforts have been made to distinguish between financial integration (*e.g.* joint budgets), administrative integration (*e.g.* partnerships, “rural proofing”) and institutional integration (*e.g.* “Ministries of Rural Affairs”) (see Thomson and Psaltopoulos, 2004).

Whatever conceptual approach or approaches is/are taken to the analysis of agricultural and rural policies, a number of requirements seem plain if policy assessment is to be satisfactorily accomplished. These include:

- the need for rigour in identifying the relevant policy objectives, whether explicit, *i.e.* in the legislative text, or implicit, *i.e.* inferable from the government’s other or general policy stances, *e.g.* on sustainability
- the need for adequate monitoring and evaluation mechanisms, both at and after the start of the policy measure – these may include both data collection exercises and attitude/opinion surveys amongst key stakeholders
- data disaggregation, both territorially and socio-economically, *e.g.* by income and occupation groups, sectors, etc.

Each of these requirements may seem obvious, these but are often hard to meet in practice. For example, governments have a wide range of objectives, which may be considered hierarchically, *e.g.* development → jobs → incomes → welfare, or are sometimes expressed in vague terms that are difficult to quantify. Although modern Geographical Information Systems are lessening the problem of linking separate sets of spatial data, geographical features of policy relevance may only become apparent some time after the measure has been applied, too late for the necessary information to be collected from the start. Nevertheless, if the role of agriculture and agricultural policy in rural development is to be fully understood, a much wider range of data needs to be collected and appropriately analysed than was often the case in the past.

Two more general aspects of agricultural and rural policies may be noted. Firstly, the role of part-time farming – or perhaps of certain types of part-time farming – deserves clarification as regards “successful” rural development. Part-time farming allows the continued existence of many more farm enterprises – and often of long-established farm features, such as boundary markers, and cultural practices, such as adherence to traditional land uses and to farmer organisations – than are likely to result from allowing or encouraging consolidation into increasingly fewer and larger full-time farm businesses. Even though the latter usually appear more viable in economic terms, the clear preference of many households to devote time, income and wealth to the maintenance of family farms should not be under-estimated or under-valued. Do part-time farmers obstruct rural development (*e.g.* by refusing to sell or rent land, or by undermining regional efforts at market brands or livestock disease control), or do they advance it by providing a social and financial basis for non-farming activities by rural households, including commuting to urban employment, and semi- or full retirement lifestyles? These are difficult and complex questions, mostly bound up with the history and cultures of the country involved (not least, the issue of in-migration of “hobby farmers” from the same or another country), but it seems essential to address them if agricultural market and agricultural development policies are not to drive the farming of some highly developed regions and countries down an irreversible path.

Finally, the fundamental economic lesson that policy support (and market value) tends to end up embodied in the value of the most immobile factor – land, in the case of

agriculture – must never be forgotten. Complaints that agricultural incomes are lowered or that efforts at farm restructuring are undermined by high land prices are usually based on the misconception that policy support can offset these costs, whereas in fact the reverse relationship holds, as argued by Ricardo as long ago as 1821. Unless – as is unlikely for development purposes<sup>4</sup> – landowners are the focus group for policy, there is always a risk of “leakage” of benefits into higher land prices. Certainly, the prices of land and other rural assets are important symptoms of the growth or decline of rural economies. However, they are not – or should not be – primary indicators of the need for state intervention, except perhaps in the workings of the land market itself.

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Thomson, J.K. and D. Psaltopoulos (2004), “Integrated’ Rural Development Policy in the EU: A Term Too Far?”, *EuroChoices*, Vol. 3, No. 2, pp. 40-45.

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4. Although environmental objectives may be an exception.

## Rural Development Policies and Agriculture

*Comments by Thomas Dax<sup>1</sup>*

### Introduction

As has been the case with agricultural structures and production, the regional economy of most countries has undergone significant change. The changes in the competitiveness of regions are relevant for all types of regions (OECD, 2005). Over recent decades, and in all parts of the world, rural development policies have been conceived on an increasing scale in order to harness the potential of rural areas and enhance the elaboration of place-based policies. The cases presented in this session highlight their specific relationship to agriculture.

OECD has attached great interest to capturing the specificity of rural areas, and has been developing, since the beginning of the 1990s, a conceptual framework and typology of regions which aim to describe the rural character of regions in a comparative way. Together with a rising commitment to spatial differentiation, the scope of rural policies in many OECD countries has increased and they have sometimes taken on board innovative approaches to address specific problem patterns. Despite the prevailing demand for a shift of rural policies from sector to territorial policy, sector policies, and particularly agricultural policies, have remained very important in establishing rural development programmes. Although starting from an holistic viewpoint, the examples of rural development activities from Italy (see the paper by Mantino), Germany (see Schubert) and Canada (see Matheson), underpin the continuing major role of agriculture in the programmes.

### Discussion

The aim of this session is to analyse the relationship between rural policy programmes and agricultural policy and structures. With this orientation in mind, the papers have focused particularly on the presentation of the rural policy approaches used and the lessons we could learn from these policies. Above all, it is important to observe the common and divergent aspects of the country experiences and the governance concept used. Some of the major conclusions derived from examples of rural development programmes should be briefly highlighted through the following items:

- Rural development schemes are framed in a *context of horizontal and vertical co-ordination*. A great number of different departments, and the co-operation between – and attribution of tasks to – all the administrative levels, as well as the

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1. Federal Institute for Less-favoured and Mountainous Areas, Vienna.

inclusion of stakeholders, non-governmental organisations and private actors is required to achieve a successful programme performance. Increasingly, the involvement of new actor groups is required, and focus is now being placed on the perspectives and participation preconditions of groups previously not considered central to the regional development process (such as women and young people [Dax and Machold, 2003]), but decisive for success in the long run. This is quite in contrast to agricultural policy which, being a sectoral policy, still tends to be developed and delivered by one department, and to focus on sector objectives.

- It is important that agricultural policies integrate additional objectives to the sector-specific ones and respond to the *emerging demands of society*. In many respects these demands request the provision of public goods by agricultural practices which are often linked to a specific type of farm management. Agricultural policy development should therefore increasingly continue to adopt principles widely accepted for spatial development processes. These have already been addressed by shifts in terminology: the discussion and the priorities of agricultural policies have started to include rural development measures over recent years. In particular this trend refers to the need to support the types of farming which favour the provision of public goods (multifunctionality).
- There is a strong influence on the *spatial distribution of agriculture* by place-specific factors (production potential, fertility); technology potential; and agricultural and other policies. Rural policies have a direct impact on agriculture in various aspects (local employment, production chains, marketing of produce, land-use, linkage to amenity base, diversification potential, rural services provision, etc.).
- Moreover, it is of core relevance to take account of the *spatial impacts of agricultural policies* in themselves (see the assessment of rural development policies in Italy). As a recent study for the EU has revealed, the mechanisms of Common Agricultural Policy are not favouring the cohesion objectives which regional policy seeks to achieve (Shucksmith, *et al.*, 2005). This is particularly relevant for large parts of (remote) rural regions, and rural development has only started to counteract this policy effect.
- Many rural development programmes target agricultural activities in particular, by focusing on *diversification approaches* and linking agriculture to other sectors. It is still important and – for many rural regions, a particular component of the regional strategy – to nurture this development potential and also explore “niche-markets” if available. Many innovative pilot schemes achieve an interesting economic performance and learn lessons which are very relevant for actors in other areas (see, in the case of Germany, the REGIONEN AKTIV programme). What is important is that these initiatives rely to a high degree on the specific amenity character of the rural regions.
- In almost all successful rural development programmes farmers are actors in a restructuring process that includes agriculture as one component of a comprehensive and place-based strategy for rural development. This integration is also relevant at the level of farm households: *off-farm income* is the major income source of the majority of farm households. In other terms, the health of the farm and non-farm economies in rural areas are inexorably linked.

- As the long-lasting efforts to achieve partnership development show, it is not sufficient to build a comprehensive policy framework, however complex it might be. The bottlenecks often appear in the *personal commitment*, the development of “soft” skills and in the *institutional changes* required to cope with the new challenges. Informal mechanisms are frequently more efficient, but obviously can hardly be directly enhanced by policy measures (Canadian Rural Partnership).
- The rural development programmes presented have delivered a number of *success factors*. These might also be very relevant to the discussion of agricultural policy priorities and the integration of the spatial dimension. In particular, successful cases point to following aspects:
  - understanding the causes of problems;
  - finding widely shared commitment and “high-profile” actors in the collaborating institutions;
  - careful planning and adjustment to place-specific needs;
  - openness and transparency of the programme and the process;
  - communicating success experiences;
  - links to social/political periphery;
  - spatial integration into regional and inter-regional networks and economy.
- With reference to the presentations, we can realise that the monitoring of the implementation process and evaluation of programme performance is crucial. The assessment results are not only essential for the acknowledgement of the achievements, but particularly for answering general issues on organisation and procedures of such programmes. This can enhance the *learning process* of the actors in the regions involved and can also be transferred to regional development processes in other regions.

In particular, a *comprehensive evaluation* is required in order to underpin specific impacts of rural development on agriculture. This might include:

- development of a strategic approach, involving land-use changes and widening the use of natural resources;
- focus on local identity creation, including the particular contribution of agriculture to the challenges for the area’s development;
- development of a meaningful partnership, linking agricultural with non-agricultural actors;
- the long-term increase of participation of citizens, local leadership and institutional capacities;
- a positive impact on economic performance, aiming at the stabilisation of the rural economy.



## Key questions

The diversity in approach of different countries' programmes suggests that rural policy is characterised by context-specific programmes and still includes a wide field of experimentation. In order to serve the policy agenda on rural development, a comprehensive assessment of the implementation, success factors, constraints and relationships to other policy fields is needed. This includes learning about *processes* like partnership-building, community involvement, empowerment, exclusion and inclusion, and the practical application of concepts such as sustainable development, integrated development and policy-proofing.

### *Questions arising include, in particular:*

- How can the *governance issues* be advanced and requirements for institutional changes addressed? This issue has to take account of the roles of the different levels of administration and sectoral tasks and has to consider the appropriate mix of sectoral *versus* co-operation concepts.
- In many regions agriculture provides *public goods* which serve as core elements in rural development efforts. To what extent can the inter-linkages of rural development and agriculture be directly included in the development programmes?
- The impending *demographic changes* in rural areas require adapted regional strategies. How can these changes be anticipated and how can concepts be developed which do not consider the new situation only as a “threat”, but also specifically focus on opportunities future potential?
- Many initiatives attain high *participation* levels of the core group of actors. From a general viewpoint of inclusion and the aim of enlarging the effects of the programme, the involvement of more distant groups of local/regional society is also necessary. Do we have to target these groups separately and focus on rural women, rural youth, minorities or other groups? How can linkages to agricultural changes be improved for these groups?
- As mentioned above, we have to find ways to learn from experiences. This implies both an internal exchange and also a much wider inter-regional exchange. Do we make sufficient effort in developing concepts for *communicating experiences*, discussing successes and constraints?
- How can the learning processes be stimulated so that local actors are interested in trans-regional (including trans-national) exchanges?
- How can we achieve maintained momentum for rural development and renew commitment over longer periods? In particular, how can the understanding of the need for agriculture to link with rural development concepts be deepened?

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## Rural Development Policies and Agriculture

*Comments by Sabrina Lucatelli<sup>1</sup>*

### Introduction

Rural development and agricultural policies differ in both nature and objectives. Rural development policy is territorial and targeted to the needs of a specific area. Agricultural policy is sectoral and horizontal. The major objectives of rural development policy are the enhancement of the quality of life of the rural population and improvement of the overall competitiveness of rural areas; whilst agricultural policy has the improvement of farmers' incomes as its main goal, even if agricultural policy objectives have been evolving in many countries and at present they often include environmental objectives and the production of non-output goods (multifunctionality of agriculture). It is important that policy makers keep in mind the difference between these two policy objectives, so that appropriate strategies and policies can be designed. In this framework, it is crucial for countries to have both a rural development policy and an agricultural policy and that the two policies have resources that are proportionate to the objectives they pursue and that they are carried out in a coherent way.

Nevertheless, it is important to try to understand the consequences of these two types of policy. Co-ordination between agricultural policies and broader rural development policies (and regional policies, of which they are a part) is becoming essential in many OECD countries, due to two main concerns: reduced public financial resources and increased public awareness of the cost-effectiveness of public investments.<sup>2</sup> Governments thus need to assess to what extent agricultural policy, just like all other sectoral policies that have a significant impact on rural areas, contributes to the overall development of rural areas. Conversely, it is important to assess to what extent integrated rural policies serve the interest of the agriculture sector and the other sectors of the rural economies.

### *Main messages*

First of all, there is the *size* argument. It is important to keep in mind the differences linked to the size of rural development policy, which depends on whether one country has relatively small rural development projects or large rural development programmes. There can be an evolution, with countries starting with small rural development projects, and ending up with a structured rural development strategy and policy. The *size* of the

- 
1. Ministry of Economy and Finance, Department for Development and Cohesion Policies, Rome.
  2. There is an increasing pressure of public opinion on agricultural policies, concerning their objectives; the corresponding financial budgets, achieved results and side-effects.

policy is also (but not only) linked to its financial relevance. There can be situations in which, even without rural development programmes, projects are financially important. For example, the Turkish South Eastern Anatolia Project is the most comprehensive rural development project in Turkey, covering fields such as infrastructure, services, industry and agriculture, with a total cost of USD 32 billion. This cost corresponds to approximately 70% of the entire regional policy budget for Italy for the period 2000-06 (for Objective 1 regions). In Turkey there are also smaller rural development projects with more specific objectives, such as improving living conditions of women in rural areas, or diversification of agricultural production.

Depending on the size and importance of a country's rural development policy, the potential impacts on agriculture (but also on rural areas) can vary considerably. Concerning agriculture, the extent of these impacts will also depend on the importance of *strictly agricultural policy interventions* within the overall rural development policy. The coherence of these interventions with a country's agricultural policy is also important, even if not always under the control of policy makers. Concerning impacts of rural development policies on rural areas, the possible (but not obvious) linkage of rural development policy to one country's regional policy, or to a more general development policy (as seen in the Turkish case), or to social policy (the Mexican case), also matters.<sup>3</sup>

The second element to take into account is "*Territory*". The Austrian case showed how different the direction of "pure" agricultural interventions (like those included in Pillar I of the CAP) and rural development interventions (like those included in Pillar II of the CAP) can be, depending on the location of farmers (classed between all farmers; farmers in favourable zones; and mountain-based farmers). Pure agricultural payments (Pillar I direct payments) barely reached disadvantaged areas, represented in this case by mountain-based farmers. Traditionally, in fact, if rural development policies tend to be "territorially oriented", agricultural policies are horizontal and do not take into consideration the specific needs of different areas with individual characteristics. Different regions imply different territories and different needs.

The Mexican case confirms this point, with Deschamps Solórzano's paper asserting that "Mutual Effects between Agricultural Policies and Rural Development Policies" call for both rural development and agricultural policies to become more territorially based, and to take into consideration the different structural conditions that exist in rural Mexico. Even agricultural policies have to fit specific territories and they have to strengthen relationships with local actors.

The third lesson, made especially clear by the Japanese case, is the importance of "networks of different actors" in rural areas. Saika's paper underlines how "reflecting the increasing number of non-farmers in rural areas, co-operation between farmers and non-farmers is essential for these areas". The participation and collaboration argument is linked to the concern to find new ways or alternatives to maintain rural and cultural identity (currently under threat) with farmers representing an ageing and diminishing sector of the rural community (the same problem is also reflected by the Mexican paper). This argument is linked to the importance, for policy makers, to build up new "rural

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3. The linkage with social policy is particularly important for a country with rather high poverty rates in rural areas. But the importance of supplying basic services in rural areas is also becoming an issue in other countries, because of main demographic trends recorded in many rural areas (ageing population; low levels of population density; low levels of youth employment).

partners” – groups able to understand and express rural interests and needs, which cannot coincide anymore with agricultural association groups.

### ***What would be the ideal rural development policy for agriculture, and vice versa?***

Now, keeping in mind these main messages and the content of the different papers presented in this session, I will briefly try to give an answer to the main questions: what would be the ideal rural development policy for agriculture? and what would be the ideal agricultural policy for rural areas? In answer to the first question, the ideal rural development policy for agriculture has to be able to:

- improve the quality of life in rural areas, including the social context (in terms of supply of social and *ad personam* services);
- maintain the level of the rural population (by providing job opportunities, infrastructure and services);
- improve the existing accessibility of rural areas, for both people and goods;
- enhance local rural infrastructure (irrigation systems; local transportation systems);
- strengthen the linkages between rural and urban areas;
- increase the competitiveness of rural territories, identifying in each different territory its main assets and combination of assets, helping agriculture to find its role within such a comprehensive picture, if there is one; and to
- build up a “rural local voice”, facilitating the organisation of rural local actors’ associations, with farmers being one of several local actors participating in such local lobbying groups;
- help “agriculture” to find its role in respect to a specific territory, consistent with its competitiveness potential.

Indeed, each territory has to find its own competitiveness profile, identifying the main assets on which it can construct a development strategy. Agriculture may (or may not) be one of these assets, depending on the nature of a particular territory. In some territories agriculture can be important, supplying quality products characteristic of the region; to other, more industrially-oriented territories it can be an important link in the food chain; in other territories where the main asset is the environment, agricultural policy can help farmers to produce in a more environmentally friendly way.

For rural development policy to achieve the above-described ideal characteristics, integration with regional policy is crucial. But integration with other national policy (such as social policy and research and innovation investments), is also important. Horizontal co-ordination between different administrations is becoming vitally crucial. But what is even more important is acquisition of *a real knowledge* of rural territories, with attention given to both the economic and the social characteristics of these areas, and proper monitoring of policy impacts on them. In fact, the first step towards achieving such an integration between different policies at territorial level is to establish a sort of “*Observatory of Rural Areas*”, to provide the knowledge necessary for monitoring these areas. At the same time, different policies that, in each country, have impacts in rural areas (*e.g.* schooling, health, infrastructure and local transportation systems) should be

monitored at rural-area level. This is not the case in many OECD countries that do not even monitor agricultural policies at territorial level.

It is also important to try to define the ideal agricultural policy for the future development of rural areas: this would

- work for the competitiveness of the agro-food sector with a food-chain perspective;
- be able to connect the agro-food sector with the local economy, through the integration between up-stream and down-stream levels of the food chain;
- create a class of “*farmer-entrepreneurs*”;
- differentiate agricultural interventions, depending on the needs of the territory;
- be based on *conditionality*, linking farmers’ subsidies to the provision of a “service” (environmental services, local “culture” tutoring; contribution to landscape preservation); these services can be different, depending on the specific rural area;
- enable access to credit for farmers; and
- involve a governance implication: helping farmers to work with other local actors (and not *vice versa*, isolating farmers).

Finally, some characteristics of rural development policies<sup>4</sup> (having a strategy; adapting to different territories; targeting different needs; using evaluation practices at different stages of programming; transparency and accountability) should be extended to agricultural policies. However, the impression remains that the effects of agricultural policy have not yet been sufficiently examined, especially with a territorial perspective.

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4. These characteristics, in the European case, are due to the fact that rural development policies are conceived and implemented in strict relation with regional policies.

## **Part II.**

### **Setting the Scene**



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# Chapter 1. Trends in Agricultural and Rural Development Policies in OECD Countries

OECD Secretariat<sup>1</sup>

## Introduction

The 1998 OECD Agriculture Ministerial Communiqué states that:

*Beyond its primary function of supplying food and fibre, agricultural activity can also shape the landscape, provide environmental benefits such as land conservation, the sustainable management of renewable natural resources and the preservation of biodiversity, and contribute to the socio-economic viability of many rural areas. In many OECD countries, because of this multifunctional character, agriculture plays a particularly important role in the economic life of rural areas.*

The relationship between agricultural and rural development policy is constantly evolving as the structure of rural economies changes. Similarly, there is no a single, simple relationship between agricultural policy and rural development policy. Agricultural policy is sector-specific, while rural development policy is multisectoral, territorial policy. In both cases, there are a multitude of objectives – some of which may be conflicting – and a multiplicity of sectoral and regional circumstances.

In the past, the share of agriculture and its related activities in rural economies in many areas of the OECD was such that the terms “rural” and “agricultural” were often used almost interchangeably. An important implication of the process of structural change witnessed in OECD countries over the past two or three decades is the decline not only in the proportion of total output and employment accounted for by agriculture, but also in the income derived by farm households from farming. In many OECD countries and regions agriculture is no longer a driving force for employment and income in rural areas. This implies that measures confined to the agricultural sector will be limited in their ability to underpin the economic performance of rural areas.

At the same time as the sector’s economic significance has declined in OECD countries (its share of employment fell from 10% in the mid-1980s, to 6% in the early years of the 21<sup>st</sup> century, and that of GDP from 3% to around 2% over the same period), its structure and interactions with the rest of the economy have become more complex. One of the major manifestations of structural change is that the nature and extent of linkages between sub-sectors is changing. Rapid advances and adoption of new technology in OECD countries’ agriculture has strengthened the linkages between agricultural and non-agricultural sectors and the agricultural sector has become technologically more sophisticated. The extent and nature of these linkages have

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1. The part of the paper on agricultural policies was prepared by Dimitris Diakosavvas, Directorate for Food, Agriculture and Fisheries, and the part on rural development policy was prepared by Nicola Crosta, Directorate for Public Governance and Territorial Development.

implications for the effectiveness of agricultural policies as well as on the effects of agricultural policy reform on the rural economy (OECD, 1998).

The context in which agricultural policy is being formulated has also changed to respond to growing society's concerns regarding food safety, food security, animal welfare, environmental protection and the viability of rural areas. There has been a shift away from production-linked support towards various types of payments that are often linked to land use. In many OECD member countries, this shift of agricultural policies is intended – to an increasing extent – as a vehicle for contributing to economic and social revitalisation of rural areas and not solely a means for maintaining farm incomes. Nevertheless, the sectoral nature of these policies, and concerns over their economic cost, have raised questions about their effectiveness in addressing non-agricultural objectives, including rural development.

On-going changes in agricultural policy reinforce the importance of more fully understanding the role of agriculture in rural economies. Most countries have begun to reduce their reliance on the most distorting forms of support to agriculture and are increasingly moving towards budgetary support which is linked to land. This trend in reducing such forms of support eases environmental pressure and offers the opportunity to more effectively target farmer incomes and the provision of specific rural and environmental benefits.

An important challenge that policy makers are facing is the design and implementation of coherent policies capable of contributing to overall rural development objectives without impeding structural adjustment or creating new distortions. Policy makers should balance the need for greater economic efficiency, with transparency and with environmental and social concerns in rural areas.

The 1998 OECD Agriculture Ministerial Communiqué underscored the need for a coherent approach to agricultural reform policies, encompassing concerns for rural development. One of the policy principles adopted was that the contribution of the agro-food sector to the viability of the rural economy should be enhanced through “... *efficient and well-targeted agricultural policy measures facilitating the mobility of labour, new market opportunities, alternative uses of land (both within and outside agriculture), and the provision of rural amenities.*”

The effectiveness of agricultural policies in improving the economic well-being of rural areas depends upon several factors, including: linkages between the local rural economy and the agro-food sector; levels and type of agricultural support; and their coherence with cross-sectoral policies.

The aim of this paper is to highlight the evolution of both agricultural and rural development policies and their implications for the rural economy. First, the linkages between agriculture and rural economies are discussed. Then the evolution of agricultural policies and their implications for rural areas are examined. This is followed by a discussion on trends in rural development policies and the implications for governance of shifts towards an integrated approach to rural policy. Some background data on farm structures are presented in the Annex.<sup>2</sup>

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2. The first three sections draw primarily on OECD (1998) and OECD (2005) and the last two sections draw on OECD (2003) and OECD (2006).

## Linkages between the agro-food sector and the rural economy

Rural areas in OECD countries are quite diverse. They differ in their development experience, economic structure, natural and human endowments, geographical location, demographic and social conditions. They are affected in different ways, and to differing extents, by ongoing socio-economic and policy developments that occur nationally and internationally. There are rural areas which have successfully adapted to such changes, while others continue to experience economic and social difficulties. Understanding these processes of adjustment is crucial for policy.

The nature and degree of linkages between agriculture and rural areas depends on many factors, and the relationship is two-way, evolving over time. The rural non-agricultural economy provides alternative uses of labour, land and capital, and shifts in demand for these factors will affect farm structures. For example, a large non-agricultural rural economy can provide more off-farm income opportunities for farm households and raise the opportunity cost of farm labour, thereby improving farm household incomes, wealth and influencing farm production over the medium and long term. Likewise, a less diversified rural economy could be more dependent on agriculture as farm households seek to expand operations in pursuit of employment and higher incomes.

In the past, the agricultural sector was often the engine for growth in rural economies in many OECD countries as it was the predominant source of rural income, employment and output. Consequently, rural and agricultural problems were considered to be virtually synonymous and it was often assumed that rural and agricultural objectives could be pursued through a single set of policies focused mainly on commodity price support. That situation has changed dramatically for a variety of reasons.

Agriculture in OECD countries, like other industries, is continuously facing adjustment challenges stemming from economic and non-economic factors. Farm structures and changes in them affect rural areas in a variety of ways. Farm households in different farm size classes organise their labour, production methods, financing and marketing arrangements in different ways. The regional distribution of benefits from agricultural support policies is also influenced by the structural characteristics of the sector. Commodity- and input-coupled support, as well as any change in its level or form, has different rural effects because of the varying importance of each commodity among regions. The scope for changes in labour allocation on and off farms by farm families in different regions will also have a fundamental bearing on the extent to which adjustment process would be smooth in response to market signals or whether there is a need for policy intervention to address particular income or adjustment problems.

Further, farm structures at the rural level are influenced by a wide range of attributes of rural area such as economic structure of the area, the physical and social geography of the area, population, human capital characteristics. Increasing non-farm employment opportunities in a particular rural area could have an effect on the farmer's perception of economic risk, with implications for the selection of farm product- and input-mix. Risk-averse farmers may be more likely to participate in non-farm employment and in regions where geography is not conducive to farming. Risk-averse farmers may prefer full-time off-farm employment to farm expansion. The rural characteristics could also affect a farm household's asset position. In general, as land values are influenced by expectations about the ability of the land to generate income, in regions where farming is the dominant economic activity, land values will be sensitive to expectations about farm income.

While structural change in the sector is not uniform among rural areas, some common trends can be discerned. The main results on agricultural structural changes suggest that there has been a continuation of a number of long-term trends in farm structures and increased diversity has become an important feature of the sector. The duality of farm structures in terms of land fragmentation, the size of farms, ownership and age structure is one of the specific characteristics of OECD agriculture.

One universally recognised feature of structural change is that, as countries develop, the proportions of total output and employment accounted for by agriculture decline; this is true also for the agricultural sectors in OECD countries. This structural transformation of the economy has prompted farmers to migrate from rural areas to urban areas and seek alternative employment opportunities, especially in less-diversified rural areas. The share of agricultural employment in total civilian employment in OECD countries is now less than 6% for most countries, although for some countries with relatively large agricultural sectors the figure exceeds 15%. There is also considerable variation in the relative importance across rural areas within countries. In general, agriculture remains the dominant land use in rural areas, but rarely the dominant source of economic activity. In the enlarged European Union (EU25), 96% of rural land is occupied by agriculture (including forestry), around 13% of employment in rural areas is in farming and 6% of rural gross value added comes from farming.

Farm numbers, farm land and labour have declined, while farm output and average farm size have increased (Annex Table). In most countries there is a general tendency for an increasing proportion of “commercial” agricultural production to be concentrated in a declining proportion of farms. As farms have become more specialised, the number of commodities produced per farm has decreased. While the number of larger farms has increased, the number of small farms continues to be very high and the largest declines are in the numbers of “middle-sized” farms. This bi-modal distribution reflects the heavy reliance of smaller farms on off-farm income sources, on the one hand, and the continued growth of very efficient, larger-scale farms on the other.

The age structure of farmers shows that a major share are over 55 years old in many OECD countries. There are very few countries where the majority of entrants into agriculture are less than 35 years old. On average, in 2000 in the EU15, 52% of farmers were 55 years old or older and only 8% were less than 35 years old. There are only a relatively small number of OECD countries where more than 40% of farmers have even basic agricultural training, although there are wide variations in the educational attainment levels of farmers across countries. This low level of training could reduce farmers’ adaptability to new economic, social and environmental conditions in the future. Usually farmers with a university degree participate in training to improve their farm management skills, adopt best management practices and are more likely to have a farm plan compared with farmers with no formal education. However, farm operators and other members of their households resort increasingly to off-farm work to complement their incomes.

While there are clearly differences in the scope and definitions employed in the statistical surveys by OECD countries, the incidence of full-time farm work, that is with agriculture as the main occupation, is less prevalent than part-time farming and its relative importance has declined over time. In the EU25, of the 10 million people working in agriculture in 2003, 46% worked full-time. In Japan in 2002, 32% of the farmers worked full-time, while in the United States around 30% of hired farm workers worked 150 days or more per year. An important policy consequence of increased off-

farm employment by farm households is increased reliance on off-farm income to maintain farm family well-being. For many farm households agriculture is no longer the only income source and often no longer the most important income source.

Another important feature of structural change is the increasing tendency to add value to the product. Rapid advances and adoption of new technology in OECD countries' agriculture and changes in consumer preferences have led to more complex patterns of processing and distribution of farm output. In addition, regional location, particularly in European countries, is often tied to products with a specific label and the characteristics and processing techniques are specific to the regions concerned (niche markets).

Notwithstanding the reduction in the number of farmers, agriculture's importance to the well-being of rural communities should not be understated. The relevance of the agricultural sector to the well-being of rural economy cannot only be encapsulated in developments in the number of persons directly employed by the farm sector. Agriculture is the predominant user of rural territory and its manifold functions constitute an important function in the rural landscape. Farm practices can have positive effects such as maintaining a particular form of landscape, biodiversity, or negative effects such as causing groundwater pollution. There is thus a widespread and growing awareness of the importance of the various linkages between farm practices, rural amenities and environmental sustainability.

Moreover, the agricultural sector is increasingly dependent on inputs which are not supplied by farmers, including purchased services such as contracting, technical, financial and business advice. New linkages and relationships among levels in the production-marketing chain have evolved which dramatically change the rural structure of agriculture. Consequently, as emerging new technologies tend to substitute farm-supplied inputs for purchased inputs, both the backward linkages (*i.e.* where the sector purchases its inputs) and forward linkages (*i.e.* the market for an industry's output) of the agricultural sector might be changing with important implications for the rural economy, depending on where these industries are located.

## Trends in agricultural policy

Governments have long intervened in domestic and international markets for agricultural products. Most OECD countries utilise an array, often complex, of domestic and trade measures to support their agricultural sectors. These include price supports, quantitative restrictions on outputs or inputs, budgetary payments, trade barriers and subsidies on inputs, reflecting multiple policy objectives and changes in priorities over time. These different measures influence the flow of resources between commodity sectors and regions and consequently inputs used, farm structure, incomes and the rural economy. Agricultural policies have generally acted to increase input returns and resource use in agriculture. However the pattern of this increased resource use and returns differs, largely depending upon the type of agricultural policy considered.

Agricultural support policies in OECD countries have exerted varying degrees of influence on the level and the mix of resources utilised in agricultural production. By maintaining producer prices at levels above those on world markets, they have attracted into and retained in the sector higher levels of resources than would have occurred without such support. By prolonging the involvement of marginal producers in agricultural production, these policies have maintained employment in agriculture and its adjacent sectors, particularly in rural areas where there are often few alternative

employment opportunities. In the absence of production-linked agricultural support policies, agricultural production would have been lower; production could also have tended to be more concentrated in rural areas with favourable conditions and to have led to greater contraction of agriculture in less favoured rural areas. Moreover, agricultural support policies resulted in excess of resources, particularly labour and land remaining in agricultural production, thereby boosting agricultural and rural populations, or at least curtailing their rates of decline.

Notwithstanding the aforementioned potential positive contribution of agricultural support policies to rural economy, a number of factors may reduce or even offset this benign effect. First, although in the absence of production-linked support, the incentives for rural to urban migration might have been much stronger, it is unlikely that such support would have been the most effective means of preventing the rural exodus and reversing the long-term trend of young people leaving the countryside in many rural areas. Second, the degree of support varies by commodity. Resources may have been attracted into less labour-intensive products (*i.e.* more land and or capital-intensive products). Third, the incentives created by agricultural support have not facilitated employment, on the contrary they have favoured more capital-intensive farming methods in many OECD countries. Fourth, the policies were unable to prevent the widening of disparities in the agricultural sector and in the rural areas. In fact they may have even exacerbated such disparities because most of their benefits are conferred to the most affluent rural areas. Fifth, production-linked policies are neither very efficient nor very effective in correcting market failures as positive externalities of agriculture are mostly related to the continuance of farming rather than on the intensity of production. Further, by bidding-up land rents, farm support might have deterred other non-farm industries from locating in rural areas. In general, policies designed to retain resources in agriculture effectively contributes to the problem of excess capacity in the sector, which in turn lowers the rate of return on farm labour.

Price support has also become increasingly inefficient as a way of helping those in farming who are most in need of income assistance as the benefits conferred are proportional to output and hence to farm size. The largest farmers, who are generally also the most profitable, receive most of the benefits. Across the OECD, the largest 25% of farms produce 72% of the output and receive 68% of support, though this varies considerable across countries and commodities (OECD, 1999).

Moreover, given that in many instances agricultural land is owned by non-farmers, an important part of the income generated by price support is transferred to non-agricultural landowners, many of whom do not even reside in rural areas. Such policies undermine the development of the rural non-farm economy by bidding-up the costs of location-specific factors and increasing the rural cost of living. OECD work suggests that only a quarter of each extra dollar of market price support actually ends up in increasing farm incomes. The balance of support is either capitalised into asset values (land) or transferred up or down the food chain (input suppliers, processors, distributors) (OECD, 1996). Because so much of the support is reflected in higher land values, the result over time is a higher cost structure and reduced farm competitiveness.

Broadly speaking, agricultural policy measures that are directly related to rural development could be grouped into three main categories:

- measures aiming at restructuring and increasing competitiveness of the agricultural sector;

- measures aiming at providing environmental services and for land management, including support for specific areas; and
- measures aiming at wider rural development.

Measures aiming at restructuring and improving agricultural competitiveness comprise a wide array of measures that promote structural change, amalgamation, modernisation of farms and improvement of farmers' living conditions. They include support for human capital (vocational training, advisory services, the setting up of young farmers, early retirement), physical capital (investment support for the improvement of production, processing and marketing structures and for agricultural infrastructures, setting up producer groups) and support focusing on quality and value added products (meeting standards, food quality incentive schemes, food quality promotion, geographical origin). This category of measures is provided to farmers or to the agricultural sector as a whole and are, in general, applicable to all rural areas.

Reflecting heightened policy concerns over the environmental performance of agriculture, OECD countries have increasingly made support payments to farmers subject to environmental conditions (cross compliance). There is a great diversity of agri-environmental payments across OECD countries and regions. In practice, agri-environmental payments tend to be linked to on-farm practices associated with certain environmental outcomes. Payments directly based on environmental outputs, such as “improved landscape” or “more diversity”, are rare. In particular, many European countries and the United States have increased the use of these measures since the 1990s. Some notable trends include the growing use of payments to support the adoption of less-intensive farming practices (*e.g.* organic production); land retirement payments to promote environmental objectives; and transitional payments to assist farmers in implementing structural changes intended to benefit the environment. By contrast, some countries, including Australia, make available payments administered through community-based schemes involving local governments and other community groups.

Environmental and land management measures also comprise programmes for farming in disadvantaged areas to enable farmers to continue farming despite permanent natural handicaps. For example, in many OECD member countries, particularly in Europe, special schemes for farming in mountainous and less favoured areas are implemented, not to facilitate adjustment or modernisation of the agricultural sector but rather to enable farmers to cope with these pressures and to prevent land abandonment.

Agri-environmental payments represent only a small proportion of the total amount spent on agricultural support (financed by both consumers and taxpayers) to the sector (around 3%). However, it should be kept in mind that the level of environmental payments does not necessarily reflect the importance that governments accord to environmental protection and conservation of natural resources, as other agricultural policies are related directly or indirectly to the environment (*e.g.* natural disaster, general services, regional assistance, cross compliance, etc.), while the plethora of environmental regulations affecting agriculture is significant in most OECD countries.

Measures aiming at wider rural development include measures to encourage on-farm diversification towards non-agricultural activities, support for off-farm activities and strengthening the links between agriculture and other sectors of the rural economy, including rural tourism, craft activities, renovation and development of villages, protection and conservation of the rural heritage and agricultural water resource management. Implementation of these measures involves a greater participation of rural



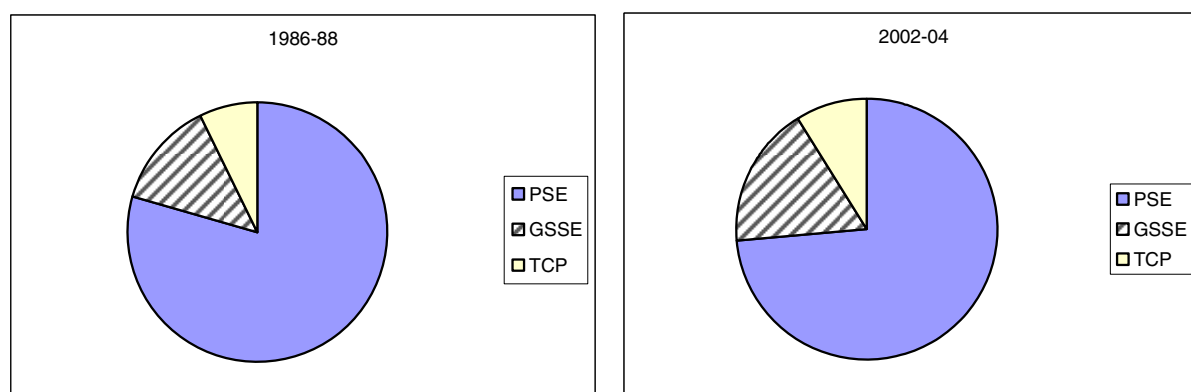
farm and non-farm communities. In Australia, Canada, the EU and New Zealand, for example, there are programmes which provide payments not to individual farmers but to community-based groups of farmers. The role of government under such programmes is to provide start up funding as facilitator and co-ordinator of local initiatives.

Since 1987, the OECD has been monitoring and evaluating agricultural policies in OECD countries and measuring and monitoring the annual cost of agricultural policies of its 30 member countries as well as a number of non-OECD countries using the Producer Support Estimate (PSE). In a nutshell, the PSE measures the cost of support to farmers from policies that keep domestic farm prices above those on the world markets (paid by consumers), plus budgetary-financed payments and input subsidies (paid by taxpayers). Another indicator, the Total Support Estimate (TSE), measures the cost of consumer and taxpayer support to the agricultural sector as a whole (that is, not only to individual farmers, but also for research, development, training, inspections, marketing and promotion). Classification of policies into different categories is according to their implementation criteria (*i.e.* conditions under which transfers are provided), independently of their objectives and effects.

In 2004, total support associated with agricultural policies was USD 378 billion, which is equivalent to 1.3% of total GDP across the OECD area (OECD, 2005). While this total includes both support to consumers and to general services (such as agriculture-related research, extension, inspection, training, infrastructure, marketing and promotion), much of this support is directed at farmers (Figure 1).

To enable meaningful cross-country comparisons, the absolute value of producer support is expressed as a share of gross farm receipts (%PSE). As portrayed in Figure 2, there has been little change in the level of producer support since the late 1990s for the OECD as a whole. It has fallen from 37% of farm receipts in 1986-88 to 30% in 2002-04, a level of support already reached in 1995-97. In other words, on average, almost a third of gross farm receipts across the OECD area originate from transfers associated with agricultural support policies.

**Figure 1. Total agricultural support in the OECD area**

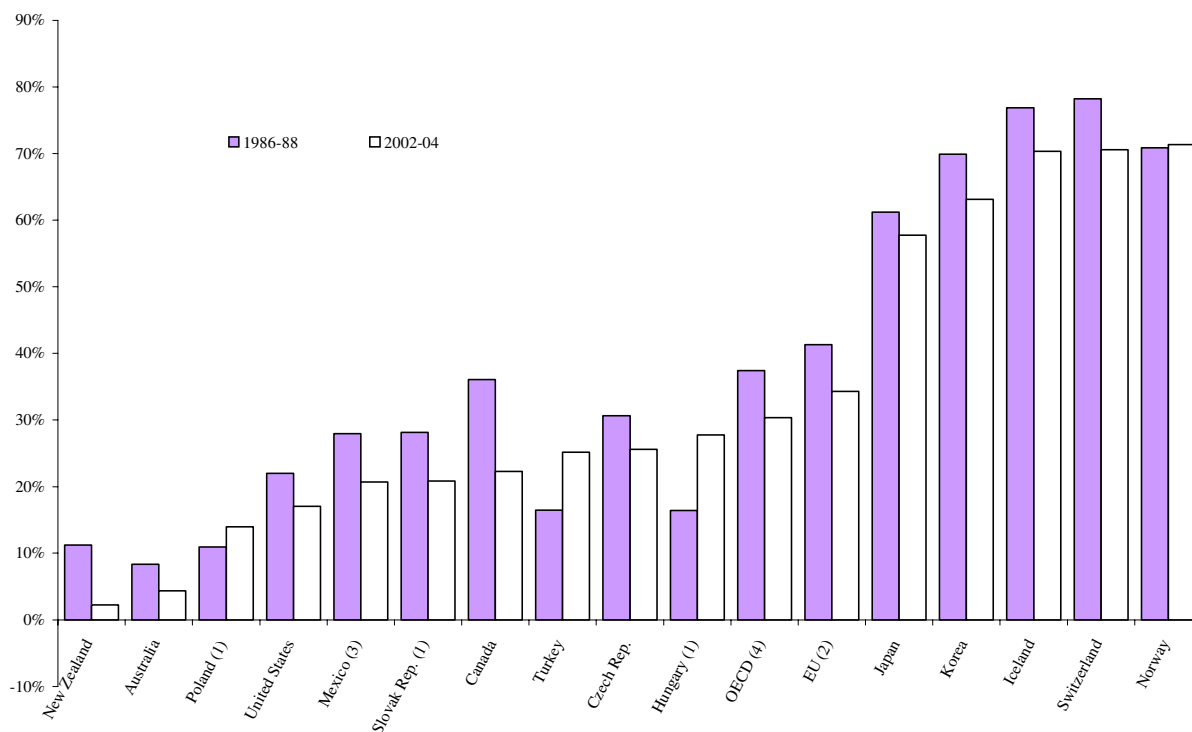


PSE = Producer Support Estimate

GSSE = General Services Support Estimate

TCP = Transfers to consumers from taxpayers

Source: OECD, PSE/CSE Database, 2005.

**Figure 2. Producer Support Estimate by country**

Countries are ranked according to 2002-04 PSE levels.

1. For the Czech Republic, Hungary, Poland and the Slovak Republic, 1986-88 is replaced by 1991-93 and 2002-04 by 2001-03.
2. EU-12 for 1986-94 including ex-GDR from 1990; EU-15 for 1995-2003; EU-25 from 2004.
3. For Mexico, 1986-88 is replaced by 1991-93.
4. Austria, Finland and Sweden are included in the OECD total for all years and in the EU from 1995. The OECD total does not include the six non-OECD EU member states.

Source: OECD, PSE/CSE database, 2005.

Both the level and form of support vary very widely across countries, commodities and regions. Iceland, Norway and Switzerland have more or equal than 70% of the value of agricultural production accounted by support policies, while Australia and New Zealand have less than 5%. In most OECD member countries, on average, livestock products are more heavily supported than crops. For individual commodities, rice, sugar and dairy are relatively highly supported, whilst oilseeds, poultry meat and horticultural products are less assisted.

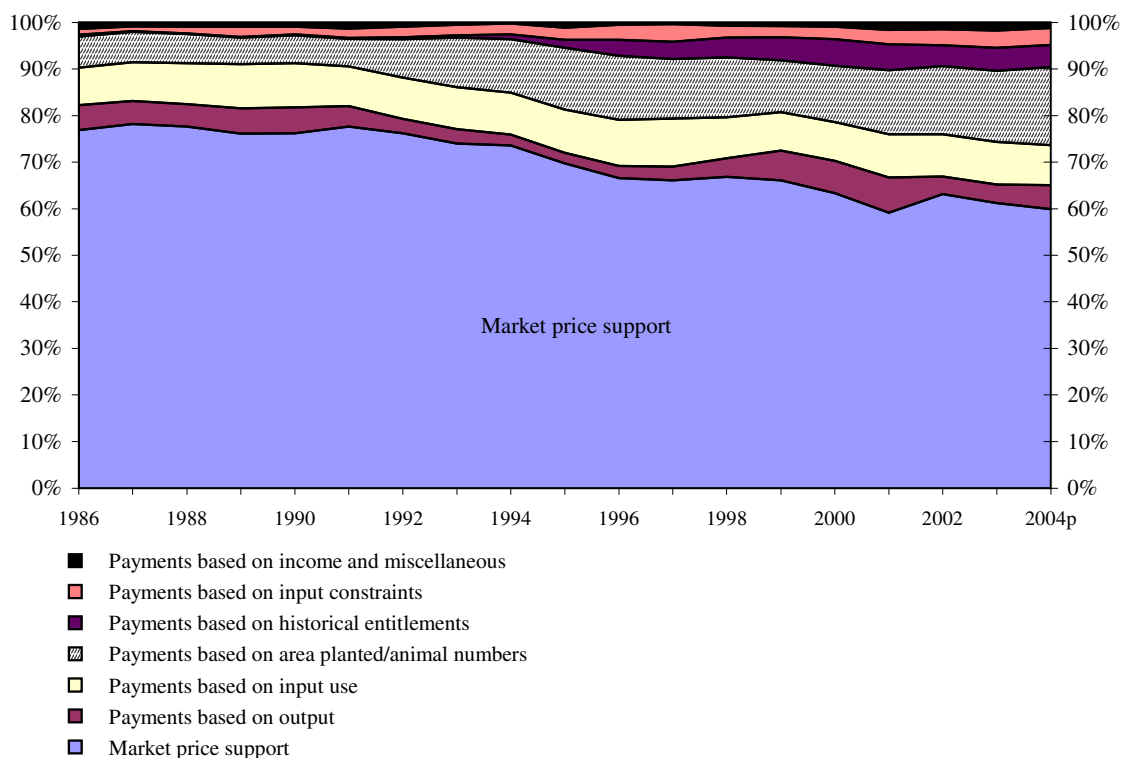
It is not only the level of support, but also the form in which it is provided, that affects resource allocation and rural impacts. Agricultural policies that are closely linked to production have the greatest potential to stimulate production, exacerbate environmental pressures and distort regional allocation of resources. All other things being equal, market price support (such as administrative prices, quotas, tariffs, export subsidies), output payments (per output unit produced) and input subsidies (such as those

apply to fertilisers, pesticides, water and energy) provide the greatest potential incentive for output increase and intensification of input use, through stimulating farmers to change their management practices and rates of input use and can have a negative effect on the rural environment.

Shifting government priorities, domestic budgetary pressures and the implementation of multilateral, regional and bilateral trade agreements have impacted on the agricultural policy of OECD member countries. In a number of OECD countries both the number and complexity of policy measures are increasing, as the centre of gravity of policy measures shifts gradually from traditional market price support and output-related measures towards sector-wide and non-commodity specific policies, particularly those encompassing environmental and rural development concerns. Policy re-instrumentation and the shift to area payments are likely to encourage more land use in rural areas.

The PSE calculations show that while the overall level of producer support for the OECD as a whole has fallen from 37% to 30%, there has been a greater change in the composition of support, with a noticeable shift away from transfers paid by consumers to budgetary payments, and also between the different types of budget payments provided to producers. The share of market price support and output payments taken together decreased from 83% of overall OECD support to producers in 1986-88 to 65% in 2002-04 (Figure 3).

**Figure 3. Composition of the Producer Support Estimate in the OECD area**



Source: OECD, PSE/CSE database, 2005.

Despite this policy shift, *market price support* (MPS) constitutes the largest and most common policy intervention in the agricultural sector of OECD countries. Almost two-thirds of total support in the OECD area as a whole in 2002-04 was provided in the form of higher market prices. This type of support, is by definition commodity specific, maintains domestic prices above world market prices for both producers and consumers, thereby generating an economic transfer to farmers from consumers and from taxpayers in the case of exporting countries. These higher prices are regulated or administered by governments, and maintained *via* border protection. By raising domestic prices, it effectively acts as a regressive tax on consumers. MPS is the only type of support that simultaneously affects production and consumption of a commodity and as such has the greatest potential impacts on production, consumption and trade. *Payments based on output* are financed from government budget (taxpayer) and raise prices received by producers. As such they have the same impact on production as MPS, but do not affect consumption.

Market price support is often combined with supply controls. Such measures, which are taken primarily to reduce excess supplies, although increasingly environmental provisions are incorporated (cross compliance). They can be implemented in various ways, with potentially different consequences for resource allocation and the rural economy. They could be designed to restrict output (production quotas) or factor use (set-aside, acreage) at the country or regional level. Supply controls are sometimes used as a vehicle for targeting particular groups of producers in specific regions.

As well as output-linked support, *payments based on input use* also distort production. They are also budget financed, and serve to reduce certain input costs. They affect the utilisation of both fixed and variable inputs and encompass policies affecting land and buildings as well as fertiliser, energy or transport use. The more the payment is specific to a variable input the greater the incentive for production intensification and its impact on production and trade. The share of input payments in support to producers has remained fairly constant over the period, rising from 8% of the overall OECD PSE in 1986-88 to 9% in 2002-04.

In 1986-88, the majority of OECD countries had a share of transfers associated with output and input-linked measures in producer support at or above the OECD average of 90%, including the EU, Iceland, Japan, Korea, Norway, Switzerland and Turkey. As a consequence of policy developments, the share of these transfers in producer support is now below the 2002-04 OECD average of 75% in the EU, Norway and Switzerland. However, they remain above 90% in Japan and Korea. For the OECD area as a whole, the combined share of output and input-linked support decreased from 91% to 75% over the same period.

The reduction in the most distorting forms of support in some countries has been accompanied by the introduction of other forms of support, which are potentially less distorting and more closely linked to *land*. In 2002-04, the share of payments based on area planted or animal numbers more than doubled to 16% of support to producers, compared to 7% in 1986-88. These payments were particularly important in the EU (28% of PSE) and Norway (18% of PSE). Payments based on historical entitlements (area, animal numbers, yields, support or receipts) were first introduced in 1993 and represent 5% of overall support to OECD producers in 2002-04. These payments are mainly used in Mexico, Switzerland and Turkey (18% of PSE) and the United States (14% of PSE).

While payments based on *historical entitlements* can be independent of current production decisions (based on past support, farm receipts, or area and yields of specific

commodities), *area or headage payments* are determined by current planting or animal numbers. Although these payments can be targeted to specific income or environmental objectives, they are most often implemented on a broad, sector-wide basis. They partly benefit landowners, who are not always farmers, and benefit large farms more than small ones. They may also encourage the use of environmentally fragile land, although payments are sometimes conditional upon farmers undertaking some type of environmental management practice (compliance), such as restrictions on mowing or timing and amounts of fertiliser application. This can have positive implications on rural areas.

Several countries are increasingly using *payments based on input constraints* for sharing the costs of reducing, replacing or withdrawing resources from production, or changing production techniques, including for environmental purposes. While the value of transfers from these policies has more than tripled since 1986-88, they represent only 4% of the overall OECD PSE. In 2002-04, the share of these payments in the PSE was 5% in both the EU and the United States, 3% in Japan, 2% in Norway and Switzerland and effectively zero in all other countries.

Payments based on input constraints are among the categories of support having a smaller impact on the production and trade of specific commodities. However, as these payments are based on land rental costs and/or costs of adopting and maintaining good farming practices, which increase with production-linked payments, their level and hence the costs of providing environmental services or reducing environmental damage are higher than they would be in the absence of production-linked support. Policies requiring producers to pay for pollution they cause, such as through taxes and charges or meeting the costs of environmental regulations, also provide an important contribution to improving the environmental performance of agriculture.

Some countries also use *payments based on overall farming income or revenue*, which are the most effective measures in transferring income to producers and tend to be less production and trade distorting. In 2002-04 these payments represent 17% of the PSE in Canada, 10% in Australia, 5% in the United States and 3% in Norway. While significant in a few countries, the importance of these payments has remained consistently low at around 1% of the overall support to OECD producers.

Virtually all OECD member countries provide budget-financed services of a *general* nature. Such support does not depend on individual farmers' production decisions regarding output or use of factors of production, and does not directly affect farm receipts and can have important implications for agricultural structures and the rural economy. Most of agricultural rural development measures are included in this category. They often include research, extension, training, inspection and market promotion and in many cases increase farm productivity. For example, while general services in the areas of advisory services, training, research and development, and inspection services can improve long-term productivity or expand the sector's production capacity, the distorting effects on production and trade are lower than producer support.

While support to producers has been falling, there has been an increase in the value of support for general services to the agricultural sector, from 13% of the TSE in 1986-88 to 18% in 2002-04. The average %GSSE in 2002-04 was above 40% in Australia and New Zealand, 30% in the United States, around 20% in Canada and Japan, and less than 15% in all other countries. For all countries, with the exception of the EU, Iceland and Switzerland, this was higher than in 1986-88, both in monetary terms (measured in US dollars or euros) and as a share of the TSE.

There have been some notable changes in the composition of support within the GSSE. For example, marketing and promotion support has increased the most since the mid-1980s, rising from 31% in 1986-88 to 41% of the overall GSSE in 2002-04. It has always been the most important form of GSSE support in Turkey and the United States, and now also in the enlarged EU.

About one-third of overall GSSE support is for infrastructure. It is particularly important in Japan and Korea, and has been increasing in the EU, partly as a result of financing available through the *Rural Development Regulation*. Support for research and development, and for education remained stable at 12-14% of the overall GSSE, but is around 50% or more of the GSSE in Australia, New Zealand and Norway. While the share of inspection services in the overall GSSE remains small at just 4%, its share rose in a number of countries, reflecting a greater public policy focus on food safety and on maintaining sanitary and phytosanitary standards.

## Trends in rural development policy

Following on from the discussion of the evolution of agricultural policy, the aim of this section is to identify some of the key policy (re-)orientations that are emerging as a result of the increased focus on rural development policy. The shift in the nature, content, and administration of rural policies in several OECD countries since the 1980s has been noted in numerous reports and studies, including those of the OECD. The changes observed concern both 1) shifts in the policy focus and 2) adjustments to the governance structure, in particular:

- a shift from an approach based on subsidising declining sectors to one based on strategic investments to develop new activities;
- a focus on local specificities as a means of generating new competitive advantages, such as amenities of an environmental or cultural nature or traditional or labelled local products;
- more attention to quasi public goods or “framework conditions” which support enterprise indirectly;
- a shift from a sectoral to a territorial policy approach, including attempts to integrate the various sectoral policies at regional and local levels and to improve co-ordination of sectoral policies at central government level;
- decentralisation of policy administration and, within limits, policy design to those levels; and
- increased use of partnerships between public, private and voluntary sectors in the development and implementation of local and regional policies.

The rationale for a territorial approach to rural policy is expressed in various ways of which the following are the most common:

- many but not all rural areas still suffer from relatively low incomes, high unemployment and under-employment, poor quality of employment, outward migration of young people, and low-quality services which raises localised issues of equity and cohesion (for example, within the EU rural policies are essential for the achievement of cohesion objectives in Objective 1 countries like Greece and Portugal);

- some rural areas contribute to the quality of life of society as a whole because they contain important public or quasi-public goods such as a clean environment, attractive landscapes and cultural heritage; relatively socially integrated and “safe” communities, and it is difficult or impossible to capture the relevant values through the market;<sup>3</sup>
- the interests of the majority of rural citizens, and even most farm families, are only partially served by sectoral policies, since they increasingly depend on employment and income generated by a complex mix of interacting economic activities;

In some cases at least, these arguments are about local market failures – the best-known examples being those concerning public and quasi-public goods, of which the natural and cultural heritage are most usually cited. But they may also be couched in terms of imperfect knowledge or information, restrictions on access to resources and services and other “market imperfections”, as well as in terms of social goals of equity, political cohesion or sustainability.

Even though in many countries, sectoral policies, centralised sectoral administration of them and subsidies to maintain existing activities remain very important, there seems to be a consensus that rural development policy is evolving. The emphasis on rural development policy is partly a result of concern that traditional agricultural policies, notwithstanding the positive contribution of agricultural support policies to rural economies, are not, or are no longer, the most efficient means by which to achieve rural development objectives.

The new focus on rural development policy implies moving from agriculturally-based rural development to broader, place-based rural development. In the past, public policies have tended to focus on rural areas *en bloc* – treating them as homogenous, with uniform problems and similar opportunities. Such an approach no longer reflects the reality of diversity among rural areas. The development contexts of the French Auvergne, Tuscany in Italy, the Spanish region of Andalusia and Portuguese Alentejo, for example, are fundamentally different. All are rural areas – with low population density and significant agricultural land use – but their development patterns are significantly different. As a result, governments are increasingly recognising the need for a more locally tailored or “territorial” approach.

Recent rural development literature draws primarily on insights from the new and old economic geography and notions of endogenous development theory. These approaches hold that mobilising and generating knowledge is the critical input to development, that agglomeration of interacting actors are the sources of much of this knowledge, and that economic proximity is necessary for knowledge pooling to take place. It is only the extent to which particular places are loci of underexploited knowledge pools that it makes sense to target public investments to places. In many countries, it is assumed that endogenous development capacities and entrepreneurship are latent in rural areas and that specific measures to encourage them are needed in order to bring out local dynamics of business creation and development. Thus, the new course of action in many countries, has led to tentatives to replace large-scale support programmes with a more selective approach using packages of co-ordinated programmes focused on the development of the economic

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3. Because relevant markets do not exist and are difficult or impossible to create and because the “utilities” involved cannot only be considered and measured in economic terms.

tissue of underdeveloped regions and rural zones.<sup>4</sup> These forms of aid tend to offer collective services either to improve the quality of the business environment or build social and human resource capital thereby indirectly helping local enterprise.

The rural development strategies being introduced by member governments are, therefore, based on a multisectoral and global approach to the rural economy and take into account the interdependence of its components and the diversity of its structures. The recent trend to integrate sectoral action plans into more general territorial plans means that rural development is now viewed in most countries as being spatially oriented and a cross-sectoral policy area, which takes into account such issues as efficient and well-targeted agricultural policies, active labour market policies, the creation of new market opportunities, alternative uses of land (both within and outside agriculture), protection of the environment and improvement of the quality of life, the provision of services and infrastructures, and the need to address human capital issues.

Within these broad lines, the main areas of policy attention can be defined as: economic diversification, restructuring agriculture, strengthening transport, communication and business infrastructures, developing human resources, amenity and environmental resource policies, and adapted financing mechanisms. Many of these areas overlap and policies are directed towards several of these areas simultaneously.

The most successful cases of integrated rural policies comprise some or all of the following elements and policy objectives:

- efforts to reinforce rural economies, principally through diversification of economic activities: often this involves creation of local products based on local identity and aiming at a market niche, usually linked to local natural and cultural “capital”, and including development of quality labels and guarantees linking products to places, particular production techniques, etc.;
- upgrading of transport and communications infrastructure, promoting networks of knowledge and expertise, supporting education and training, and increasing the attractiveness of areas for new enterprises; including enhancing business assistance especially efforts to diffuse new technologies through research and development and the development of specialised regional institutes or centres, enhancing business services, establishing inter-regional and international business networks and encouraging endogenous innovative initiatives;
- attempts to restructure agriculture through intensification, modernisation and increasing value added in productive regions, extensification and development of multifunctional agriculture in less productive regions, and internal diversification and quality products in areas of “traditional” agriculture;
- new ways of providing public services in rural areas, sometimes combined in service centres and, as in the case of telemedicine and distance learning sometimes using information and communications technologies;

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4. The feasibility of large-scale projects (where central government involvement is greatest) is increasingly under challenge. First, their structural and economic benefits are not fully acknowledged. Secondly, big projects often arouse opposition because of ecological risks. Lastly, high costs and the difficulty of enlisting private sector participation in low-return projects make financing more difficult.



Bringing these different elements together into a multi-sectoral policy capable of promoting rural diversification and competitiveness, while increasing the quality of life of rural inhabitants, represents, to varying degrees, a challenge for all OECD countries.

Despite the evolution of rural policies over the past two decades and the emergence of new areas of activity, less progress has been made on developing effective financial instruments to support rural policy. Nonetheless, some traditional tools have been adapted to the new context and some new approaches developed. Most rural development programmes are focused on strengthening areas in economic decline or facing special problems by providing grants, subsidies and support funding, incentives, transfer payments and fiscal arrangements. As such, they make up one element (more or less explicit) in national regional policy or the general commitment to reducing disparities. In addition, financial equalisation mechanisms exist in several member countries in order to distribute funds more equitably on the basis of need and often tend to favour rural regions. The current climate of budgetary restraint and the quest for improved cost-efficiency have led, in some countries, to reduce or abandon large-scale automatic subsidy programmes and replace them with a more selective approach focusing more on the development of the economic framework of underdeveloped regions through indirect, collective investments. This tendency to switch from direct aid to indirect support have led in effect to the emergence of “mix” systems of rural policy delivery, where direct subsidies have been scaled down and replaced with a wide range of measures offering provision of services and collective access to packages of co-ordinated programmes and initiatives.

## The governance of rural policy

The design and implementation of an integrated rural policy requires changes in the inter- and intra-governmental relations and between the public and the private sectors and the civil society. From an analytical perspective, relations between actors form along two different dimensions. First, a vertical dimension encompasses relations across levels of government from the supra-national level to the national and the local one. Within this dimension the role of different institutional actors can vary substantially: in some countries the governance system is centred upon the national government, while in other countries a crucial role is given to regions or to a federal system. In the former case, a strong function of upper co-ordination has to be developed; in the latter case this should be efficiently complemented by co-ordination at the lower level (regional or federal). In regional or federal systems upper co-ordination does not lose its crucial role, it simply changes its function: it is more geared towards the definition of an overall policy strategy rather than towards the implementation of rural policies. The second key governance dimension is horizontal. The focus in this case is on co-operation mechanisms which need to be examined at both the central level of government (for example, between ministries) and at the local level (for example, between municipalities and other stakeholders).

In practice, a wide variety of institutional arrangements for the delivery of rural policy has been noted in OECD countries, but some common features are:

- decentralisation towards regions and localities, sometimes involving efforts at community “empowerment”, in order to better meet diverse needs and conditions found in rural areas and tap local knowledge and other resources;
- support for “bottom-up” development initiatives, for example through the Canadian Community Futures Programme and the EU LEADER programme;

- attempts at better co-ordination of policies affecting rural areas at central levels through inter-departmental and inter-ministerial working groups or committees, sometimes paralleled by rural affairs committees in national parliaments, and possibly involving various forms of “policy-proofing” to ensure that all policies consider the rural dimension (policy proofing is the process by which a designated body “proof-reads” legislation to verify that rural issues have been adequately considered);
- greater co-ordination and co-operation at regional and local levels usually through partnerships involving the different public departments and agencies as well as private and voluntary sector interests.

This section addresses the main issues related with the design and implementation of place-based policies for rural development focusing on three key issues: 1) horizontal co-ordination at the central level; 2) the role of the central and regional government and vertical co-ordination mechanisms and 3) The role of local actors and lower tier horizontal relationships.

### *Horizontal co-ordination at the central level*

*Central governments moving away from a sectoral approach to rural areas face the question of how to organise their policy action to embrace an integrated approach.* Co-ordination is needed to encourage the various institutional and managerial systems which formulate and implement rural policy to work together. Consistency is also requested to ensure that individual policies are not contradictory, and that they converge in a coherent strategy. This implies the political will to overcome sectoral tendencies and an overall clarification of roles and responsibilities of different ministry/ies or agency/ies in the field of rural development.

Various options are available ranging from a clear-cut separation of responsibilities to more flexible forms of inter-ministerial co-ordination. The first solution may imply the creation or reform of a ministry or agency with enlarged capacities and explicit “jurisdiction” over rural development issues. National and central authorities in the United Kingdom and Germany represent examples of institutional innovation in this field. In the United Kingdom, the same central authority, the Department for Environment, Food and Rural Affairs (DEFRA), embodies wider responsibilities over a broader set of areas including the environment, food and rural affairs. In Germany the Ministry of Agriculture includes competences upon food and consumers’ health. In other countries, responsibilities over agriculture, environment, food and consumers’ health are distributed among several national administrative bodies, resulting in a fragmentation of these functions and frequent conflicts in decision-making processes and resources distribution. There are some positive implications in the concentration of different responsibilities within the same authority: a more open coherent view for rural areas, the concentration of technical and administrative skills and the possibility for a more integrated programming approach.

When such functions cannot be identified in one institutional authority, a more flexible approach can involve upper-horizontal partnerships built around inter-departmental and inter-ministerial working groups or committees. In Mexico for example, the implementation of the Micro-regions Strategy involves the co-ordination of more than 60 different sectoral programmes belonging to 16 different ministries addressing rural

areas. Through the *Principles for Inter-ministerial Co-operation and Co-ordination* Mexico has opted for a co-ordinative agreement among ministries to introduce a place-based approach to rural development.

A similar approach can be found in other countries for types of public interventions requiring the financial contributions of several administrations or setting objectives that cannot be pursued without the effort of different public actors. In Italy, for example, the frequent and increasing scarcity of water resources in southern rural regions calls for a stronger co-ordination of public interventions from several national and regional administrations. To this aim, a special inter-ministerial committee has been set up in order to improve horizontal co-ordination among several ministries including Agricultural Policies, Environment, Infrastructures, Economy and Treasury, Health and Social Security. Other interesting institutional solutions come from Italy's "negotiating planning". This definition refers to several forms of public interventions implemented in recent years involving national, regional and local actors, like the "Institutional Agreements" that not only incorporate horizontal co-operation mechanisms (between different national administrations), but also innovative forms of vertical co-ordination.

### ***Role of the central government and vertical co-ordination mechanisms***

Many OECD countries are actively encouraging local actors to participate in the design and implementation of place-based policies for rural development. This shift requires that central governments re-define their role and devise new multi-level and cross-sectoral co-operation frameworks. The multi-level governance perspective emphasises power sharing between different levels of government, with no centre of accumulated authority. It does not portray the levels of government in a hierarchical order, but instead acknowledges that policymaking requires a growing interdependence between a wide range of actors, each bringing specific sets of skills and resources into a partnership. Issues arising from a multi-level governance perspective may involve not only national, but also supra-national actors. The presence of supra-national actors is particularly significant in the European context where the main EU institutions (European Council, Parliament and European Commission) play a crucial role in providing a conceptual and legislative framework for the development of rural development policies.

***Different models of multi-level co-ordination frameworks for the implementation of rural development policies can be identified.*** From this point of view, underlying principles in the EU Regional policy and Rural Development Plans but also embodied in programmes in several OECD countries constitute useful illustrations of governance frameworks for the phases of design, implementation, monitoring, assessment and re-design of place-based policies for rural development (Box 1).

The originality of such arrangements, that introduce into the traditional hierarchical relations some innovative form of organisation based on negotiation and learning processes, lies in the "sub" level not being looked upon as the mere recipient of a mandate. On the contrary, it is made responsible by virtue of its participation in decision-making and also in the implementation of the policies that it decides. These arrangements require a high level of participation, effective knowledge sharing and competence on the part of local representatives. To limit "moral hazard risks" that this type of principal-agent relation involves, national or supra-national authorities draw up contracts and establish mechanisms to monitor and evaluate the effectiveness of multi-tier co-

ordination and co-operation and the efficacy of the resulting policies. Traditional evaluation mechanisms include reporting, programme review, and cost-benefit analysis. The evaluation has to be a function of the objectives set in the original contracts. Targets and performance indicators (both quantitative and qualitative) should thus be established in a way that allows the effectiveness of local governments' actions to be judged with fairness and homogenous standards.

**Box 1. Examples of vertical contractual arrangements in support of rural development**

**The European Structural Funds** (European Regional Development Fund, European Social Fund and European Agricultural Guidance and Guarantee Fund) have been recently reformed by Council Regulation (EC) 1260/1999 which establishes the general provisions on the Structural Funds and introduces goals and elements to multi-level policy-making. The regulation stipulates that Community actions shall be drawn up in close consultation (referred to as the “partnership”) between the Commission and the member state, together with the regional and local authorities, economic and social partners; and other relevant bodies. “Partnership” shall cover the stages of preparation, financing, monitoring and evaluation. A particularly interesting mechanism operating within the European Structural Funds' system (for the 2000-06 programming period) is “the performance reserve” introduced by Agenda 2000. The reserve issues penalties and rewards set by the European Community Support Framework (ECSF) for Operational Regional Programmes in Objective 1 regions. The “accountability” of this mechanism is crucial to its effectiveness and its acceptance by all the actors involved. All partners (European Commission, national and regional administrations) participate in the definition of the evaluation criteria which are formally included within the ECSF. Italy has decided to extend the use of performance reserves: in its Objective 1 regions the role of the reserve has been strengthened both financially and operationally.

**In France, the Contrats de Plan Etat Région**, since their inception in July 1982, have served in successive waves to underpin the multi-level co-ordination of regional development policy. Under these contracts, each partner enters into a commitment as to the nature and financing of various projects. The central government is represented by the préfet who has a broad mandate to negotiate with the regions, the latter being designated as the “pilot” level of government for policies relating to territorial economic development. That said, some critics see such arrangements as being more an instrument of State devolution than as imparting any real impetus in partnership terms.

**In Germany, the programming system of rural development** comes from a joint decision process where the central level (Bund, Federal State) and regions (Lander) agree on a common framework for the Regional Plans of Rural Development. A joint committee (the Federal-Regional Planning Committee, PLANAK), including representatives from the Bund and regions, defines the Pluriannual Plan (GAK) according to the general framework. The Pluriannual Plan defines not only general strategies but also specific interventions that are considered as priorities at the national level. Each Lander, in designing the Regional Plan of Rural Development, includes priorities established by the GAK as well as measures chosen independently from it. All measures are co-financed by the European Commission, the Federal State and regions. Rules of co-financing are established within the Pluriannual Plan. The entire programming process assures that decentralising rural policy is consistent with establishing more general strategies and priorities.

Within vertical relations between the supra-national and local levels an increasingly important role is played by the “intermediate level”. In the more decentralised countries (such as Germany, Italy, and some autonomous communities in Spain), regional authorities have been assuming a lead role in:

- programme design and implementation;
- negotiating competences and resources with supra-regional institutions (EU and state);
- allocating resources among local communities;
- monitoring, evaluating and control of local projects.

As a result of a reinforced intermediate institutional level, the role of state and central government bodies shifts its focus towards:

- establishing a general framework of rules for rural policies;
- defining national strategies and priorities;
- allocating resources among regions and other intermediate bodies;
- evaluating consistency between regional and national programmes;
- establishing a system of monitoring and evaluation of regional programmes;
- establishing a system of penalties and rewards in order to stimulate “virtuous competition” among regions and other intermediate bodies.

### ***The role of local actors and lower horizontal relationships***

***Countries are increasingly relying on bottom up approaches to rural development that involve associations of local actors.*** The conventional justification for development of local co-operation mechanisms in rural areas is the need to achieve economies of scale and to account for territorial spillovers. Thus, small municipal authorities may seek to get closer in order to attain a more efficient size for the provision of public services. This, for example, is the main reason given for municipal mergers in Denmark, Canada, Finland, Korea and Japan. Moreover, as administrative boundaries do not necessarily coincide with areas that are relevant economically, municipalities can co-operate with the aim of playing a more effective role in local economic development through exchanging information, sharing responsibility for certain investments and programmes (such as territorial labelling and marketing schemes to differentiate themselves from other areas) and dealing with territorial externalities. When applied to rural areas, the logic that emphasises the potential linked with increased local co-operation runs opposite to the traditional approach focusing on mechanisms that compensate for comparative disadvantages of lagging rural regions.

This logic is at the base of different local partnerships that have been developed in recent years as part of a new governance of rural development policy. These have evolved differently depending on the institutional and administrative characteristics of every country. One way to conceptualise the new vision of bottom-up rural development is what is called in many countries a micro-region, that is to say an association of local authorities aiming to achieve common development goals. Another example is that of the UK’s Local Strategic Partnerships (LSPs). These represent new and evolving forms of local governance pulling together the local authorities, the business sector and the local voluntary and community sector. The aim, particularly in more rural LSP areas where there is little separate regeneration funding available, is to get all the partners to support a shared ‘Community Strategy’ for the area and to incorporate their existing budgets towards meeting the objectives within the agreed strategy. In the case of the EU LEADER initiative, local co-operation for rural development has taken the form of Local Action Groups (LAGs). This type of local partnership is characterised by the participation of different actors, including municipalities, sub-regional government institutions and development agencies. The participation of private actors (private firms, co-operatives, associations, non-profit organisations, farm organisations, other categories organisations, etc.) is also important (Box 2). Other forms of innovative local partnerships have been set

up in the US and in various European countries within the EU programmes funding the “employment territorial pacts”.

These experiences present some common features and underlying principles. **First**, a target area is defined based on administrative and/or functional criteria. The size of the target area differs according to the type of programme and, sometimes, to the amount of public and private investments available. The definition of the target area may follow two different approaches: a) a bottom-up approach where the area is defined on the basis of the project strategy and the autonomous decision of the partners promoting the project; or b) a top-down approach where eligible areas are chosen *ex ante* by national or regional authorities. In the latter case, the choice depends on territorial priorities established by these authorities. **Second**, local public and private actors join a partnership and pool knowledge and resources. The leadership in these partnerships is not the exclusive competence of elected authorities but can be effectively carried out by private actors or other elements of the civil society. The role of the private component is often the key to guarantee the necessary financial support to the project. The public component of the partnership contributes with political support to local initiatives and provides necessary administrative competencies and skills. The interaction among public and private actors generates the legitimisation to the project within the target area. **Third**, a rural development strategy is developed around a shared “vision” of the territory and a set of common objectives. This is frequently the result of a complex process, where different and often conflicting views on the most appropriate strategies for the whole territory converge. The role of the *mediator* of such conflicting views is ideally assumed by a local “leader” who is capable of leading the strategy and project design.

#### Box 2. Fostering co-ordination at the local level: some examples

**In France**, reforms in the 1990s, seeking to re-group small towns and areas (“Communautés de Communes”, “Communautés de Villes”) with new mechanisms based on the principle of transferring competencies to a supra-municipal body disposing of own fiscal powers, have led to the creation of more than 2000 such entities known as EPCIs (“Etablissements Publics de Coopération Intercommunale”). With an average membership of 12 municipalities, these bodies carry out spatial planning, economic development and infrastructure investment. In 1995, an innovative approach to municipal co-operation was taken by opening up this possibility to voluntary groupings of municipalities not necessarily belonging to the same “département” or “canton”, thus transcending the traditional administrative boundaries around which co-operation was hitherto organised. The law of 4 February 1995 legally recognised the notion of “Pays”, a small area characterised by “geographical, economic, cultural or social cohesion”. One hundred such groupings were created over five years, with most of these receiving national funding on a competitive basis considering the coherence and merits of their local development strategy and projects. The financing of the operational expenses of the “Pays” is ensured by the member municipalities, with investment for projects receiving multi-annual support within the framework of the CPER (“Contrat de Plan Etat-Région”). Around 300 “Pays” exist today or are in the course of creation.

**In Italy**, various multi-level contractual instruments were introduced from 1998 within “negotiated planning”. Recently, the need to adapt the “legal” geographical boundaries of districts (*i.e.* as identified by administrations) to the economic scale of development of the territories has prompted other important institutional innovations. Today, the “multisectoral districts” of Emilia-Romagna or the “meta-districts” of Lombardy can be the contractual partners of the regions. A logic very close to the “old” Territorial Pacts (Patti Territoriali) is that followed by “Integrated Territorial Projects” (ITPs) as a modality of implementation of Structural Funds. ITPs were introduced for Objective 1 Programmes and were then extended to the other types of regions. ITPs are a combination of different measures deriving from the Structural Funds on the basis of local strategies designed by local partnerships. The selection of projects is usually made by regions on the basis of criteria agreed upon with local partnerships.

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**In Europe**, the LEADER (Liaisons entre actions de développement rural) initiative, introduced in 1988, is based on local partnerships (private and public) designing a development project for a target area whose size is generally limited by administrative boundaries (not more than 100 000 inhabitants). LEADER has been implemented three times (LEADER I 1989-93; LEADER II 1994-99; LEADER+ 2000-2006). The number of projects approved in Europe was very limited in LEADER I (experimental phase), but increased to almost 1 000 across 15 EU countries in LEADER II. In the last phase the number was lowered so that a higher concentration of better-quality initiatives could be achieved. The main features of the LEADER approach are the following ones: a) a bottom-up approach; b) integrated actions; c) a multi-sectoral vision; d) co-operation (local and transnational); and e) networking. A similar approach has been introduced in Spain by the PRODER scheme (Operational Programme for the Development and Diversification of Rural Areas). PRODER was introduced as part of the 1994-99 programming of Structural Funds for Objective 1 to complement the LEADER approach and extend it to areas that were excluded by it.

**In the UK**, the National Strategy for Neighbourhood Renewal Action Plan (January 2001) and the more detailed LSP Guidance (March 2001) set out the Government's initial model of what LSPs should be and what they should do. This guidance reflected a cross-government commitment to LSPs by all departments and agencies. The guidance made it clear that a LSP is a non-statutory, multi-agency body, which matches local authority boundaries, and aims to bring together at a local level the different parts of the public, private, community and voluntary sectors. LSPs are intended to operate at a level which enables strategic decisions to be taken while still being local bodies. Local partners working through a LSP take many of the major decisions about priorities and funding for their local areas.

**In Germany**, the LOCALE scheme was set up to implement the Structural Funds in Saxony-Anhalt for the period 2000-2006. This consists of two strategic elements: a) support for integrated, territorial development approaches below the federal State level; b) increased participation of local stakeholders in the implementation of the Operational Programme. LOCALE was strongly influenced by positive experiences with LEADER, the Territorial Employment Pacts and village renewal schemes. To qualify for LOCALE, applicants must devise a Territorial Development Plan for a "functional, traditional and/or agriculturally cohesive rural area below the district level". The Plan must include SWOT analysis, budget and time schedules, the development objectives for the area, monitoring methods and details of local stakeholders' participation. The Plan is then assessed by a regional decision-making body, including representatives of the federal State, and may be submitted to the organisations administering the funds (Ministry of Agriculture, Ministry of Environment and Ministry of Industry and Commerce).

**In the US**, several examples of innovative local governance in rural areas have emerged in recent years. In the state of Minnesota, the creation of the Northeast Minnesota Higher Education District (NHED) in 1999 was the catalyst that spurred innovations in other key institutions in the region. After seeing the benefits of one "super-regional" umbrella for community colleges, governments and private actors across the region have begun to cooperate more often and more extensively. Today the regional "thinking" has acquired a new identity and True North has been established as a framework for local partnerships. Other examples innovations in rural governance have seen as catalysts the Office of Rural and Community Affairs in Texas, the Manufacturing Alliance in northeast Oklahoma and the Discovery Park at Purdue University.

Annex Table

	Share of agriculture in total employment	Share of agriculture in GDP	Average farm size (ha)		Share of farms <5ha	Farmers <35 years old	Farmers >=65 years old	Full-time regular farm labour (men)
	2003	2003	1990	2003	2003	2003	2003	2003
Austria	5.5	1.2	12	19	32	13	8	47
Belgium	1.7	1.0	16	25	28	8	19	67
Canada	2.1	2.2						
Czech Republic	4.5	2.8	71 <sup>(1)</sup>	67	58	9	17	67
Denmark	3.3	1.6	34	55	4	8	16	67
Finland	5.3	1.0	27 <sup>(1)</sup>	30	10	10	6	58
France	4.3	2.0	31	45	28	9	14	65
Germany	2.4	0.7	36 <sup>(1)</sup>	41	24	12	6	61
Greece	16.3	5.4	4	6	76	7	35	54
Hungary	5.6	3.3	7 <sup>(1)</sup>	6	90	6	30	74
Ireland	6.4	1.9	26	32	8	11	20	80
Italy	4.7	2.2	6	12 <sup>(1)</sup>	77	4	40	65
Japan	4.6	1.3	1	2	96	6 <sup>(4)</sup>	56	32
Netherlands	2.7	2.0	16	24	30	7	16	54
New Zealand	8.1 <sup>(2)</sup>	8.7 <sup>(2)</sup>	216	222	17 <sup>(3)</sup>		33 <sup>(2)</sup>	
Norway	3.7	1.4	9	18	14	10	8	
Poland	18.4	3.0	7 <sup>(1)</sup>	12	67	16	15	47
Portugal	12.8	2.5	7	14	77	3	46	32
Slovak Republic	5.8	4.0	30 <sup>(1)</sup>	30	92	5	26	69
Spain	5.6	3.6	15		55	6	32	70
Sweden	2.5	0.6	29	46	10	6	17	63
Switzerland	4.1	1.3	12	16	18	11	5	38
Turkey	33.8	11.9						
United Kingdom	1.2	0.7	68	57	37	3	28	71
United States	1.6	2.0	187	224		50 <sup>(3)</sup>	12 <sup>(3)(5)</sup>	67 <sup>(3)</sup>
EU15	4.0	2.0	19 <sup>(1)</sup>	21	57	8 <sup>(1)</sup>	30 <sup>(1)</sup>	60

1. 2000.

2. 2001.

3. 2002.

4. Less than 30 years old.

5. 55 years old and over.

Source: OECD (2005); Eurostat and various national sources.



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## Chapter 2. Linkages between the Agro-food Sector and the Rural Economy

Maureen Kilkenny<sup>1</sup>

### Introduction

The agricultural sector is directly linked to the non-farm economy through its input purchases and output sales to other industries. These linkages are complementary: the more agricultural activity, the more purchases, sales, employment and activity up- and down-stream. The sector is also directly linked to the non-farm economy through its employment of land, labour, and capital. But those links are competitive: the more land, labour and capital used by agriculture, the less available for other economic activities.

Agriculture is also *indirectly* linked through revenue and spending relations. Farm income and spending provide a complementary indirect link to non-farm sectors. The more farmers earn, the more they spend on other sectors' outputs. The rest of the indirect links are competitive. The more people and governments spend on food or fibre or farm subsidies, the less there is to spend on non-farm goods, services, or income support. Because of all these direct and indirect linkages, changes to *farm* policy affects land use, income, employment and government budgets in the *non-farm* economy.

Furthermore, most of the effects decline with distance. Rural non-farm economies can enjoy or suffer the most from incoherent farm policies. Primarily, farm policy has an immediate and very local affect on land uses. Secondly, the effect of farm policy on labour is less, depending on the (im)mobility of rural people. Also, neighbouring urban, as well as rural, capital markets can be affected by changes in net farm capital use. But distant labour and capital markets may not be affected at all. Finally, the farthest-reaching effects are through the direct inter-industry or input/output links. These linkages are global now that transport costs are low enough to support very long-distance trade (especially over water).

This paper analyses the variety of policy-relevant linkages between past and prospective developments in the agri-food sector, the rural economy and society, and the use of rural space across OECD countries. It pays particular attention to spatial and geographic issues.

Historically, human concentrations followed agriculture, and, as formalised by von Thünen, agriculture concentrated around people. Dramatic improvements in agricultural productivity, transport, the optimal scale (size) of farms and establishments, private property rights, and the subsidisation of agriculture have induced significant changes in the relations between farms and towns over the last two centuries. As industrialisation

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1. Associate Professor, Department of Resource Economics, University of Nevada, United States.

proceeded in OECD countries, large cities grew much larger and rural population shares diminished. The adjustments forced upon rural people and the rural environment arising from those market forces have motivated many rural development policy interventions. While the policies are intended to assist, too often they cause new problems or exacerbate old ones. Many expensive policies have no effect.

Rural people in some OECD countries still suffer the consequences of rural-to-urban migration and relatively low rural property values (Canada, Finland, parts of France, parts of Germany, Greece, Hungary, Japan, Mexico, Poland, Spain, Switzerland, Turkey, parts of the United States). In contrast, in other OECD countries, urban-to-rural migration and rising rural property prices challenge the farm sector (Belgium, parts of Germany, the Netherlands, New Zealand, the United Kingdom, parts of France, parts of the United States). While every place has unique features, fundamentally people are more alike than different. In particular, there is a coherent explanation of all this variety. Thus, there is hope for a coherent approach to rural development.

This paper will present a selective review of old and new economic geography to provide a unified analytical framework that rationalises both types of migration patterns and both low and high rural property values. Country size, infrastructure, proximities, and population densities are all relevant explanatory variables, but they are insufficient for a complete explanation. Some new theories are presented to explain more. The analytical framework is applied to explain the effects of farm and rural development policies on rural problems such as rural under-employment, urban sprawl or farm land-use conversion, and “too low” or “too high” rural housing prices.

The structure of the paper is as follows. After a brief review of the historical dependence of cities on their local farm regions, there will follow a discussion of why this dependence no longer exists, and how that explains *why rural areas no longer depend on agriculture*. There will then be a review of *what determines property values*, which explains the self-defeating character of some farm support policies, as well as the impotence of farm subsidies against farm land-use conversion. A correct explanation of what determines land rents also highlights the *non-market determinants of migration*. This clarifies why rational people migrate from low-cost rural areas to high-cost urban ones. Because of urban amenities, such as social and culture-enhancing service sectors, rational people migrate away from rural places where real income (as measured) appears to be high.

Next, the argument for advocating that *the rural service sector is a key to sustainable rural development* is presented, as, in contrast, are the *pitfalls of an “export base” approach*. The discussion also focuses on the inter-sectoral links between agriculture and manufacturing, and an analysis of subsidising directly-linked sectors as a rural development strategy is provided.

Finally, new data are presented to show that, contrary to popular belief, capital markets (for bank credit) are spatially circumscribed. The implication is that the presence of *rural bank offices* that make loans as well as accept deposits *are critical for sustainable rural communities*. In closing, the ideal role of governments in the market economies of the OECD, where people are economically self-determined, is discussed.

## The historical dependence of cities on their local farm region

Agriculture has always been a critical determinant of human geography and community development. Population concentrations historically located in either the most inaccessible or accessible places. Inaccessible sites were chosen for the security they provided. Accessible sites for human settlement were chosen for proximity to food, where the land, water, and climate most favoured farming. The ancient cities that were sited proximate to agriculture have survived to this day (Mumford, 1961).

The size of cities was historically determined by two features: farm productivity in the local area and the costs of transporting agricultural products. Before the agricultural and industrial revolutions that dramatically boosted farm productivity and significantly lowered transport costs, only about 10% of a region's population could be sustained in cities, and even the largest cities were generally concentrations of fewer than 150 000 people (Bairoch, 1988; McEvedy, 1992). Only 200 years ago, almost 90% of the world's population lived in "rural communities" (Table 1).

Since then, there have been dramatic increases in farm productivity and dramatic decreases in transport costs. There do not appear to be any constraints to modern city size (Glaeser and Kolhase, 2004). Modern people no longer have to live close to farms. And farms do not have to be close to people. Cities, however, continue to be "in the middle of farms" because of that historic legacy and some path dependency (which we will be discussed in a later section). But it is no longer necessary for either customers or farmers to live on crop land (there remains a need to live near one's livestock, however). Rural-to-urban migration can continue until people are satisfied with the real income and quality of life they find wherever they live.

**Table 1. Percentage of population living in rural areas**

	1700	1900	1950	2000
Europe	89	70	57	26%
America	89	71	52	24%
Africa	96	94	88	63%
Asia	89	91	85	63%

The criterion for an *urban* place is a population of a minimum of 5 000.

Source: adapted from Bairoch, 1988, Table 31.1, p. 495. Data for the year 2000 are from the population division of the United Nations: [www.un.org/esa/population/publications/wup2001/WUP2001\\_CH1.pdf](http://www.un.org/esa/population/publications/wup2001/WUP2001_CH1.pdf).

## What determines land use, property values and farm proprietor income

Since 1824, when von Thünen published his explanation of how land is allocated to its most profitable uses, it has been possible to predict which activities will occur and where, if revenues, production costs and transport cost rates for each possible activity are known. The net revenues over costs decline with distance from the market destination. This profit will be captured by the owner of the fixed factor of production: land. If land markets are competitive, all other profits will be driven to zero. The profit at each location,  $R(d)$ , thus called *bid rent*, is formalised as:

$$P \cdot Q - c(Q) \cdot Q - t \cdot d \cdot Q = R(d) \quad (1)$$

where  $R(d)$  denotes land rent at distance ( $d$ ) kilometers or miles from the market.  $P$  and  $Q$  denote output price and output quantity;  $c(Q)$  is the average production cost per unit (exclusive of land rent); and  $t$  is the output transport cost rate per unit per km or mile. Land will in general be allocated to the use that earns the highest bid rent at each location.

The model is also informative about local income determination. With respect to agricultural users of land, proper economic accounting practice dictates that a farmer's wage (the opportunity cost of his labour time) is included in costs ( $c(Q)$  in equation 1). Because labour is mobile – people commute or migrate – this portion of a farm proprietor's income is independent of changes in farm policies. It depends instead on the return to non-farm labour in the area. This implies that increases in the rate of return to *farm labour* depend on increases in the prosperity of the local non-farm economy, *not* on increases in the return to farm production or farm land use. Increases in farm productivity merely release land and labour from farming. Where the local non-farm rural economy is impoverished, farmers are likely to be “land-rich but dirt-poor.” These situations cannot be ameliorated by the provision of additional farm subsidies of any kind, coupled or decoupled.

Furthermore, the fact that profits tend to go to the owners of the relatively fixed factors of production (to the most inelastic part of the vertical market chain) leads to the problem that if a land-using activity is subsidised, the subsidy directly raises the bid rent, and thus the land price. In the United States for example, farm land values are estimated to be 30-40% higher because of US farm support than they would be without the programmes. This causes a third problem. It erects a barrier to entry, excluding young people from farming. Many OECD countries share the problem that the population engaged in agriculture is old (*e.g.* the US, Japan, Spain). This problem is exacerbated by the provision of subsidies, coupled as well as the so-called decoupled subsidies, because both encourage farm land use.

Fourth, farm subsidies encourage farm size expansion, farm consolidation, and the reduction in the number of farmers in rural areas. The fact that there are significant economies of scale in agriculture means that costs per unit decline (and profits per acre rise) the larger the farm size. Thus, all farmers have incentives to expand their land use. The provision of farm subsidies provides the wherewithal to acquire land. Indeed, that is the mechanism by which subsidies end up in the value of the land.

Thus, this simple 200-year-old model clarifies why farm support policies have the four unintended and undesirable effects of leaving farmers “land-rich but dirt-poor”, excluding new farmers and young people from the industry, enabling farm size expansion, and causing rural depopulation.

The model also helps in understand why farm support is impotent with respect to curbing urban sprawl, as will be argued below.

The extent of farming around a market centre (usually the city) is limited by the cost of transporting the land's produce. The *extensive margin* ( $\underline{d}$ ) is the distance at which bid rents just cover opportunity costs. If there are no alternative land uses, this is where rents are zero:  $\underline{d}^0 = (P-C)/t$ . When there are alternative uses, the extensive margins are found at the distances at which the activities return comparable bid rents. That is:

$$\frac{Q_1(P_1 - c_1) - Q_2(P_2 - c_2)}{t_1Q_1 - t_2Q_2} = d_{12} \quad (2)$$

formalises the distance at which land used for activity 1 (such as urban land use) stops and land use by activity 2 (*e.g.* farming) begins. Von Thünen’s model rationalises the land use around towns: land closest to the town is used to produce high-value, expensive-to-transport (*i.e.* perishable) crops, such as fresh vegetables and dairy. Farther out it is economically feasible to cultivate field crops and grains. Pastures and range lands are farthest out. This model explains urban as well as rural land-use patterns today (Samuelson, 1983).

The data show that the land rent gradient, however, rarely declines smoothly from the city outwards. It is typically at least 4, and can be 20 times higher within urban zones, and it drops immediately and precipitously at the extensive margin between the town’s residential areas and farm lands. For example, an acre of vegetable farm land in the very urbanised state of Rhode Island returns about USD 11 000 per acre (Rhode Island Agricultural Digest, 2003), while the value of housing land is between USD 40 000-80 000 per acre. In San Francisco USD 80 000 buys less than a quarter of an acre (Glaeser and Gyourko, 2002).

The implication is that subsidies at the rate of 3 to 20 times the value of land in farm production would be required to compensate farmers on the rural-urban interface to keep their land in agriculture. It would be prohibitively expensive to attempt to thwart farm land conversion to urban uses *via* farm subsidies. And it would have the undesirable side-effect of further inflating housing prices (Quigley and Rosenthal, 2004).

## Non-market amenities, wages and rents, and migration

Currently, just one-quarter of the population in OECD countries lives in communities smaller than 5 000 (Table 1). Rural householders have an incentive to migrate or commute to city jobs if they believe they could enjoy higher returns to their labour (and capital) than they earn from farming. If “return” is measured only in money, an indicator can be estimated of the pressures for rural-urban migration – or the incentives to transform rural areas into commuter zones – by how much the share of employment in agriculture exceeds agriculture’s share of income (GDP). As shown in Table 2, these pressures are observed in all but two OECD countries, the United Kingdom and the United States.

The rural→urban migration incentives are relatively high in transition or recently developed economies like Poland, the Slovak Republic, the Czech Republic, Portugal, Greece, Ireland, and Turkey. But they also appear to be high in Austria, Finland, and Sweden. The 58-59% increase in the average size of Austrian and Swedish farms, however, suggests that this force is accompanied by on-going structural adjustment. Their farm sectors are still evolving to larger farms with fewer farmers.

The release of labour from farming to the non-farm economy and rural-to-urban migration typically continues until real incomes/employee equate. *Real income* is nominal income adjusted for its local purchasing power, which is estimated by dividing local personal income per household by the local cost of living.

Housing costs are the single largest component of the local cost of living. Thus, nominal income may be low for rural residents but real income relatively high, because

rural housing costs are relatively low. In this situation, employment/GDP may overstate the pressure to migrate. Rural residents may accept a low nominal income in exchange for a higher quality of life than they could afford if they migrated to the city. A high quality of life in a rural area may be due to the quality of the area's family, social, cultural, or natural environment. It is also likely to depend on the depth and quality of the local service sector (more on that later).

**Table 2. Employment/GDP, change in farm size**

	Share of agriculture in employment	Share of agriculture in GDP	Ratio of employment share to GDP share	Change in farm size 1990-2003
Poland	18	3	600%	
Austria	6	1	600%	58%
Finland	5	1	500%	11%
Portugal	13	3	433%	100%
Greece	16	5	320%	50%
Ireland	6	2	300%	23%
Sweden	3	1	300%	59%
Turkey	34	12	300%	
Italy	5	2	250%	
Slovak Republic	6	4	200%	0%
Czech Republic	5	4	200%	
Belgium	2	1	200%	56%
France	4	2	200%	45%
Germany	2	1	200%	14%
Hungary	5	3	167%	
Denmark	3	2	150%	62%
Netherlands	3	2	150%	50%
Spain	6	4	150%	
United Kingdom	1	1	100%	-16%
United States	2	2	100%	

Source: OECD, 2006.

As indicated above, many of the components of the quality of life in one's place of living are non-market amenities (the weather, the appearance of the natural or built environment, the schools, the culture or social "flavour", and so on.) The value of the non-market amenity bundle in a place is also reflected, however, in local land prices and wages (Roback, 1982).

In particular, empirical analysis has shown that, indeed, people are willing to accept lower wages or pay higher housing costs in order to reside in places with their preferred amenity bundles. This evidence revolutionises our ability to understand the observed phenomenon of people migrating *from* places with lower wages, higher rates of employment, and low housing costs *to* places with higher housing costs and lower rates of employment. Rural young people in particular often leave their rural jobs and low-cost housing for under-employment and high rents in the city – because they prefer their social opportunities in the city. Again, this suggests the need or opportunity for the development of service sectors in rural towns.

Finally, when rural amenity values are capitalised into rural property values, this will show up in the (employment/GDP) ratio by raising the denominator. This has been happening in the Low Countries and the UK. Indeed, in the UK, the employment and GDP shares are about equal. This is indicative of gentrification of the countryside, the increase in hobby farming, and the switch to specialty crop production at small scale that characterise advanced market economies in densely populated areas.

### The sustainability of a rural area depends on its service sector

While the rural population share has fallen in all OECD countries over the last century, it is not strictly correct to conclude that the rural economy or rural population growth depends on farm employment. Available evidence shows that, for example, the shares of the French and US populations that are rural, but not engaged in farming, have been remarkably stable for over 200 years, despite dramatic reductions in the share engaged in farming (Ravignon and Roux, 1990).

The implication of this stable, rural, non-farm population share is that, contrary to common assumptions, farming is not necessarily “basic” in the sense that reductions in the number employed in farming did *not* lead to reductions of employment in other rural sectors.<sup>2</sup> These data show that, despite declines in farming, rural non-farm employment was either stable (France) or growing (US). This suggests that the service sector may be central in rural economies.

A claim that the sustainability of a rural area depends on its service sector, not its farm sector, may be surprising. For example, an attempt to project the rural non-farm employment trend, using an input-output model, would have resulted in a completely different picture (the whole rural economy would have been projected to disappear) from what actually happened.

An input-output model’s usefulness is limited to helping a central authority plan the concomitant expansions in many sectors in order to meet a particular output goal (Isard, 2004). It is not a model of how real economies grow, nor can it predict how land, labour, or capital will be re-deployed faced with changes in endogenous fundamentals. Mathematically, it *cannot* simulate any local change that does not originate outside the system. Models like I-O and CGE require exogenous drivers. But real world economies do not. Statistical models rely on past data to predict future trends. Unfortunately, most statistical models are reduced-form, with unknown structural foundations. Such models cannot be used to interpret cause and effect.

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2. See Hoover and Giarratani (1984) for the definition of “basic” sector.



Fortunately, it is now possible to model *endogenous* growth, although its sources have yet to be identified (Lucas, 1988; Harrington, *et al.*, 2005). It is now generally recognised that *growth comes from within*. Clearly, the world has been developing and economies expanding rapidly for decades, yet our world does not export to Mars, or Venus, or the Moon, and we do not receive subsidies or grants from outer space.

The important implication is that demand from within a region – such as demand by a region’s own residents for its own products *or services* – can drive growth. As Hoover and Giarratani (1984) wrote, “A region *can* get rich taking in its own washing”.

Just as a farmer grows and sells food to earn income that can be spent on others’ products, a chef cooks it, and a waiter serves it; also in exchange for cash that can be spent on others’ products or services. If a region’s service sector is not developed enough to satisfy the housing, social, education, health care, security, entertainment, and other needs and desires of the local residents, businesses and farms, the service sector will be a constraint on local growth. Firms will shut down or move. Young people will move out. Parents will prefer to raise their children where schools are better, roads are safer, etc. Thus, a government’s priority should be to remove the constraints on the development of their local service sectors if it seeks to enable a rural region’s development. And, the most important service a rural community can have may be banking.

### The irrelevance of an “export-base” approach to rural development

Two-thirds or more of the workforce in any region and every country is typically engaged in local service sector employment. Nevertheless, traditionally-trained planners argue that only export industries have local employment multiplier effects. That is an egregious oversight. The equivalence between the “multiplier effect” of an increase in employment in export industries and the multiplier effect of an increase in local service sector can be shown as follows.

All employment ( $E$ ) either produces goods/services for export ( $X$ ) or for local consumption ( $C$ ):

$$E = X + C. \quad (3)$$

Employment in the export sector depends on exogenous demand from outside the region. Employment in the local service sector is in part autonomous and in part endogenous to total local employment. Even if there is no export activity in a region, a minimum number of persons ( $S$ ) work to provide local necessities (shelter, security, health care, education, entertainment, etc.). The more people there are in a region, the more service sector employment, at a rate of  $\beta$  ( $0 < \beta < 1$ ) additional employees in the  $C$ -sector per person:  $C = S + \beta E$ .

In sum:

$$\begin{aligned} E &= X + S + \beta E \\ E - \beta E &= X + S \\ E(1 - \beta) &= X + S \\ E &= 1/(1 - \beta) * (X + S) \end{aligned} \quad (4)$$

An “export base multiplier” is the change in total employment due to a change in export sector employment. This is  $1/(1-\beta)$ . Note, however, that the effect on total employment due to a change in autonomous service sector employment is also  $1/(1-\beta)$ . There is no difference between the “employment multipliers” of export and local service sectors.<sup>3</sup>

The above mathematical model, however, is just a set of static identities, with little more empirical relevance than the IO and CGE models criticised earlier, because all sources of growth are exogenous by construction (see also Krikelas, 1992). It is shown above simply to make the point that even using the same modeling assumptions, a service sector can have the same “multiplier effect” on an economic as an export industry.

## Growth comes from within

Economies grow when more factors of production are engaged more productively. A place must be an attractive place to live to retain or increase its population or labourforce. And to engage more land or labour later, local people need capital. When local people can obtain credit today to bring more land, labour, or equipment into production, a region grows tomorrow. That capital can come either from local savings or from outside the region. This section will argue the pitfalls of attempting to attract capital by exporting goods and services outside the region. A later section will consider how a region can, and should, grow its own capital.

Consider first capital coming into an area from outside the region. It should be remembered that regions that enjoy net capital account surpluses are those with current account *deficits*. Regions with net *current account surpluses* (more money earned selling regional exports than spent on goods or services purchased from other regions) have *capital account deficits*.

A surplus on current account and deficit on a region’s capital account means, basically, that the net exporting area’s local savings are being lent to other regions (so that they can buy the region’s exports, for example). Thus, some local savings in a net exporting region are not reinvested to finance local growth. As long as rural areas insist on being net exporters, they will continue to have capital account deficits. For example, net exporting countries with current account surpluses, such as many Third World countries, suffer the concomitant capital account deficits. They struggle to obtain loanable funds, particularly for their rural areas. Countries with trade and current account deficits, like the US, enjoy the growth financed by the net inflow of capital.

A region can “get rich” exporting its comparative advantage goods or services, however, if it also imports, avoids a sustained capital account deficit, and saves and invests locally. A region’s comparative advantage sectors are those that employ the region’s relatively abundant factors relatively intensively. Land is the most relatively abundant rural factor. But it is not only a farming input, it is also the foundation of the bucolic rural environment that attracts population to reside in rural areas. And it is now well documented in many countries that “jobs follow people” at least as strongly as “people follow jobs”. Thus, policies that support local service sector employment are very appropriate for sustainable rural development in every country.

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3. If  $C = 67\%$  of  $E$ , and  $S = 10\%$  of  $C$ , then  $\beta = 0.52$ , and the employment *multiplier* according to this type of model is about 2. For example, the total effect of adding 100 new export sector jobs in a locality is typically estimated to be about 200 new jobs. The same total effect of 200 jobs should be estimated to arise from an exogenous increase of 100 new service sector jobs.

## Supporting directly-linked sectors (agro-industry) as a rural development strategy

This section discusses non-farm rural comparative advantage industries: the sectors that process farm outputs. First, it will be shown that all sectors, not just agro-industry, are linked to agriculture. Second, data will be presented which document that, contrary to popular conception, agro-industry is not rural in the US. Third, the empirical results of the model of agro-industrial location will be given. This new research shows that agro-industrial plants tend to disperse spatially. The implications of these findings are discussed with respect to the policy of subsidising agro-industry as a rural development strategy.

While about 80% of the US workforce is employed in service industries, farming accounts for less than 2% of the US workforce and GDP. But the primary production of raw farm products and commodities is just a small part of the agri-food sector's contribution to a region's income and output. Value added *by* agriculture is farm income. Value-added *to* agriculture is income earned in non-farm sectors that handle and/or process farm products. It is important to note, however, that almost every sector in the US economy adds value to agriculture, including many personal service sectors (Figure 1).

Figure 1. *All sectors are within three steps of agriculture*

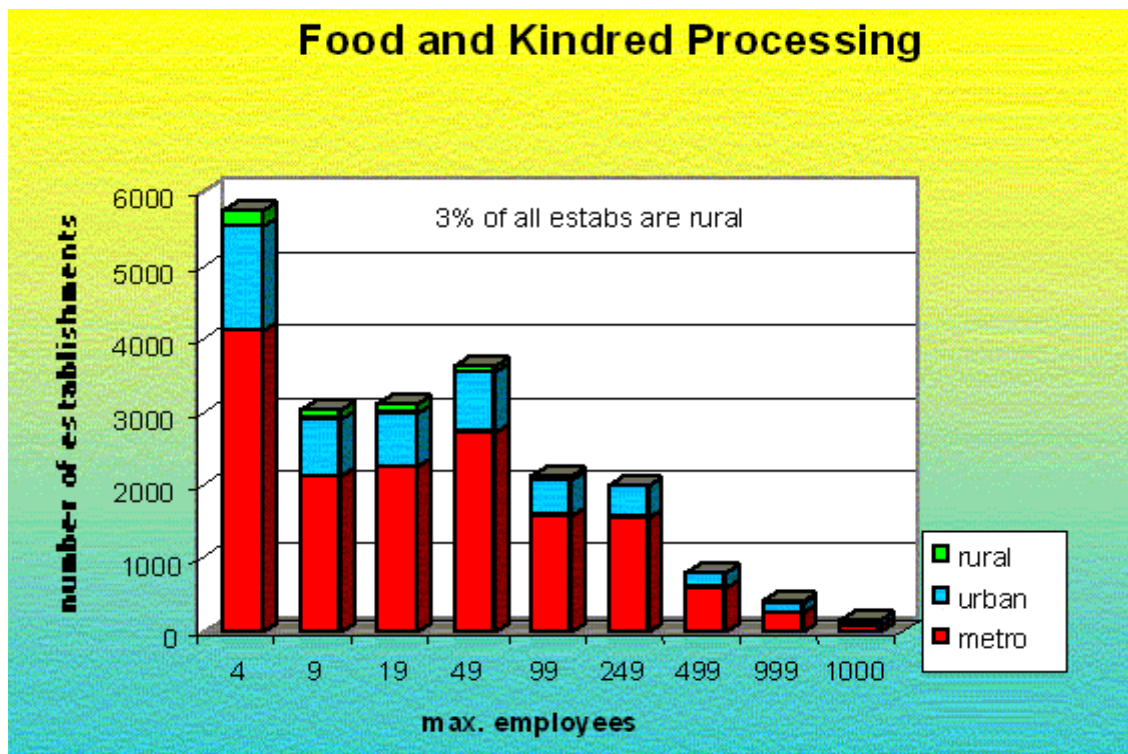
	Dairy farm products	Poultry and eggs	Meat animals	Miscellaneous livestock	Cotton	Food grains	Feed grains	Grass seeds	Tobacco	Fruits	Tree nuts	Vegetables	Sugar crops	Miscellaneous crops	Oil-bearing crops	Greenhouse and nursery	Average length of links to farming
Food preparations, n.e.c.	2	2	2	1	2	2	1	2	2	1	2	1	2	1	1	1	1.6
<b>Amusement and recreation services</b>	2	2	2	1	2	2	2	1	2	1	2	1	2	2	2	1	1.7
<b>Hospitals</b>	2	1	2	1	2	2	2	2	2	1	2	1	2	2	2	1	1.7
Cereal breakfast foods	3	2	2	2	2	1	1	2	2	2	1	2	2	2	2	2	1.9
Meat-packing plants	2	1	1	1	3	2	2	2	2	2	2	2	3	2	2	2	2
Wet corn milling	3	2	3	2	3	1	1	2	2	2	3	2	3	1	1	2	2.1
Sausages and other prepared meat products	2	1	1	2	3	2	2	2	2	2	3	2	3	2	2	2	2.1
<b>Retail trade, except eating and drinking</b>	2	2	2	2	2	2	2	2	2	2	3	2	2	2	3	1	2.1
Creamery butter	1	2	3	2	3	2	2	2	2	2	3	2	3	2	3	2	2.3
<b>Tire cord and fabrics</b>	3	2	2	2	1	2	2	2	3	2	3	2	3	2	3	2	2.3
<b>Hotels</b>	3	2	2	2	2	3	2	2	2	2	3	2	3	2	3	1	2.3
<b>Glass containers</b>	3	2	2	2	2	2	2	2	2	2	3	2	3	2	3	2	2.3
Macaroni, spaghetti, vermicelli and noodles	3	2	3	2	3	2	2	2	2	2	3	2	3	2	3	2	2.4
Chewing and smoking tobacco and snuff	3	2	3	3	3	2	2	2	1	2	3	2	3	2	3	2	2.4
<b>Insurance agents, brokers, and services</b>	3	2	3	2	3	3	2	2	2	2	3	2	3	2	3	1	2.4
<b>New residential 2-4 unit structures</b>	3	2	3	2	3	3	1	2	2	2	3	2	3	2	3	2	2.4
Sugar refining	3	2	3	2	3	3	2	2	2	2	3	2	1	2	3	2	2.3
<b>Bookbinding and related work</b>	3	2	3	2	3	3	2	2	2	2	3	2	3	2	3	2	2.4
<b>Gaskets, packing and sealing devices</b>	3	2	3	2	3	3	2	2	2	2	3	2	3	2	3	2	2.4
<b>House slippers</b>	3	2	3	3	2	3	2	2	2	2	3	2	3	2	3	2	2.4
<b>Clay refractories</b>	3	2	3	3	3	2	2	2	2	2	3	2	3	2	3	2	2.4
<b>Fine earthenware table and kitchenware</b>	3	2	3	3	3	3	2	2	3	2	3	2	3	3	3	2	2.6
<b>Copper foundries</b>	3	2	3	3	3	3	3	3	2	2	3	2	3	2	3	2	2.6

n.e.c. = not elsewhere classified.

Despite the fact that many sectors are as closely linked to farming as sausage-making, for example, the popular presumption is that only the food and kindred sectors tend to be rural-located. In fact, service sectors are much more likely to be rural-located, because services tend to be activities with very small geographic market areas, and tend to exist in small towns as well as large. In contrast, modern agro-industry tends to be large-scale so activity occurs in just a few plants. Thus only a few towns, small or large, host a modern agro-industrial plant. Large plants need a large labour pool, which means either the site had a large labour force or one develops around it. Indeed, in the US food and kindred processing industry is largely urban, not rural. This is surprising to many.

In Neolithic times, people conserved their scarce and costly human and animal power by locating ancient agro-industry (drying, milling, storage, etc.) in the centre of their farm regions. Those central agro-industrial sites became population centres. Cities sprang up where agro-industry occurred. And even today – although the statistics seem to suggest the opposite – less than 3% of US food and kindred processing establishments are located in rural counties (Figure 2), agro-industry continues to locate optimally in the middle of farming regions (Kim, 1999).

Figure 2. Agro-industry is *urban* or *metro*



Agro-industry is urban largely because sites central to farms have become cities. The accessibility of those original sites has also increased, reinforcing the low-cost attributes of cities. Agro-industry is not urban because it is “demand-” or “market-oriented.” It is “supply-” or “materials-oriented” because inputs are sourced ubiquitously so input transport costs per unit output is relatively high (Kilkenny, 2003).

The dramatic reduction in transport costs that have occurred over the past century also allows agro-industrial plants to locate farther away from the farms. Furthermore, our latest research on the location of agro-industry shows that plants tend to disperse rather than cluster (Kilkenny and Coleman, 2005).

Support for industries directly linked by input/output ties to agriculture, called “value-added agriculture,” is promoted ostensibly to ensure competitive incomes for farmers and rural citizens. An objective of all policy should be to help markets function better. Two indicators that rural markets may not be functioning effectively are crop surpluses and rural unemployment. It can be argued that crop surpluses, low farm prices and idle rural resources are unintended consequences of national farm policies. Farm subsidies coupled to production encourage excess production, which leads to surpluses that must either be exported (with additional subsidy) or will flood the domestic markets, causing market prices to fall. Alternatively, subsidies tied to production controls leave idle resources.

Second, it can also be argued that market concentration (few firms) on the buyer side of the markets for farm products are the reasons for the surpluses, low prices and idle resources (Sexton, 2000). Monopsonists (single buyers) can exploit their market power by buying less (leaving surplus supplies) until sellers accept lower market prices, which then discourage farm land use. No matter which problem is at the root, people imagine that public subsidies to value-added agriculture firms may be a solution. It may not be.

Kilkenny and Schluter (2001) have analysed the history of US state-level programmes promoting agro-industry. Over about 100 years, state governments in the US have spent millions to expand value-added by and to agriculture. The programmes have numerous objectives: to increase the demand for local farm output, to capture for farmers a larger share of consumers’ willingness to pay for higher quality, to curtail the effects of concentration on the buyer side of the market, and to increase rural non-farm employment opportunities. The US Federal government has also spent millions to support new product development, marketing and small business development. The hopes are that expanding local value-added agriculture will use up the farm surpluses and raise local farm prices, and, that it will increase rural employment and income.

Is it possible to “kill two birds with one stone?” Can subsidising agro-industry raise both local farm prices and rural employment? In practice, two or more policy instruments are usually needed to meet two or more policy objectives. And unfortunately, analyses show that policies that successfully raise local exports or prices received by local farmers – regardless of the mechanism – often have little effect on rural economies (see the other papers in this volume, and Goetz and Debertin, 1996).

Finally, as argued above, there are at least two reasons why targeting agro-industry is unlikely to be the best way to stimulate the rural economy. First, agro-industry is not the only sector that adds value to farming. Amusement parks, restaurants, and other service sectors also add value. Second, while service-sector establishments are ubiquitous and present in even the smallest towns, agro-industry is actually an urban or metro industry. Given those two facts, the effects of subsidies to agro-industry on rural income and employment may be negligible.

When agro-industrial firms are allowed to respond the market forces that determine their revenues and costs by locating at their most profitable site, they can retain their competitiveness in the globally trading economy. Attempts to force firms to open in hinterland locations which they would not choose themselves (because other sites are more costly) may simply lead to the demise of the local industry.

## The importance of the local banking service sector

Why do some rural communities thrive, and others fail, even though they have the same natural resources, proximity to cities, and so on? In this section it will be argued that the difference is the local banking sector.

A thriving community cannot continue to thrive without sources of investable capital. There are three main sources of investable capital. First are retained earnings. Most new businesses are started and financed by existing old businesses. Second are banks. Third are family or friends. Even in the US, credit cards, venture capital funds, etc., are insignificant sources of funds for businesses located in non-metropolitan areas (National Survey of Small Business Finance, 1998).

It is widely believed that banks accept deposits in rural (and urban) areas, but make loans just in urban areas. The fear is that commercial banks are a drain on rural savings. As previously explained, a farm export region is likely to have a capital account deficit, that is to say, it is likely to lend money out of the region rather than in. The “culprit” however, is the region’s net current account surplus, not financial intermediaries.

Now if a rural area has a balance or deficit on current account, it will save locally and/or accept investment from outside the region. So what role do local banks play? They have two very important roles. First, local banks provide loans to locals that banks located far away will not. Second, banks that accept deposits *and* make loans are the most important source of local liquidity. In all countries, local banks play a major role in the country’s money supply process. In many OECD countries (excluding Japan and the US), bankers are also the main financial intermediary providing business access to equity capital as well as debt capital.

This new research provides compelling evidence of these claims. At first, it was noticed that (in the US) there are more bank offices in rural towns than grocery stores. Furthermore, despite the emergence of electronic communication technologies that have enabled e-finance, and despite a significant reduction in the number of bank firms, *there has been an increase in the number of brick-and-mortar bank offices in the last few years* (Table 3). This tendency to maintain more offices *per capita* in rural areas has persisted despite the removal of legal restrictions against branch banking that people believed protected small and remote banking markets. If the old regulations forced banks to maintain offices that were not profitable, there should have been an observable decline in the number of non-metro offices. The data show that it did not happen. The data suggest that brick-and-mortar bank offices in non-metro towns are profitable (Kilkenny and Pecharsky, 2005).

To rationalise these observations, it was hypothesised that because loan contracts require information and accountability, local banks and bankers who are “close” (in every sense) to their borrowers have the advantage as lenders. If being far away from potential borrowers is costly to bankers, two things are likely to be observed: 1) that loans are provided only to close in borrowers; 2) that the number of bank offices proliferates, to enable personal contact with customers. The data in Table 3 are consistent with that second implication.

To test the first hypothesis, it was decided to directly measure the distances between depositors, bankers and borrowers. Data from bank offices on the geographic origins of the deposits to each office and on the geographic destinations of loans from each office from about 60 bank offices in twelve US states were collected and analysed.

Table 3. Bank firm and office entry

County type	Code	2001			2001-2003 (% change)			
		No. of firms	No. of offices	Offices/ 1 000 capita	No. of firms	No. of offices	POP	Offices/ capita
Central metro	0	33.0	161	0.27	4.9	12.0	2.1	9.7
Fringe metro	1	11.3	25	0.35	5.3	5.0	4.3	0.7
Mid-sized metro	2	13.5	50	0.33	6.8	5.7	1.5	4.2
Small metro	3	12.7	36	0.35	6.8	7.6	1.0	6.6
Large non-metro, adjacent	4	12.0	25	0.38	2.0	2.3	0.3	2.0
Large non-metro, non-adjacent	5	10.2	19	0.41	7.8	10.8	-0.3	11.2
Mid-sized non-metro, adjacent	6	7.6	13	0.50	3.0	3.3	0.6	2.7
Mid-sized non-metro, non-adjacent	7	6.7	10	0.59	3.3	3.4	-0.6	4.0
Rural, adjacent	8	5.3	7	0.73	-6	-0.2	-0.3	0.1
Rural, non-adjacent	9	3.6	5	0.91	1.0	1.4	-1.4	2.8

It was found that deposit markets, while nationally integrated, are largely local. About 85% of deposits into a bank office come from businesses and people located within 12 miles of the bank office. But the effect of distance is convex and quite noisy. Deposits also come in from very far away. To obtain loanable funds, banks can sell Certificates of Deposit (CDs) over-the-counter (using electronic markets). Thus, even some very small US banks hold time deposits from savers across the country, from Alaska to Florida.

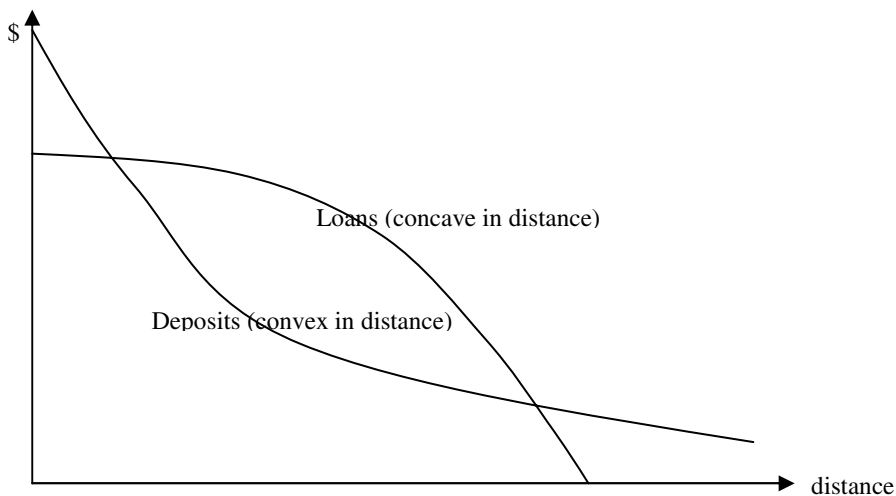
But they make only local loans! The effect of distance on lending is strong, and concave in distance (Figure 3). Eighty-five per cent of the dollar value of a bank office's loans are made within 24 miles of the office. The average loan market area is statistically significantly smaller than its deposit market area. While the average distance to a loan customer is less than 80 miles, the average distance to a depositor is over 100 miles. In other words, credit markets are spatially segmented. For this reason, it is important for rural residents to have a bank office in their neighbourhood. Furthermore, there should be more than one bank firm operating in the rural area, or else the residents will be subject to exploitation of monopoly power (Kilkenny and Pecharsky, 2005).

Another important implication of the local nature of bank lending is that this means that liquidity is a local phenomenon. Banks are key players in the modern monetary systems in OECD countries. Banks create the money supply by accepting deposits and making loans. The borrowers typically deposit their bulk of the loans in the lending bank, which holds a fraction in reserve and lends the rest out. This process repeats itself, each time with a bit less being re-deposited and a bit more retained, until it dies out. The total effect on the money supply is measurable. The cumulative money multiplier in the US is measured to be between 2 and 3. (Note the similarity between the *observed* money multiplier and the *hypothesised* export base multiplier.) This is the well-known process of money multiplication by banks. What was not well-known is that this process can be very local.

Secondary information consistent with the hypothesis that money supply is a localised phenomenon is the existence of local housing price “bubbles” and depressed areas.

“Inflation is always and everywhere a monetary phenomenon” (Friedman, 1963). The prices of tradable goods and services are determined outside a local economy. But housing is non-tradable, and property prices are determined by the localised demand for those properties. Property markets must clear locally, regardless of where the transactors (buyers or sellers) are located. When local demand is also highly monetised because local banks are multiplying money rapidly, local property price inflation results.

**Figure 3. Commercial banks accept deposits from afar but make loans close-in**



Until now, inflation was thought to be a nationwide phenomenon. Kilkenny’s and Pecharsky’s (2005) research on the segmentation of commercial bank credit markets suggests that it may be a spatially-circumscribed phenomenon (see, also, Jacobs, 1984). This new model may explain why there is significant spatial variation in the cost of immobile property in OECD countries.

In sum, profit-making commercial banks have incentives to open offices in remote towns, and such banks profit more by lending locally rather than far away. Profitable commercial banks thus *suck capital into* rural areas, not drain it out. In addition to the local money multiplier effects this has, there are a number of policy implications.

In Japan, for example, this research suggests that Japanese rural citizens should welcome the privatisation of the Japanese postal “banking” system. First of all, they should welcome commercial banks who will also make loans, not just accept their deposits. Currently, rural savings in the Japanese postal bank system provide liquidity to the Japanese central government; the postal banks do not make loans. Second, because of this, Japanese postal “banks” do not operate as local money multipliers. Commercial banks would multiply money locally. Third, this underscores an important shortcoming of a “Grameen Bank” approach to rural credit for OECD countries. The Grameen approach is the mirror image of the Japanese Postal Banking system. With Grameen, the institutions just make loans, they do not accept deposits. Neither approach solves the problem of a lack of local liquidity.

The Grameen Bank approach to rural credit provision is a wonderful solution to the asymmetric information problems bankers have concerning loan origination and monitoring. It requires borrowers to self-form borrower groups. Potential borrowers



choose credit-worthy partners whom they know well, and group members then monitor each other. Without the local knowledge and local enforcement, bankers (typically in the cities!) do not make loans to rural clients – they cannot afford to monitor the loans and cannot risk the default. The Grameen “borrower group” approach is an excellent solution to those problems, but it fails to provide local money multiplication. Rural stagflation (low rural wages low rural property prices, but high-priced city goods, services and tradables) cannot be ameliorated without a process of money multiplication in the rural area.

In sum, the best solution to a lack of rural liquidity appears to be a competitive rural commercial banking sector. Governments that care about rural development should make sure that there are no barriers to commercial bank entry in rural areas. Governments can encourage private sector brick-and-mortar institutions to open offices in rural areas to accept deposits and make loans. One way to do this is to underwrite some of the risk for new bank officers in the short run, because it may take a while for bankers to know their local communities and make financially sound loans. This recent research on the United States shows that commercial banks make a profit when they lend locally and when branch offices are dispersed. There would seem to be no reason for rural citizens to fear these market forces.

## Summary

Every year more young people migrate from small rural towns to cities in all OECD countries. Every year fewer farmers are producing more agricultural output. Every year, another big rural manufacturing plant closes – sometimes to re-locate in a developing country (closer to where its market is growing). Every year rural shopkeepers serve fewer young people, fewer farmers, and fewer workers, and wonder how they can afford to pay their rents or compete with the high-volume, low-cost mega-retailers in nearby cities.

This paper has discussed some of the main market forces behind those problems and has clarified why subsidising farming is unlikely to solve them and may even make them worse. It has demonstrated that subsidies have the unintended effect of raising land prices, causing the exclusion of young and new farmers.

On the other hand, environmental amenities, such as those associated with agriculture, clearly attract people to rural areas – and there is plenty of evidence that jobs follow people just as strongly as people follow jobs. This underscores the appropriateness of conservation and environmental stewardship as a rural development strategy.<sup>4</sup> However, this paper has argued against attempts to thwart farm land conversion because the existing strategies are either prohibitively expensive or have other unintended, bad consequences. One consequence could be a disequilibrium increase in the rural cost of living, which would lower real rural incomes and exacerbate rural→urban migration.

The same rural amenity values that may sustain rural areas in developing countries, and help stem rural→urban migration are driving urban-to-rural migration and raising rural property prices in some of the most urbanised OECD areas (Belgium, parts of Germany, the Netherlands, New Zealand, the UK, parts of the US). Those countries are

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4. There is also an important role for government in the provision or maintenance of non-market amenities. Particularly with respect to rural amenities, most of the beneficiaries are not the locals who bear the costs of maintenance. A public solution is needed to collect revenues from all beneficiaries to remunerate those who maintain the non-market values.

also tempted to subsidise farm land use or value-added agro-industry. Rural non-farm constituencies (mistakenly) believe they will suffer if they become commuter zones depending on service-sector employment. This fear is ungrounded. Indeed, cities have grown larger and larger on the basis of little but service industries. Rural townspeople will also benefit from the deepening of their local service sectors.

A place simply does not need to be a net “exporter of things” in order to grow. Indeed, the opposite is true. A place with a deficit on current account enjoys a surplus on capital account. The key to sustainability is how the rural townspeople use the inflow of loanable funds in these cases.

This leads on to a discussion of the role of financial intermediaries in rural development. This paper has presented new research showing that commercial banks in the United States are important providers of local liquidity. Recent research about the Netherlands shows the same (Degryse and Ongena, 2005). Contrary to popular belief, bank credit market areas are spatially circumscribed. The implication is that the presence of rural bank offices that make loans as well as accept deposits are critical for sustainable rural communities.

In closing, it would be apt to paraphrase Tom Dorr, Agriculture Undersecretary for Rural Development, USDA, who said that “government policy does not develop rural places, rural people develop rural areas” (Dorr, 2003).

Governments help by enacting policies that support rather than interfere. Most important, governments co-ordinate the provision of rural infrastructure such as roads and utilities, co-ordinate the stewardship of non-market rural amenities and environmental resources, and ensure competition: particularly in rural banking systems. Other policies can be pointless if a country either has too few rural bank offices, or if rural banks do not handle both loans and deposits. Furthermore, without a healthy banking system that makes loans, rural money – earned or transferred – just “leaks” out.

Rural people take care of their environment and invest in themselves to serve local customers. Rural people take risks, start businesses and increase employment. Rural retained earnings held in rural bank offices are lent to rural borrowers, and this cycle repeats itself. That is the real *multiplier*. And it is the basis of sustainable farm prosperity, high quality rural life and rural economic development.

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## **Part III.**

# **Trends and Linkages in the Agro-food Sector in Rural Areas: Empirical Evidence**

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## Chapter 3. The Demographic Overlap of Agriculture and Rural: Implications for the Coherence of Agricultural and Rural Policies

Ray D. Bollman<sup>1</sup>

### *Abstract*

*The people-scape of predominantly rural regions in OECD countries is not agricultural – even though the landscape may be agricultural. On average, less than 10% of the OECD predominantly rural workforce is employed in agriculture. Thus, agricultural policy directly affects a minority of the rural workforce (although spin-off effects may occur). In addition, agricultural policy is not solely focused on predominantly rural regions. In fact, about one-half of the agricultural workforce across the OECD area is employed in intermediate and predominantly urban regions. Since only one-half of agricultural policy is delivered to predominantly rural regions and since agricultural policy within predominantly rural regions is delivered to less than 10% of the workforce of these regions, “agriculture” and agricultural policy would appear to have a weak demographic overlap with “rural” and rural development policy.*

### Introduction

The historical tight overlap between “rural” and “agriculture” no longer exists – at least in a demographic (or “jobs”) sense. The purpose of this paper is to document the changing nature of this overlap.

**What is rural?** Rural is distance and density. Individuals are “more rural” if they must travel longer distances to access services or to access markets to sell their goods and services. Also, low population density (which results in the lack of “agglomeration economies”) defines rural areas – implying that production systems will be smaller and generally less diversified (due to the availability of a smaller workforce).

Thus, since rural is distance and density, **rural policy** will focus on the price of distance<sup>2</sup> and the price of low population density (or low agglomeration economies). Considerations of factors other than distance and density would be more correctly labelled as regional policy – and the policy options for regional development are quite

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1. Statistics Canada.

2. The price of distance would include the money cost and the time cost of moving goods, services and people across space. As an alternative to the term “price of distance,” one might use the term “socio-economic cost of distance”. A health price of distance could be estimated by comparing the probability of dying if one skips a health examination *versus* the probability of dying from a road accident on an icy winter road if one drives to the health examination.



similar for both predominantly urban regions and for predominantly rural regions (except for the distance and the density aspects that define predominantly rural regions).

**What is development?** In many short(er)-run policy discussions, one key policy focus of “development” is growth in the number of jobs.<sup>3</sup> This implies that rural development is the creation of jobs in areas with a long distance to services or markets and in areas with a low population density. Thus, rural development policy is a focus on policy initiatives to enhance the creation of jobs for areas that are a long distance from markets and with a low population density.<sup>4</sup>

**What is agriculture?** Agriculture is the production of food and fibre. Hence, agricultural policy will focus on the efficient production of food and fibre in order to ensure food and fibre production remains competitive. Given the variability in agricultural production due to weather and international price shocks, agricultural policy in some countries also attempts to stabilise the returns in resources employed in certain lines of production so that resources stay in their long-run competitive line of production, rather than suffering short-run transactions costs of switching from one line of production to another. In other countries, some commodities receive a price subsidy – sometimes to ensure national self-sufficiency of the commodity, sometimes to ensure an adequate supply of the commodity for the processing sector and sometimes with the stated objective of ensuring a “fair standard of living for farmers”.

**Where is the overlap or intersection of agriculture and rural?** When many observers view an agricultural vista, they see rural. And, when many observers think rural, they envision an agricultural landscape. Historically, this has been a reasonable set of observations. However, over time, in rural areas, there have been more and more jobs in non-agricultural sectors. At the same time, transportation technology has allowed individuals in rural-metro-adjacent regions to access city jobs, including members of farming families. Many farming families are not nearly as “rural” as they used to be. As a consequence of the improvements in transportation technology and the relative decline in the price of transportation, a considerable share of agricultural production now takes place in areas that are not rural – *i.e.* in areas without a high price of distance to cities. For example, about 20% of Canadian agricultural production occurred within “Larger Urban Centres”<sup>5</sup> in 1996 (Lonmo, 1999).

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3. The choice of the indicator of community success is important. The choice will depend, in part, to whom one is speaking. The school teacher may prefer population growth from an influx of young families, whereas the swimming pool salesperson may prefer a growth in community wages. Different factors are associated with different measures of community success (Bollman, 1998).
  4. In the long(er) run, “ideas” are, arguably, the driver of development (jobs, or other desired development outcomes). Thus, rural development would be the generation of ideas in areas that are a long distance from markets and with a low population density. Rural development policy would be the focus on policy initiatives to enhance the creation of new ideas in areas that are a long distance from markets and with a low population density.
  5. “Larger Urban Centres” refers to Census Metropolitan Areas” (CMAs) and “Census Agglomerations” (CAs) which are functional labour markets with an urban core population of 100 000 or more for CMAs, and an urban core of 10 000 to 99 999 for CAs. The CMA and CA include the residents of surrounding incorporated towns and incorporated municipalities where 50% or more of the workforce commutes to the core of the CMA or CA.

## An historical view: what share of Canada’s census-rural population lives on a census-farm?

Using the “census-rural” definition (du Plessis, *et al.*, 2001), which defines rural as residents living outside centres of 1 000 or more, Canada’s rural population has remained at about 6 million inhabitants since World War II.

In 1931, two-thirds (67%) of the census-rural population lived on a census-farm<sup>6</sup> (Table 1). This is a large share in a Canadian context where rural also encompasses many communities associated with fishing, lumbering and mining. By 2001, 11% of Canada’s census-rural population lived on a census-farm. Thus, in 1931, agricultural policy was received by two-thirds of rural Canadians – today, agricultural policy is received by 11% of rural Canadians.

**Table 1. Share of rural population living in farm operator households in Canada, 1931 and 2001**

	<b>Total population</b>	<b>Census-rural population</b>	<b>Census-rural population living in census-farm operator households</b>	
	(million)	(million)	(million)	%
1931	10.4	4.8	3.2	67
2001	29.9	6.1	0.7	11

Source: Statistics Canada, Census of Population.

In Canada, a major focus of agricultural policy is revenue stabilisation support to farmers. In 2001, about one-half (53%) of the census-farms generated less than CAD 50 000<sup>7</sup> of gross farm revenue and families associated with these census-farms would have received very small programme payments because the payments are generally based on the level of farm output. Therefore, about one-half of the census-farms would be big enough to receive an agricultural programme payment – implying that the demographic overlap of agriculture and rural is now less than 10% of the rural population. Thus, there has been a significant structural change in the people-scape of Canada’s rural areas in the last 70 years.

## Across OECD countries, what share of the workforce in predominantly rural regions is employed in agriculture?

In the OECD countries for which we have data on employment by sector by region, in 2001, only 9% of the workforce in predominantly rural regions<sup>8,9,10</sup> was employed in

6. Census-rural population refers to individuals living outside centres of 1 000 or more. A census-farm is any agricultural holding with some agricultural products for sale.
7. Using October 2005 exchange rates, CAN 50 000 was the equivalent of approximately USD 43 000, or EUR 35 000.
8. A “predominantly rural region” has over 50% of its inhabitants living in a rural community. A rural community has a population density less than 150 persons per square kilometre (and, in Japan, less than 500 persons per square kilometre) (OECD, 1994). Data for regions are tabulated at Territorial Level 3 (OECD, 1994).

agriculture<sup>11</sup> (Table 2). In other words, 91% of the predominantly rural population is not directly impacted by the delivery of agricultural policies. No OECD country had more than one-third of its workforce in predominantly rural regions employed in agriculture (Figure 1). In fact, by 2001, only three countries (Mexico, Greece and Portugal) had more than 20% of their predominantly rural workforce employed in agriculture. Also, note that the share of the predominantly rural workforce employed in agriculture has been declining in almost every OECD country. In Canada, the share declined from 13% in 1981 to 9% in 2001. These observations suggest that a focus on agricultural policy is missing the vast majority of rural residents.

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9. The analysis in this paper focuses on predominantly rural regions for a number of reasons. First, a focus on sub-national development is becoming more important because, in an era of simultaneous globalisation and localisation, some important decisions impacting the well-being of individuals are made by trans-national agencies or trans-national corporations and other important decisions are now coming at the local level (*e.g.* the quality of the local environment, the quality of local schools, etc.). Second, in many cases, communities do not have the capacity to manage these “local” issues and thus a regional focus is required. However, if the local population does not identify themselves with a specific region, progress on regional policy will be difficult (Douglas, 1999).
  10. For reasons of simplicity, in the tables predominantly urban regions and intermediate regions were combined into one category. More detailed tables are available from the author upon request. Sometimes rural policy is discussed in terms of intermediate areas (*e.g.* in the Netherlands, as the OECD methodology on rural indicators does not designate any region in the Netherlands as a predominantly rural region). However, intermediate regions typically contain a significant agglomeration (admittedly not a mega-agglomeration) and thus residents of intermediate regions may not be rural because the population in the region is *not* distant from urban services or urban markets. There is, admittedly, significant agricultural countryside in predominantly urban and intermediate regions. This “countryside” may be agricultural but these areas are not rural – they are *not* distant from services and they are *not* distant from urban markets. For some issues (*e.g.* the supply of clean drinking water), the countryside-dwellers in predominantly urban and intermediate regions may share concerns with rural residents. However, the residents of predominantly urban and intermediate regions are not rural – because they are not distant from urban services and they are not distant from urban markets.
  11. “Agriculture” refers to International Standard Industrial Classification (ISIC) =1, which includes employment in agriculture (*i.e.* on farms) plus employment in forestry, fishing and hunting. Although the term “agriculture” is used in this paper to refer to ISIC=1, this will somewhat overstate the importance of agriculture in countries with a significant forestry and fishing workforce, such as Canada. However, overstating the importance of “agriculture” will bias the results against the argument made in this paper that there is a small and declining demographic overlap of agriculture and rural.

**Table 2. Distribution of employment by sector and by type of region, 20 selected OECD countries,<sup>1</sup> 2000**

Type of region	Sector		
	Agriculture (ISIC=1) <sup>2</sup>	All non-agricultural sectors (industry and services)	All sectors
	Number employed (million)		
Predominantly urban or intermediate regions	8	277	285
Predominantly rural regions	9	90	100
All types of regions	18	368	385
	Percent distribution of employment across sectors within each type of region (row %)		
Predominantly urban or intermediate regions	3	97	100
Predominantly rural regions	9	91	100
All types of regions	5	95	100
	Percent distribution of employment across types of regions for each sector (column %)		
Predominantly urban or intermediate regions	47	75	74
Predominantly rural regions	53	25	26
All types of regions	100	100	100

1. The 20 countries included in the calculation are: Australia, Belgium, Canada, Denmark, France, Germany, Greece, Hungary, Ireland, Italy, Japan, Mexico, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland and the United States.

2. ISIC (International Standard Industrial Classification) = 1 includes agriculture, forestry and fishing.

Source: OECD Territorial Database.

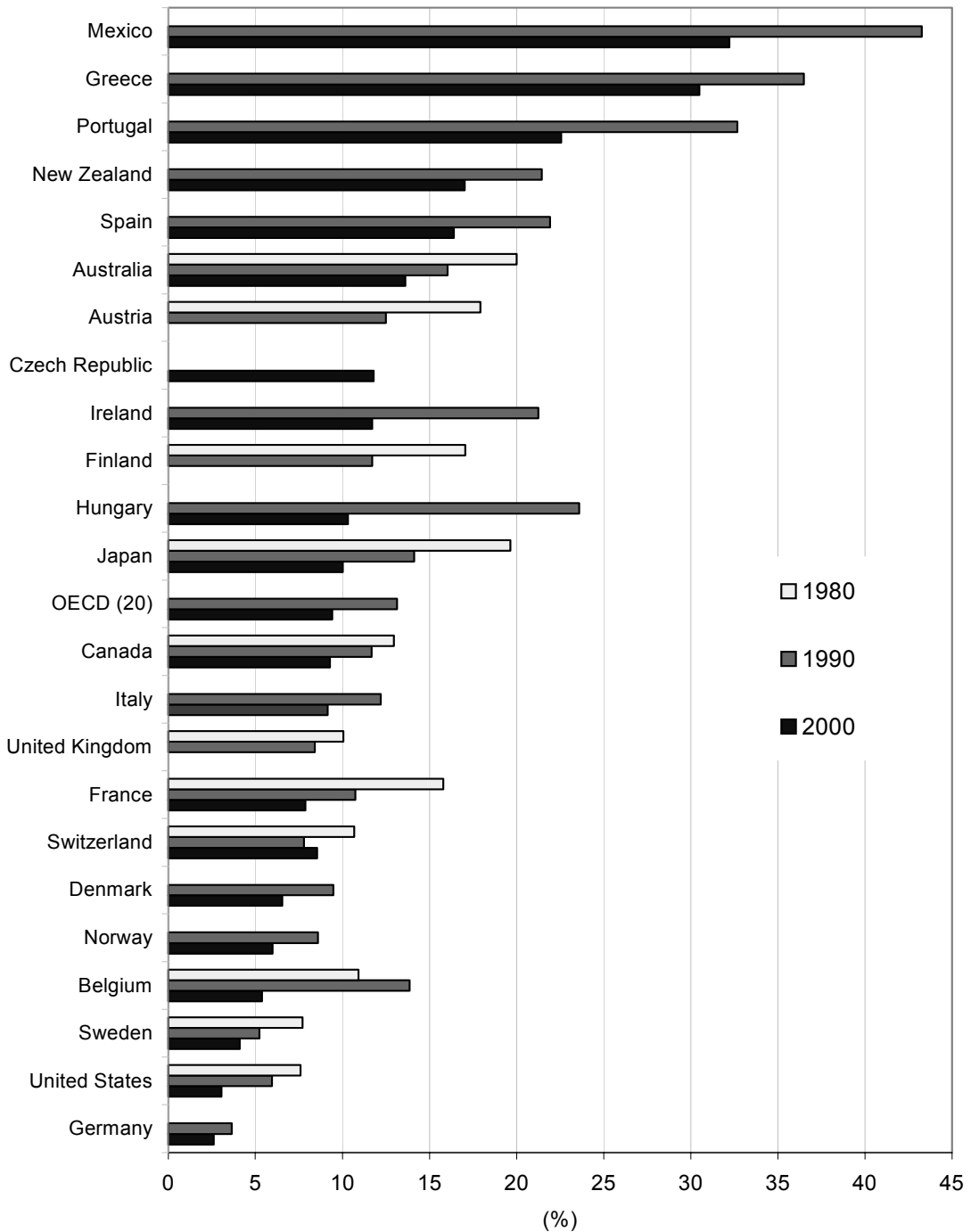
### Across OECD countries, what share of the agricultural workforce is employed in predominantly rural regions?

Within the OECD, one-half (53% in 2000) of the agricultural workforce is employed in predominantly rural regions – the remaining one-half of the agricultural workforce is employed in intermediate or predominantly urban regions (Table 2). In Finland, 84% of the agriculture workforce was in predominantly rural regions and only 16% in intermediate or predominantly urban regions in 2000 (Figure 2). At the other end of the scale, there are no predominantly rural regions in the Netherlands – its agricultural workforce is split between 19% in intermediate regions and 81% in predominantly urban regions.

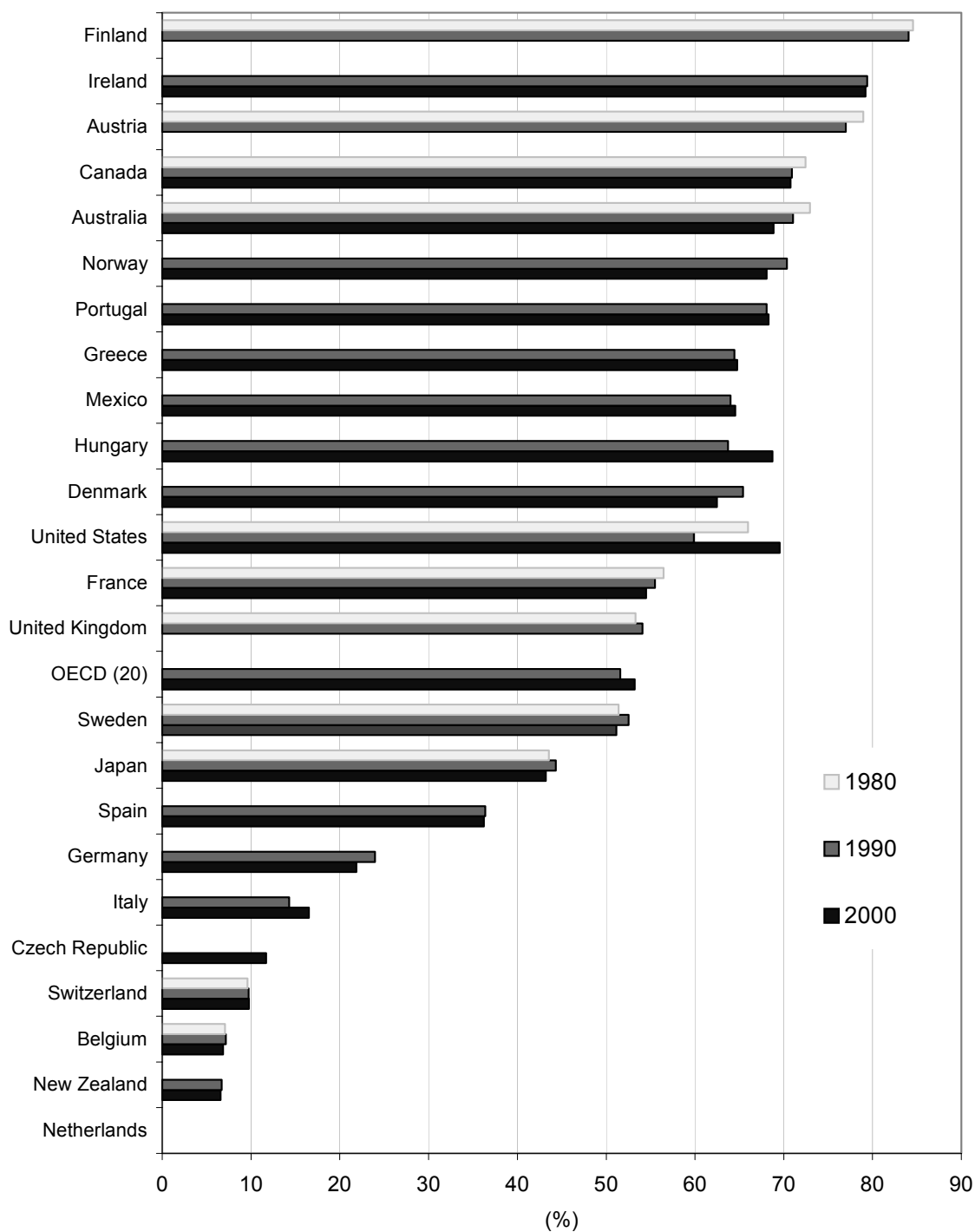
Thus, not all agricultural policy goes to predominantly rural regions. About one-half of agricultural policy across the OECD is delivered to intermediate or predominantly urban regions.<sup>12</sup>

12. This invites a discussion of the coherence of the policy for agricultural production in relation to the policy for the development of metropolitan regions.

**Figure 1. Share of agricultural workforce in total workforce of predominantly rural regions**



OECD (20) refers to the 20 countries for which employment data were available by sector and by region in 1990 and 2000. See note 1 in Table 2. Agriculture refers to ISIC=1. Source: OECD Territorial Database.

**Figure 2. Share of total agricultural workforce employed in predominantly rural regions**

OECD (20) refers to the 20 countries for which employment data were available by sector and by region in 1990 and 2000. See Note 1 in Table 2. Agriculture refers to ISIC=1.

Source: OECD Territorial Database.

## The interest of rural in agriculture

Rural development, as conceptualised here, is the growth of jobs in areas with a long distance to urban and with a low population density. Thus, the interest of “rural” in “agriculture” is the ability of “agriculture” to create rural jobs. Across the OECD, the agriculture workforce is declining. Within predominantly rural regions, the agriculture workforce declined 2.3% per year during the 1990s (Table 3). Thus, the agriculture sector is not creating jobs in farming.

However, some farming enterprises are also involved in non-farm enterprises. Bollman (1998) notes that about 15% of Canadian census-farms also operate a non-farm business. Rural development (*i.e.* the creation of rural jobs) would thus have an interest in farming operations which create jobs in non-farm enterprises. Examples of non-farm enterprises located on a census-farm might be a machinery repair enterprise or a hair dressing enterprise that is operated by a family member. This may or may not have a significant impact on the number of jobs in any given predominantly rural region.<sup>13</sup>

According to the OECD (OECD, 2001), strategies for regional development should look to invest in, or to valorise, under-utilised assets. One potential asset is the agricultural landscape. Thus, one possible interest of “rural” in “agriculture” is the enhancement of an agricultural landscape that can be valorised to create rural jobs. However, in some countries, the asset of the agricultural landscape is a relatively small share of all rural assets. In Canada, for example, tourists are more likely to be drawn to mountains, tundra, icebergs, northern lights, whale-watching, pristine lakes, polar bears and white-water rapids and are less likely to be drawn to an agricultural vista. Thus, in some countries, a focus on the asset of the agricultural landscape is a small portion of all rural assets.

Arguably, the agricultural landscape near cities (recall that this is *not* a “rural” agricultural landscape because it is not distant from urban services and is not distant from the [potential] urban consumers of the agricultural landscape) would be expected to be more valuable (*i.e.* valorised at a higher rate per hectare) because the demand for this landscape would be expected to come from urban consumers.

In some countries, agricultural policy is moving from a focus on agricultural production towards a focus on the agricultural landscape. OECD (2006) indicates that, across the OECD area, about 90% of the PSE (Producer Support Estimate) is tied to the level of agricultural production.<sup>14</sup> Thus, although there is a shift towards supporting the landscape for possible valorisation by rural development initiatives, this policy shift has a

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13. In Canada, 9% of the predominantly rural workforce is employed in agriculture (Figure 1). Canada is similar to the United States, with an historical constant of about 1.4 workers per census-farm (Kislev and Peterson, 1982). If the 15% of census-farms with a non-farm business each created, for example, two non-farm jobs, then the contribution to the non-farm workforce in predominantly rural regions in Canada would be 0.02 (or 2% of the non-farm workforce) (*i.e.* 0.09 agricultural workers per rural non-farm job divided by 1.4 agricultural workers per census-farm times 0.15 non-farm enterprises per census-farm times 2 non-farm jobs per non-farm enterprise). Thus, on average, the impact on non-farm employment by census-farms with non-farm enterprises is small.
14. This includes market price supports plus payments based on output plus payments based on input use plus payments based on area planted and animal numbers.

long way to go. And, the agricultural landscape is only one of a myriad set of rural assets that may be valorised by rural development policy.

Jobs generated from the valorisation of an agricultural landscape may be classified to the farming sector (for example, in the case of a farming operation that adds a bed and breakfast enterprise to the farming operation) or the jobs may be classified to another sector (for example, if a tour operator offers weekend bicycle tours through the agricultural landscape). Regardless of the sector, these jobs are generated from the agricultural landscape. The jobs generated in predominantly rural regions will appear as rural jobs and jobs in predominantly urban and intermediate regions will be urban jobs.

**Table 3. Employment in agriculture declined in the 1990s in each type of region, selected OECD countries<sup>1</sup>**

	Agriculture	Industry	Services	All sectors
	Annualised rate of growth of employment (%)			
Predominantly urban regions	-3.0	-0.8	1.7	0.9
Intermediate regions	-2.9	-0.1	1.8	1.0
Predominantly rural regions	-2.3	0.5	1.9	1.0
All regions <sup>1</sup>	-2.6	-0.2	1.8	1.0

Data for 20 OECD countries for which data were available by sector and by region for 1990 and 2000.

See note 1 in Table 2.

Source: OECD Territorial Database.

## The interest of agriculture in rural

“Agriculture” as the competitive production of commodities relates to rural in two possible dimensions:

- i. being less rural would imply that commodities are produced closer to a market; and
- ii. being more rural would imply that commodities are produced at lower costs because of lower land prices and less attention would need to be paid to the externalities of pollution (noise pollution, odour pollution, water pollution, light from greenhouses, etc.).

Moving past the definition of “agriculture” as being the efficient production of commodities, it might be noted that farming families have an interest in rural. Specifically, some efficient farming enterprises do not require a full-year, full-time operator. Thus, some operators choose an off-farm job rather than a secondary farming enterprise to maximise their own labour returns. Similarly, not all farms have full-year, full-time work for all family members who wish to work. Thus, some choose an off-farm job.

Typically, farm operators with some off-farm work have higher incomes.<sup>15</sup> Interestingly, in the 1980s, Canadian farmers appeared to have made this adjustment

15. Bollman (1991) showed that operators who receive one-half of their labour earnings from farming and one-half of their labour earnings from off-farm work have lower total labour



more than farmers in the United States, who, in turn, appeared to have made this adjustment more than European farmers. For operators of farms classified to each size class of standard gross margin,<sup>16</sup> operators of Canadian farms were more likely to work off the farm than operators of US farms.<sup>17</sup> In turn, for farms of each size, operators of US farms were more likely to work off the farm than operators of EU farms (Fuller and Bollman, 1992). Operators with larger farms were less likely to work off the farm (or, individuals with off-farm jobs were more likely to operate smaller farms).

When looking at the spouses of farm operators, the same general conclusion was found: spouses of Canadian census-farm operators were more likely to work off the farm than the spouses of US farm operators who, in turn, were more likely to work off the farm than the spouses of EU farm operators. However, the participation in off-farm work by the spouse of the farm operator appeared to be independent of the size of the farm for all three cases (Canada, the US and the EU).

The point is that farming families have an interest in rural development (*i.e.* rural jobs). If we move from agriculture and agricultural policy to a focus on the socio-economic well-being of families associated with farming, then we find an interest of farming families in rural development and rural development policies. Recall however that the demographic count of farming families in predominantly rural regions is small.

### **If rural has little interest in agriculture, where does its interest lie?**

As suggested above, if rural development is the growth of jobs at a distance from a service centre or at a distance from a market centre, then rural development would appear to have little interest in agriculture because agriculture is not creating jobs.<sup>18</sup> Thus, where might the interest of rural lie?

The price of transporting goods is falling in real terms (*i.e.* relative to the general price level as measured by the Consumer Price Index or the GDP implicit price deflator) (Bollman and Prud'homme, 2006; Glaeser and Kohlase, 2004). As a result, rural areas are becoming more competitive in manufacturing (Beshiri, 2001). In Canada, manufacturing is moving to the rural metro-adjacent regions (Baldwin *et al.*, 2001). Thus, manufacturing remains the exportable sector in predominantly rural regions with the best potential to be

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earnings than operators with a small amount of farm earnings or operators with a small amount of off-farm earnings. In this sense, a ½ : ½ mix of farm and off-farm work appears to be a less efficient allocation of the time of the operator (in the sense that overall labour returns are smaller).

16. Standard gross margin is calculated as gross farm revenue minus selected expenses.
17. Agriculture and Agri-Food Canada (Agriculture and Agri-Food Canada, 2005) shows that, in Canada, less than 50% of operators of one-operator census-farms were engaged in some off-farm work: in the US, principal operators of all census-farms were more likely (more than 50%) to report some off-farm work. We suspect that the higher share of US census-farm operators reporting some off-farm work is due, at least in part, to the fact that operators associated with smaller census-farms are more likely to report off-farm work and a higher share of US census-farms are “small”. About one-half of US census-farms have a gross revenue of less than USD 10 000, whereas only about one-quarter of Canadian census-farms have gross revenue lower than USD 10 000 (Whitener *et al.*, 1995).
18. It is acknowledged that growth in agricultural commodity output may be creating jobs in other sectors (*e.g.* trucking, food processing, etc.)

the future pillar of rural development (Freshwater, 2003). Note that in the 1990s across all predominantly rural regions (in 20 OECD countries for which data are available by sector by region), employment in “industry”<sup>19</sup> grew by 0.5% per year, whereas “industry” employment declined in the 1990s in intermediate regions and in predominantly urban regions (Table 3).

Not all countries reported growth in “industry” employment in their predominantly rural regions in the 1990s. About one-half reported growth and about one-half reported a decline in “industry” employment in their predominantly rural regions (Figure 3).

One important component of manufacturing is adding value to food and fibre products. This invites a look at the interest of rural in sectors related to agriculture.

Agriculture and Agri-Food Canada has defined the agriculture and agri-food sector to include the sectors which manufacture farm inputs; the primary agricultural sector; the food processing sector; the wholesale and retail trade of agricultural and food products (including grocery stores); and the food and beverages services sector (*i.e.* restaurants and drinking places) (Keith, 2003). Thus, the discussion of the overlap of rural and agriculture can be extended into a discussion of the overlap of rural and agriculture *plus* agri-food.

In Canada, between 1981 and 2001, employment in the food processing sector in predominantly rural regions increased (marginally, by 6 000 jobs, or 0.4% per year, on average) (Table 4). Thus, the manufacturing component of the agriculture *plus* agri-food sector did make a positive contribution to rural development (*i.e.* rural job growth) in Canada in the last two decades of the 1990s.

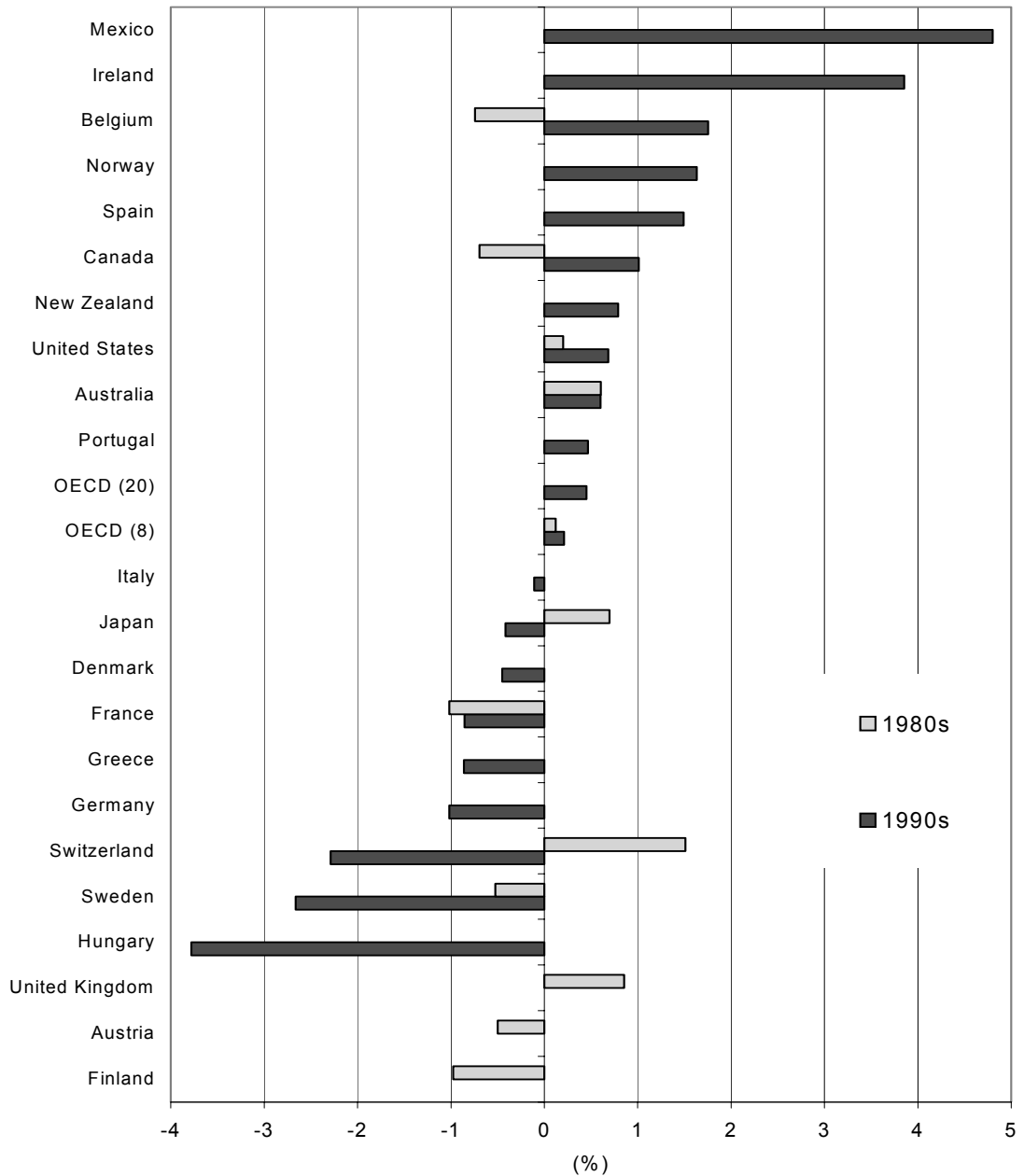
In addition, employment in the wholesale and retail trade of agricultural and food products grew in both urban and rural regions, at about the same rate – 1.6% per year from 1981 to 2001. Similarly, employment in the food and beverage services sector grew in both urban and rural regions, at about the same rate – 3.4 and 3.7% per year, respectively. Part of the growth in food and beverages may be due to tourism. Beshiri (2005) indicates that tourism employment growth was slightly higher in predominantly rural regions than in predominantly urban and intermediate regions from 1996 to 2003.

Thus, the creation of rural jobs in the food processing sector and the creation of rural jobs in the food and beverage services sector, due to growth in rural tourism, represent two components of the agriculture and agri-food sector in Canada that are contributing to rural development (*i.e.* the creation of rural jobs).

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19. Manufacturing is the major component of “industry” but it is possible that manufacturing is not causing the growth of “industry” employment.

**Figure 3. Employment in "industry"<sup>1</sup> in predominantly rural regions, by country**  
(annual percentage change)



OECD (20) see note 1 in Table 2; OECD (8) refers to the 8 countries (Australia, Belgium, Canada, France, Japan, Sweden, Switzerland and the US) for which employment data were available by sector and by region for 1980, 1990 and 2000.

1. "Industry" includes ISIC 2 (mining, oil extraction and quarrying); ISIC 3 (manufacturing); ISIC 4 (utilities); and ISIC 5 (construction).

Source: OECD Territorial Database.

Table 4. Distribution of employment by sector and type of region in Canada, 1981 and 2001

Type of region	Agriculture	Agri-food sectors				Agriculture and agri-food (sub-total)	All sectors
		Food processing	Wholesale and retail trade of agricultural and food products	Food and beverage services	All agri-food sectors(1) (sub-total)		
<b>Number employed ('000)</b>							
Predominantly urban or intermediate regions							
1981	143	193	322	332	877	1 021	8 274
2001	146	166	439	643	1 260	1 405	11 060
Predominantly rural regions							
1981	344	67	154	122	361	705	3 603
2001	311	73	211	256	548	859	4 517
All types of regions							
1981	487	260	476	455	1 238	1 725	11 877
2001	456	240	650	899	1 808	2 264	15 576
<b>Distribution of employment across sectors within each type of region (row %)</b>							
Predominantly urban or intermediate regions							
1981	2	2	4	4	11	12	100
2001	1	2	4	6	11	13	100
Predominantly rural regions							
1981	10	2	4	3	10	20	100
2001	7	2	5	6	12	19	100
All types of regions							
1981	4	2	4	4	10	15	100
2001	3	2	4	6	12	15	100
<b>Distribution of employment across types of regions for each sector (column %)</b>							
Predominantly urban or intermediate regions							
1981	29	74	68	73	71	59	70
2001	32	69	68	72	70	62	71
Predominantly rural regions							
1981	71	26	32	27	29	41	30
2001	68	31	32	28	30	38	29
All types of regions							
1981	100	100	100	100	100	100	100
2001	100	100	100	100	100	100	100
<b>Annual rate of employment growth (%)</b>							
Predominantly urban or intermediate regions							
1981 to 2001	0.1	-0.7	1.6	3.4	1.8	1.6	1.5
Predominantly rural regions							
1981 to 2001	-0.5	0.4	1.6	3.8	2.1	1.0	1.1
All types of regions							
1981 to 2001	-0.3	-0.4	1.6	3.5	1.9	1.4	1.4

1. This category includes smaller sectors not shown (*i.e.* employment in the farm input sectors).

In this table, employment is allocated to sectors using the 1980 Standard Industrial Classification (SIC). "Agriculture" includes (self-employed and paid) employment on farm plus employment in services related to agriculture and thus differs somewhat from the "Agriculture ISIC=1" used elsewhere in this paper.

Source: Statistics Canada, Census of Population, 1981 and 2001.

## How far can we go by looking at the demographic or jobs overlap of agriculture and rural?

Above, it was shown that only one-half of agricultural jobs (and arguably agricultural policy) are in rural regions and that these jobs (and arguably agricultural policy) represent less than 10% of rural jobs (Table 2). To pursue the discussion of the coherence of agriculture and rural policy, two additional conversations might be envisioned:

- a. the coherence of agriculture and rural policy objectives; and
- b. the coherence of agriculture and rural policy mechanisms.

For example, in terms of agricultural policy objectives, three groups of objectives might be identified:


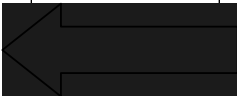
1. commodity policy (*i.e.* policy to enhance the competitive production of agricultural commodities);
2. land policy (*i.e.* policy to lessen negative externalities from the use of agricultural land (*i.e.* lowering pollution and the degradation of the land resource) and policies to enhance the positive externalities of agricultural land (such as the multifunctional aspects of a pristine agricultural landscape); and
3. people-focused policy (both policy focused on the socio-economic well-being of individuals working in agriculture and policy focussed on the safety of the food produced for people consuming the agricultural products).

These objectives work in a vertical fashion in Table 5.


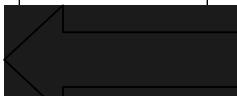
In terms of rural policy objectives, they might be stated generally as enhancing the socio-economic well-being of rural citizens. This includes jobs and incomes and access to services, etc. These objectives work in a horizontal fashion in Table 5. Thus, one specific item for future discussion might be – how can agricultural policy objectives and rural policy objectives become (more) coherent in the overlapping quadrant of Table 5?

Another view of the issue would be a discussion of the policy mechanisms (or policy approaches). In general, agricultural policy is a top-down approach from a central government. This operates vertically in Table 6. Rural development policy, on the other hand, is, in general, a bottom-up approach to the identification and delivery of local projects. In the EU, the LEADER+ Programme and in Canada, the CFDC (Community Futures Development Corporations) are examples of such a policy approach. These programmes operate horizontally across all sectors in Table 6. Thus, another specific item for discussion might be – how can agricultural policy delivery mechanisms be “coherent” with rural development policy mechanisms in the overlapping quadrant in Table 6?

**Table 5. Coherence of agriculture and policy objectives**

	Agriculture sector	All other sectors	All sectors
Predominantly urban and intermediate regions			
Predominantly rural regions			Quality of life of residents
All regions	i) commodities ii) land iii) people		

**Table 6. Coherence of agriculture and rural programme mechanisms**

	Agriculture sector	All other sectors	All sectors
Predominantly urban and intermediate regions			
Predominantly rural regions			LEADER+, CFDCs
All regions	i) price support ii) land quality/landscape iii) farming family income		

In a nutshell, future discussions of the coherence of agriculture and rural policy might profitably consider:

1. the demographic overlap of the workforce;
2. the overlap of agricultural and rural policy objectives; and
3. the overlap of agricultural and rural policy delivery mechanisms.

## Conclusions

The people-scape of predominantly rural regions in OECD countries is not agricultural – even though the landscape may be agricultural. A large majority of the rural workforce is employed in sectors other than agriculture. In 2000, no OECD country had over one-third of its predominantly rural population employed in agriculture. On average, less than 10% of the predominantly rural workforce across the OECD area is employed in agriculture. Thus, agricultural policy is received by a minority of the rural workforce.

In addition, agriculture is not solely a rural enterprise. In fact, about one-half of OECD agricultural workers are employed in intermediate and predominantly urban regions. Thus, agriculture extends beyond rural. Agricultural policy is not solely focused on predominantly rural regions.

Since only one-half of agricultural policy is delivered to predominantly rural regions and since agricultural policy within predominantly rural regions is delivered to less than 10% of the predominantly rural workforce, “agriculture” and agricultural policy has a weak demographic overlap with “rural” and rural development policy.

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## Chapter 4. New Evidence on the Contribution of Swiss Agriculture to the Settlement of Rural Areas

Vinzenz Jung<sup>1</sup>

### *Abstract*

*This paper presents recent evidence on the importance of agriculture for the viability of rural municipalities in Switzerland. It is based on a study mandated by the Swiss Federal Office for Agriculture and carried out by the Swiss Federal Institute of Technology. The study first analyses the vulnerability of all Swiss municipalities with less than 1 000 inhabitants, based on long- and short-term working population trends. It then simulates what would have happened in these municipalities, if, on top of the observed developments, agriculture had disappeared. Without agriculture, 244 municipalities would change status from “not vulnerable” or “borderline case” to “vulnerable”. Another 115 municipalities would be considerably more vulnerable than they already are. Thus it can be said that agriculture contributes significantly to the viability of 359 of the 2 900 Swiss municipalities (12%). Policy responses are outlined which are designed to strengthen the viability of vulnerable rural communities in general and agriculture’s contribution in particular. They include changes in both regional and agricultural policies. Their common feature is that they are all based on a bottom-up approach.*

### **Introduction**

Agriculture contributes to the viability of rural areas in numerous ways. Its own economic activities generate direct employment and income, which is spent partly on locally produced goods and services. Through upstream and downstream linkages the sector generates other economic activities. Last, but not least, it contributes to an attractive landscape, which is a pre-condition for many recreational and tourist activities.

This paper presents recent evidence on the importance of agriculture to the viability of rural communities in Switzerland. It is based on a study mandated by the Swiss Federal Office for Agriculture and carried out by the Swiss Federal Institute of Technology. The paper is organised as follows: first, some background information on the territorial development of Switzerland and Swiss agriculture is given; secondly, recent and planned developments in agricultural and rural policies are reviewed; thirdly, the methodological approach and the findings of the study on agriculture’s contribution to the viability of rural communities are presented. Lastly, some policy conclusions are drawn.

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1. Swiss Federal Office for Agriculture.

### ***Territorial development of Switzerland***

Over the last fifty years, Switzerland has been going through a process of rapid urbanisation. Of the 2 896 municipalities one-third (979) are today considered as urban. These can be found mainly in the plains region of the country, in southern Switzerland and in certain large mountain valleys (Valais and Grisons). It is feasible that, in the not-too-distant future, it will be possible to travel from the south-west to the north-east of the country without setting foot on “rural ground” – at least, statistically speaking (ARE, 2005).

To simplify, the part of the territory which is not urban can be considered as rural<sup>2</sup> (ARE, 2004). This is where agricultural production mainly takes place, although of course much of this surface cannot be cultivated as it consists of mountains and lakes. In fact, 32% of Swiss territory consists of unproductive land (built-up areas, mountains, lakes, etc.) (BFS, 2001).

### ***Swiss agriculture***

Swiss agriculture contributes 0.9% to gross domestic product (GDP) (BLW, 2004) and employs 193 000 people (3.5% of the total working population). There is evidence, however, that its contribution goes way beyond what these two indicators would suggest. Agriculture, together with up- and down-stream industries, contributes 7.4% to GDP. Furthermore, almost 40% of Swiss territory is shaped by agriculture (BFS, 2001), a contribution which is especially important in the mountain areas, where tourism is an important economic factor. A study shows that when the Swiss spend their holidays in Switzerland, more than one-third of their budget (or CHF 2.3 billion) is spent on “nature-orientated tourism” (*Naturnaher Tourismus*), *i.e.* a form of tourism which, to a considerable extent, takes place in a landscape shaped by agriculture (Siegrist, *et al.*, 2002). The other public goods that agriculture provides to society are also of great importance. In the absence of agriculture, forest would take over and all fertile soil would be lost. After 25 years, re-cultivation would be possible only at a high price. Agriculture also contributes to biodiversity, as open land is a habitat for some plant and animal species which cannot be found in the forests. Agro-biodiversity in Switzerland is particularly rich where forage is produced, as agriculture uses many different types of grassland at different altitudes and different levels of intensity.

### ***Agricultural policy and regional policy***

Both agricultural and regional policies are undergoing fundamental changes. While in agriculture the reform process was initiated more than a decade ago, the regional policy reforms were initiated 1998 and will be pursued based on proposals made by the government to parliament in autumn 2005.

Comprehensive agricultural reforms were introduced in Switzerland in 1993. The core of these reforms was the substantial reduction of market support and the introduction of direct payments. Direct payments are not based on production, and reimburse farmers for the public goods and special ecological services they provide. During the 1990s, guaranteed prices were gradually phased out, causing farmers’ earnings to fall

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2. The OECD makes a distinction between urban, semi-rural and rural areas. Regions are classified according to population density and the results depend on the level of the analysis (ARE, 2004).

substantially. Today, farmers have to reckon with prices which are around 25% lower than fifteen years ago. Since 1999, all direct payments have been based on a stringent proof of ecological performance (cross compliance). This ensures that strict ecological standards apply throughout the country. Legislation which came into force 2004 foresees the abolition of milk quotas by 2009 at the latest. A bilateral agreement with the EU will open the Swiss market for cheese entirely by 2007 (SFOA, 2004).

For a long time, regional policy in Switzerland has concentrated on improving the provision of infrastructure in disadvantaged areas. The aim of the new regional policy is to shift the focus towards supporting the creation of value-added in disadvantaged areas. In future, instruments will mainly support bottom-up initiatives in the fields of education, training, research, know-how and technology transfer, regional networks and the effectiveness of local organisations.

## **Agriculture's contribution to the viability of rural municipalities**

### *Constitutional mandate*

According to the article on agriculture in the Swiss constitution, agriculture has to contribute substantially towards ensuring food supplies for the population. Production methods are to be used which will ensure the availability of fertile soils and clean drinking water to future generations. This means that ecological standards are an important objective of agricultural policy. Furthermore, the article recognises that protecting the landscape is an essential task of agriculture. A varied landscape means a high quality of life for the population and is at the same time the basis of a flourishing tourist industry. Finally, agriculture is to help maintain rural areas across the whole country, a goal which is also supported by regional policies (SFOA, 2004).

The study carried out by the Institute of Agricultural Economics of the Swiss Federal Institute of Technology evaluates this contribution to the decentralised settlement of the territory (Institut für Agrarwirtschaft, 2004). What follows is a presentation of their analysis.

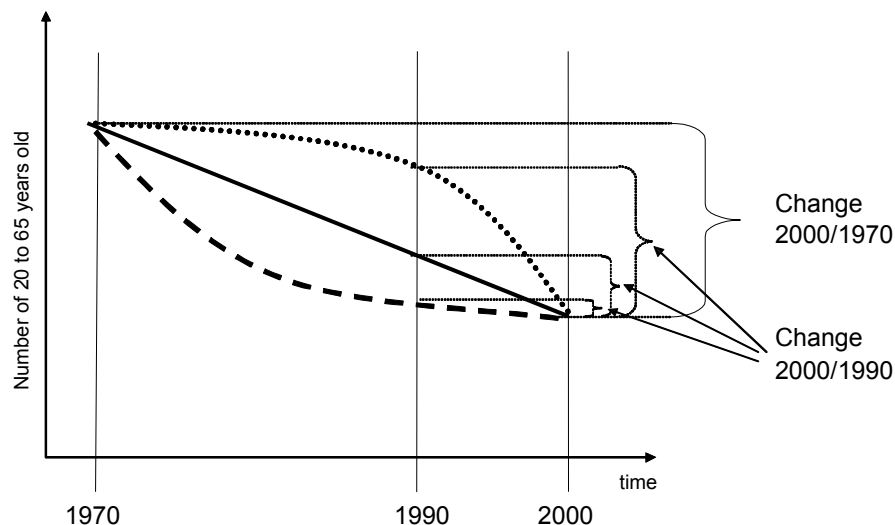
### *Municipalities threatened in their continued existence*

In order to determine agriculture's influence on the viability of rural municipalities the study first looks at how viable Swiss municipalities are in general. Viability in this context refers exclusively to the question of whether settlement can be maintained in the medium term. A first proxy for viability used is the size of the population. All municipalities with a population of 1 000 or more are considered viable in the medium term and are therefore excluded from the analysis. Thus, the study focuses on the 1 560 municipalities which fall into the category of 1 000 inhabitants or less (out of a total of 2 896 municipalities).

Next, two indicators are developed to determine the municipalities' future viability. Both are based on the development of the population aged 20-65 over time. The first one (X 00/70) shows the longer-term development of the population between 1970 and 2000

and the second one (Y 00/90) the shorter-term development between 1990 and 2000. As Figure 2 illustrates, it is not enough to look at  $\Delta 2000-1970$ . Only the additional information of  $\Delta 2000-1990$  reveals that in one municipality population numbers are stabilising while in the other a continuation of the decline after 2000 is likely to occur (Figure 1). Furthermore, the second indicator takes into account the development of the number of young people (20-39) between 1990 and 2000 as this is a proxy for the attractiveness of the municipality for young (rural) professionals.

**Figure 1. Different population trends in two rural municipalities**



The viability of a municipality is considered threatened if its population either shrank between 1970 and 2000 and did not grow enough to compensate between 1990 and 2000; or if it grew to a moderate extent between 1970 and 2000, but shrank between 1990 and 2000 (see Table 1 for the threshold values applied for the two criteria). The threshold values applied differ according to the size of the population. The smaller the population, the more sensitive a municipality is to further decline. This is reflected in the fact that the threshold values chosen are more severe for smaller municipalities.

According to the chosen indicators and applied thresholds, the continued existence of 231 out of the 1 560 municipalities can be considered as under threat (15%). Of these municipalities, many are very small: 74% have less than 300 inhabitants.

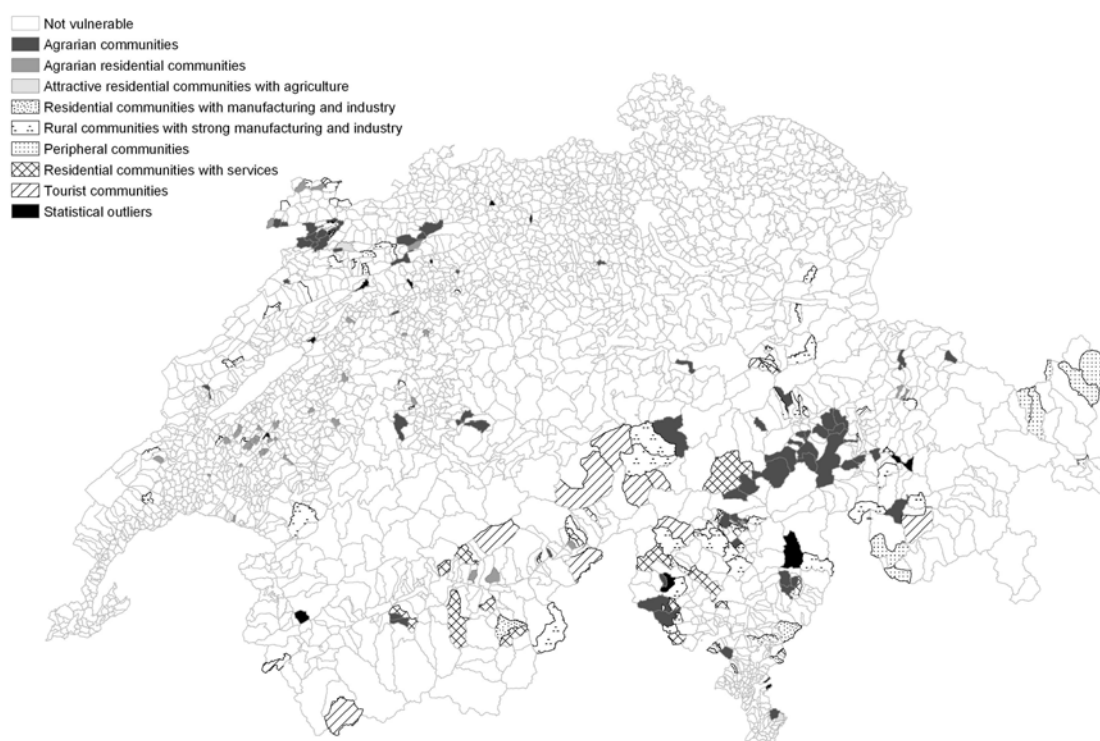
Multiplying the two indicators provides a measure to classify the municipalities according to how much they are threatened. Only a few municipalities can be considered as very threatened. At the same time these are the ones with the smallest populations. In total, 48 811 inhabitants are affected. Threatened municipalities can mainly be found in the mountain regions of the Gotthard area (central/southern Switzerland), the Canton of Grisons (south-eastern Switzerland) and the Jura (north-western Switzerland) (Figure 2).

**Table 1. Criteria for the classification of municipalities threatened in their existence**

Population size	Criterion 1		Criterion 2	
	X 70/00	Y 90/00	X 70/00	Y 90/00
< 300	< 0.95	< 1.3	< 1.2	< 0.9
> 299 and < 500	< 0.9	< 1.1	< 1.1	< 0.9
> 499 and < 1000	< 0.8	< 1.1	< 1.1	< 0.8

X 70/00: working population 20-65 in % of 1970.

Y 90/00: (working population 20-65 in % of 1990 + working population 20-39 in % of 1990)/ 2.

**Figure 2. Types of vulnerable municipalities**

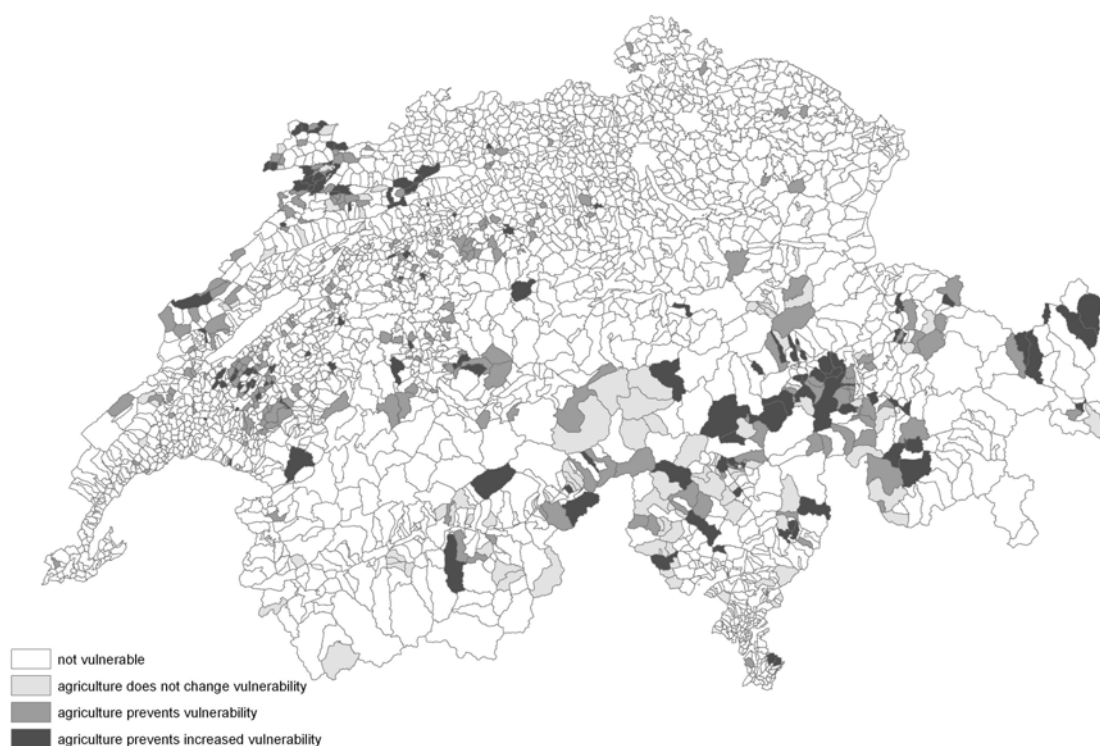
The study then goes on to develop a socio-economic typology of all Swiss municipalities. Figure 2 shows that, whereas many municipalities characterised as “agrarian communities” are threatened, other types of municipalities (such as those communities where tourism is dominant, or where industry is still important, or those whose main characteristic is their remoteness) are also affected.

### *Influence of agriculture*

For all municipalities with a population smaller than 1 000 the effect of the disappearance of the agricultural sector is simulated. With a few adaptations the same indicators as those used to determine the municipalities threatened in their existence are applied.<sup>3</sup> These indicators are re-calculated under the hypothesis that between 1990 and 2000 agriculture had disappeared.

If agriculture had disappeared over the time period 1990-2000, 172 municipalities which were not classified as threatened (vulnerable) would now be threatened. Seventy-two municipalities which were borderline cases would now definitely be threatened and 115 municipalities which are already threatened would be considerably more threatened. In total, 359 municipalities would be considerably affected by the disappearance of agriculture. In other words, agriculture today contributes to the viability of these 359 municipalities (Figure 3, *c.f.* categories “agriculture prevents vulnerability” and “agriculture prevents increased vulnerability”).

**Figure 3. Agriculture’s contribution to the viability of rural areas**



3. The indicator Y 00/90 has to be simplified in the sense that it is no longer possible to include the development of the number of people in the age category 20-39, as the age distribution in agriculture at the municipality level is not known.

The 359 municipalities represent 12% of all Swiss municipalities; 1.2% of the total Swiss population lives there and they encompass 11% of the utilised agricultural area (Table 2). In all the other municipalities the contribution is not important, *i.e.* the disappearance of the sector would not affect the stability as measured in terms of the development of the working population.

**Table 2. Municipalities where agriculture’s contribution to their viability is significant**

Municipalities		Population		Utilised agricultural area	
Number	Share of total (%)	Number	Share of total (%)	Hectares	Share of total (%)
359	12.4	49 858	1.2	113 786	10.7

## Policy conclusions

The current package of new agricultural policy proposals is called “Agricultural Policy 2011”. It was submitted by the Swiss Government to all stakeholders for consultation in September 2005 (EVD, 2005). Its main goal is to improve agriculture’s international competitiveness. The main elements are the abolition of all remaining market support measures (apart from a payment for milk transformed into cheese) and a corresponding shift of the funds to non-production-linked direct payments. In addition, all remaining export subsidies for agricultural raw materials will be phased out by 2009.

These measures will increase the sector’s efficiency, but also lead to a further shrinking of the sector in terms of the size of its workforce and its direct contribution to the viability of rural areas. In order to compensate for this effect, the policy package also includes a number of new incentives to support agriculture in improving its value added, namely:

- Introduction of new labels, (*e.g.* a new label for mountain products).
- Improvement of the incentives for individual and collective initiatives at the local level in the areas of marketing, investment aids, biodiversity programmes etc., by introducing an instrument to support the start-up phase of such projects.
- Introduction of a programme to support local initiatives which aim at increasing the efficiency of the use of ecological resources (targeted at those areas with remaining ecological problems).
- Improvement of the framework conditions for biomass production, *e.g.* by making investment aids available for biogas plants.
- Loosening of building restrictions to improve the conditions for the development of farming-related activities such as agro-tourism.

These measures are all bottom-up, *i.e.* they depend on farmers’ initiatives.

The study demonstrates that in a number of regions agriculture does indeed contribute to the viability of rural areas and the settlement of the territory, especially in fragile



mountain areas. It also confirms, however, that the sector, on its own, cannot ensure the decentralised settlement of the territory. Therefore, regional policy measures are important. In future, cantons (“states”) will negotiate regional development plans with the Confederation. Cantons will have the option to include the new agricultural policy instruments described above in their plans. This will ensure optimal co-ordination between these measures and regional policy measures.

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## Chapter 5. The Contribution of Agriculture to Rural Development in France: What Role for Public Action in Supporting Joint Production of Public Goods Required for the Development of Rural Areas?

Dominique Vollet<sup>1</sup>

### *Abstract*

*Using selected case studies, representing the full diversity of French rural areas, this paper indicates the degree to which agricultural and Agri-food activities contribute to the development of rural areas, essentially in the environmental, but also in the social field. More precisely, using regional-economy models, estimations of direct and indirect jobs created by rural activities (and of the upstream and downstream linkages) shows the great diversity of the basic<sup>2</sup> activities in French rural areas and consequently the integrated character of rural development. Whereas in certain areas, agricultural and Agri-food activities remain the primary basic activities, in other, more aesthetically attractive areas, the sectors related to the residential and recreational functions play the central role.*

*What is more, agriculture provides agricultural goods and, in the process, environmental and territorial services that are indispensable for the development of the other rural activities, particularly in the more attractive rural areas. After describing these services in a few areas, the strong interdependence between the agricultural and Agri-food sectors on the one hand, and the tourism and residential sectors on the other, will be shown, via the notion of a set (or basket) of territorial-based goods and services. In fact, these French case studies tend to show that the consistency of agricultural and rural development policies is improved when public action encourages, first, the continued existence of public goods provided by agriculture (some of which are purely public goods and could be financed by public funds over the long term), and secondly, the emergence of co-ordinated networks of actors capable of enhancing the value, via the market, of some of the services provided, e.g. by developing baskets of territorial-based goods and services in which each product is worth more than would be the case were it to be sold separately. In this case, the financing intended to enhance local co-ordination can be temporary.*

### **Introduction**

The designers of the Common Agricultural Policy (CAP) set up production aids (called “first-pillar” aids) to make the European Union self-sufficient in food products. In

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1. UMR (*Unité Mixte de Recherches*) METAFORT Cemagref-ENGREF-ENITAC-INRA, France.
  2. In this paper, the term “basic” is used in the sense of the economic-base theory.

parallel, the underlying theory<sup>3</sup> guiding rural development policies held that maintaining agricultural activity was an indispensable element in the development of rural economies. In step with the increases in agricultural production, the numbers of people active in agriculture declined significantly (by 4% between the last two census studies in 1990 and 1999). However, it was hypothesised that the decline in the agricultural workforce (with migration of young workers to cities) would be compensated by two phenomena. The first was the growth in jobs in the up-stream (production of fertilisers, agricultural machinery, etc.) and down-stream sectors (Agri-food industries). The second was growth in retail and service jobs due to the increase in the revenues of farmers. Work attempting to determine the multiplier or distribution effects of the revenues of the agricultural sector was carried out in parallel with this perception of agriculture as the basic foundation for rural development.

But in spite of the acceleration in the drop in the agricultural workforce, rural economies diverged significantly. Whereas the rural areas farthest from the centres of development (Massif central, plateaux in the east) continue to lose inhabitants, the areas along the Atlantic and Mediterranean coasts and those closest to the cities have gained inhabitants and jobs over the past two decades. In fact, this turn-around in the population figures for certain rural areas is due to the arrival of permanent inhabitants (commuters, retired people) or temporary visitors (tourists), drawn by the quality of life and by rural amenities. A major part of these amenities are environmental non-market goods produced by farmers (notably the landscape). Consequently, farmers have taken on a new role, that of suppliers of public goods. Gradually, the underlying theory for agricultural public policy has become more complex. Part of European (“second-pillar” aids), national and local public funding now attempts to enhance this second dimension of agricultural activity by encouraging the quality of agricultural landscapes, biodiversity, etc.

This paper will attempt to validate two hypotheses:

- Agriculture, in different ways, depending on the type of rural area, plays both a direct role in rural development (by providing agricultural goods and a large number of rural jobs) and an indirect role (by providing positive externalities that are indispensable for the development of other jobs, notably in connection with the residential and recreational functions).
- Given the importance of the public goods produced by agriculture for the development of rural areas, public action must attempt to assist directly not only the combined production of agricultural and public goods, but also the organisations capable of enhancing the market value of that production.

To that end, a number of different research efforts based on regional-economy and environmental-economy models will be called upon. The research work will be surveyed and the interested reader can consult the referenced publications. In addition, at least one area, the Aubrac (Annex 1) will be addressed throughout the discussion. The Aubrac is a mid-altitude, mountainous region with a small population and agriculture remains its main economic activity. The main agricultural activity in the Aubrac is low-intensity cattle farming and the presence of pastures significantly impacts on the landscape.

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3. This theory consists of the cause and effect hypotheses implicitly or explicitly held by public decision makers.

However, wherever possible, other zones representative of the diverse rural areas in France have been included. Examples are relatively unattractive areas with light tourism (Cézallier, Northern Côte d'Or département), peri-urban areas near Dijon, major tourism areas (Aix-les-Bains), highly attractive areas with light tourism (Southern Ardèche département) and rural areas heavily impacted by industry (Avallon, Northern Côte d'Or département).

This paper is divided into three main parts. The first will estimate the number of direct and indirect jobs (taking into account the up-stream and down-stream linkages or multiplier effects) created by the basic activities in the mentioned rural areas, namely agriculture, industry and activities related to residential and recreational functions. The latter activities (which depend largely on agricultural rural amenities) play a growing and diverse role (of great importance in the most attractive rural areas). The second part will attempt to present and estimate the production of agricultural non-market goods, whether in the form of externalities, or intentionally produced services. Finally, the third and last part of the paper discusses the role of public aid in stimulating production of non-market goods and consequently in increasing, directly and indirectly, the role of agriculture as a factor in rural development.

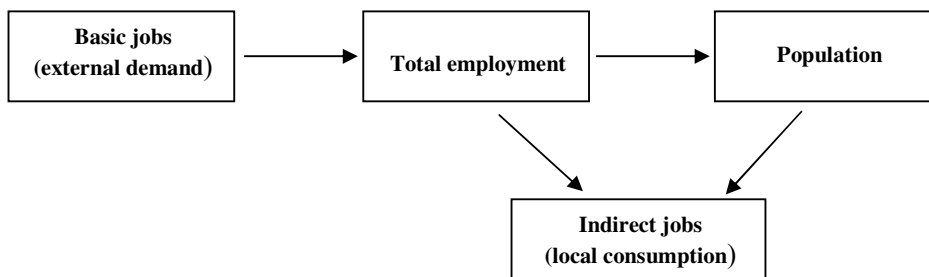
## **A gradual decrease in the role of agriculture as a basic activity in rural economies and an increase in residential and recreational activities capitalising on agricultural amenities**

### ***Agriculture, industry and the residential and recreational sectors: the three basic activities today in rural economies***

To determine the contribution of agriculture to rural development, it is first necessary to identify its role in the local economy with respect to the other economic sectors. A simple description of jobs is far from sufficient because it cannot provide an explanation of the driving forces behind regional development. To identify the mechanisms at work, it was decided to use the economic-base theory. This theory is based on the premise that the development of a local and regional economy depends on its capacity to sell its products outside its borders or to attract external revenues (Krikelas, 1992). The ambiguities concerning the economic-base concept resulted in occasionally unfortunate interpretations and use of the theory. Whereas the initial formulation of the theory in the 1940s insisted on defining the “economic base” as the external revenue, a majority of the applications in the 1960s to 1980s restricted the base to those jobs producing goods and services sold externally (Richardson, 1985). Due to the difficulty in obtaining detailed data on the composition of regional revenues, the authors simply identified the sectors exporting outside the studied zone and considered them the main factors in explaining the inflow of the basic revenue. Such approximations were quite suitable and acceptable from an empirical standpoint as long as the added value constituted the main source of the external revenue. But it is the origin of the demand that determines the basic nature of a revenue. In order to fully take into account the regional-development mechanisms, it is necessary to consider as basic activities not only those selling their physical production outside the studied area (*e.g.* agriculture and industry in most rural areas), but also those selling their products or services to people inhabiting or visiting the area and whose

revenues are external.<sup>4</sup> In rural areas, it is possible to distinguish two basic types of job. The “traditional” jobs, whose production is sold outside the zone (agriculture and industry), and the jobs related to the residential and recreational functions (*e.g.* hotels and a part of restaurant). Indirect jobs are created through the purchase of intermediate products by the basic activities (*e.g.* wholesale businesses) or the purchase of final products by basic-job holders (some service jobs to meet local demand).

**Figure 1. Simplified presentation of the economic-base theory**



In short, this theory is based on the hypothesis that “exports” are the main variable determining regional development (and not other variables that play a role on the national level, such as consumption, savings, investment, etc.). Activities are divided into basic activities (meeting external demand) and non-basic or indirect activities (meeting local demand). The impact or the multiplier effect of the basic activities on the indirect activities is determined by a multiplier (Box 1). Based on a Keynesian view of development, the economic-base models have two major advantages. First, they highlight the main comparative advantages (*i.e.* those at the origin of the basic activities) on which the development of a local economy is dependent (Mulligan, 1994). Secondly, they demonstrate the capacity of a zone to amplify a given external demand in terms of the indirect jobs (using an estimated multiplier) (Leven, 2000). The more diversified the local economy, the higher the multiplier.

4. This is the case, for example, of retail stores serving tourists or retired people (whose revenues are provided by the central state).

### Box 1. The main implementation methods for economic-base models

#### 1. The main methods in determining the basic activities

The estimation of basic activities can use "direct" methods (*i.e.* more or less complete surveys of local businesses) or "indirect" methods that call on available statistics.<sup>1</sup> There are a large number of indirect methods including location quotients, minimum requirements and the econometric method (MacGregor, *et al.*, 2000). Only the first two methods are widely used. Selection of a method depends to a large extent on the available spatial information (detailed job or revenue data per sector). For activities meeting both local (non-basic) and basic demand (*e.g.* retail stores), one of the difficulties in using indirect methods lies in separating the two types of demand.

#### 2. Calculation methods of the multiplier effect used in economic-base models

Consider M = Multiplier, BE = Basic employment, TE = Total employment, NBE = Non-basic employment

##### I. Overall multiplier

**Method 1** (ratio specification): For year  $n$ ,  $M_n = \frac{TE_n}{BE_n}$ ,

**Method 2** (regression specification): Using annual data,  $\Delta NBE = \hat{a} + \hat{b}\Delta BE$  and  $\hat{M} = 1 + \hat{b}$  (1)

In the second method, the dependent variable is not total employment, but basic employment for econometric reasons. Part of the information of the independent variable (basic jobs) would be contained in the dependent variable (total jobs), which often creates autocorrelation problems.

##### II. Specific multipliers for each sector

One of the extensions of method 2, above, consists of estimating specific multipliers for each basic sector. The estimation of equation (2) can be used to estimate the specific multipliers for each basic sector (Mulligan, 1994).

$$\Delta NBE = \hat{a} + \sum_{s=1}^S \hat{b}_s \Delta BE_s \quad (2)$$

$$\text{and } \hat{M}_s = 1 + \hat{b}_s, s \in \{1, \dots, S\}$$

1. The "assumption" technique is even simpler in that it consists of arbitrarily assuming that a given sector is a basic activity in the given territory. This is typically the case for agriculture in a rural zone (Mulligan, 1994).

Table 1. Relative importance of different basic jobs in local economies

		Traditional basic jobs (actual export of goods)			Basic jobs related to benefits of rural amenities (local consumption of goods or services by persons with external revenues and attracted by rural amenities)				
		Agriculture	Industry	T O T A L	Breakdown according to permanent or temporary nature of external persons		Breakdown according to origin (public or private) of revenues		T O T A L
					Recreational functions (temporary population, including tourists)	Residential functions (permanent population, including retired persons, commuters)	Private revenues (tourists, commuters)	Public revenues (retirement)	
Northern Côte d'Or <sup>1</sup>	Entire region	53	17	70	15	15	18	13	30
	Semur- en- Auxois	27	51	78	11	11	13	9	22
Avallon <sup>1</sup>		25	44	69	18	14	20	11	31
Periurban Dijon <sup>1</sup>		13	67	80	1	19	12	8	20
Aix-les-Bains <sup>1</sup>		3	51	54	27	19	34	12	46
Southern Ardèche <sup>1</sup>		42	16	58	19	23	22	20	42
Aubrac <sup>2</sup>		62	23	86	7	7	8	6	14
Cézallier <sup>2</sup>		81	9	90	6	4	5	5	10

Sources: 1. Vollet (1998); 2. Vollet, Roussel and Callois (2005).

In fact, application of the economic-base theory to a certain number of rural areas in France reveals the great diversity of their basic economic activities (Table 1).

- Concerning the traditional bases (agriculture and industry), the industrial nature of certain rural areas (Semur-en-Auxois, Avallon, Aix-les-Bains), including peri-urban areas, is clear. Agriculture remains the main basic activity only in lightly industrialised areas, with light tourism (which is not incompatible with a high level of attractiveness, e.g. the Aubrac) and far from urban centres (Cézallier, Northern Côte d'Or département) (Annex 1).
- Analysis of the non-traditional bases (residential and recreational functions, e.g. tourism, retirement, holiday homes, commuters) reveals different situations.
  - *Areas where the non-traditional bases are becoming major basic sectors in the regional economies.* This is particularly the case for Aix-les-Bains and the southern part of the Ardèche département, where environmental comparative advantages are taking on a strategic role. Within these areas, two sub-categories have been identified.

The first is sensitive to both the general economic situation and the preservation of rural amenities (Southern Ardèche, Northern Côte d'Or, Avallon and Aix-les-Bains). These areas are characterised by significant

transfers of funds, either private (approximately 20 to 30%) and/or public (7 to 10%).

The second is particularly dependent on the continuation of national redistribution policies. This is notably the case for Southern Ardèche where public transfers (retirement payments) play a non-negligible role (approximately 20% of the local economic base). During periods of economic recession and maintained redistribution policies, this is a major advantage.

- ***Areas not particularly affected by the development of non-productive functions in the rural context.*** Contrary to the two previous cases, the non-traditional economic bases remain a distinct minority (approximately 10 to 15%), in spite of efforts made to increase tourism.

What is more, the multiplier effects of traditional functions reported in Table 2 are seen to be weaker in all areas (*i.e.* isolated rural areas and peri-urban areas) than the residential and recreational functions, in studies by both Vollet (1998) and Samson-Gueguen (2003) using similar methods. This notable difference in the multiplier effect between the two types of functions would appear to be caused by the fact that for services and particularly stores (*i.e.* basic sectors linked to the residential and recreational functions), the multiplier effect is generated primarily by wages which, in the vast majority of cases, are spent locally. Conversely, for agriculture and industry, the multiplier effect takes place essentially between sectors (procurement of supplies and intermediate products). The economic fabric of the regional economies analysed here is generally not very diversified (few intermediate and wholesale businesses), which explains the low multiplier effects of traditional functions such as agriculture. These results are consistent with those obtained in France using other methods to estimate multiplier effects (Bossard, *et al.*, 2000).

In addition, in spite of uncertainty related to the significance of the econometric results (some results are significant only at the 10% threshold), it is important to note that the results in these French regions are similar to those estimated in comparable North-American regions by a number of other authors using fairly similar methods<sup>5</sup> (Mulligan, 1994). These authors also found that the multiplier effects of basic jobs related to consumers, tourists and retired persons were much higher than those for agricultural and industrial jobs.

### ***New comparative advantages for rural areas in externalities and environmental services produced by agriculture capable of attracting tourists, commuters and retired persons***

Application of the economic-base theory to a certain number of rural areas in France reveals the increasing differences in the comparative advantages on which the current development of rural areas (and urban areas, for that matter) is based. The local comparative advantage that makes it possible to attract basic revenue is no longer related simply to the various elements determining the competitiveness of the traditional

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5. When making comparisons, it is important to pay attention to certain points, notably the type of multiplier (revenue, production, jobs), the calculation method (estimation by ratio, by regression) and the types of regions studied (situation with respect to cities) (Vollet and Bousset, 2002).



productive system (access to raw materials, cost of labour, etc.), as put forward in the first-pillar aids of the CAP (funding for investment, modernisation, etc.). With the increasing split between places of work, residence and recreation, the climate, landscape, local heritage – in short, the rural amenities – have become comparative advantages. And the majority of these comparative advantages are today positive externalities of agriculture and forestry. If no thought is given to the aids required to maintain these externalities (*e.g.* in the framework of the second pillar of the CAP), we risk losing a significant or even crucial part of rural basic activities. Whereas the fate of certain rural areas (industrial and agricultural areas focused on the production of market goods) depends essentially on their capacity to handle “globalisation”, that of coastal and mountainous rural areas depends on their aptitude to attract basic revenues *via* the residential and recreational functions, and more generally speaking, *via* the new functions of rural areas. Just as the development of the traditional basic sector depends on attracting mobile production factors, that of the non-traditional basic sector depends on attracting the mobile revenues of retired persons (approximately 25% of revenues of French households), commuters,<sup>6</sup> tourists, people renting holiday homes, the wealthy, etc.

Table 2. Overall and specific multipliers

		Overall multipliers (all sectors included)			Specific multipliers for each sector		
		Ratio specification (see Box 1)	Regression specification (see Box 1)		Traditional basic jobs	Basic jobs related to residential and recreational functions	
			Multiplier	R <sup>2</sup>		Multiplier	Multiplier
Northern Côte d'Or	Entire region	1.78	1.56***	0.57	1.29*	2.52*	0.46
	Semur- en - Auxois	1.71	1.62***	0.50	1.54*	2.71*	0.65
Avallon <sup>1</sup>		1.47	1.11*	0.32	1.16*	3.98*	0.87
Peri-urban Dijon <sup>1</sup>		1.86	2.14*	0.22	1.66*	2.88*	0.36
Aix-les-Bains <sup>1</sup>		1.89	1.78***	0.73	1.44**	2.93***	0.86
Southern Ardèche <sup>1</sup>		1.78	1.56***	0.60	1.29*	2.52**	0.59
Aubrac <sup>2</sup>		1.8	1.63**	0.67			
Cézallier <sup>2</sup>		1.5	1.42**	0.78			
Morlaix <sup>3</sup>		2.6	1.97***	0.85	2.95	Not significant	0.30
Redon <sup>3</sup>		2.2	1.79***	0.49	1.33**	6.24*	0.26
Pontivy-Loudéac <sup>3</sup>		2.2	1.83***	0.89	1.82*	4.40***	0.60

\*: Significant at 10% threshold.

\*\* : Significant at 5% threshold.

\*\*\*: Significant at 1% threshold.

R<sup>2</sup>: coefficient of determination.

Sources: 1. Vollet (1998); 2. Vollet and Dion (2001); 3. Samson-Gueguen (2003).

6. In 1999, 52% of employed workers did not work in their town of residence.

The competition between areas no longer concerns exclusively the territorial offer directed toward companies (as is the case for the traditional basic sector, *i.e.* agriculture or industry), but also the offer directed toward households.<sup>7</sup> In this context, it is imperative to determine the relative importance of this basic sector related to the residential and recreational functions, otherwise it may be impossible to understand the changes observed. It follows that two territories with similar traditional bases can undergo very different changes depending on the dynamics of the residential and recreational functions. The form of analysis offered by the economic-base theory is a means to better understand a certain number of paradoxes. The economic recovery in the years 1998 to 2002 clearly impacted on the companies in many rural areas and centres, but did not affect local employment or unemployment levels. The loss of revenue to outside areas coupled with the absence of revenue from the residential and recreational functions (*e.g.* due to lack of aids for agricultural externalities) has to date deprived these territories of any prospects of development (cases in point being the rural industrial centres in the east and in central France). It is therefore particularly important to characterise and estimate precisely the available externalities.

## Link between market and non-market production in rural development

### *Agriculture, a major contributor of externalities and environmental services*

Public authorities use two means to support the production of environmental goods. They can support the operation of farms in the name of the positive externalities created by agricultural production. This is the case for the Agri-environmental Grazing Subsidy (*Prime Herbagère Agro-environnementale*, PHAE) and the Natural Handicap Subsidy (*Indemnité Compensatoire des Handicaps Naturels*, ICHN) in France. Another less frequent means is to order specific environmental services, part of which may not be related to agricultural production (upkeep of paths, preservation of wildlife, etc.) (Aznar and Perrier-Cornet, 2004).<sup>8</sup>

To identify the types of externalities sought after by tourists and estimate their value in monetary terms, it was decided to use an environmental-economy tool, the hedonic price method, on one of the previously selected areas, the Aubrac, because this area is fairly representative of the large number of rural areas in France that are located far from urban centres (and where livestock farming is a major presence, along with the development of light tourism). The hedonic price method is the main analysis tool on the effects of location characteristics on the preferences of consumers in a competitive environment (Rosen, 1974). Through the breakdown of real-estate prices, among others, this method estimates the marginal willingness of people to pay for location conditions, the surroundings and the natural environment of their residence, based on the prices

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7. Concerning people working in the public sector, most authors consider them part of the non-basic sector, even though their revenues are external. This is because the number of public jobs depends to a large extent on the number of local inhabitants.
  8. Farmers are not the only producers of environmental services. Other providers are towns and associations.

effectively paid by consumers (for *gîtes ruraux*<sup>9</sup> in this case), which is not possible using other environmental-economy methods (notably the contingent evaluation method). These characteristics of the natural environment may be air quality, the view (Bastian, *et al.*, 2002), access to natural areas, the landscape (Garrod and Willis, 1992), etc. Location characteristics can also be attractive features of hotels and vacation rentals. Access to these characteristics enables the tourist industry to differentiate its products and consolidate their capacity to influence the market.

It was decided to use a semi-log function. There are two advantages to this. First, it maintains a certain non-linearity in the price equation and, secondly, the relation between the price variation and the variation of a characteristic can be interpreted as a percentage.

$$\text{Log}P_{ik} = \beta + \gamma z_k + \delta_1 A_{1k} + \delta_2 A_{2k} + \varepsilon_{ik} \quad (1)$$

where  $\beta$  is the constant,  $z_k$  the vector of the intrinsic characteristics of the *gîtes*,  $A_{1k}$  the vector of the access characteristics and  $A_{2k}$  the vector of the environmental characteristics.

The location characteristics theoretically comprise two components. First, access or the distance to certain services or amenities and, secondly, the characteristics of the surroundings, the identification of which occupies a significant part of the literature on the real-estate market. It is a question here notably of the social-demographic and environmental characteristics. The use of environmental variables in a hedonic equation is a source of measurement difficulties. The empirical concerns currently deal with the manner of measuring these variables in order to obtain a close approximation of the characteristics actually perceived by individuals. The divergence between objective and subjective measurements may be greater for localised environmental variables. For the Aubrac, vacation rentals during the peak season of the two main chains (*Gîtes de France* and *Clévacances*) were selected as a dependent variable. The regressions were carried out for each of the three départements covered by the Aubrac (Cantal, Aveyron, Lozère). We obtained 799 observations for Aveyron, 792 for Cantal and 740 for Lozère. To obtain a sub-set of environmental variables that is identical for all three of the markets under consideration, we used the township land-use data drawn from the General Agricultural Study and the Township Inventory produced by INSEE. The proportion of forage land, pastures, moors and forests is used to take into account the surrounding natural environment (landscape) of the *gîte*. Dichotomous variables for small agricultural areas (*petite région agricole, PRA*) containing the township in which the *gîte* is located are also included in the price regression to take into account the influence of the natural or cultural environment on a larger scale and consequently the role of the territorial image as an attribute of the *gîtes*.<sup>10</sup>

The complete results cannot be reported here (see Mollard, Rambonilaza and Vollet, 2005), but, as an example, the results obtained for the part of the Aubrac located in Lozère will be presented below. Moorland has a positive coefficient. A 1% increase of moors results in a 0.21% price increase for a one-week rental during the peak season. In

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9. A *gîte rural* is vacation lodging in a village or on a farm. Cooking facilities are usually included and the rental period is usually for one week during peak seasons and for weekends during off-peak seasons.
  10. The PRAs are relatively old geographic divisions (1946). They can group slightly different micro-areas. But in the absence of more precise divisions (according to landscape criteria), the PRA are relatively homogenous zones from the agronomic, pedological and landscape viewpoints.

monetary terms, that represents approximately EUR 0.72. In Lozère, “moors” in fact include wooded prairies that are part of the traditional agricultural systems and are generally appreciated, as indicated by the results of the hedonic price method.

To analyse the territorial differentiation between the two lodging chains, the estimated rental price of a class 2 *gîte* for four people is used as the reference.<sup>11</sup> The significant access variables in the price equations are set to 1. The results of the calculations are presented in Table 3 (based on the estimations presented in Annex 2).

**Table 3. Comparative analysis of weekly rentals in each section of the Aubrac (euros)**

Territories (PRA)	Gîtes de France	Clévaccances
Aubrac	477	430
Rougier	477	536
Lévezou	415	430
Causses	477	430
Viadène	432	430
Ségala	428	430
Lacaune	477	430
Quercy	423	430

\* The price of a *gîte* characterised by the class = 2 ; capacity = 4 ; average number of *gîtes* in the town = 7 ; distance to stores = 1 ; distance to services = 1 ; density = 0.50.

Source: Mollard, Rambonilaza and Vollet (2005).

The territorial rent may be evaluated by comparing these estimated prices for the Aubrac with prices for the same quality *gîtes* in other territories. The prices of *gîtes* in the Aubrac are either identical or higher than those in other territories in the same département, whether or not the other territories are tourist spots (Causses and Ségala). Le Rougier is an exception in that the prices of the *Clévaccances* chain are higher than those of the *gîtes* in the Aubrac. But the number of *gîtes* in this territory is low. The increasing value of the Aubrac – which has only recently become a tourist destination – has gradually produced a positive price differential with respect to the other touristic sites in the département (Ségala, with 30% of total capacity in the département and the Causses, with 25%), primarily for the *gîtes* in the *Gîtes de France* chain. The difference is EUR 49 per week (for a rental in the Aubrac, compared to a similar rental in Ségala).

Application of the hedonic price method made it possible to distinguish the respective roles played by the environmental variables in the immediate vicinity of the *gîtes* and by the “territory”. The natural environment in the immediate vicinity, maintained by farmers, plays a significant role.<sup>12</sup> However, the difference between the two chains of *gîtes* is

11. Class 2 *gîtes* represent over 50% of all *gîtes* on the markets considered in the survey (see appended table).
12. Note, however, that these results are subject to caution in that use of objective measurements on the environment presents a number of limits in terms of the method (approximate nature of certain agricultural variables in characterising the landscape, hence their lack of signification in the regression of hedonic prices).

primarily based on the territorial environment. These results therefore tend to highlight the role played by local governance in an effort to maintain a strong territorial image. This strong image is based on high-quality products and a preserved environment produced essentially by farmers and promoted by the tourism business. The environment serves as a “setting” that is indispensable to enhance the value of the products and services of the territory, *i.e.* the basket of territorial-based goods and services that we identified for the Aubrac.

***Will increasing links between agricultural products and environmental services result in generalisation of a basket of territorial-based goods and services?***

*The concept of a basket of goods*

For the Aubrac, it has been shown that a “basket of goods” has grown up around *Laguiole* cheese and *Laguiole* knives (the leading products of the territory) that have joined forces with other traditional products (Aligot, aperitifs, special meats) (Angeon and Vollet, 2004). Under these conditions, the basket of quality goods and services is an original combination. On the one hand, the offer is both composite (comprising quality products and services) and localised (*i.e.* linked to a particular territory, its natural environment, culture and history) (Pecqueur, 2001). On the other, demand is due to an original relation between a set of products and their territory with its specific characteristics. This economic model results in a Territorial Quality Rent (TQR) (Mollard, 2001) for producers (as is the situation for cheeses and knives from the Aubrac region). It occurs when product quality and territorial image converge, *i.e.* when, on a given territory, there is both a complementary offer of quality products and services, and a strong demand for the traditional goods specific to that territory.

*The components of the basket of goods*

Using the various methods presented in Box 2, combined with qualitative observations on the strategies of actors, it is possible to sum up the relations between the three main components whose simultaneous presence constitutes the basket of goods.

*A specific offer of private products and services in a territory*

The products in the basket, the result of a long history and culture, reinforce each other in that they have a common territorial origin and an image of consistent quality, and are not readily replaceable by generic products. Their mode of production is specific and closely linked to the territory, a specialised type of know-how and innovations, *i.e.* they cannot easily be reproduced. And consumption of these products in the territory is made easier by the attractiveness of market and non-market services which play the role of resource providers. For example, tourism and local restaurants facilitate access to the contents of the basket.

*Inelastic and specific demand*

Basket consumers often have the shared characteristic of preferring the territory for the purchase of both products and services, where the relation of confidence and proximity are considered specific to the territory.

### Box 2. Observation methods for a basket of goods and services

The heart of the “basket of goods” model lies in the TQR benefiting the producers of products and services and in the “basket effect” that pulls in a set of quality products and services around a leading product. To demonstrate the above, a number of techniques must be used.

— First, it is necessary to analyse the purchases of tourists and notably the combinations of the most common products, in order to identify, if applicable, clusters in a graphic presentation of the baskets. The results are more or less detailed depending on the number of links that one looks for, the minimum required number of co-occurrences or the maximum number of products per cluster. The results quantify the baskets purchased by consumers, indicate the complementarity of the goods acquired, determine the leading product(s) and can be used to draw up a basket typology. Analysis can be applied to people renting the gîtes to link the products purchased to the services used.

— Secondly, to determine the potential differential rent of a given product in a territory, statistical analysis is required to compare homogeneous sets of prices for the analysed product or service and its generic substitute. The time span of the statistical series used must be long enough to check that the price difference is more or less stable over time and significant with respect to a reference substitute product. In that the analysed rent is a higher margin over the total production cost (including profit), it is necessary to deduct from the observed price differentials the respective production costs of the compared products.

— Finally, the hedonic price method (see above). It is the means to determine the origin of the observed rents for quality products and services due to the relative importance of their intrinsic and extrinsic characteristics.

#### *Public goods that enhance the value of the basket*

The territorial context “brands” this particular configuration of supply and demand. For this reason, all the territorial connotations associated with the products contribute to enhancing the value of the basket. A set of public goods such as the natural environment, with its landscapes and biodiversity, is an important factor in this, but the local heritage, architecture, history and traditions also serve as a backdrop and a “décor” for the products. These public goods also condition the sustainability of development, and any sources of pollution play a highly negative role.

In parallel to the in-depth study carried out in the Aubrac, a general typology was established in the Rhône-Alpes region, based on observations in the eight départements concerning the potential of the specific and combined territorial resources, the types of supply and demand, and the mode of governance (Hirczak, *et al.*, 2004). On the basis of the above criteria, two major families of models were identified, ranging from simple groups of products to more complex configurations of baskets of goods. There can be sets of products that do not make up a basket. The products bear no real relationship to each other and are not clearly linked to their territories which lack consistency (*e.g.* peri-urban zones in the region, such as Saint Etienne, Chambéry, Lyon, Valence). In the “puzzle” model, there are all the components of a basket with a potential for complementarity, but synergy is lacking (Monts du Forez, Bugey, the Maurienne Valley or the area around Roanne). There are also “hybrid” baskets resulting from the presence in a single territory of a generic model and local high-quality products stemming from a long tradition, *e.g.* in the Bresse (Hirczak and Mollard, 2004).

Among all the above observations, the model of a basket of goods constitutes one of the most advanced forms of the various possible combinations of complex territorial-based goods. To exist, the image of farmers maintaining traditions by farmers (“décor”) is indispensable. But this type of enhancement of the positive externalities generated by agriculture is fragile if the resources, programmes and governance are not synergistically mobilised. For example, a study carried out on a sample of 130 farms in the Aubrac attempted to establish a link between the level of public aid and the different types of environmental or social jointures (Callois, Rapey and Vollet, 2002). On the whole, there

is no clear relation between the level of public aid per unit of human work and the environmental jointures (openness and diversity of the landscape, biodiversity). The question remains, however, as to whether the second-pillar aids, specifically designed for this purpose, play a more active role. What role could public aids play in producing, in a sustainable manner, agricultural externalities? The third section, more prescriptive in nature, may provide some answers.

## **The role of public aids in sustaining a basket of goods and services**

The configuration of the basket is always fragile. For example, in the Aubrac, the sale of many low-quality imported knives, combined with the absence of quality symbols on *Laguiole* knives, has weakened not only the sector, but also the other products in the basket (which can be affected by a negative reputation in a process inverse to that of the knife when it benefits from the rural amenities produced by agriculture). Co-ordination between private and public actors therefore plays a crucial role on three levels in maintaining the basket model and the TQR.

### ***Good co-ordination between private actors, supported by the public actors***

The number of products and services making up the basket and their complementarity depends above all on the private actors. It is in their interest to encourage the emergence of complementary, high-quality products and to ensure that the basket is representative of the territory by including a maximum number of local products. This means that when new products show signs of quality, the private actors must agree on the production borders and on the severity of the quality specifications, which is often a source of conflict. They must never cease their efforts to sustain their rent with respect to the competition. In the Aubrac, for example, the co-ordination between private actors differs greatly from one sector to another. Whereas the dairy sector is well structured with the *Jeune Montagne* (Young Mountain) co-operative that has taken strides to improve its quality specifications and market image (in an astute strategy between the co-operative and the producing farmers), the knife sector has not, to date, succeeded in setting up a strong professional association capable of blocking the unprincipled behaviour of certain producers or retailers that seriously damage the quality image of their knives.

### ***Converging institutional co-ordination***

It is nonetheless understandable that private actors can have divergent interests and that public intervention may be required. It is often indispensable in setting up viable territorial and sectoral borders for protected designations of origin and quality labels or to enhance the visibility of territorial goods and services by encouraging trade shows and events or regional parks with specially designated itineraries. The project to create a regional nature park in the Aubrac is an example. To date, development efforts have been carried out by three inter-township structures in the three départements in spite of the fact that the economic and environmental problems were the same for the area as a whole. The local public policies of the towns, inter-township structures, larger groupings (*pays*) and even départements also determine the quality of public goods and environmental resources. Finally, the public actors can impact effectively on the types of local aids and on the first and second pillar aids of the CAP to encourage better co-ordination between companies.

### ***Balance and consistency between private and public action***

It is clear that all the above public and private actions must be co-ordinated in order to converge towards territorial-development goals. That means there must be very few products and services outside the system or without any links to the others. In a basket of goods, the most important factor is to organise the emergence of the TRQ based on solidarity between the strategies of the producers of different products or, better yet, on a collective structure of private producers. This is typically the case for the *Maison de l'Aubrac*, which was set up with funding from the Aubrac development board in the Aveyron département, but whose management was based on a commercial structure bringing together a knife manufacturer, the cheese co-operative, a restaurant owner and a liqueur producer. Solidarity must be strong in organising the non-market services and, more generally, anything that highlights the links between products and territories and enhances the TRQ: in short, it must promote a composite institutional compromise between the public and private actors. For example, the *Maison de l'Aubrac* has taken on the responsibility of organising itineraries to present the natural riches and the heritage of the territory.

### **Conclusions**

Agriculture contributes to rural development first of all in a direct manner because in many rural areas in France it is an essential basic activity. The regional-economy models (economic-base models) show that agriculture represents 30-60% of basic jobs in the most isolated rural areas. It also contributes indirectly. Production of agricultural externalities is indispensable to increasing jobs in tourism and attracting retired persons and commuters drawn by rural and agricultural amenities. In fact, the models show that these activities have a powerful multiplier effect on local economies. Using environmental-economy methods (hedonic price method), it is possible to estimate the marginal willingness of tourists to pay for the amenities of the natural environment. It has been demonstrated above that in a mid-altitude, mountainous region (the Lozère département), a 1% increase in the surface area of moorland results in a price increase of 0.21% for holiday rentals.

In a small area such as the Aubrac, weekly rental prices are significantly higher than in other small areas. The territorial “brand” image, in which the natural environment plays a leading role, and which is promoted by local actors, is a major factor in explaining this phenomenon. The links between quality products and services on the one hand, and their natural “décor” and heritage on the other, were identified using the basket of goods and services concept that was used successfully for a range of small areas. Baskets are characterised by a specific offer of products and services, as well as public goods that enhance the value of the basket. Their sustainability is directly related to institutional coordination and the consistency of public and private action. Public aids must not only support the production of environmental externalities by farmers, but also encourage the setting up of local organisations designed to enhance the market value of the externalities (e.g. a quality agricultural product where the consumer buys both the product and an environmental service). This public aid for the production of environmental public goods complements first-pillar aids in as much as the goods produced are environmental jointures. The aid is all the more justified in that these goods are often purely public goods (e.g. biodiversity, remarkable landscapes) (OECD, 2001).



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### Annex 1. Areas in France



## Annex 2. Estimation for the hedonic equation in the Aubrac (Lozère département)

<b>Dependent variable: weekly rent (log)</b>		
Constant	6.08	(30.04)
<i>Gîtes</i> in the <i>Gîtes de France</i> chain	0.03	(1.93)
Class	0.15	(12.58)
Capacity	0.09	(16.79)
On a farm	0.04	(1.58)
Character	0.13	(3.46)
Isolation	-0.02	(-1.31)
Number of <i>gîtes</i> in town	0.00	(1.99)
Distance to stores	0.03	(1.55)
Distance to services	-0.006	(-0.24)
Distance to centre	0.03	(1.44)
Density (log)	0.01	(1.47)
Altitude (log)	-0.15	(-5.55)
Causses	-0.03	(-0.54)
Aurillac		
Massiac		
Saint-Flour		
Châtaigneraie		
Cézallier		
Plateau Limousin Est		
Artense		
Cantal		
Margeride	-0.03	(-0.58)
Cévennes	-0.06	(-0.94)
Forest surface area	0.16	
Forage surface area	0.33	
Pasture surface area	-0.19	(-2.38)
Moorland	0.21	(3.40)
Chow test <sup>1</sup>	0.90	
R <sup>2</sup>	0.58	
Number of observations	740	

Student statistics between parentheses.

1. Fischer statistic.

Source: Mollard, Rambonilaza, Vollet (2005).

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## Chapter 6. Agro-food Linkages in Rural Areas: An Empirical Evaluation of Integrated Development Programmes

Konstantinos Mattas,<sup>1</sup> Efstratios Loizou,<sup>2</sup> Vangelis Tzouvelekas<sup>3</sup>

### *Abstract*

*EU and national authorities have implemented various development plans in order to achieve integrated rural development. Such a plan is the Third Community Support Framework, which consists of several specific programmes. The three most important of those programmes, concerning rural activities, are evaluated in the present study by employing a regional Input-Output model. An ex-ante impact assess is attempted for those three programmes by measuring direct and indirect linkages in the regional economy. A NUTS level 2 regions, Dytiki Makedonia, in northern Greece, is used as a case in point. In addition, the relative importance of the economic sectors is illustrated by estimated linkage indices. The empirical analysis indicates that significant knock-on effects result in the regional economy and significant impacts are produced from activities related to the agro-food sector.*

### **Introduction**

Achieving regional economic and social cohesion by implementing integrated development plans constitutes the primary goal for any regional policy. The European Union (EU) itself, in collaboration with national and regional authorities, designs such integrated development plans targeting rural areas. Integrated development planning is pursued today throughout the EU, replacing one-sector planning. Thus, the need to devise effective integrated development programmes comes from conceding positive effects due to interdependence among economic sectors.

Interlinkages among various sectors in a rural economy can be the integral key to stimulate economic activity in a region and to promote integrated development. This can help the rural economy to reduce dependence on agriculture and on the various support schemes. Identifying such linkages in a rural economy offers a powerful tool in developing initiatives that promote integrated or multi-sectoral development. The current Greek development strategy, programming period 2000-06, is based on such an integrated development framework.

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1. Aristotle University of Thessaloniki, Greece.
  2. Technological Education Institute of Western Macedonia - Florina Branch, Greece.
  3. University of Crete, Rethymno, Crete, Greece.

The present study aims to examine the presence of linkages among sectors in the rural region of Dytiki Makedonia (northern Greece) by employing regional Input-Output (I-O) analysis. A regional Input-Output model is developed in order to view the whole structure of the area and identify the key sectors of the regional economy in terms of generating indirect impacts. Also, particular attention is given to relations between the agriculture/agro-food sector and the rest of the economy. Moreover, the study attempts to evaluate, *ex-ante*, three development programmes promoted in the selected region, by performing I-O impact analysis.

Those three development programmes are part of the Third Community Support Framework 2000-06 (CSF), financed by the structural funds of the EU and the Greek authorities. Thus, the *Regional Development Programmes* designed and run under the guidance of the Regional Directorate (NUTS 2) of the Dytiki Makedonia region; the *Agricultural Development Programme*; and the *Operation Programme for Restructuring Rural Areas*, run under the guidance of the Greek Ministry of Agriculture, are the three evaluated programmes. The specific axes and measures of the above three programmes are directly or indirectly related to various rural activities.

Next, a brief profile of the region under investigation is presented, followed by a short reference to the Rural Development Strategy for the programming period 2000-06 (arising from the third CSF). Then, a few methodological issues related to regional Input-Output (I-O) application are explained and the computed results are given. Finally, the main concluding remarks are drawn together.

## A rural region

The region of Dytiki Makedonia covers an area of 9 451 km<sup>2</sup>, 7.2% of the country's total area, and accounts for 2.9% of the country's total population (Table 1). Agriculture contributes 15.4% and manufacture 30% to the gross domestic product (GDP), while the shares of agriculture and manufacture in the total regional employment are 23.5% and 32.9%, respectively.

**Table 1. Dytiki Makedonia region profile**

				<b>Dytiki Makedonia</b>	
		<b>National share</b>		<b>Regional share</b>	
Population <sup>1</sup> (1998)	303	0.029		–	
Area (km <sup>2</sup> )	9 451	0.072		–	
GDP <sup>2</sup> (1998)	2 793.28	0.029		–	
Agriculture	429.00	0.054		0.154	
Manufacture	839.96	0.040		0.301	
Services	1 524.31	0.022		0.546	
Employment <sup>1</sup>	103	0.027		–	
Agriculture	24.2	0.032		0.235	
Manufacture	33.9	0.039		0.329	
Services	45.0	0.020		0.436	

1. In thousands.

2. In EUR millions.

Agriculture's contribution to the regional GDP is relatively low mainly because large parts of the region (80%) are classified as mountainous and semi-mountainous areas. In addition, electricity and mining activities constitute the most significant industrial production (70% of the country's electricity power is produced in the region).

### Rural development policy 2000-06

The regional development policies pursued over the last twenty years have focused on ending the isolation of the region, by improving its transportation infrastructures. Also, incentives were provided for new investments in industrial activities in order to reduce production specialisation.

Considering the current situation of rural areas and with the benefit of the experience gained from the first and second CSFs and other community support initiatives, the authorities have realised the need for a reorientation of rural development policy towards an integrated development approach. Thus, within the third CSF framework a new rural development strategy was set up. Alongside market measures for a competitive agriculture, special interest is given to measures concerning rural population needs, employment and natural environment.

The Greek Ministry of Agriculture and the Regional Directorates have prepared a new integrated development plan composed of several individual programmes. Three programmes – the *Regional Development Programme*; the *Agricultural Development Programme*; and the *Operational Programme for the Restructuring of Rural Areas* – comprise the core of the rural development policy. The last two programmes, formulated and guided by the Ministry of Agriculture (Ministry of Agriculture, 2001a; 2001b), concern the whole country, whereas the Regional Development Programmes, designed and guided by the Regional Directorates, concern individual regions of the country (Regional Directorate of Dytiki Makedonia, 2001).

The *Regional Development Programme* (RDP) for the Dytiki Makedonia region includes seven axes and only two are examined here (Table 2), as this evaluation is focused on axes directly or indirectly related to rural development. In particular, Axis 5 (sustainable rural development) consists of ten measures, and Axis 6 (integrated development of rural and by lake areas) consists of five measures. The proposed two axes are aimed at promoting an integrated and sustainable rural development and improving the agricultural sector's competitiveness.

The *Agricultural Development Programme* (ADP), administered by the Ministry of Agriculture, is targeting all the country's regions (NUT 2 level). Axis 2 (integrated interventions for less-favoured areas and areas with environmental limitations [Table 2]) was evaluated as it refers to less-favoured rural areas and the environmental problems of the region. The programme aims at counterbalancing the agricultural income losses and sustaining employment.

The *Operational Programme for the Restructuring of the Rural Areas* (OPRRA), also administered by the Ministry of Agriculture, is comprised of 34 measures and five general axes (Table 2) and targets the entire country. The first axis of the programme mainly targets at assisting the agricultural sector to confront competition through specific measures promoting investments and supporting agricultural organisations. The second axis aims at improving the competitiveness of agricultural products. Specific actions are included in Axis 3 to encourage the establishment of new farmers and to improve the age



structure of the rural population. The sixth axis is focused on development and protection of the natural environment. The last axis aims at rural development through fourteen diversified measures, which take into consideration the specific characteristics of each region.

**Table 2. The three evaluated programmes**

<b>Regional Development Programme of the Dytiki Makedonia Region</b>	
Axis 5: 10 measures	Sustainable rural development
Axis 6: 5 measures	Integrated development of rural and by lake areas
<b>Agricultural Development Programme</b>	
Axis 2:	Integrated interventions for less-favoured areas and areas with environmental limitations
<b>Operational Programme for the Restructuring of Rural Areas</b>	
Axis 1: 3 measures	Integrated actions at farm level
Axis 2: 2 measures	Processing and marketing of agricultural and other primary products
Axis 3: 2 measures	Improvement of the average age of the agricultural population
Axis 6: 5 measures	Development and protection of the natural environment and resources
Axis 7: 14 measures	Rural development

Source: Ministry of Agriculture (2001a,b) and Regional Directorate of Dytiki Makedonia (2001).

## Regional Input-Output methodology

Input-Output analysis employed to examine the regional economy of Dytiki Makedonia and to assess the impacts of the three development programmes. In the present study results were derived by utilising a multi-regional I-O model (MRIO) following the methodology used in Polenske (1970, 1980), and described in Miller and Blair (1985).

The 1994 national I-O table, which consists of 60 sectors and is compiled according to the Standard Industrial Classification (SIC) system, was used for the empirical analysis. For the needs of the regional analysis, the 60 sectors were aggregated to a 29-sectors scheme, according to the structural characteristics of the regional economy. The tables were updated to 1999, by applying the procedure described in Ro (1982) and used by Mattas *et al.* (1984).

The GRIT technique – developed by Jensen *et al.* (1979) – was used for the regionalisation of the national I-O table. This technique is a formalised non-survey method of compilation with the facility for the user to insert superior data at any stage of the compilation procedure in sectors of particular interest. Most studies applying the GRIT technique estimate interindustry flows by using an employment-based *Simple*

*Location Quotient* (SLQ) or a *Cross Industry Location Quotient* (CILQ) to the corresponding elements of the national direct requirement matrix.<sup>4</sup>

As Flegg, *et al.* (1995) refer in their study (after refreshing some ideas of Round [1978]), the two above-mentioned LQs provide an alternative way of estimating the relevant trading coefficients. Trading coefficients measure the proportion of any given commodity supplied from within the region (that is, they measure the degree of self sufficiency of a region). Those trading coefficients depend on three variables: 1) the relative size of the supplying sector, 2) the relative size of the purchasing sector and 3) the relative size of the region. SLQ takes into account only the first and the third, while CILQ takes into account only the first two, hence both have certain deficiencies.

In order to overcome the above shortcoming, in the present study we applied an adjustment of the traditional *CILQ* suggested by Flegg *et al.* (1995) and modified after a discussion in the literature by Flegg and Webber (2000)<sup>5</sup>, for the regionalisation of the national I-O table. Specifically, regional technical coefficients were estimated by the following formulae:

$$FLQ_{ij} = CILQ_{ij} \cdot \lambda$$

where,  $CILQ_{ij} = \frac{E_i^R / E_i^N}{E_j^R / E_j^N}$  and  $\lambda = \log_2 \left[ 1 + \left( \frac{\sum_{i=1}^n E_i^R}{\sum_{i=1}^n E_i^N} \right)^\delta \right]$ ;  $R, N$  stand for the

region and the nation, respectively,  $i, j=1, \dots, n$  are the economic sectors,  $E$  is the sectoral employment, and  $0 \leq \delta < 1$  is the coefficient of adjustment, the magnitude of which depends on the relative size of each region. When  $FLQ_{ij} \geq 1$  then the corresponding regional technical coefficient ( $a_{ij}$ ) is the same with the national-one ( $\alpha_{ij}^R = \alpha_{ij}^N$ ), whereas when  $FLQ_{ij} < 1$  it is adjusted accordingly ( $\alpha_{ij}^R = FLQ_{ij} \cdot \alpha_{ij}^N$ ). The rest of the national technical coefficient ( $\alpha_{ij}^N - FLQ_{ij} \cdot \alpha_{ij}^N$ ) is included in the imports row as the sector  $i$  in the region cannot satisfy the demand from sector  $j$ , which in turn comes from imports.

After the adjustment for competitive and non-competitive imports, superior data, collected from surveys, were inserted. External, superior data were collected for the significant sectors in the region (with high shares in employment and output). Finally,

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4. Detailed discussion and application of the GRIT technique can be found in Jensen, *et. al* (1979), Johns and Leat (1987) and Tzouvelekas and Mattas (1999).
  5. The original proposal of FLQ by Flegg, *et al.* was introduced at 1995, since then a dialogue was opened in the literature (Flegg and Webber 1996a, 1996b, 1997, 2000) and McCann and Dewhurst (1998)) and the original version was improved and modified to the version appeared in the literature by Flegg and Webber 2000.

following the steps of GRIT, the regional I-O table was constructed and the linkages were estimated, as well as the impacts from the application of the development programmes.

## Empirical analysis outcomes

### *Input-Output multipliers*

The most important sectors of the regional economy are identified in terms of output, employment and income generation utilising I-O multipliers.<sup>6</sup> In terms of output, the metal products sector has the potential to generate additional output more than any other sector in the region. The multiplier of metal products is ranked at the first place (Table 3); indicating that for a monetary unit increase in its final demand, the total output of the regional economy will be increased by 1.416. In addition, paper and publishing (1.348), food and beverages (1.332) and vegetables (1.310) are among the sectors with the highest output multipliers.

In order to identify the sectors with the ability to induce the highest increase in household income in the regional economy, the income multipliers were calculated. The sector of oil and chemical products has the highest multiplier (1.537), indicating that a monetary unit increase in the sector's household income will induce an increase of 1.537 units in the household income of the regional economy. Metal products (1.498), vegetables (1.423), and food and beverages (1.389) are sectors with very high income multipliers.

The textile industry is the sector that can increase more than any other the total employment of the region. The employment multipliers indicate the economy's total employment increase due to an employment increase for a particular sector by one person. In the case of the textile sector, by employing one additional person, total employment will gain 1.79 persons. Food and beverages, metal products and oil and chemical products are among the sectors with the highest employment multipliers.

### *Input-Output elasticities*

Input-Output elasticities are the second index used to identify the important sectors for the region. The use of elasticities has the advantage of being able to take into account the size of a sector compared to its share in final demand (Mattas and Shrestha, 1991). Elasticities are calculated in terms of output, income and employment and express the percentage change in the regional economy originating from a 1% change in the final demand of a particular sector. Elasticities are shown in Table 4.

Mining is the sector with the highest elasticity in the region in terms of output, income and employment generation. So, an increase in the final demand of mining of 1% will cause a gross output increase of 0.1869% (output elasticity) and a total employment increase of 0.1863% (employment elasticity). Construction and trade are among the sectors with the highest elasticities. It can be seen that in the sectors with the highest output, income and employment elasticities are almost the same: this is mainly because these sectors have significant shares in the final demand and high linkages in the regional economy.

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6. Details on the way of calculating I-O multipliers can be found, among others, in Mattas, *et al.* (1984) and Miller and Blair (1985).

**Table 3. Output, income and employment multipliers for the Dynic Makedonia region**

<b>Sector</b>	<b>Output multipliers</b>	<b>Rank<sup>1</sup></b>	<b>Income multipliers</b>	<b>Rank</b>	<b>Employment multipliers</b>	<b>Rank</b>
Cereals	1.148	14	1.230	9	1.104	18
Vegetables	1.310	4	1.423	3	1.166	10
Tree crops – fruits	1.155	13	1.217	10	1.119	14
Livestock	1.106	21	1.168	15	1.087	20
Forestry	1.011	29	1.008	29	1.007	29
Fishing	1.135	16	1.306	5	1.146	11
Mining	1.012	28	1.020	25	1.025	27
Food and beverages	1.332	3	1.389	4	1.463	2
Textile	1.226	7	1.181	13	1.797	1
Apparel and leather	1.117	20	1.121	20	1.110	16
Timber industry and furniture	1.158	12	1.175	14	1.131	12
Paper and publishing	1.348	2	1.287	6	1.291	6
Oil and chemical products	1.247	6	1.537	1	1.413	4
Plastics	1.216	8	1.213	11	1.234	8
Metal products	1.416	1	1.498	2	1.435	3
Machinery, appliances	1.074	24	1.148	17	1.192	9
Electricity, gas, water	1.178	9	1.078	22	1.081	22
Construction	1.144	15	1.139	18	1.108	17
Trade	1.161	11	1.270	7	1.087	21
Hotel and catering	1.129	17	1.231	8	1.269	7
Transport	1.275	5	1.102	21	1.120	13
Mail and communications	1.015	27	1.011	27	1.027	26
Finance and real estate	1.122	19	1.201	12	1.310	5
Research and development	1.126	18	1.157	16	1.088	19
Public administration – defence	1.106	22	1.036	23	1.076	23
Education	1.040	25	1.010	28	1.014	28
Social security – health	1.102	23	1.030	24	1.053	24
Recycling	1.033	26	1.014	26	1.032	25
Other services	1.163	10	1.127	19	1.114	15

1. Sectors are ranked according to their multipliers magnitude.

Table 4. Output, income and employment elasticities for the Dync Makedonia region

Sector	Output Elasticity	Rank <sup>1</sup>	Income Elasticity	Rank	Employment Elasticity	Rank
Cereals	0.0027	25	0.0056	24	0.0023	29
Vegetables	0.0068	22	0.0086	22	0.0043	23
Tree crops — fruits	0.0467	9	0.0495	9	0.0450	9
Livestock	0.0083	21	0.0119	18	0.0081	22
Forestry	0.0041	23	0.0043	25	0.0042	24
Fishing	0.0018	28	0.0065	23	0.0041	26
Mining	0.1869	1	0.1861	1	0.1863	1
Food and beverages	0.0424	10	0.0437	10	0.0432	10
Textile	0.0027	26	0.0040	27	0.0110	19
Apparel and leather	0.0753	5	0.0772	4	0.0765	4
Timber industry and furniture	0.0119	20	0.0116	19	0.0108	20
Paper and publishing	0.0020	27	0.0028	29	0.0028	27
Oil and chemical products	0.0242	13	0.0219	13	0.0209	14
Plastics	0.0132	18	0.0116	20	0.0120	18
Metal products	0.0120	19	0.0115	21	0.0104	21
Machinery, appliances	0.0155	17	0.0161	15	0.0170	16
Electricity, gas, water	0.0774	4	0.0740	6	0.0742	5
Construction	0.0972	2	0.0973	2	0.0968	2
Trade	0.0826	3	0.0878	3	0.0832	3
Hotel and catering	0.0663	6	0.0741	5	0.0740	6
Transport	0.0161	16	0.0156	16	0.0172	15
Mail and communications	0.0179	15	0.0155	17	0.0161	17
Finance and real estate	0.0659	7	0.0620	7	0.0665	7
Research and development	0.0013	29	0.0041	26	0.0028	28
Public administration — defence	0.0490	8	0.0502	8	0.0517	8
Education	0.0271	11	0.0273	11	0.0275	11
Social security — health	0.0242	14	0.0247	12	0.0254	12
Recycling	0.0037	24	0.0032	28	0.0042	25
Other services	0.0271	12	0.0218	14	0.0215	13

1. Sectors are ranked according to their elasticity magnitude.

### *Agro-food sector's importance*

The above-estimated multipliers and elasticities demonstrate that agriculture and the sectors related to agricultural activities play an important role in the region's economy. The high interrelationships of those sectors with the rest of the regional economy indicate their dynamics and ability to induce positive effects in the regional economy in terms of output, household income and employment.

Specifically, the vegetables sector possesses the highest multipliers in terms of output and income. The output multiplier ranks in 4<sup>th</sup> place (1.31), whereas the type I income multiplier is in 3<sup>rd</sup> place (1.423). The ability of the sector to stimulate the economy's employment is also notable from the size of the employment multiplier (1.166). The food and beverages output multiplier (1.332) ranks in 3<sup>rd</sup> place, whereas employment (1.463) and income (1.389) multipliers rank in 2<sup>nd</sup> and 4<sup>th</sup> place, respectively. The textile sector is also among those sectors with extremely high linkages as its respective multiplier (1.797) is at the top of the list.

A comparison of the estimated I-O elasticities (Table 4) with the estimated multipliers (Table 3) reveals that the multipliers of the agro-food sectors are higher than the elasticities. This can be mainly attributed to the computational form of the elasticities, as agro-food sectors are highly disaggregated. Nevertheless, the estimated linkages indicate the importance of the agro-food sectors for the regional economy. The food and beverages sector ranks 10<sup>th</sup> in terms of output, income and employment elasticities, manifesting the significance of the agro-food sectors in generating linkages.

### *Impact analysis*

Output, income and employment impacts arising from the development programmes through the third CSF for the period 2000-06, are presented hereafter. Initially, the impacts from the RDP and the ADP are assessed and are shown in Table 5. Total expenditure in the region under the RDP concerning rural development activities is EUR 192.9 million, which is allocated to the two axes and 15 measures of the programme. Specifically, Axis 5, which supports measures for the sustainable development of the region, accounts for 72.6% (EUR 140.1 million) of total expenditure of the RDP. Axis 6, which supports the development of mountainous and by-lake areas, accounts for the rest 27.4% share in the total budget. The first and second measures of Axis 5 are those with the highest share in the total expenditures of the RDP.

The total change in the region's output reaches EUR 219.7 million (the EUR 60.5 million coming from Axis 6, and EUR 159.2 million from Axis 5), while the total change in household income amounts to EUR 13.8 million (EUR 9.65 million and EUR 4.17 million from Axes 5 and 6, respectively). The region's total employment will gain 3 703 additional employees. The additional increase in the region's total gross output due to RDP is approximately 14%.

Table 6 presents the impacts on the regional economy arising from the OPRRA programme. The region is financed by EUR 201.73 million through the axis and measures of the OPRRA. Axis 1, which concerns integrated investments at farm level, receives the highest amount (EUR 82.69 million). The financing of the remaining axes is distributed as follows: axis 2 (processing and marketing of the agricultural and other primary products): EUR 35.74 million; Axis 3 (Improvement of the average age of the agricultural population): EUR 18.93 million; Axis 6 (Development and protection of the natural

environment and resources): EUR 11.74 million; and Axis 7 (Rural development measures): EUR 52.64 million.

The total change in the regional output due to the initial inflows appears in detail in Table 6 and, overall, the generated output equals EUR 230.61 million. The highest increase in income and employment arises from Axis 1 (EUR 4.39 million and 1 735 employees) and the economy gains 4 327 employees in total.

**Table 5. Total change in the output, income and employment of the region from the Regional Development Programme (RDP) and the Agricultural Development Programme (ADP)**

Measures	Total change in:			
	Expenditure (million EUR )	Output (million EUR )	Income (million EUR )	Employment (No. of employees)
<b>Regional Development Programme (RDP)</b>				
Axis 5: Sustainable rural development (10 measures)				
Axis 5 total	140.1	159.2	9.65	2 648
Axis 6: Integrated development of rural and by lake areas (5 measures)				
Axis 6 total	52.8	60.5	4.17	1 055
RDP total	192.9	219.7	13.8	3 703
<b>Agricultural Development Programme (ADP)</b>				
Axis 2: Integrated interventions for less-favoured areas and areas with environmental limitations (1 measure)				
Measure 2.1	80.2	91.7	7.6	1 849

**Table 6. Total change in the output, income and employment of the region from the Operational Programme for the Restructuring of the Rural Areas (OPRRA)**

Axis	Total change in:			
	Expenditure (million EUR )	Output (million EUR )	Income (million EUR )	Employment (No. of employees)
Axis 1: Integrated actions at farm level (3 measures)				
Axis 1 Total	82.69	93.53	4.39	1 735
Axis 2: Processing and marketing of the agricultural and other primary products (2 measures)				
Axis 2 Total	35.74	41.13	2.2	761
Axis 3: Improvement of the average age of the agricultural population (2 measures)				
Axis 3 Total	18.93	22.21	0.94	652
Axis 6: Development and protection of the natural environment and resources (1 measure)				
6.1	11.74	13.68	0.82	173
Axis 7: Rural development (14 measures)				
Axis 7 Total	52.64	60.06	3.77	1 006
Total OPRRA	201.73	230.61	12.11	4 327

## Conclusions

The need for an integrated development strategy in rural areas of Greece is promoted through the initiatives financed by the third CSF, for the programming period 2000-06. Integrated initiatives were set up aiming at promoting development not only by supporting rural activities but also by creating alternative opportunities to strengthen regional employment and incomes. The planning and specification of the target of the proposed initiatives were designed at regional level, by taking into consideration the specific limitations of each region. The primary scope of the present paper is to perform an *ex-ante* evaluation of three programmes prepared for the region of Dytiki Makedonia in northern Greece, by assessing the indirect impacts on regional output, income and employment.

I-O multipliers and elasticities were estimated in order to identify the most important sectors of the regional economy, in terms of high inter-relations with the other sectors in the economy. Results demonstrate that such inter-relationship is very strong among particular economic sectors and the dynamics of food sectors are determinant to the region's development. Metals and metal products, chemical industries, food and beverages, textiles and vegetables sectors are amongst the sectors with the highest linkages with the remainder of the economy.

The impacts due to the implementation of those development programmes (RDP, ADP and OPRRA) were estimated and their effectiveness was evaluated in terms of their ability to create additional output, income and employment in the economy. All the three programmes seem to have significant knock-on effects on the regional economy, affecting all sectors, despite the fact that the programmes target agricultural and rural activities. Results indicate the important role of the agro-food sector in stimulating economic activities in rural areas.

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## Chapter 7. Rural/Urban Impacts of CAP Measures in Greece: An Inter-regional Social Accounting Matrix (SAM) Approach

Demetrios Psaltopoulos,<sup>1</sup> Evdokia Balamou,<sup>2</sup> Kenneth J. Thomson<sup>3</sup>

### *Abstract*

*This paper evaluates the impacts of CAP measures implemented in the rural town of Archanes (Prefecture of Heraklion, Crete), an area which has received considerable CAP Guarantee and rural development funds during the 1990s. A hybrid inter-regional Social Accounting Matrix is used to describe interlinkages between three areas, namely Archanes; the less-developed agriculturally dependent neighbouring rural area of Nikos Kazantzakis; and the adjacent urban centre of Heraklion. Results are reported on the diffusion patterns of economic impacts generated by the CAP. These show that the diffusion of economic impacts away from Archanes is lower than that expected for a small open local economy. On the other hand, policy-induced economic benefits leak primarily to Heraklion and marginally to rural Nikos Kazantzakis. Finally, generated income benefits seem to accrue mostly in favour of richer households, especially in the case of CAP Guarantee subsidies.*

### **Introduction**

Until the early 1990s, the main instrument used to support farm incomes in the European Union was market price support, rural development policies being at best a complementary element of the Common Agricultural Policy (CAP), pursued as one of the Structural Funds. Since the reform of the Structural Funds in 1988, significantly greater EU expenditures<sup>4</sup> have been directed towards “Objective 1” areas characterised by significant structural weaknesses, and development policies in rural regions have been implemented in a more integrated framework. Regulation 1257/99, a core part of the CAP’s “second pillar”, replaced all previous Regulations on rural development, specified a menu of rural policy measures to be implemented “at the most appropriate geographical level”, and represented an effort to restructure, simplify and widen the existing policy framework, in particular recognising that higher production of farm commodities is no longer desired, and that agriculture can no longer act as the sole basis for rural development.

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1. Department of Economics, University of Patras, Greece.
  2. Department of Economics, University of Patras.
  3. Emeritus Professor, University of Aberdeen, United Kingdom.
  4. Rural development policy spending from the EU’s Agricultural Fund (EAGGF, FEOGA) rose from nearly 8% of total in 1994, to 15% in 2003 (European Commission, 2004a; 2004b).

However, in practice, and especially in south European countries, most EU funding to rural areas continued to be directed through the CAP's Agricultural Fund, either from its Guarantee Section for market and farm income support, or from its Guidance Section for structural rural development,<sup>5</sup> largely by means of multi-annual programmes, including "horizontal measures", such as grants for farm modernisation and marketing, and less favoured areas (LFAs), regional measures (Objective Areas 1, 5b and 6, and Community Initiatives such as LEADER II), and "supporting measures" such as those for the agri-environment, forestry and early retirement. The European Commission still regards agriculture as "the heart beat of rural areas", and considers that "rural development can help supply the multiplier effect" from major investments under EU regional and cohesion policies (European Commission, 2005). Thus, the economic effects of such expenditure continue to be of interest, and in particular the geographical spread of these effects, including "leakage" to neighbouring areas, urban or rural. Although some regard farming in peri-urban areas as problematic (European Economic and Social Committee, 2004), the links between town and country have become the focus of increased attention, *e.g.* in the Cork Declaration (1997) which states that "Support for diversification of economic and social activity must focus on providing the framework for self-sustaining private and community-based initiatives [including] strengthening the role of small towns as integral parts of rural areas and key development factors, and promoting the development of viable rural communities and renewal of villages". Courtney and Errington (2003) have commented that "One strategy is to use small towns as 'sub-poles' in rural economic development, but the effectiveness of such a strategy depends not only on the size of the various multipliers but their spatial distribution".

In the not-so-distant past, it has been argued that the potential effects of policy changes are not equally distributed amongst EU rural regions (European Commission, 1996). Most of these areas begin from distinctly different starting points in terms of their development, and there is significant diversity in terms of socio-economic structures and environmental conditions. In addition, there has been an active debate over "cohesion" and the role of "balanced" and "polycentric" development in the EU, focusing on regional and urban-rural interactions (Davoudi, 2002; European Commission, 2004a). It has also been argued that the comprehensiveness of policies that target rural areas is rather limited, due to the various interconnections and interdependencies between rural and urban areas (Baldock, *et al.*, 2001), and the greater significance of important nation wide policies, *e.g.* for transport, education, and health. Almost all rural areas in Europe are experiencing a decline in the importance of agriculture, while manufacturing and particularly service employment have spread to rural areas. At the same time, a number of non-rural policy elements seem to "intervene" in rural areas and to increase the rural-urban interface, perhaps to the point where a separate "rural economy" or lifestyle cannot be easily distinguished.

In this context, a number of efforts at quantitative analysis have been made in recent years. Kilkenny (1993) constructed a rural-urban inter-regional Computable General equilibrium (CGE) model for the US, and simulated the effects of terminating farm subsidies for both the rural and urban economy. Hughes and Holland (1994) constructed an inter-regional input-output model to investigate economic linkages between core and periphery regions of Washington State. Roberts (1998) has constructed a number of inter-

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5. For the period 2000-06, both Guarantee and Guidance Section Funds have been used to finance rural development (outside the new Objective 1 areas), as part of the "Pillar 2" of the CAP (Thomson and Psaltopoulos, 2004).

regional SAM models in order to analyse the nature of interdependencies between rural and urban areas in the United Kingdom.

In parallel to this multi-sectoral approach, there has been an increasing “geo-structural” interest in the role of small rural towns as economic poles that diffuse economic activity into adjacent rural areas, as well as attracting inward investment and exploiting scale economies (as in older growth-pole models). Mills, *et al.* (1999) investigated the range of services provided by enterprises located in small towns, while Errington and Courtney (2000) introduced the concept of the ‘economic footprint’ of small towns. By mapping economic transactions between firms and households both in and around two towns in England, they investigated the extent of the diffusion of economic activity to the surrounding countryside.

In southern Europe during the 1990s, after the reform of the EU Structural Funds, several rural municipalities have been recipients of both Pillar 1 and 2 funds. In practice, the economic purpose of these policy measures is not always clear. Some measures attempt to promote or re-direct structural change and generally aim at the transformation of structures and the attainment of efficiency, with positive effects in development. Other policy measures such as, for example, Pillar 1 of the CAP and LFA payments, appear to have attempted to maintain existing economic activities and local incomes, against market pressures. Hence, it becomes useful to distinguish between i) measures with generally positive effects on *development* (transformation of structures) and ii) measures that *support* existing structures and income levels, and to consider the extent to which rural development policy has enabled *development* or whether it has provided *support* for existing economic activity and structures. Regardless of their origin and purpose, CAP interventions have both generated local economic activity and affected the structure of the targeted rural economies. In parallel, there are indications of a diffusion of policy-induced economic benefits to neighbouring rural areas. In many cases though, it seems that benefits flow rather towards the economy of adjacent urban centres. If the “spatial” diffusion of policy economic-benefits is an issue worth investigating, its distribution to different categories of “beneficiaries” is arguably another important point, as the CAP has been repeatedly “accused” of favouring mostly the “wealthier” segments of the rural population. If these arguments correspond to reality, then the impacts of the CAP do not seem to correspond to the core objective of promoting economic cohesion at the regional level.

Within the above contexts, the objective of this paper is to analyse and evaluate the impacts of CAP measures implemented in the rural town of Archanes located in the Cretan (Greece) Prefecture of Heraklion, an area that received considerable CAP Guarantee and rural development funds during the 1990s. A hybrid inter-regional SAM is used to describe interlinkages between three areas, namely Archanes itself, and two neighbouring localities. Results are also reported on the diffusion patterns of the CAP measures (distinguished between *support* and *development* measures) in terms of generated output; income (of firms and households, the latter distinguished by income-groups); and employment in three localities: Archanes, the less-developed agriculturally dependent neighbouring rural area of Nikos Kazantzakis, and the adjacent urban centre of Heraklion. The paper is organised as follows: the next section presents the main socio-economic characteristics and briefly assesses CAP interventions in the study area. Then, the applied methodology and the analysis of economic linkages are presented, followed by the CAP impact-analysis results. The paper ends with relevant conclusions.

## Background to the study

The rural municipality of Archanes (a NUTS IV area) is located in north central Crete and is characterised as an Objective 1 area. Its land area of 31.5 km<sup>2</sup> is mostly classified as semi-mountainous, while 28.1 km<sup>2</sup> is agricultural land. The population of Archanes amounts to 4 548 and has significantly increased since 1991 (Table 1).

Local economic activity is dominated by agriculture, mainly vine and olive cultivation. The secondary sector is based on traditional, small enterprises that process local farm output and provide inputs to farmers and the construction sector. Since the early 1990s, there has also been a gradual development of the tertiary sector, including retail and wholesale trade units, but of also firms that serve a continuously expanding tourist demand. The employment share of its primary sector has declined from 57% in 1991 to 41% in 2001, while, during the same period, the share of employment in the service sector increased from 31% to 50%, and that of manufacturing declined from 12% to 9%.

**Table 1. Profile of Archanes and Prefecture Heraklion, 1991-2001**

	Archanes		Heraklion	
	1991	2001	1991	2001
Population	4 279	4 548	264 906	292 489
Density (persons/km <sup>2</sup> )	135.77	144.31	100.30	110.74
% Population Change		8.74		10.41
Employment	1 657	1 960	40 718	57 395
% Primary	57	41	32	24
% Secondary	12	9	18	17
% Tertiary	31	50	50	59

Source: National Statistical Service of Greece.

Since the beginning of the 1990s, significant improvements in local infrastructure, especially the road network that links Archanes to the urban centre of Heraklion (about 20 km distant), have resulted in a significant increase of tourism flows into the area, and significant restructuring of the local and dynamic agricultural sector. This process has resulted in the continuous increase of the local population, while employment has increased by 18% since 1991. Average annual spending on CAP measures implemented in Archanes during the period 1988-98 amounted to GRD 953.80 million (Table 2). The majority of these funds was directed towards farm income support (75% of total CAP spending) – mostly direct payments to vine growers and subsidies for olive oil. Most of the CAP-related *development* measures (25% of the total) were focused on improving agricultural productivity (19%) – mostly on farm investment plans (9.5%) and the installation of young farmers (6.3%). Finally, about 6% of CAP spending was directed to measures aiming at diversifying the local economy – especially agro-tourism – and the establishment of small local firms.

**Table 2. CAP Measures Implemented in Archanes, 1988-98 (at 1998 prices)**

<b>CAP Measures</b>	<b>Annual Average Expenditure (GRD million)<sup>1</sup></b>	<b>%</b>
<b>Farm Income Support</b>	715.0	75.0
Olive Oil Subsidy	163.8	17.2
Sheep and Goat Premium	4.5	0.5
LFA payments	42.5	4.5
Direct payments	504.2	52.8
<b>Aids to Increased Farm Productivity</b>	179.4	18.8
Young Farmers	60.4	6.3
Farm Improvement Plans	90.9	9.5
Early Retirement	13.7	1.4
Technical Support	14.4	1.6
<b>Aids to Diversification of Economic Activity</b>	59.4	6.2
Agro-tourism	35.9	3.8
Small Firms	12.0	1.3
Food Processing & Marketing	9.5	1.0
Environment	2.0	0.1
<b>TOTAL</b>	<b>953.8</b>	<b>100</b>

1 euro = GRD 340.750.

Source: Development Agency of Heraklion, Greece.

## Modelling framework

### *Methodology*

The selection of an “appropriate” evaluation technique mainly depends on the policy actions to be evaluated and on the focus of the evaluation. As policy is usually defined as “a set of activities which may differ and may have different direct beneficiaries at different domains, and which are directed towards common general objectives or goals” (European Commission, 1997), a general equilibrium approach seems more appropriate for evaluating the impact of development policy in a local economy. Such a model can be based on the SAM technique (Pyatt and Roe, 1977), which allows the identification of the economic effects of policy funding on both investment and direct income transfers in a local economy. An inter-regional SAM model can discern not only the relative importance of all linkages within a locality, but also the significance of spatial interdependencies.

The SAM technique has not often been used in rural and regional economic analysis, mainly due to severe data demands. However, in recent years, some indicative studies have applied this technique. Marcouiller, *et al.* (1995) analysed the differential impact of natural resource management programmes and policies on timber development on three

groups of households by income level, while Leatherman and Marcouiller (1996) used a SAM to analyse the impacts of local policy on income distributional patterns in Wisconsin, through targeting specific economic sectors for growth. Roberts (2003) built a 1997 SAM for the Western Isles of Scotland and estimated the economic impacts of both central government funding of public services and exogenous transfers of income to local households. Also, Psaltopoulos, *et al.* (2004) built regional SAMs for six remote rural areas of Scotland, Finland and Greece, in an attempt to discover how EU Structural Policies have affected their economies.

Examples of inter-regional SAMs are very few, since regional analysts have either adopted input-output (I/O) methods (Leontief, 1953; Isard, 1951), or have failed to portray local inter-regional flows in their models. Exceptions are D'Antonio, *et al.* (1988), who built an inter-regional SAM and analysed economic relationship between the Mezzogiorno and centre-north economies in Italy; Roberts (1998), who constructed a rural-urban inter-regional SAM model in Scotland, in order to investigate financial flows and relations with the rest of the world; and Mayfield and van Leeuwen (2005) who constructed local/rest-of-world SAMs to assess the importance of the agro-food industry for the local economy of small- and medium-sized towns in the UK and the Netherlands. However, there has not so far been any evaluation of the impacts of the CAP and their diffusion patterns, through the use of a three-region SAM with more explicit urban and rural features.

### *Application*

The inter-regional SAM constructed in this study draws its structure from the pioneering I/O efforts and also from Round (1985) and Roberts (1998). However, the model incorporates detailed data on the transactions between three areas, and thus provides a snapshot of rather more complicated linkages. The benchmark year (1998) was determined by the availability of both national IO tables and data from other secondary sources, as well as the purpose of the analysis (estimation of policy impacts). First, inter-regional I/O tables were generated for the three areas, using the hybrid GRIT technique (Jensen, *et al.*, 1979), which has been extended to an inter-regional framework by West *et al.* (1982) as GRIT III. After regionalising the national I/O tables (a mechanical GRIT procedure), information from sectoral business surveys in Archanes and Nikos Kazantzakis was utilised. In the case of the urban area of Heraklion, study resources and the size of the city economy prohibited survey work, and superior data were collected from public administrations and chambers of commerce as well as from policy makers with local knowledge. Although this could be regarded as a shortcoming, our main interest lay in the investigation of linkages that occur between rural areas and the urban economy, and not particularly linkages that take place within the urban economy. In both Archanes and Nikos Kazantzakis, surveys were undertaken largely through stratified random sampling from business directories supplied by local authorities. However, some large businesses were expressly chosen due to their major economic role in the study areas. The surveys were conducted face-to-face with business owners, using a structured questionnaire. In total 102 questionnaires were completed (representing responses from around 25% of local firms), while data on agriculture were provided by the local agricultural cooperatives.

The second main source of superior data was a survey of households in Archanes and Nikos Kazantzakis. In each area, the sample was selected randomly from household telephone directories, and interviews were conducted face-to-face using a structured

questionnaire. Around 8% of local households provided information on their income sources and consumption patterns, which enabled their disaggregation into income groups. In the case of Heraklion, household consumption patterns were mechanically generated, using GRIT. Finally, in order to develop the non-I/O components of the inter-regional SAM, a wide range of regional and national data sources was used.

Initially, the constructed inter-regional SAM had several discrepancies caused by inconsistencies between different data sources. Consequently, the SAM tables were unbalanced and the relevant SAM and National Income Accounts identities were not satisfied. In order to overcome these problems, the cross-entropy balancing technique was used in a GAMS code (Robinson and El-Said, 2000).

### *Economic linkages*

The inter-regional SAM model recognises two types of direct flows between its three areas: the geographical movement of commodities, either for final consumption or for intermediate use in production, and the transfers of payments for factor services, mainly in the form of employment income earned by households from one area working in another area. The model areas also trade and transfer money to exogenous accounts, including rest-of-world and government accounts (leakages). The model can consistently estimate new equilibria for the structure of production, the distribution of factor incomes and the pattern of consumer demands in all areas, simultaneously.

The aggregate inter-regional multiplier matrix,  $M$ , captures all the relationships in the system. It takes into account the effect of relationships within each area relating to income distribution and the structure of production and also the dependencies between the regions resulting from inter-regional flows.  $M$  may be decomposed into two different multiplier matrices which explain the relative importance of the various types of linkages and interdependencies that exist between the areas. The following explanation is based on the methods suggested by Round (1985) and Roberts (1998).

By endogenising production, factor and household accounts, the basic equation of an inter-regional SAM model can be represented as:

$$y = Zy + x \quad (1)$$

where  $y$  = column vector of endogenous accounts incomes in the three areas

$Z$  = transaction coefficient matrix including linkages within and between areas

$x$  = column vector of exogenous expenditures

The aggregate inter-regional multipliers are estimated as:

$$y = (I - Z)^{-1} x = Mx \quad (2)$$

The inter-regional SAM model for a three-region system can be expressed in a partitioned form as follows:

$$\begin{bmatrix} y_1 \\ y_2 \\ y_3 \end{bmatrix} = \begin{bmatrix} Z_{11} & \tilde{z}_{12} & \tilde{z}_{13} \\ \tilde{z}_{21} & Z_{22} & \tilde{z}_{23} \\ \tilde{z}_{31} & \tilde{z}_{32} & Z_{33} \end{bmatrix} \begin{bmatrix} y_1 \\ y_2 \\ y_3 \end{bmatrix} + \begin{bmatrix} x_1 \\ x_2 \\ x_3 \end{bmatrix} \quad (3)$$



where subscripts 1, 2, 3 relate to regions 1, 2, and 3 of the system, respectively, and subscript ~ to the diagonal sub-matrices.

The multipliers from the modelling system, within and between regions are derived as:

$$\begin{bmatrix} y_1 \\ y_2 \\ y_3 \end{bmatrix} = \begin{bmatrix} Z_{11} & 0 & 0 \\ 0 & Z_{22} & 0 \\ 0 & 0 & Z_{33} \end{bmatrix} \begin{bmatrix} y_1 \\ y_2 \\ y_3 \end{bmatrix} + \begin{bmatrix} 0 & \tilde{z}_{12} & \tilde{z}_{13} \\ \tilde{z}_{21} & 0 & \tilde{z}_{23} \\ \tilde{z}_{31} & \tilde{z}_{32} & 0 \end{bmatrix} \begin{bmatrix} y_1 \\ y_2 \\ y_3 \end{bmatrix} + \begin{bmatrix} x_1 \\ x_2 \\ x_3 \end{bmatrix} \quad (4)$$

$$\begin{bmatrix} y_1 \\ y_2 \\ y_3 \end{bmatrix} = \begin{bmatrix} (I - Z_{11})^{-1} & 0 & 0 \\ 0 & (I - Z_{22})^{-1} & 0 \\ 0 & 0 & (I - Z_{33})^{-1} \end{bmatrix} \left\{ \begin{bmatrix} 0 & \tilde{z}_{12} & \tilde{z}_{13} \\ \tilde{z}_{21} & 0 & \tilde{z}_{23} \\ \tilde{z}_{31} & \tilde{z}_{32} & 0 \end{bmatrix} \begin{bmatrix} y_1 \\ y_2 \\ y_3 \end{bmatrix} + \begin{bmatrix} x_1 \\ x_2 \\ x_3 \end{bmatrix} \right\} \quad (5)$$

$$\begin{bmatrix} y_1 \\ y_2 \\ y_3 \end{bmatrix} = \begin{bmatrix} 0 & (I - Z_{11})^{-1} \tilde{z}_{12} & (I - Z_{11})^{-1} \tilde{z}_{13} \\ (I - Z_{22})^{-1} \tilde{z}_{21} & 0 & (I - Z_{22})^{-1} \tilde{z}_{23} \\ (I - Z_{33})^{-1} \tilde{z}_{31} & (I - Z_{33})^{-1} \tilde{z}_{32} & 0 \end{bmatrix} \begin{bmatrix} y_1 \\ y_2 \\ y_3 \end{bmatrix} + \begin{bmatrix} (I - Z_{11})^{-1} & 0 & 0 \\ 0 & (I - Z_{22})^{-1} & 0 \\ 0 & 0 & (I - Z_{33})^{-1} \end{bmatrix} \begin{bmatrix} x_1 \\ x_2 \\ x_3 \end{bmatrix} \quad (6)$$

By defining  $D_{ij} = (I - Z_{ii})^{-1} z_{ij}$

$$\begin{bmatrix} y_1 \\ y_2 \\ y_3 \end{bmatrix} = \begin{bmatrix} I & -D_{12} & -D_{13} \\ -D_{21} & I & -D_{23} \\ -D_{31} & -D_{32} & I \end{bmatrix} \begin{bmatrix} (I - Z_{11})^{-1} & 0 & 0 \\ 0 & (I - Z_{22})^{-1} & 0 \\ 0 & 0 & (I - Z_{33})^{-1} \end{bmatrix} \begin{bmatrix} x_1 \\ x_2 \\ x_3 \end{bmatrix} \quad (7)$$

or 
$$y = M_{rz} M_{r1} x \quad (8)$$

where  $M_{rz}$  in equation (8) is the inter-regional multiplier matrix, which captures all of the (spatial) repercussions between the accounts of one region and those of the other two, excluding all the within-region effects. The inter-regional multipliers in  $M_{rz}$  depend upon the linkages represented by  $z_{12}$ ,  $z_{13}$ ,  $z_{21}$ ,  $z_{23}$ ,  $z_{31}$  and  $z_{32}$ , while the degree of departure of  $M_{rz}$  from the identity matrix depends on the strength of bilateral trade linkages and other endogenous inter-regional transfers. The matrix  $M_{rz}$  can be further decomposed to show inter-regional open and closed loop effects (Round, 1985). The inter-regional open loop multiplier matrix,  $M_{r2}$ , captures the effect that one region has upon the others, after accounting for all own-region effects, while the inter-regional closed loop multiplier matrix,  $M_{r3}$ , shows impacts which pass through the accounts in the other regions before returning to the region of origin: in other words, it shows the inter-regional feedback effects.

In contrast,  $M_{r1}$  is the intra-regional multiplier matrix, which shows the multiplier effects that result from linkages wholly within each separate region of the system; it can be decomposed into three multiplicatively multiplier matrices,  $M_{3r1}$ ,  $M_{2r1}$  and  $M_{1r1}$ , which reflect inter-account, cross-account and intra-account effects, respectively (Pyatt and Round, 1979).

The total multiplier relationship in the inter-regional system can be expressed as:

$$y = M_{r3}M_{r2}M_{r1}x \quad (9)$$

This clarifies the nature of the separate effects involved in the inter-regional system. The total inter-regional multiplier effect for “own regions” is obtained as the product of  $M_{r3}$  and  $M_{r1}$ ; while the equivalent multiplier effect of one region upon the others is the product of the appropriate inter-regional open loop ( $M_{r2}$ ) and the total “own region” effect for the other regions.

The last column of Table 3 shows the aggregate inter-regional output multipliers ( $M$ ) from the SAM model; these figures indicate the impacts on the industry accounts of a unitary change in final demand for sectoral output. For example, they suggest that a GRD 1 million increase in demand for output from the food-processing sector of Archanes would result in an increase of GRD 1.711 million in total local industrial activity; at the same time, this shock will increase industrial activity in Nikos Kazantzakis by GRD 0.174 million and in Heraklion by GRD 0.345 million.

The first three columns of Table 3 shows the total inter-regional output multiplier effect for “own regions” ( $M_{r1} * M_{r3}$ ), which focuses on the impact on the industry accounts of a unit change in demand for sectoral output. In other words, it shows the value of sectoral output multipliers relating to both rural and urban industries. In the Archanes economy (first column), multipliers range from 1.179 for the timber and furniture sector to 1.785 for “Other Agriculture”. Multiplier values for the area’s key sectors (vine-growing, olive-growing, food processing) are quite high, showing that these sectors have potential for stimulating local economic activity due to their high level of linkages in the local economy.

From Table 3, it seems that the diffusion of impacts (from Archanes) is considerably stronger towards the urban area of Heraklion, than to the rural area of Nikos Kazantzakis. Output multipliers for Nikos Kazantzakis are small compared with those for Archanes. Again, key sectors of the area (agriculture, food processing and construction) seem to possess a satisfactory capacity for creating local output. The diffusion of economic activity from Nikos Kazantzakis towards Heraklion is much larger than its equivalent towards Archanes, with the sectors of trade and public administration seeming especially able to stimulate economic activity in both areas. In general, urban impacts originating from Archanes are larger than those that originate from Nikos Kazantzakis. Furthermore, economic activity in Archanes seems to generate a higher benefit to the Nikos Kazantzakis economy than *vice versa*. Finally, results show that Heraklion still “concentrates” economic activity in the wider area; output multipliers are higher than those in the two rural areas, while leakages to both rural areas are marginal, a little higher towards Nikos Kazantzakis.

Table 3. Output multipliers: Archanes, Nikos Kazantzakis, Heraklion, 1998

<b>ARCHANES</b>	<b>Archanes</b>	<b>Nikos Kazantzakis</b>	<b>Heraklion</b>	<b>Aggregate</b>
Vine-growing	1.674	0.089	0.387	2.150
Olive-growing	1.687	0.095	0.375	2.157
Other Agriculture	1.785	0.085	0.407	2.277
Food Processing	1.711	0.174	0.345	2.230
Timber and Furniture	1.179	0.036	1.115	2.330
Metal Products	1.223	0.055	0.240	1.518
Construction	1.544	0.142	0.463	2.149
Trade	1.399	0.081	0.639	2.118
Hotels and Restaurants	1.442	0.090	0.375	1.907
Research & Development	1.247	0.045	0.544	1.836
Public Administration	1.643	0.122	0.606	2.371
Health and Social Care	1.533	0.102	0.579	2.214
Other Services	1.521	0.114	0.591	2.226
<b>NIKOS KAZANTZAKIS</b>	<b>Archanes</b>	<b>Nikos Kazantzakis</b>	<b>Heraklion</b>	<b>Aggregate</b>
Vine-growing	0.024	1.421	0.254	1.699
Olive-growing	0.036	1.414	0.285	1.735
Other Agriculture	0.045	1.476	0.365	1.886
Food Processing	0.031	1.372	0.250	1.653
Timber and Furniture	0.027	1.265	0.419	2.711
Metal Products	0.019	1.195	0.564	1.778
Construction	0.056	1.476	0.351	1.883
Trade	0.043	1.300	0.769	2.112
Hotels and Restaurants	0.071	1.383	0.447	1.901
Public Administration	0.057	1.648	0.522	2.227
Health and Social Care	0.041	1.420	0.605	2.066
Other Services	0.050	1.309	0.444	1.803
<b>HERAKLION</b>	<b>Archanes</b>	<b>Nikos Kazantzakis</b>	<b>Heraklion</b>	<b>Aggregate</b>
Agriculture	0.012	0.013	1.764	1.789
Manufacturing	0.017	0.016	1.538	1.571
Construction	0.010	0.010	1.825	1.845
Trade	0.019	0.025	1.979	2.023
Hotels and Restaurants	0.009	0.012	1.680	1.701
Transport and Communications	0.010	0.011	1.987	2.008
Research & Development	0.010	0.010	1.854	1.874
Public Admin. and Health	0.012	0.012	2.013	2.037
Other Services	0.016	0.017	1.928	2.117

Source: Authors' calculations.

**Table 4.  $M_{r1}$ ,  $M1_{r1}$  multipliers and their percentage contribution to aggregate inter-regional output multiplier: Archanes, Nikos Kazantzakis, Heraklion, 1998**

<b>ARCHANES</b>	<b><math>M_{r1}</math></b>	<b>%</b>	<b><math>M1_{r1}</math></b>	<b>%</b>
Vine-growing	1.668	77.6	1.287	59.9
Olive-growing	1.681	78.2	1.291	59.8
Other Agriculture	1.778	78.1	1.406	61.7
Food Processing	1.703	76.4	1.473	66.1
Timber and Furniture	1.166	50.1	1.074	46.1
Metal Products	1.218	80.2	1.053	69.4
Construction	1.535	71.4	1.223	56.9
Trade	1.389	65.6	1.065	50.3
Hotels and Restaurants	1.434	75.2	1.143	59.9
Research and Development	1.243	67.7	1.019	55.5
Public Administration	1.634	68.9	1.076	45.4
Health and Social Care	1.526	68.9	1.047	47.3
Other Services	1.513	68.0	1.092	49.1
<b>NIKOS KAZANTZAKIS</b>	<b><math>M_{r1}</math></b>	<b>%</b>	<b><math>M1_{r1}</math></b>	<b>%</b>
Vine-growing	1.416	83.3	1.198	70.5
Olive-growing	1.353	78.0	1.189	68.5
Other Agriculture	1.407	75.4	1.260	66.8
Food Processing	1.359	82.2	1.286	77.8
Timber and Furniture	1.258	46.4	1.078	39.8
Metal Products	1.188	66.8	1.062	59.7
Construction	1.470	78.1	1.237	65.7
Trade	1.288	61.0	1.065	50.4
Hotels and Restaurants	1.372	72.2	1.179	62.0
Public Administration	1.638	73.6	1.078	48.4
Health and Social Care	1.411	68.3	1.058	51.2
Other Services	1.300	72.1	1.047	58.1
<b>HERAKLION</b>	<b><math>M_{r1}</math></b>	<b>%</b>	<b><math>M1_{r1}</math></b>	<b>%</b>
Agriculture	1.755	98.1	1.106	61.8
Manufacturing	1.530	97.4	1.214	77.3
Construction	1.818	98.5	1.290	69.9
Trade	1.947	96.2	1.269	62.7
Hotels and Restaurants	1.673	98.3	1.135	66.7
Transport and Communications	1.982	98.7	1.252	62.4
Research and Development	1.848	98.6	1.118	59.7
Public Administration and Health	2.005	98.4	1.151	56.5
Other Services	1.918	90.6	1.123	53.1

Source: Authors' calculations.

Table 4 presents intra-regional multipliers and intra-account effects for each sector in the three economies, as well as their percentage contribution to the aggregate inter-regional multiplier  $M$ . The most important finding is that in the urban economy, the intra-regional component of the aggregate inter-regional multiplier is much higher than in the two rural regions, due to limited diffusion of economic activity to both rural areas. In contrast, diffusion of economic activity out of both rural areas is much higher, as indicated by the smaller importance of the rural intra-regional multipliers in determining the aggregate inter-regional multipliers. These results can be explained by the fact that input and final demand “purchases” of rural firms and households from the Heraklion economy are more important than those of their Heraklion “counterparts” from both Archanes and Nikos Kazantzakis.

Focusing on the inter-industry multipliers,  $M_{1,1}$ , it can be seen that values are rather low in all three areas, which suggests that they leak output benefits to the rest of the world. Also, the urban area has marginally higher inter-industry multipliers than the two rural areas, implying that both rural areas (especially Archanes) are rather more “open” economies than Heraklion.

Table 5 presents aggregate household multipliers for the three areas, distinguished by income groups; these figures indicate the impact on total household incomes in a region from a unitary change in the income of a rural/urban household group. For example, an increase of GRD 1 million in the income of poor households in Archanes would result in an increase of GRD 1.324 million in total household income in this area. At the same time, this shock would increase household income in Nikos Kazantzakis by GRD 0.030 million and in Heraklion by GRD 0.198 million. The Heraklion aggregate multiplier is higher than those of the two rural areas, while income multipliers in Archanes are higher than those in Nikos Kazantzakis. Also, it seems that the diffusion of household income impacts in rural areas (especially in Nikos Kazantzakis) is considerably stronger towards the urban area of Heraklion, and rather weak between them. Moreover, middle-income households of Archanes and low-income households of Nikos Kazantzakis seem to possess a higher income-generating potential than the high-income group in both areas.

**Table 5. Household multipliers: Archanes, Nikos Kazantzakis, Heraklion, 1998**

<b>ARCHANES</b>	<b>Archanes</b>	<b>Nikos Kazantzakis</b>	<b>Heraklion</b>	<b>Aggregate</b>
Low-income	1.324	0.030	0.198	1.552
Middle-income	1.321	0.035	0.255	1.611
High-income	1.216	0.029	0.187	1.432
<b>NIKOS KAZANTZAKIS</b>	<b>Archanes</b>	<b>Nikos Kazantzakis</b>	<b>Heraklion</b>	<b>Aggregate</b>
Low-income	0.025	1.219	0.253	1.497
Middle-income	0.025	1.216	0.254	1.495
High-income	0.019	1.172	0.269	1.460
<b>HERAKLION</b>	<b>Archanes</b>	<b>Nikos Kazantzakis</b>	<b>Heraklion</b>	<b>Aggregate</b>
All Households	0.009	0.007	1.773	1.789

Source: Authors' calculations.

## CAP impact analysis

Given the estimated inter-regional linkages, an indication of the estimation of the economic impacts of CAP measures implemented in Archanes and their diffusion in and between the three areas is provided in this section. CAP measures were grouped into three categories, namely, farm income support, aids to increased agricultural productivity, and aids to economic diversification. CAP expenditures for the period 1988-98 were first identified on a project and CAP regime basis (in the case of subsidies from the Guarantee Section Fund), then classified in terms of direct demand for sectoral output, and finally treated as injections of expenditure in base-year prices (1998) into different sectors of the Archanes economy. Following the traditional Leontief procedure, growth-generating impacts were estimated, in terms of average annual effects.

Results (Table 6) indicate that, for the Archanes economy, the impacts of farm income support measures are by far the highest, especially in the case of firm and employment effects. On the other hand, despite their much lower share in total CAP spending in the area, measures for the economic diversification seem to be able to generate satisfactory output and employment impacts in Archanes. In the case of income distribution, results show that farm income support measures mostly benefit high-income Archanes households, while middle-income households “retrieve” only 6.5% of total household income effects. This pattern of income distribution is more or less repeated in the case of farm productivity measures, but changes in favour of middle-income households in the case of measures that promote economic diversification. Results for Nikos Kazantzakis are similar, but compared to Archanes, generated income seems to accrue even more in favour of high-income households, and “against low-income ones.

The diffusion of economic impacts away from the Archanes economy is generally rather lower than expected for a small open local economy. The proportions of economic impacts of CAP measures that remain in Archanes are especially high in the case of the output (76.4% of total impacts stay in Archanes) and employment (76.7%) effects generated by economic diversification measures, and also in terms of the firm (85.8%) and household income (63%) effects generated by Guarantee subsidies. As might be expected, related economic benefits leak primarily to the more affluent urban area of Heraklion, and only marginally to the less developed, agriculturally dependent neighbouring rural area of Nikos Kazantzakis. Farm subsidies leak significant output (43.4%) and household income (29.3%) benefits to Heraklion, while diversification measures generate similar diffusion-patterns in the case of firm (22.6%) and household (29.0%) income effects. Income support subsidies generate the highest diffusion for Nikos Kazantzakis, in the case of generated output (11.6%) and employment (15.0%), while economic diversification measures generate the highest firm (5.6%) and employment (7.0%) benefits for this less developed rural area. Finally, a low rate of economic diffusion away from Archanes (*e.g.* firm and household income effects generated by CAP subsidies) leads to comparatively low benefits for both Nikos Kazantzakis and Heraklion, and *vice versa*.

**Table 6. Effects of CAP Expenditure in Archanes, 1988-98**  
(% average annual increase compared with 1998 baseline)

<b>Farm Income Support</b>	<b>Archanes</b>	<b>Nikos Kazantzakis</b>	<b>Heraklion</b>
Annual Average Expenditure (GRD mill.)	715.0		
Output (GRD mill.)	285.5	69.1	240.2
Output (%)	5.1%	0.8%	0.1%
Firm Incomes (GRD mill.)	801.5	27.9	105.1
Firm Income (%)	38.2%	0.9%	0.2%
Low Household Incomes (GRD mill.)	53.6	1.4	
Middle Household Incomes (GRD mill.)	21.5	11.4	154.4
High Household Incomes (GRD mill.)	256.7	27.9	
Total Household Incomes (%)	7.9%	0.8%	0.1%
Employment (number of jobs)	163	43	82
Employment (%)	9.8%	1.8%	0.2%
<b>Aids to Increased Farm Productivity</b>	<b>Archanes</b>	<b>Nikos Kazantzakis</b>	<b>Heraklion</b>
Annual Average Expenditure (GRD mill.)	179.4		
Output (GRD mill.)	88.6	17.9	64.6
Output (%)	1.6%	0.2%	0.03%
Firm Incomes (GRD mill.)	189.1	7.2	27.7
Firm Income (%)	9.0%	0.2%	0.04%
Low Household Incomes (GRD mill.)	13.4	0.4	
Middle Household Incomes (GRD mill.)	11.7	3.0	40.9
High Household Incomes (GRD mill.)	64.4	3.6	
Total Household Incomes (%)	2.1%	0.1%	0.03%
Employment (number of jobs)	52	11	22
Employment (%)	3.1%	0.5%	0.05%
<b>Aids to Economic Diversification</b>	<b>Archanes</b>	<b>Nikos Kazantzakis</b>	<b>Heraklion</b>
Annual Average Expenditure (GRD mill.)	59.4		
Output (GRD mill.)	86.0	5.7	20.8
Output (%)	1.5%	0.1%	0.01%
Firm Incomes (GRD mill.)	24.4	1.9	7.7
Firm Income (%)	1.2%	0.1%	0.01%
Low Household Incomes (GRD mill.)	2.4	0.1	
Middle Household Incomes (GRD mill.)	12.0	0.8	11.3
High Household Incomes (GRD mill.)	11.5	0.9	
Total Household Incomes (%)	0.6%	0.04%	0.01%
Employment (number of jobs)	33	3	7
Employment (%)	2.0%	0.1%	0.02%

Source: Authors' calculations.

## Conclusions

In this paper, a three-area, hybrid inter-regional SAM model was constructed and, through multiplier analysis, the relative importance of different types of linkages and interdependencies between Archanes and two neighbouring localities, one rural and one urban, was indicated. The economic impacts of CAP measures implemented in Archanes and their diffusion patterns were evaluated in the three study areas in terms of generated output, income, and employment.

The results suggest a number of important conclusions. Firstly, aggregate inter-regional output multipliers relating to the two rural areas are generally larger than the equivalent urban multipliers. This can be explained by the fact that rural areas have lower intra-regional multipliers and are thus more "open" compared to the urban area. Also, both rural areas leak economic benefits, especially to the urban area of Heraklion. The diffusion of economic activity from the remoter rural area of Nikos Kazantzakis towards the urban centre of Heraklion seems to be much larger than that of more adjacent but also more diversified Archanes, while Heraklion still concentrates economic activity within the wider area.

Secondly, all rural household groups are found to have lower income-earning potential than urban households. Rural households are more dependent on inter-regional flows, mainly towards the urban area of Heraklion (especially Nikos Kazantzakis), in the form of factor payments for their provision of labour. These show that the rural residents work in the urban centre of Heraklion, indicating the increasingly dependence of rural income-earning on urban sectors.

Thirdly, impact analysis results suggest that CAP *support* measures have generated significant impacts for the Archanes economy, especially in terms of firm and household incomes. However, these income support measures are also associated with comparatively high output and employment benefits for Nikos Kazantzakis and especially, high output and household income benefits for Heraklion. CAP *development* measures seem more successful in generating firm income and employment impacts in Archanes and Nikos Kazantzakis, as well as output and household income impacts in Heraklion. Farm subsidies mostly generate income for high-income households in both rural areas, while *development* CAP measures mostly "benefit" middle-income households.

To conclude, this analysis has indicated that (at least in the case of these three areas), CAP measures of different economic purpose generate different impacts. Therefore, if the wider policy aim (of the EU, national and local policy makers) is to ameliorate regional imbalances and generate jobs and output in "lagging" rural localities, such as Nikos Kazantzakis, *via* providing policy-funds to the more affluent rural economy of Archanes, then CAP subsidies to farmers seems to be the most effective way of doing this. If the main policy aim is to improve relative incomes at the regional and/or local level, then CAP *development* measures seem better equipped for this purpose.



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**Part IV.**

**Agricultural Policies and Rural Development:  
Country Experiences**

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## Chapter 8. Using Agricultural Policy to Promote Rural Development: Contrasting the Approach of the European Union and the United States<sup>1</sup>

Nancy Cochrane, Mary Anne Normile, Tim Wojan<sup>2</sup>

### **Abstract**

*There has been an evolution in the perception of the role of agriculture in promoting rural development. But in both the United States and the European Union, there has been a growing recognition among stakeholders that commodity-based programmes were not achieving the desired benefits in rural areas. Many of the US and EU concerns over the problems facing rural areas are similar. In both the US and the EU consumers and taxpayers are increasingly voicing similar concerns, including the ability of commodity-oriented agricultural policy to ensure production of safe and high-quality food, animal welfare and negative environmental consequences of large-scale agricultural production. At the same time, many in the general public are sympathetic to the plight of the family farmer and supportive of government efforts to sustain small farmers.*

*Concurrent with this evolution in thinking regarding the role of agriculture in rural development policy, significant changes have taken place in the agricultural policies of the US and of the EU. Moreover, for both the US and the EU, World Trade Organization disciplines on agricultural policy have provided a further impetus for the increased emphasis on agricultural rural development programmes as under the WTO “Green Box”, there are no limits on government expenditures for most rural development programmes. Agricultural rural development may be seen by the US and the EU as one way of providing support to the farm sector without breaching their WTO commitments.*

*The paper addresses the following questions: How has the role of rural development programmes as a component of US and EU agricultural policies changed? How do US and EU agricultural rural development policies differ in terms of philosophy, motivation, objectives, programmes used to promote rural development, and programme implementation? Does the increased emphasis on agricultural rural development programmes represent a significant shift in policy emphasis, or is much attention being given to relatively small changes at the margins of public policy? To what extent has this new emphasis on rural development as part of agricultural policy been reflected in funding levels and shares?*

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1. The views and opinions expressed here do not necessarily reflect the views of the Economic Research Service (ERS), or the United States Department of Agriculture (USDA).
  2. ERS, USDA, Washington, D.C.

## Introduction

Motivated by budget constraints, public concerns, and restrictions imposed by international trade agreements, some developed countries are beginning to re-examine the role of agriculture in promoting rural development. Traditionally, public policy has focused on commodity-oriented programmes on the assumption that these would promote rural development through farm activities, as well as off-farm economic activity, through multiplier effects associated with handling, distribution, transportation, and processing of agricultural products, provision of inputs to the farm sector, and ancillary services. But in both the US and the EU, there has been a growing recognition among stakeholders that commodity-based programmes have not achieved all the desired goals in rural areas (OECD, 1998.)

As a result, some policy makers have begun to give more attention to other programmes that focus on the role of agriculture as a provider of public goods. Recent policy changes in the EU have placed greater emphasis on the use of rural development programmes to provide farm payments and funding for agricultural programmes, continuing a trend that began in the early 1990s towards phasing-out commodity price support in favour of non-commodity support for agriculture. This trend accelerated under the *Agenda 2000* CAP reform, when the EU began to shift agricultural support outlays from commodity price support to rural development, which encompasses support for the structural and environmental aspects of farming and some non-farm rural development initiatives. Over much the same period, US agricultural policy has also been moving away from price support towards producer income support, and, with the 1996 Federal Agriculture Improvement and Reform Act, toward payments that are not linked to current production. However, in the US, the link between new forms of farm support and the promotion of rural development objectives is less explicit.

The responses at the US Federal government and the EU supranational levels are a study in contrasts that may be informative for policy makers. These differences are explored, with the purpose of determining whether the stated emphasis of EU agricultural policy on rural development provides additional insights to those who might wish to make agricultural policies more consistent with rural development objectives. The US model, which relies to a greater extent on private organisations and public-private partnerships in the explicit promotion of rural development, may be similarly instructive for the EU and other countries faced with serious conflicts between the desires of policy makers to shift policy emphasis toward rural development programmes and the realities of tightening budgets. Each region may have an interest in exploring the other's programmes as efficacious ways of providing targeted support to the farm sector.

## Agricultural policy and rural development objectives in the US and the EU

The US and the EU share many general objectives for rural policy. Both are concerned with alleviating rural poverty, boosting rural employment, stemming out-migration, providing housing, improving rural infrastructure, developing human capital, maintaining an attractive countryside, and protecting the environment. But the countries differ in the relative emphasis they put on the different objectives, and they also differ in their vision of the role of agriculture in promoting these objectives.

The mission statement of USDA's Rural Development Agency (RDA) emphasises increasing economic opportunities for rural residents, improving the quality of life,

creating quality jobs, and supporting rural infrastructure. USDA rural development programmes support all types of economic activity. Agriculture-related businesses are eligible for support, but there is no rural development programme that is targeted exclusively to farming, and nowhere is there any language about a role for agriculture in promoting the broader objectives of rural development. The following words can be found on the RDA website<sup>3</sup> [*authors' emphasis*]:

*USDA Rural Development is committed to the future of rural communities. Our role is to **increase rural residents' economic opportunities and improve their quality of life.** Rural Development forges partnerships with rural communities, funding projects that bring housing, community facilities, utilities and other services. We also provide technical assistance and financial backing for rural businesses and cooperatives to **create quality jobs** in rural areas. Rural Development promotes the President's National Energy Policy and ultimately the nation's energy security by engaging the entrepreneurial spirit of rural America in the development of renewable energy and energy efficiency improvements. Rural Development works with low-income individuals, State, local and Indian tribal governments, as well as private and nonprofit organizations and user-owned cooperatives ...*

*Our financial programmes support such essential **public facilities and services** as water and sewer systems, housing, health clinics, emergency service facilities and electric and telephone service. We promote **economic development** by supporting loans to businesses through banks and community-managed lending pools. We offer **technical assistance and information to help agricultural and other cooperatives** get started and improve the effectiveness of their member services. And we provide technical assistance to help communities undertake **community empowerment programmes.***

In contrast, rural development policy under the EU's Common Agricultural Policy (CAP) includes a broad range of policy measures specific to agriculture, including measures to promote agricultural competitiveness, marketing assistance, human resource development, sustainable agriculture, and environmental protection. Statements from the EU Commission, like USDA statements, advocate economic growth and employment opportunities, but the EU gives equal emphasis to such goals as preserving natural resources, sustainability, maintaining the cultural heritage of the countryside, and satisfying consumer demand for high-quality and safe food. Furthermore, EU policy gives agriculture an explicit role in promoting these objectives, and rural development programmes under the CAP are aimed primarily at farms and agri-businesses. These concerns find expression in the following statement from the EU Commission<sup>4</sup> [*authors' emphasis*]:

*These sectors [agriculture and forestry] play a key role in the **management of natural resources in rural areas**, and can contribute effectively to their development. However, the viability of rural areas needs more than agriculture. A rural development policy has a wider scope to fulfill in the years to come: to **contribute to economic growth and employment opportunities, to satisfy consumers' growing demand for food quality and safety**, to develop further its*

3. [www.rurdev.usda.gov/rd/index.html](http://www.rurdev.usda.gov/rd/index.html).

4. MEMO/04/180, Brussels, 15 July 2004:



***leadership in environmental technologies, to provide attractive livelihoods and prosperity to farmers, their families and to the rest of society.***

Likewise, in a recent speech the EU Agricultural Commissioner Mariann Fischer Boel stated:

*Policy must better support sustainable, economically viable, and market oriented agriculture ... Agriculture means more than bringing food to the table—it stands for sustainability in a threefold sense: economic, social and ecological.<sup>5</sup>*

A study by Dries, Hartell and Kilkenny (2003) reports on a survey of rural development economists from the US and the EU in an attempt to evaluate attitudes concerning the most important problems in rural areas, the most important constituency for rural policy, and the most effective programmes. Although the viewpoints of rural development economists do not necessarily reflect those of policy makers or the inhabitants of rural areas, the results of the survey reveal some interesting contrasts, which are consistent with the authors' observations above.

Of particular interest, Dries, *et al.* found that, in answer to the question about the priority that different groups should have in rural development policies, 75% of the Americans ranked the rural poor as the highest, while 53% of the European respondents ranked farmers as the highest. In response to a question concerning the most significant rural development problem, 79% of the Americans ranked “substandard rural housing, infrastructure, or public services” as the most serious problem, while Europeans gave higher priority to land stewardship, rural unemployment, and environmental degradation. When asked to rank alternative rural development objectives, Americans gave highest rankings to “high quality rural community life” and “full employment of rural labour”. Europeans share the US concern with “high quality rural community life”, but gave equal priority to “high quality rural environment and biodiversity”, which did not rank nearly as high among American respondents.

In keeping with these different philosophies, EU policies focus on agriculture's contribution to the socio-economic development of rural areas, whereas US policies are not so explicit. EU policies recognise that agriculture's contribution to the rural economy is small, but even so, agriculture is important to the management of natural resources and land-use in rural areas. There is an explicit recognition that while rural is no longer synonymous with agriculture, farm policy is an essential element of rural policy.

This is not to say that US policy makers are not concerned with issues such as land stewardship, environmental degradation or food safety. There are many programmes within USDA that address these issues. USDA's Natural Resource conservation Service (NRCS), for example, oversees a variety of agriculture-related conservation, environmental, and sustainable agriculture programmes; technical assistance and training related to agriculture are provided by USDA's Extension Service. Consumer demands for food safety and quality are addressed by the Food Safety and Inspection Service, the Animal and Plant Health Inspection Service and the Food and Drug Administration. The important difference is that the enabling legislation does not explicitly identify “rural development” as a programme objective as is done in the 2003-04 CAP reforms. The rural development implications of these USDA programmes will be addressed below.

5. <http://europa.eu.int/rapid/pressReleasesAction.do?reference=SPEECH/05/28&format=HTML&aged=0&language=enguiLanguage=en>.

## EU Rural Development Programmes under the CAP

The recent emphasis on rural development policies in the CAP was developed in response to the need to reform the CAP, while continuing to provide support to the farm sector. Successive EU agricultural reforms shifted policy emphasis from commodity price support to producer income support through direct payments, and gradually toward incentives to promote rural development objectives. Early reforms were driven by the need to reduce surpluses of agricultural products by reducing price support, limiting area eligible for support, and imposing mandatory set-aside requirements. A series of budget crises gave rise to the need to provide budgetary stability by fixing a large share of the agricultural budget through fixed producer payments. The impending enlargement to a Union of 25 and the entry of several large agricultural-producing countries threatened budget stability with runaway farm support spending. Equity concerns were also a factor, as policy makers recognised that large farmers were benefiting disproportionately from the CAP (EPSON, 2004.)

The policy shift in favour of rural development measures was also in response to new concerns raised by the public and recognised by policy makers as important to the long-term well-being of EU agriculture – food safety and quality, animal welfare, and environmental concerns. As a result of repeated incidents of food-borne disease outbreaks and tainted food and general wariness of external contaminants like pesticide residues and other plant-protection products, consumers began to associate intensive agricultural production with harmful environmental effects.

World Trade Organization (WTO) negotiations and rules on agricultural support played an important role in the policy shift. Limits on EU-subsidised exports under the WTO Agreement on Agriculture provided a strong incentive to reduce price support and rein in surpluses. At the same time, the Agreement provided an incentive for countries to shift spending on agricultural programmes from trade-distorting forms of support, like price support and production-linked payments, to “Green Box” support, which included some agri-environmental programmes, infrastructural services, decoupled producer income support, structural adjustment assistance, and regional assistance programmes. WTO members agreed, in Article 20 of the Agreement on Agriculture, to include non-trade concerns (which include environmental protection, rural development, and food security) in the negotiations, but disagreed over whether these concerns provided a rationale for production-linked support.

The bulk of EU rural development programmes are implemented through the four Structural Funds, which address a broad array of rural development objectives, one of which is to address imbalances in less-developed regions, known as Objective 1 regions (regions with less than 75% of average EU GDP.) Of the four Funds, the one that relates specifically to agriculture is the Guidance Section of the European Agricultural Guidance and Guarantee Fund (EAGGF), which funds the structural reform of agriculture and development of rural areas in Objective 1 regions. Also of interest is an initiative under the Structural Funds, known as LEADER+, which supports rural development through local initiatives. A number of LEADER+ initiatives relate to agriculture, and the 2007-13 budget guidelines give additional emphasis to LEADER+.

The Guarantee Section of the EAGGF is funded through the CAP. It funds the “market organisation measures” of the EU – direct market support (intervention purchasing, export subsidies, etc.), as well as direct payments to producers – but also

funds a number of rural development programmes. Specifically, the Guarantee Section finances:

- rural development initiatives similar to those financed by the Guidance Section, but targeted to regions that do not qualify for Objective 1 programmes under the Structural Funds; and
- measures introduced to “accompany” the market organisation measures. There are four such accompanying measures. Three were introduced during the 1992 CAP reforms – they include afforestation, agri-environmental measures, and aid for the early retirement of farmers. The fourth, which was introduced under Agenda 2000 CAP reform, includes “payments for less favoured areas and areas subject to environmental constraints”.

Rural development programmes financed by the CAP are commonly referred to as “Pillar II” of the CAP (Pillar I being the set of market organisation measures).

During 2000-06, Pillar II supported a menu of 22 measures, from which member countries can choose. These options fall into the following broad categories:

- investments in farm business aimed at reducing production costs, improving product quality, meeting sanitary and animal welfare requirements, environmental improvement, and diversification of agricultural activities;
- human resources – early retirement of farmers, vocational training, and training of young farmers;
- aid to less-favoured areas and areas subject to environmental constraints;
- agri-environmental schemes;
- processing and marketing of agricultural products;
- forestry; and
- “measures promoting the adaptation and development of rural areas” – these include measures that reach beyond the farm and promote the broader development of rural areas. They include infrastructure development, land re-parcelling, preservation of cultural heritage, agri-tourism, water management, environmental protection, recovery from natural disasters, and others.

The 2003 CAP reform added new measures to the menu – including support for food-quality improvement, meeting EU environmental standards, agricultural advisory services, and implementation of the Birds and Habitat Directive – and increased levels of support for others. Also, the New Member States (NMS) were given funds for additional measures:

- semi-subsistence farms undergoing restructuring,
- producer groups,
- compliance with Community standards,
- technical assistance,
- top-ups to direct payments.

The total Pillar II budget for the period 2000-06 was EUR 32.9 billion, just over 10% of the total CAP budget (European Commission, 2003.) However, the symbolic

importance is much greater than that. This is seen as the first step in a major move away from commodity-linked support towards greater emphasis on promoting the “non-commodity outputs” of agriculture. The vision is one of a sustainable agricultural sector that promotes the broader objectives of rural development. In keeping with this vision, the 2003 CAP reform called for a steadily increasing share of CAP spending to go into Pillar II during the 2007-13 budget period. The goal was for the Pillar II share to reach 25% by 2013. In part this will be accomplished by compulsory *modulation*, introduced in the 2003 CAP reform, whereby member states are now required to reallocate a fixed percentage of their Pillar I funds to Pillar II each year.

### ***Pillar II implementation: top-down institutional structure, bottom-up initiatives***

The Pillar II funds are allocated among the member countries. Each member country draws up a rural development plan allocating funds among the menu of measures in the way that best suits its individual circumstances. Austria and Denmark, for example, put high priority on agri-environmental schemes, whereas England puts more emphasis on aid to less-favoured areas and rural enterprise development. Poland, one of the NMS, has given higher priority to restructuring of semi-subsistence farms, farmer retirement, and top-ups to direct payments. In Slovakia, on the other hand, where subsistence farming is not so widespread, the bulk of the funds is directed towards less-favoured areas.

A wide range of projects can be funded through Pillar II programmes. They include grants to purchase small-scale food processing equipment, investments in manure handling equipment, support for web-based marketing outlets, payments to farmers to convert cropland into pasture in order to preserve historical landmarks, and support to agri-tourism. Examples of farm diversification projects in the UK include the conversion of a redundant farm building into a children’s nursery, conversion of a dairy facility into a micro-brewery, and the construction of equestrian facilities.

The LEADER+ Programme supports both agricultural and non-agricultural activities. The Programme encourages the formation of Local Action Groups (LAG), community partnerships which jointly apply for funds for integrated development projects “conceived and implemented by those that will benefit from them.” One example relating to agriculture is a project to promote a *Glenbarrow Farms* brand for locally produced beef and lamb meat in County Laois, Ireland. The LAG is the *Laois LEADER Company* ([www.laois-leader-rdc.ie/](http://www.laois-leader-rdc.ie/)), a partnership made up of local business representatives, regional state agency officials, elected representatives and members of the community. The Glenbarrow Farms brand was developed in co-operation with local food retailers. Another is a *Link-up Live Event* – a day of hands-on demonstrations of best practices aimed at landscape gardeners, garden centre managers and other related businesses – organised by a group of eight nurseries in the county of Lincolnshire, England.

All projects must be co-financed. The EU budget provides 75% of eligible costs for Objective 1 regions and 50% for others. National governments provide some co-financing, and beneficiaries are also required to provide co-financing. The co-financing comes from several sources – national, local and municipal government grants, as well as private funds. For example, the Organic Centre Wales, which acts as a clearing house for information on organic farming, is partly funded through EAGGF, but also receives support from the Welsh Assembly Government.

### ***EU introduces changes to promote policy coherence***

In July 2004, the European Commission adopted a proposal that will change somewhat the funding mechanisms and objectives of Pillar II programmes, with the general aim of reinforcing the *coherence* between agricultural policy and rural development. Under this proposal, the guidance and guarantee sections of the EAGGF will be replaced by a single fund called the European Agricultural Rural Development Fund (EARDF), and the long list of “measures” funded in the 2000-06 period will be grouped under three *axes*:

- improving the competitiveness of farming and forestry – to include infrastructure improvements, support for farmers participating in food quality schemes, farmer retirement, support for young farmers, and support for semi-subsistence farmers in the NMS;
- environment and land management, including agri-environmental measures, support to farmers in mountainous areas, animal welfare payments, and support for *Natura 2000* (measures to preserve biodiversity); and
- improving the quality of life and diversification in a wider rural context – including diversification, agri-tourism, village renewal, and support for micro-enterprises.

Member countries will be required to spend a minimum of 15% of their EARDF funds on Axis 1, 25% on Axis 2, and 15% on Axis 3. In addition they must devote 7% of the funds to LEADER+ initiatives.

### **Do US programmes promote rural development through agricultural policy?**

The contribution of farm policy to rural development is not explicit in the 2002 Farm Security Act. In fact, since at least 1970, when the first title for rural development appeared in a Farm Bill, the Federal interest in activities inside and outside the farmgate has been largely legislatively distinct. Rural development titles in the past six farm bills provide formal recognition of the importance of a vital rural economy to the functioning of farm businesses, and these initiatives are summarised below. However, the reciprocal relation – the contribution of farming to rural development – is much more difficult to glean from legislation or from other official documents in the public records (Roth, *et al.*, 2002).

Despite the absence of explicit recognition in the legislation that various forms of farm support contribute to rural development objectives, there are notable parallels between the US and the EU. Initiatives that clearly link the contribution of farming to rural development are to be found at the State and local level; these initiatives emphasise many of the themes found in Pillar II of the CAP. At the Federal level, rural development benefits are most evident in agri-environmental programmes.

#### ***The Rural Development Title in the 2002 Farm Security Act***

The rural development initiatives in the 2002 Act seek first and foremost to overcome a perceived market failure to provide basic infrastructure in rural areas. Private markets alone will not generate efficient transportation, energy, or information infrastructure in rural areas, due to the sparseness of the population. Thus a major thrust of US rural programmes is to subsidise the development of such infrastructure. The 2002 Act also

contains a number of measures to promote strategic planning initiatives that identify local needs and assemble the resources to address those needs. Since the farm economy often suffers the same disadvantages of remoteness and sparse population that affect many rural areas, these objectives apply equally to activities inside and outside the farmgate.

The largest share of funds and the most notable rural development successes have been associated with providing basic infrastructure, beginning with rural modernisation initiatives, ranging from rural electrification and a rural postal service, to infrastructure investments in water and sewer and telecommunications. Federal efforts to close the rural “digital divide” are motivated by the long-standing concern to ensure equal access to opportunity for all citizens. Grants, loans, and loan guarantees are authorised for the purpose of improving access to broadband telecommunications services in rural areas. The funds are for the construction, improvement, and purchase of equipment and facilities for rural broadband service in eligible communities (USD 2.157 billion in FY2005). To ensure adequate demand for the new infrastructure, the Rural E-Commerce Extension Initiative was also established in the 2002 Act to develop programmes for educating small businesses in rural areas about the efficiencies and marketing opportunities of doing more business online. Several of the demonstration projects have targeted outreach activities to farm businesses.

Overcoming failure in rural financial markets is another long-standing Federal concern and it garnered a significant share of rural development funds in the 2002 Act (USD 82.8 million in FY2005). The Rural Business-Cooperative Service (RBS) operates several business assistance programmes that serve both non-farm businesses and producer co-operatives. These initiatives aim to provide credit for businesses that are unable to secure traditional bank loans and to fund community organisations that provide business assistance to micro-enterprises and rural businesses. One programme that is specifically targeted to agricultural business is the Value Added Producer Grants Program that provides working capital and matching planning grants for value-added agricultural and farm-based renewable energy projects (USD 14.3 million in FY2005).

The emphasis on promoting strategic planning in the rural development title of the 2002 Act recognises the difficulty of formulating and implementing a single national rural development plan for the vast diversity that characterises rural America. The current approach, which dates back to “New Federalism” initiatives of the 1980s, opts instead for flexibility in the application of programmes based on locally identified needs. The 2002 Act established the National Rural Development Partnership (NRDP) as a Federal programme (it had been operating in concert with State Rural Development Councils since the early 1990s without authorisation). Greater vertical co-ordination in rural development planning is achieved by the involvement of Federal agencies, State agencies, local government, tribal government, and the private for-profit and non-profit sectors. In fact, for any given State, Federal support for the State councils has required the active involvement of all of these stakeholder groups. Greater horizontal co-ordination is achieved by the representation of Federal and State programmes affecting rural development in addition to the traditional institutions of the USDA and agriculture departments in each State. The fact that both Republican and Democratic administrations have defined the appropriate Federal role in rural development as one of enabling rural Americans to help themselves places the onus on State and local initiatives to spur development. Not surprisingly, State and local initiatives have been at the forefront in initiatives linking the contribution of agriculture to rural development.

### *US state and local initiatives echo the EU approach*

USDA programmes seek to achieve many of the same objectives as the EU Pillar II programmes – raising rural living standards, aid to value-added production, infrastructure improvement, etc., but few are specifically targeted to the farm sector. Farmers are eligible for many USDA rural programmes, but they compete equally with non-agricultural entrepreneurs for funds.

Yet, at the state and local level, there are many initiatives that express a philosophy similar to that of the EU's Pillar II. Their mission statements all focus on themes such as value-added agriculture, raising the competitiveness of agriculture, increasing opportunities for rural employment through assistance to agriculture and agri-business, sustainability, farmland protection, and so forth. Some are state-funded programmes, some are local NGOs. Some examples are described below. Many of these are quite similar in spirit to some of the initiatives undertaken in the EU to promote product branding, sustainable development, and diversification. Also analogous to the EU experience, many receive partial funding from USDA's Rural Development Agency, but in all cases USDA funds are leveraged by funds from local entities or membership fees.

#### *Support for value-added agriculture and branding of local products*

In the spring of 2005, the South Dakota legislature passed a law giving legal support to the creation of a branded beef product – “South Dakota Certified Beef” (*Washington Post*, 7 May 2005.) Under this law “the state guarantees consumers who buy South Dakota Certified Beef that they will be partaking of a computer-tracked cow that was born, fed and butchered inside state borders, using exacting standards of nutrition, with a humane upbringing and walled off from all possible contact with mad cow disease.” Consumers will be able to use the Internet to view pictures of the farm where their beef came from. The law imposes a two-year prison sentence for any rancher or butcher who does not comply.

The goal is to keep more profits within the state's borders and thereby offer more and better-paid jobs to the rural population. The hope is that this will be one small step towards stemming the out-migration of younger people. The article describes “a growing consensus among agriculture experts that the commodity system is a principal culprit in the decades-long decline of the small family farms and the depopulation of rural areas. Those experts say that a partial cure for what ails the family farm is a shift from undifferentiated commodities to high-quality, high-value food products that give farmers and ranchers a profitable piece of processing and marketing.”

Similar efforts are underway elsewhere in the US. The New York Adirondack Harvest Program promotes “opportunities for profitable, sustainable production and sale of high quality food and agricultural products, and to expand consumer choices for locally produced healthy food”.<sup>6</sup> The Tennessee Center for Profitable Agriculture,<sup>7</sup> which receives partial funding from USDA's RBS, provides grants for the development of agricultural niche products, agri-tourism and other endeavours.

6. [www.nyfb.org/Grassroots/grass1104/identity.htm](http://www.nyfb.org/Grassroots/grass1104/identity.htm)

7. <http://cpa.utk.edu/>

Under the umbrella of USDA’s National Rural Development Partnership, a number of state-level Rural Development Councils have initiated programmes to promote the growth of value-added agriculture. For example:

- The Ohio Rural Development Partnership (ORDP), for example, established Heartland AgVenture to identify agricultural value-added opportunities and facilitate the establishment of business entities owned primarily by producers to increase producer profits. It serves as a clearinghouse of information ideas, conducts feasibility studies for value-added activities, aids in the development for business plans for projects identified by the feasibility studies, and facilitates access to venture capital.
- Minnesota Rural Partners (MRP) has created an alliance of non-profit foundations, corporations, and government agencies to support development of the Minnesota Farmers’ Market Hall, an initiative that fits with MRP’s plan to diversify agriculture. The project aims to preserve and expand the existing market in downtown St. Paul into an indoor, year-round facility to support a statewide network of rural growers.

### *Support for sustainable agriculture*<sup>8</sup>

Innovative Farmers of Ohio<sup>9</sup> is dedicated to promoting, through research, education, and community-building activities, an agriculture that preserves and strengthens the economic, social, and environmental well-being of Ohio’s farms, farm families and rural communities, and protects and improves the health and productivity of Ohio’s lands and waterways.

Practical Farmers of Iowa (PFI)<sup>10</sup> is a non-profit, educational organisation, whose mission is “to research, develop and promote profitable, ecologically sound and community-enhancing approaches to agriculture.” PFI carries out programmes “to assist farmers with both production and marketing needs, to raise public awareness of where food comes from and how it is grown, and to educate youth about agriculture and the environment.” The PFI *Vision for Iowa* echoes many of the objectives that are enumerated in EU policy documents:

- food that is celebrated for its freshness and flavour and connection to local farmers, to seasons, to hard work and good stewardship;
- farms that are prized for their diversity of crops and livestock, their wildlife and healthy soils, their innovations, beauty and productivity, their connection to a rich past and a fulfilling present in which individuals and families are earning a good living;

8. An explicit Federal interest in sustainable agriculture has been pursued through the Sustainable Agriculture Research and Extension (SARE) programme, begun in 1988. The programme awards competitive grants in farming systems research and disseminates information on farming practices that are profitable, environmentally sound and good for communities through its Sustainable Agriculture Network. A database of more than 3 000 projects funded by the programme is available at: [www.sare.org/reporting/report\\_viewer.asp](http://www.sare.org/reporting/report_viewer.asp). The state initiatives outlined in this section have not received funding from SARE.

9. [www.ifoh.org/](http://www.ifoh.org/)

10. [www.practicalfarmers.org/index.asp](http://www.practicalfarmers.org/index.asp)



- communities that are alive with diverse connections between farmers and non-farmers; places where commerce, co-operation, creativity and spirituality are thriving; places where the working landscape, the fresh air and the clear water remind us of all that is good about Iowa.

The Land Stewardship Project,<sup>11</sup> based in Minnesota, is a private, non-profit organisation founded in 1982 to “foster an ethic of stewardship for farmland, to promote sustainable agriculture and to develop sustainable communities.” One of its programmes is Food Alliance Midwest (FAM), a certification programme that uses a certification seal in a public education and consumer awareness campaign to support local farms and foods. By looking for the MWFA certification seal, consumers can choose foods from farms that are local, environmentally friendly, and socially responsible. The Food Alliance Midwest claims to be the only certification that combines these healthful elements into one certification seal. In 2004, 65 farms and 49 retail partners were participating in the programme.

### *Farmland protection programmes*

The preservation of agricultural landscapes has been a policy goal in many of the more densely populated areas of the US. All eleven states in the Northeast have funded programmes for the *Purchase of Agricultural Conservation Easements* or *Purchase of Development Rights*, and eight of these programmes have been in operation since the 1980s. Programmes in the Midwest (Michigan, Wisconsin, Ohio), South (Kentucky, Florida), Pacific (California and Washington), and Mountain West (Colorado, Utah and Montana) have also acquired easements to protect farmland. To date, these programmes have expended USD 1.85 billion on easements to protect 1.36 million acres (Farmland Information Center, 2005). In comparison, the Federal Farm and Ranch Lands Protection Program, which was introduced in the 1996 Federal Agriculture Improvement and Reform Act, and re-authorised in 2002, has protected more than 400 000 acres to date, with allocations of more than USD 320 million. Analysis of the enabling legislation of all farmland preservation programmes (also including right to farm and agricultural zoning laws) throughout the 50 states finds that the greatest interest in preserving the rural amenities that flow from working farms is expressed in the legislation of more densely populated regions, while there is little mention of rural amenities in the legislation of more sparsely populated states (Hellerstein, *et al.*, 2002). The greater variation in population density in the US relative to the EU may explain why the interest in the non-commodity outputs of farming expressed in some States has not been the focus of Federal legislation.

### ***Conservation and Commodity Program Titles in the 2002 Farm Security Act***

The strongest empirical case for rural development benefits flowing from farm support comes from US agri-environmental programmes. The Conservation Reserve Program (CRP) provides annual payments to establish resource-conserving cover on environmentally sensitive land. In addition to the environmental benefits that are the stated objective of the Program, the CRP also brings beneficial effects to the landscape and increased opportunities for wildlife-related activities. The annual value of these activities was estimated at USD 737 million, equal to USD 22 per acre enrolled in the

11. [www.landstewardshipproject.org/index.html](http://www.landstewardshipproject.org/index.html)

Program (Feather, *et al.*, 1999). Because of these benefits, the CRP may contribute to rural development strategies that promote the rapidly growing wildlife recreation industry (Henderson, 2004). However, the CRP is not designed explicitly to support rural economic development. Potential scenic value is not a criterion for scoring applications, and public access to CRP land is not required. From the community perspective, the CRP does not create incentives to create larger, co-ordinated conservation areas among contiguous properties (McGranahan and Sullivan, 2005).

Although land retirement in the CRP and the Wetlands Reserve Program account for the majority of USDA conservation funds (USD 2 billion in FY2005), nearly all the growth in funding for conservation programmes has been directed to working land conservation since 2001 (up to USD 1.25 billion in FY2005) (Cattaneo, *et al.*, 2005). The two largest working land programmes are the Environmental Quality Incentives Program, which provides technical assistance and financial incentives to livestock and crop producers for conservation and environmental improvements, and the Conservation Security Program, which rewards demonstrated land stewards for implementing practices that benefit soil, water, wildlife habitat or other resource concerns on working lands. In addition to cross-compliance provisions (Conservation Compliance, Sodbuster and Swampbuster) that tie the receipt of farm payments to management of highly erodible land and wetlands, these working land programmes help to create better neighbours for rural residents. Again, while heightened levels of stewardship may contribute to rural development objectives, the programmes do not explicitly address them.

As mentioned above regarding farmland preservation programmes, the Farm and Ranch Lands Protection Program (FRLPP) provides funds to state and local governments or non-profit groups to help purchase development rights that keep productive farmland in agricultural use. In contrast to the other Federal conservation programmes, the FRLPP explicitly espouses a rural development objective of preserving agrarian character. In 2004, USD 88 million was obligated for the purchase of 585 conservation easements throughout the US (Cattaneo, *et al.*, 2005).

In both entities, commodity support programmes comprise the bulk of spending on agricultural policy. In the EU, the market measures of Pillar I are not included as rural development measures. Whether or not commodity programmes in the US contribute to rural development objectives has not been explicitly addressed in legislation. However, the potential contribution of commodity payments to rural development warrants attention, given that an enduring mainstay of public support for agricultural policy has coupled the prosperity of the family farm to the vitality of rural America (Roth, *et al.*, 2002; Browne, *et al.*, 1992).

Assessing the impact of commodity payments on the rural economy is complicated by two unobserved counterfactuals. The first counterfactual is the evolution of the farm economy in the absence of commodity payments. Change in US agriculture is the result of a number of interdependent factors. While farm policies of themselves have not fundamentally altered the direction of change, they have in some cases altered the pace of change that may affect rural development. Farm consolidation, which has resulted in fewer farms and a smaller farm population, has been reinforced by payments that accrue mainly to the largest farms (Dimitri, *et al.*, 2005).

The counter to this claim – that farm payments have been effective in slowing the movement out of the farm sector – is difficult to assess, given the second counterfactual that we do not know the location of the economic activities that would have resulted in the absence of commodity payments. However, the available empirical evidence suggests

that farm payments, as structured in the 1980s and 1990s, were at best ineffective in stemming population loss from farm-dependent counties (Goetz and Debertin, 1996; McGranahan and Sullivan, 2005). Another CRP study on rural growth identified no long-term employment effects due to withdrawing farmland from production (Sullivan, *et al.*, 2004). This result counters the claim that the economic linkages to farming durably multiply the employment effects from commodity payments. To be clear, rural development is not an explicit objective of any current US farm programme. The available evidence suggests that rural development benefits from commodity programmes have been elusive.

## Parallels between US and EU approaches and experience

The strongest parallel between the US and EU is the evolution of agricultural policy away from subsidies contingent on production decisions. Budget constraints were the common influence that affected this evolution in both the US and the EU, while the influences of WTO disciplines, taxpayers, consumers, environmentalists, and other constituents, have played themselves out somewhat differently. In both entities, there has been the recognition that traditional farm support in the form of commodity subsidies is a blunt instrument for promoting a wide range of outputs that transcend support for producers of selected commodities. This recognition has been more explicit in the EU, where the concept of multifunctionality as a justification for commodity support was hotly debated before the separation of commodity payments from other forms of direct farm support, which were then labelled as rural development measures. A public debate on the value of the non-commodity output from farming has not been as explicit at the Federal level in the US, perhaps because the greater diversity in settlement patterns has hampered coalescing around a single “American model of agriculture”.

As the examples above demonstrate, farming’s contribution to rural development has been explicitly expressed in State and local initiatives in the US in ways that mirror more closely the EU approach. Thus, despite the seeming contrasts at the highest government levels regarding the role of farming in promoting rural development, there are much stronger similarities in the emphasis on local initiative to maximise farming’s contribution to rural development objectives. The importance of local initiative in both entities recognises development, whether agricultural or rural, as an open-ended process that is highly dependent on the application of local information. Arriving at a programme design that best mobilises this information and commits the resources needed to promote development will benefit from continued policy experimentation in both the EU and the US.

## Conclusions: can the EU experience inform the US policy debate?

As has been pointed out, the US and the EU share many of the same concerns when formulating rural policy. The principal difference is that by giving agriculture an explicit role in promoting the objectives of rural development, the EU has sought to promote greater coherence between agricultural and rural policy and thus mitigate some of the adverse impacts on rural communities. Since the US is facing many of the same rural issues, it is worth asking if there are lessons to be learned from the EU experience.

To answer this, it must first be asked whether Pillar II programmes have been successful in addressing the problems of rural areas. Since these programmes have only

been in effect for a few years, it is too early to do any rigorous evaluation of the success of the EU initiatives. Such an evaluation would require answers to the following questions:

1. Are the EU reforms more likely to increase the *entrepreneurial dynamism* of the farm sector? In other words, do the new policies encourage farmers to use their farms to exploit emerging market opportunities rather than as a producer of programme commodities and as a conduit for subsidies? Diversification would be one indicator, along with: a switch to non-traditional crops or produce; an increasing share of short channel sales to local markets or restaurants; agri-tourism or other non-commodity farm products, direct involvement in value-added enterprises beyond merely providing inputs, etc. From the community perspective, farmer involvement in LEADER initiatives or other efforts in development planning would be a good indicator.
2. Are the EU reforms likely to increase the quality and value of custodial functions in the farm sector? Two concerns come to mind. Without significant private-sector competition, large government outlays for caretaker functions may become inefficient. In addition, in the longer term the policy may be less effective in guaranteeing these benefits as financial incentives substitute for social norms governing farming practice.
3. Are new EU policies more likely than previous policies to raise rural living standards and reduce rural/urban income disparities? This leads to the bigger question of whether large outlays on agriculture can have a substantial impact on rural development given its small share of the rural economy. This is especially relevant in light of EU enlargement. All the new member states (with the exception of Slovenia) have a per capita GDP of less than 75% of the EU average and thus qualify for EU structural and cohesion funds. Some regions in the former EU15 will no longer qualify as Objective 1 regions, and funds under Pillar II of the CAP will be the only instrument for rural development available to them.
4. Trade-offs: Can the EU pursue its goal of sustainable agricultural development while also raising competitiveness? A move towards sustainable production practices could slow yield growth, and new requirements regarding quality and environmental stewardship could raise production costs. Will EU farms be competitive if production and export subsidies are reduced? Or will the result be a two-track European agriculture, split between large, industrial-scale farms and small “boutique” operations?

However, even without knowing the ultimate success of CAP Pillar II programmes, the EU experience suggests some new dimensions that could be added to the US policy debate.

The 2003 CAP reforms raise the question of whether some forms of farm support in the US can be evaluated on the basis of their contribution to meeting rural development objectives. The incidental rural development benefits associated with agri-environmental programmes in the US have been noted above. Clearly, a substantive debate on this issue would do more than merely append rural development objectives to any programmes found to have incidental benefits. The more productive policy debate would examine the design of these programmes and propose alternatives for maximising multiple objectives.

Similarly, the menu approach used in the CAP's second pillar provides a real-world example of the devolution of some farm programmes that could give support to proposals for the devolution of US farm support (Gundersen, *et al.*, 2004). Both the EU and the US recognise that the great diversity of rural areas requires that local solutions are devised to meet rural development challenges. This thinking has not extended to farm policy in the US, despite the great diversity in farming across states. As in the EU, the decision to link some forms of farm support to rural development objectives would likely require greater regional flexibility than is provided under current US Federal farm programmes. Whether increased flexibility in enabling farming's contribution to rural development would be better achieved using broad directives, as is the case in the EU, or through more decentralised instruments, such as block grants to state governments, would provide another productive area for debate.

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## Chapter 9. A Central Role for Agricultural Entrepreneurs in the Dutch Countryside

Barto Piersma<sup>1</sup>

### **Abstract**

*The Netherlands is a densely populated country situated in a river delta. Like in most other rural areas in Europe, agriculture is not the main occupation in the rural economy. However, agriculture still dominates rural land-use and the identity of the landscape. This means that farming activities remain crucial in maintaining the qualities of the Dutch countryside. The agricultural sector is beset by various problems, including low incomes (due to market developments), high costs, and adjustment problems related to the recent changes in the EU Common Agricultural Policy.*

*The Dutch countryside is increasingly attractive for economic activities other than agriculture: industrial, transport, trade and leisure activities, and other commercial and public services. At the same time, there is a need to maintain and strengthen nature and landscape values in rural areas. Agriculture plays an important role in the sustainable management of the countryside. Agriculture in general has to be economically competitive to play that role. Farmers in areas with natural handicaps will have to be compensated for staying on in order to maintain the countryside. Farmers who deliver “green services” should be rewarded decently.*

*According to the Dutch policy memorandum, “The Choice for Agriculture”, “entrepreneurship” is the decisive factor in the future development of agriculture in the Netherlands. The government’s view of its role in achieving the goals of a competitive agricultural sector as well as a high-quality rural area is that, if possible, government is not regulating, but facilitating and encouraging citizens to take individual responsibility.*

### **Introduction**

Like all other European countries, the Netherlands has changed in many ways since the 1950s. The population has grown from about 10 million in 1950 to over 16 million today. From being a largely agricultural country, the Netherlands has become a country in which services, industry and the public sector dominate the economy. Agriculture,<sup>2</sup> as the main user and owner of the land, has seen fundamental changes in its products and production methods.

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1. Head, Economic and Structural Policies Unit, Ministry of Agriculture, Nature and Food Quality, The Hague.
  2. In this context, including horticulture.



All this has had a profound impact on the Dutch *platteland*<sup>3</sup> (countryside or rural area): it acquired a mainly (semi-)urbanised character. This also changed the attitude of the Dutch people towards the countryside: rural areas are no longer considered as being areas exclusively for (agricultural) production, but are also expected to be available for living in and for leisure. Nevertheless, agriculture still remains the most important owner and user of the land. Almost 70% of the land surface of the Netherlands is used for agriculture – an extraordinarily high percentage compared to other European countries (European Commission, 2005). As such a large part of the surface is still used for agriculture, it is clear that this sector will have a central role to play in its management in the future.

A recent study of the Dutch Agricultural Economics Research Institute (Terluin, *et al.*, 2005) shows that, in comparison to urban regions, the rural regions in the Netherlands score equally, or sometimes even better, on most economic indicators. Social indicators, too, show no significant difference between urban and rural regions. The main problem therefore might be how to manage the open spaces in order to maintain and improve the quality of the countryside, the landscape and the natural environment.

This paper will focus on the role of agriculture in managing the Dutch countryside. It is largely based on the recently published policy paper *The Choice for Agriculture: a Vision of the Future of Dutch Agriculture* (Ministry of Agriculture, Nature and Food Quality, 2005). Together with the policy paper, *Agenda for a Living Countryside* (2004), they make up the basis of Dutch agricultural and rural development policies.

This contribution describes the current and expected developments in the Dutch agro-sector, its economic importance and its changing inter-relationship with the environment and Dutch society. It focuses on the role of farmers in managing the countryside and explores farmers' projected future incomes. It then describes future governmental policy towards agriculture and rural development. Finally, the paper draws some conclusions about the challenges for farmers and policy makers in the next decade.

## Agriculture in the Dutch countryside

The Dutch agricultural sector is closely connected to Dutch society. The sector provides its daily food, shapes its landscape and accounts for a substantial contribution to national income and employment. Almost 10% of employment and national income is directly linked to the agro-food chain.

Availability of food is no longer an issue in today's prosperous society. Nevertheless, Dutch (and European) agriculture remains of importance to future global food security. World population and income are expected to grow, leading to increasing food demand. The idea that Europe could rely on imports for its food is therefore less likely than has been argued.

The emotional aspects of food and its production are becoming increasingly important. In the densely populated countryside of the Netherlands, agricultural production takes place under the sight of society –it almost literally takes place in Dutch citizens' front and back gardens. Also, the fact that agriculture means working with living materials and natural processes causes much public and political debate.

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3. Literally translated: "flat land".

Agriculture has shaped and re-shaped the Dutch countryside, many parts of which are of cultural and historical value due, in part, to the fact that they are literally man-made; not only those parts of the Netherlands below sea-level (about a quarter of the country) with the open rectangular landscape of the polders, but also the higher parts of the country, are the result of human intervention. Because of its wide variation in physical characteristics (peat and clay soils in the lower parts of the country, sand and loess soils in the higher parts), the landscape in this relatively small country is quite diverse.

### *Economic prospects*

World population is expected to grow from 6 billion today to 8 billion by 2025. This means an increasing demand for agricultural products – stimulated, moreover, by a growth in average income. It is expected that this will have a positive impact on world market prices for agricultural commodities. However, in Europe (the most important market for Dutch agricultural products), population growth is low or even negative. The ageing population, the expected growth in average income, and changing life-styles will be the determining factors in the demand for agricultural products. Farmers and agribusiness will have to respond to the growing interest in convenience, health aspects (functional foods) and the emotional elements of food consumption. Farmers will also have to take into account demands from society concerning production methods and their consequences for the countryside.

The CAP will continue the path of reform in line with further liberalisation of world trade. Import tariffs will be substantially reduced, export subsidies will be phased-out and income support will be further decoupled. In future, it is likely that a flat-rate system will be introduced, while the available budget for direct payments will be substantially reduced. Payments will probably be limited to rewards for certain public services. Adapting to a liberalised market will be difficult for some sectors (*e.g.* sugar or starch potatoes) but, in general, Dutch agriculture will be able to maintain a solid position. Support in WTO partner countries will also have to be reduced and market access will also improve in other parts of the world. This will offer opportunities for the sector, although it is difficult to determine in exactly what way. The rise of new economies like China, Brazil and Russia will change global relations and patterns.

Next to market developments and developments in the food chain, technology and innovation also cause big changes in agriculture and the whole agro-cluster. For the future, clustering different activities in new logistic concepts may lead to lower transport costs and more efficient use of waste. Computerisation and mechanisation may further reduce labour costs. Many farmers already use milk robots and feed computers. In future, crop farmers will also use robots in their daily work (such as small robots for removing weeds). Environmental technology (use of new materials and energy-saving production technologies and new processes) may solve some pollution problems and bring about economic benefits at the same time. For example, it is already possible to turn a greenhouse into a net energy supplier. A bio-based economy may be interesting when oil prices continue to rise. Biotechnology promises a wide range of new possibilities to use less energy and crop-protection chemicals. Biotechnology also offers possibilities to increase plant production or for the production of medicines. However, public acceptance of such technologies can be a problem.

These economic and technological developments will have an impact on agricultural production methods, which, in turn, can have effects on the countryside not only in economic terms, but also in terms of its physical appearance. For example, the

introduction of milk robots and the increasing size of the average dairy farm are motivations to shelter cattle indoors on a permanent basis, but, as cows in green pastures are, in the view of Dutch citizens, a typical characteristic of the landscape, this poses a threat for the quality of rural areas and leads to much public debate. Clustering of intensive livestock farms or horticulture (greenhouses) for efficiency reasons can therefore have serious economic, ecological and social impacts on the area where these clusters are located, although at the same time, they do have the positive effect of creating new opportunities for these areas.

### ***Ecological aspects***

The agricultural sector depends far more on its natural environment than any other economic sector. Soil, water and sunlight are the primary production factors and much production does indeed take place in the open air. Agriculture is an open process in direct contact with air, soil and water. Clean, natural resources are indispensable for the sector. Meanwhile, the way in which agriculture is practised has serious consequences for the natural environment.

Dutch agriculture in general is a good example of intensive farming in a densely populated area. It was one of the first economic sectors to be confronted with the public demand to reduce its effects on the environment. In recent years the sector has shown that, with the help of new management methods and new technology much can be achieved. Dutch agriculture is now at the forefront of environmental efficiency, but in future it will need all its creativity to achieve sustainability in every respect. Food production and agriculture have to take into account the effects of their activities on the environment, not only because of public concerns, but also because it is in their own interest in the long run.

Since the mid-1980s, much has been achieved. Emissions of nitrates, phosphates and ammonia have been substantially reduced, while agricultural productivity has increased. Also, the use of chemical pesticides and herbicides has been halved since the late 1980s. In other words, eco-efficiency has improved. Nevertheless, a lot still has to be done in the coming years. Implementation of the EU Nitrates Directive and the Water Framework Directive ask for further efforts, especially for those farms located close to a Bird or Habitat Directive area. Climate change poses a serious challenge and risk for agriculture: it will force agriculture to adapt to changing circumstances (more extreme weather conditions, rising sea levels) and to lower its output of CO<sub>2</sub> equivalents.

### ***The societal context***

It has been suggested that in a densely populated country such as the Netherlands, a fast-growing share of agricultural surface will be used for other purposes. However, statistics show that this is, in fact, only a slow process, and affects about 7 000 hectares (or 0.3%) a year of the total agricultural area of approximately 2 million hectares. There is no reason to assume that this will change significantly.

At the same time, although perhaps not in quantitative terms, in qualitative terms a lot is changing, as noted in the *Agenda for a Living Countryside*:

*Although some of the traditional dividing lines between town and country are rapidly fading, the countryside still has special features, which are now being rediscovered and appreciated. For many people the Dutch landscape is strongly*

*identified with the Dutch character, and here there is a fundamental change in our attitude to the countryside. Where we used to regard it as a physical space for food production we now see it as an area for consumption, with core values such as authenticity, naturalness and quality.*

(Ministry of Agriculture, Nature and Food Quality, 2004)

The countryside has become a place for living, working and leisure for a predominantly urban population. This has important consequences for how the countryside is valued and for the way the farmers are supposed to manage it.

Because of Dutch society's attitude towards agriculture, its role in the countryside is of growing importance. Growing prosperity and mobility have turned the countryside into a recreation area or place of secondary residence for city-dwellers. This leads to a mixture of agricultural and non-agricultural activities. Urban standards and values also become more dominant in local politics in rural communities. This may cause tension, for example, when a farmer applies for a license to expand his activities. Aspects like noise, odour and light nuisance from stables, machinery or greenhouses and the spreading of manure are important, especially in the more densely populated parts of the country. Agriculture has to take into account that the countryside is no longer an area just for farming.

## Challenges for the future

What do the developments described in the previous section mean for the next ten-to-fifteen years?

It is expected that the declining trend in the number of farms in the Netherlands will continue, leaving a total of 60 000 farmers in 2015 (there were 84 000 in 2004). The agricultural surface, however, will only slightly decrease.

On the basis of several scientific studies and expert opinions the following analysis can be made for those sectors that mainly dominate the countryside. The most dominant sector is the dairy sector, using about 1.3 million hectares or two-thirds of all agricultural area (mainly grassland and maize for silage). The other 700 000 hectares are mainly used for arable farming and open-air horticulture (vegetables, fruits, flower bulbs, nursery products and other ornamental plants). Glasshouse horticulture, in production value the fastest-growing sector, uses only 10 000-15 000 hectares, but in visual terms it strongly dominates the countryside in the areas where it is located. The same is true for intensive livestock farming, which imports almost all of its feed from other countries and uses land mainly for the disposal of manure. Moreover, the intensive livestock sector is, to a great extent, located in environmentally sensitive areas in the Netherlands.

### *Dairy*

In recent years the dairy sector has been confronted with declining milk prices. Because of the high costs of land and milk quota, Dutch dairy farmers lost some of their head start on competitors. At the same time, the high prices paid for land and milk quota are a sign of the sector's vitality. Increase of scale seems to be the most preferred strategy

for Dutch dairy farmers and it is likely that by around 2015, the Netherlands will have approximately 14 000 dairy farms with an average size of 80 cows (compared to 24 000 farms with an average of 60 cows at the moment). Size, however, is not the only determining factor. There are large differences in the financial results among dairy farms of similar size, caused by farmers' diverging management practices. Also, the necessary investments, labour and technical possibilities pose a limit on the maximum size of a dairy farm. Some farmers may combine their capital, know-how and individual skills in larger companies, possibly in combination with new activities such as the production of biogas or co-operation with other sectors.

Although society has a positive image of the dairy sector, it does not mean that this image will remain unchanged. The dairy sector is the largest land-user in the Netherlands and is, more than any other agricultural sector, responsible for the typical Dutch landscape. An industrial-looking dairy sector with cows disappearing from public view will not be easily accepted by Dutch society. This might limit the acceptable development of the sector.

### *Arable farming and the open-air horticultural sector*

Dutch arable farms are, in terms of hectares, relatively small, compared to arable farms in other OECD countries. Moreover, there is a trend to mix arable farming with open-air horticulture, particularly in the production of vegetables and ornamental plants (especially flower bulbs). Increase of scale is limited by high land prices. In the past, intensification compensated for this, but environmental conditions now restrict further intensification. CAP reforms have considerable consequences for the production of sugar beet and starch potatoes. Furthermore, the new system of direct payments might restrain a shift to potatoes and fruits and vegetables. Also, more competition from east European countries, such as Poland, is expected for vegetables (onions, carrots and cabbages).

Despite these unfavourable prospects, there seem to be opportunities. The sector is organised relatively efficiently. Soil fertility, climate conditions and geographical location are outstanding. The arable sector could improve co-operation with the livestock sector to close the minerals cycle for manure. New forms of mixed farms may develop, which might offer possibilities for an increase of scale per activity. Rotating land with other farms enables specialisation without degrading soil fertility. Technological developments are expected in the area of precision agriculture and new environmentally friendly products and processes.

### *Diversified agriculture*

In 2003, almost 40% of agricultural holdings (particularly arable and livestock) were involved in one or more activities such as cheese-making on the farm, exploiting a campsite, nature management, day nurseries, care farms, education, wind energy, etc. The characteristics of the farm, the area in which it is located and the personal competences and interests of the farmer and his/her family determine the potential for success. Sometimes it concerns older farmers, preparing to close their farming business, but often it concerns young farmers who see potential in these activities.

In some parts of the country, there is definitely potential for these activities. It is likely that demand for diversified agriculture in the Netherlands will double in the years to come, although the demand will differ from region to region. For example, the market for nature management is most likely to grow considerably in the areas around the

national ecological network. There is also potential room for growth in the number of care farms. The market for recreational activities on farms seems to be saturated.

However, the care sector, the recreational sector and the agricultural sector operate largely independently of each other, and they lack the insight necessary to discover new ways of working together to their mutual advantage. It is of great importance to connect existing initiatives, to innovate and develop new arrangements. A further professionalisation of multifunctional agriculture is needed. A group of forerunners in this field have established a network (called *waardewerken* or “works of value”) to exchange experiences and join forces. They all have a rewarding agricultural activity, but they consider multifunctional agriculture as a way of reconnecting society with agriculture. This reconnection is realised by allowing people to experience the natural processes and rhythms of life that are linked to agriculture: space, tranquillity, contact with animals, plants and nature. The added value of their additional activities is inextricably bound up with the production of food. Without that, they would not distinguish themselves from other institutions in the field of care, nature and education. They find a challenge in combining and adding emotion and perception to their products. That is what makes their products unique.

### ***Intensive livestock sector***

The MacSharry reform of the CAP caused the loss of the advantage in fodder costs for the intensive livestock sector. Meanwhile, measures concerning animal welfare and environment increased production costs. Moreover, a number of outbreaks of animal diseases severely disrupted development of the intensive livestock sector in recent years. These setbacks also curbed the introduction of new technologies in the sector. Nevertheless, a recent debate on the future of intensive livestock farming in the Netherlands showed that the sector itself sees a positive perspective for the future. In north-west Europe, there is a demand for fresh, high-quality products. Further liberalisation of world trade offers opportunities for the export of less value-added products. The geographical location, the supply of raw materials through the port of Rotterdam and the presence of a large food-processing industry with re-usable by-products, are still a competitive advantage. Nevertheless, competition from countries like Brazil will increase, especially for the poultry sector.

Manure policy will lead to higher costs. This may stimulate new initiatives for the processing of manure. Farms located close to nature reserves will have to make extra efforts to reduce the emission of ammonia. Farmers will have to adjust and invest to meet higher standards. Investments are needed, not only to improve quality, but also to reduce negative effects for the environment. This will also help to regain public confidence.

The clustering of intensive livestock holdings could be interesting because it saves transport and energy costs and offers better possibilities for the re-use of waste products, as well as for the prevention of animal diseases. Transparency and communication are conditions for gaining public support for these industrial-looking agro-business parks.

## A central role for farmers in the countryside

The Dutch Government considers agriculture to be an efficient and effective manager of the land, and, for that reason, a sector of crucial importance in maintaining the countryside. Therefore, agriculture should remain able to play its role of supplier of not only marketable goods and services (such as milk, meat and vegetables), but also of “public” goods (for example, a pleasant landscape with high natural value in which people want to live, work and relax).

Figure 1.

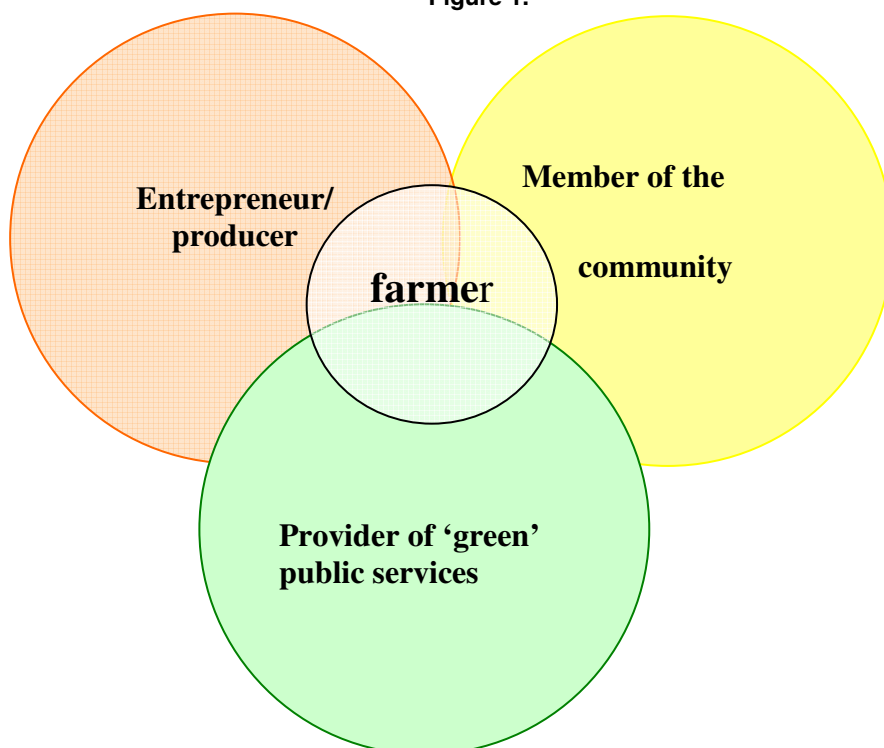


Figure 1 (above) shows the three roles of farmers in the countryside that can be distinguished.

1. Entrepreneurs and producers of agricultural products such as milk, meat, eggs, flowers and vegetables, but also other marketable goods and services like recreation, health services and various non-agricultural activities.
2. Providers of “green” public services: open vistas, high-quality nature, a pleasant, diversified landscape.
3. Members of the local community: farmers often play an important role in rural societies – for example, membership of local representative organisations, co-operatives, municipal councils (or by providing the means to build floats for street

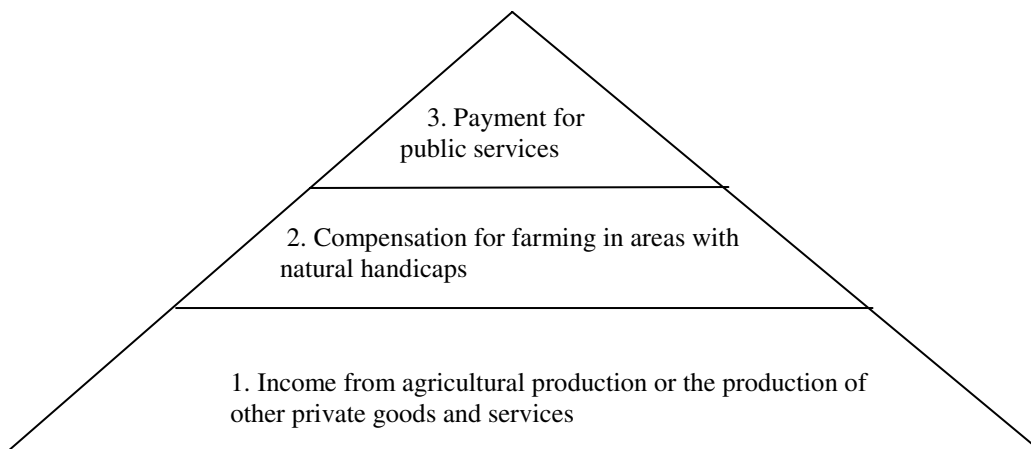
carnivals in the southern provinces, or flower parades in the western and eastern provinces).

Entrepreneurs in agriculture determine the future of their businesses within the framework of their individual capacities, the sector in which they are working and the local circumstances in which they are located. They have a promising future if they succeed in (re-)discovering a connection to the market, the environment and society, on condition that there is:

- a demand for the products produced;
- confidence in the applied production methods; and
- appreciation for the way the holding is managed.

Depending on the sector and the specific situation, a farmer's income will in future more or less depend upon one of the three "layers" shown in Figure 2.

**Figure 2. Elements of farmers' future income**



### *Layer 1: Income from production for the market*

The income of most farmers is acquired by producing agricultural products and/or other private (marketable) goods and services. That is – or should be – the core business of a farm. In the Netherlands, where the price of land and labour is relatively high, the farmers who earn the higher incomes are those who deliver their product in a very efficient way (*e.g.* milk, pork, poultry), or develop unique or innovative products with high added value (*e.g.* seed potatoes, flowers). But a very densely populated country like the Netherlands also needs other marketable services such as on-farm retail, tourism and (private) health care. The Dutch Government encourages these initiatives as long as they have real market perspectives where direct income support, especially from Pillar I of the CAP, will become more and more limited. Improved market orientation is a strict condition for survival for most farmers.



### *Layer 2: Compensation for natural handicaps*

Farmers situated in areas with a natural handicap (often areas of historical, cultural, recreational or natural importance, like the wet peat areas in the western parts of the country) might be compensated for the competitive disadvantage that arises when maintenance or up-grading of agricultural land-use is carried out for reasons of nature or landscape policy.

### *Layer 3: Payment for public services*

Farmers delivering specific public services for which no market exists (especially in the sphere of agri-environmental services and water management) might be paid from public funds by local, regional or national authorities.

## ***Entrepreneurship***

The previous section has shown that agriculture in the Netherlands has a promising future. Moreover, Dutch society needs the sector for the management of the countryside. However, the challenges are considerable and complex. It is not only a matter of improving the “green” craftsmanship, but also of dealing with the opportunities and threats that market, society and government generate.

Disparities in farm income are considerable, not only between farms of differing sizes, but also between farms which are in fact very similar as regards activities, size and location. A recent study shows that these disparities are primarily caused by variations in (operational) management (van Uffelen, *et al.*, 2005). Differences in (green) craftsmanship are believed to be the most determining factor. Modern agricultural entrepreneurship is more than merely a matter of “having green fingers”. It is also about flexible adjustment to changes in markets, governmental policies and society. The personal skills and competences of the entrepreneur are becoming more determining factors for the success of the holding than in the past.

To be successful as an agricultural entrepreneur, a clear idea of what the future holds is of great importance. This involves not only the holding’s strengths, but also the personal motivation and ambitions of the agricultural entrepreneur. What are his or her goals and what are the entrepreneurs’ strengths and weaknesses? What does he or she want to achieve? On basis of this analysis, farmers have to make their choices, sometimes very rigorous ones.

Since 1995, an “Agricultural Entrepreneur of the Year” has been elected annually in the Netherlands. Van Uffelen, *et al.* (2005) analysed the nominated candidates to see what they had in common. It is clear that most of them made a U-turn at a certain moment, some because of external reasons (*e.g.* an outbreak of animal disease, or urgency to comply with new regulations). But personal motivation played the most important role (*e.g.* pursuing an ambition to fulfil a dream, or wanting to introduce a new, improved way of doing things). All of them thought deeply about what steps should be taken to achieve their goals. In many cases this included an international orientation on, for example, potential markets or growing techniques. Finally, the operational management of the farm was adjusted. All through this process the candidates showed initiative, strength, creativity, persistence and drive.

Of course, the (nominated) entrepreneurs are a specific group. Not every one can be Entrepreneur of the Year. Every entrepreneur has an individual strategy, but most

strategies contain one or more of the following elements: reduction of cost price; appealing products; co-operation with other primary producers; marketing and sales; chain integration; additional income from diversified agriculture.

More than in the past, entrepreneurs have to choose their own strategy. Farmers operate in an increasingly complex and demanding world. Every entrepreneur will have to choose his/her own approach, taking into account the demands of consumers and society. Choosing cost-price reduction, chain integration, multifunctional agriculture or terminating certain activities can contribute to the success of a farm holding.

## The role of government

Views on the appropriate role of government shift over time. These views are influenced by general social trends, which affect the relationship between the government and citizens. Individualisation, computerisation and internationalisation lead to an ever-increasing variety of life-styles, preferences and ambitions. The existing institutional structure is no longer sufficient and this also applies to the way in which people participate in public and political life. A new approach to governance is therefore needed. In its policies relating to the agricultural cluster, the Dutch Government wishes to encourage citizens and businesspeople to take greater personal responsibility. The government aims to stimulate the competitiveness of the Dutch economy, mainly by increasing the role of education and knowledge and reducing the amount of regulation. The new role of government is not one of direct intervention, but of indirect inducement. Where possible, government is not directing, but facilitating and encouraging citizens to take responsibility. Government will set up prior conditions. Citizens will be encouraged to find their own answers to problems and challenges.

Central government will regulate only where necessary. Provincial and municipal authorities will play a greater role in decisions concerning rural areas and the countryside, as implementation and integration often take place at the regional and local level.

As has been seen in the previous sections, agriculture has a major influence on the Dutch landscape, but it also needs space to develop and reinforce its competitiveness. In this respect, the Government will support the spatial development of agriculture and the clustering of companies in the intensive livestock and greenhouse sectors. It will provide financial support for land consolidation and landscape management. As innovation is a key to improving the competitiveness of the Dutch economy and agriculture, the Government will stimulate this by encouraging new alliances between industry, research institutions and government to promote and support innovation, and by supporting innovative projects. Furthermore, the Government will make innovation easier by cutting “red tape” and making regulations more “user friendly”.

The application of “open standards” (meaning that the way a business complies with its statutory obligations is, to a greater or lesser extent, left to the business itself) also fits with an approach of less direct intervention and more indirect inducement. The point is to set the objective to be pursued, not to make a particular method compulsory. Open standards therefore provide holdings with more opportunities to be creative and inventive, make much greater simplification of the rules possible, and place responsibility where it belongs. However, placing greater responsibility on the shoulders of holdings does demand an appropriate compliance strategy. There will be fewer rules and those that remain will be different, but they will also be enforced more effectively.

## Conclusions

1. The Dutch Government considers a strong and competitive agriculture to be the best guarantee for good management of the countryside. Using almost 70% of the land area of the Netherlands, agriculture plays a crucial role in maintaining the countryside.
2. Agriculture has to adjust in order to fulfil the current and future needs and desires of society. This means that the sector has to re-think and renew its connections with the market, with the environment and with society.
3. It is clear that traditional CAP supports in the form of production support will disappear within 10-15 years. A discussion on decoupled direct payments will take place and if they are maintained they will only be paid under strict conditions concerning environment, nature, landscape, food safety and animal welfare.
4. These developments in the CAP may put the earning capacity of some vulnerable parts of the countryside under severe pressure. This is especially the case for the wet peat soil area in the western and north-western parts of the country.
5. The peat soil areas to the west are located in between the most urbanised regions of the Netherlands. To the urban population they are more than simply production grounds for traditional agricultural products. Citizens want to maintain these green buffer areas as they provide a balance between urban life and the other needs and desires of modern society, such as the enjoyment of natural landscape and the pursuit of leisure activities. Therefore, they want the agricultural activities in these areas to stay.
6. The challenge is how to manage these areas in the future in a way that will fulfil these needs and desires. Rural development policy should be focussed on this challenge.
7. This should be done in a mixture of policies that:
  - improve the competitiveness of market-oriented agriculture;
  - provide compensation for natural handicaps, where necessary and unavoidable; and
  - create mechanisms that allow society to pay for public services delivered by the sector in a way that is recognised by the WTO.
8. The role of government is one of more indirect inducement and less direct intervention, starting from the view that the general public and (agricultural) holdings take greater responsibility themselves.

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## Chapter 10. Agricultural Policies and Rural Development without Subsidies: New Zealand

William Smith<sup>1</sup>

### **Abstract**

*Agricultural policies in New Zealand since 1984 have been driven by a commitment to the free-flow of global market forces and the absence of farm subsidies. This policy shift in 1984 was designed, at least in part, to improve economic efficiency and promote a more effective use of land. A key part of this approach was the removal of the protection and promotion of specific types of land-use, notably agriculture. These changes occurred abruptly and without the development of any coherent national policy for rural development. Instead, the devolution of decision making to regional government resulted in a fragmentation of policy and a diversity of spatial outcomes.*

*The consequences of these policy changes have been a transformed rural landscape. Despite an expansion of forestry in some areas, the development of agricultural land into forestry has been less than expected. What has occurred is a massive expansion of dairying into previous beef and sheep areas, a major increase in life-style farms (hobby farms) and a massive subdivision of coastal and high-country land, often to foreign owners. All these changes have taken place against a background of declining local rural services such as banks, hospitals and post-offices. Within this context of upheaval, community initiatives have emerged seeking to re-establish or maintain such services which would otherwise no longer exist.*

### **Introduction**

Since 1984, New Zealand's agricultural and rural development policy has been underpinned by an ideology that the market should decide. The election of the fourth Labour Government in 1984 led to the abrupt removal of almost all support and subsidies to agriculture. Within twelve months all production subsidies had been removed, including those for fertiliser and other inputs. Funding for drought relief, floods and other natural disasters, the eradication of noxious weeds, support for irrigation and farm water supplies was also removed (Smith and Montgomery, 2003). In 1984, subsidies were estimated to represent as much as 33% of farm income: today, this has fallen to less than 3%, most of which is spent on agricultural research, the lowest in the OECD area (OECD, 1996).

This radical shift in policy was backed by Federated Farmers (effectively, the national farmers' union) (Chamberlin, 1996) and prompted by a national economic crisis. Driving the changes were a few leading politicians and public servants who supported a neo-

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1. School of Geography and Environmental Science, The University of Auckland, New Zealand.

liberal ideological stance. While agriculture was the prime target of moves to deregulate the economy, the broader policy changes impacted on all aspects of the economy with wide-ranging social and political implications (see, for example, Boston, *et al.*, 1992; Kelsey, 1997 and Le Heron and Pawson, 1996). The rural community was severely impacted in this period with the convergence of market-driven policy and the collapse of the New Zealand dollar and soaring interest rates, which for some borrowers rose to 30%, while land prices collapsed by between 50% and 70%. Indeed, what was neglected, even ignored, was the fact that agriculture is much more than a land-use subject to change, but an economic sector embedded in a complex social and cultural system.

## The political process

While the level of support to New Zealand farmers in 1984 was relatively high compared to current levels, these levels were themselves of relatively recent standing. The 1984 levels were not out of line with other modern industrial countries, and were lower than most. Indeed, as late as 1979 the level of agricultural support was only 15% and the rapid increase in 1978 to 33% was only brought about because of the introduction of Supplementary Minimum Payments (SMPs) (Federated Farmers, 2001). The SMPs were designed in part to cushion the impact of the United Kingdom's entry into the European Community and in part as a response to high levels of domestic inflation. The SMPs were sector-specific and went primarily to support sheep and beef farmers in the hill country. Consequently, while subsidies averaged 33% of output value in 1984, 40% of sheep and beef farm income came from subsidies (Federated Farmers, 2001). Inevitably, the withdrawal of subsidies hit those farmers disproportionately hard and had a significant, differential regional impact.

As the bulk of the subsidies had gone to hill farmers it was on these farms and in these areas that the impact of subsidy removal was most keenly felt. There was a retreat of production from marginal land, a massive reduction in the level of fertiliser application, a reduction in tree planting for erosion control, and a failure to maintain farm infrastructure. The impact of the changes was further evidenced in significant social distress, including an increase in clinical depression and broken relationships (see, for example, Elvidge, 1987; Reynolds, *et al.*, 1993; Smith, 1994; Smith and Saunders, 1995; Wilson, 1994; Willis, 1991; Cloke, 1996).

## Immediate social responses

There was initial disbelief and anger among the rural population (highlighted in a march on Parliament by farmers in 1986). However, the most immediate management response of farmers was to cut all discretionary expenditure. By 1987, the combination of falling commodity prices and increased input costs, exacerbated by soaring interest rates and falling land prices, saw fertiliser sales plummet. Fertiliser spread on pastoral land fell from 3.1 million tonnes in 1984 to 1.7 million tonnes in 1988 (Statistics New Zealand, 1996). Even official accounts which argued that the withdrawal of production subsidies had improved environmental conditions agree that tree-planting on slopes subject to erosion had undoubtedly decreased (Reynolds, *et al.*, 1993) and, as Smith and Saunders (1995) have documented, the collapse in agricultural incomes forced some farmers to the point where they collected old wire and nails to repair fences. Unable to afford pesticides, others grubbed weeds by hand and did their own shearing.

During this initial period of subsidy removal, hired labour was laid off. Capital expenditure on equipment and maintenance halted, as did all non-essential repairs and maintenance. New land development ceased and some previously developed land was allowed to fall into disuse. In retrospect, many farmers acknowledge that they survived only as a result of the build-up of fertility in the soil and investment in farm infrastructure – fencing, tracks and the like – legacies of the subsidies of the previous 10-15 years.

As land fertility was depleted, some farmers were forced to revisit their long-held beliefs that inputs such as fertiliser were non-essential maintenance costs. Inevitably, the abrupt decline in farm expenditure reduced the jobs available in local communities. Yet, paradoxically, it was often only where off-farm work was available that many farm-households were able to survive. The gendered nature of this work meant that farm women were commonly best positioned to gain employment (as in nursing or teaching) and many farms only survived because of the income generated in this way.

Other factors also muddied an understanding of the consequences of these policies for individual farmers. Fewer farmers were forced off the land than the officially projected 8 000 farmers. Federated Farmers sets the actual figure for farms lost at only 800 (about 1% of the total farm number) (Federated Farmers, 2001). Other commentators (see, for example, Taylor, 1990 and Fairweather, 1992) present much higher figures. Typically few farmers went bankrupt and the data on the number of farms lost and the interpretation of the data (even by farmers themselves) are uncertain. This is further frustrated by the patterns in the mid-1980s which saw the transfer and fragmentation of land in some parts of the country (such as Otago, Marlborough and Poverty Bay) into intensive uses such as wine and horticulture. This increased the number of “new” farms and further confuses the picture.

## Land-use change

The expectation behind the reforms was that restructuring of farming would occur and a more economically efficient pattern of land-use would result (Scott, 1996). To an extent this has been achieved, as, while pastoral land-use continues to dominate the agricultural landscape at just over 80% (Statistics New Zealand, 1996) and pastoral farming remains the dominant farm type, farm structure and land-use have fundamentally changed.

The number of farms in 1980 was 71 505; in 1990: 80 904; and in 2000: 91 645 (Statistics New Zealand, 1996; MAF, unpublished data). In effect, there is no evidence of a long-term decline in farm numbers associated with the removal of government support in 1984 – indeed, one might even argue that the reverse has occurred. Yet, while total farm numbers increased, the total farm area dropped from 21 million hectares in 1984 to 17 million hectares in 1987, and has continued to fall to around 16 million hectares in 2002. This decline is explained in part by the re-classification of some farmland into the conservation estate. However, at least some of this change is explained by the withdrawal of government assistance to sheep and beef producers and the cessation of government financial support for the conversion of non-productive land to farming. At the same time, the area cropped has decreased, down from 190 255 hectares in 1981 to 154 790 hectares in 1999, although the area for barley is up by 4%. Over the same period the area for maize climbed 13%, with 77% of this increase occurring in the South Island. The increase in both crops is largely due to the demand for winter feed in the burgeoning dairy industry.



The continued dominance of pastoral farming masks significant changes in the nature of the pastoral sector and in the use of pastoral land. Since 1990, for example, sheep numbers have fallen by 32% (Meat and Wool Innovation, 2003). Yet, images of a declining industry are countered by increasing lambing percentages and higher weights that have led to an 11% growth in the volume of exports (Meat and Wool Innovation, 2003). However, the most dramatic shift in pastoral use has been in the expansion of dairying. This has been driven largely by the removal of subsidies which, up until 1984, artificially increased the profitability of sheep and beef and distorted the relative competitiveness of other farm sectors. Previously concentrated in areas such as the Waikato and Taranaki, dairying has spread throughout much of the North Island and also has expanded dramatically in the South Island with Canterbury, Southland and Otago now established as key production areas.

Since 1984, the number of dairy cows has climbed from 3.2 to over 4.5 million. The number of herds has decreased from 16 000 to 13 500, and average herd size has increased from 137 to over 270. Total milk output from the national herd has more than doubled since the early 1980s, and output per cow, which in 1982-83 averaged 2 870 litres, was, by 2001-02, up to 3 520 litres.

These changes, as noted, reflect the relative increase in competitiveness of dairying compared to other pastoral industries. There has also been a considerable expansion and strengthening of export markets and in particular the successful diversification of exports in favour of high-value products such as dietary supplements, specialist cheeses, and casein, in addition to the traditional exports of whole-milk powder, bulk cheddar and butter.

This radical shift in the significance of dairying pre-dates 1984 and may even be seen as part of a natural progression in the evolution of the industry. Events such as the United Kingdom's entry into the European Community in the 1970s had forced a re-evaluation and repositioning of dairying within global markets. New Zealand could no longer rely on trade with the UK based solely on Commonwealth ties. Other markets needed to be expanded to account for the reduction in exports to the UK. Today, Asia is now New Zealand's biggest market region for dairy products (by weight) and the US, with annual dairy imports of over USD 500 million, is the largest single market by revenue. This contrasts with the situation in 1970, when 62.6% of New Zealand's export earnings from dairying came from the UK (*New Zealand Official Yearbook*, various years). This had already fallen to 24.8% in 1983, before the policy reforms occurred (Department of Statistics, 1984).

While sheep and cattle remain fundamental to New Zealand's agricultural economy, there has also been extensive experimentation and the emergence of some new farm types as farmers have sought to remain competitive. As a consequence, deer, ostrich and emu farming have expanded. Herds of milking sheep and goats have been established and there has been a major increase in alternative high-income crops including vines, olives and a diversity of market garden and orchard products (including herbs, cut flowers and a range of exotic fruits). The latter products are often designed to realise the highest possible price on the winter markets of the northern hemisphere. Not all of this experimentation has necessarily been successful – nor, again, is such entrepreneurship necessarily a direct consequence of the 1984 reforms. Similar experimentation with carob trees, date palms, silk, ostrich, olives, grapes and citrus can be traced back into the late 19<sup>th</sup> century (Nightingale, 1992), which perhaps reflects an on-going spirit of entrepreneurship characteristic of the New World.

This shift to high-value products such as horticulture and wine is a major factor in any explanation of the increase in farm numbers. Most of the rise in farm holdings has been in units of less than 20 hectares. Areas of horticultural production climbed by 47% in area between 1990 and 2000 (concentrated in regions such as Hawkes Bay, Canterbury and Marlborough, but also in Tasman and the Waikato). The land planted to wine grapes was only 4 853 hectares in 1984. By 2002, this had climbed to 12 822 hectares (Winegrowers of New Zealand, 2001) and was projected to reach 15 829 hectares by 2004 (New Zealand Winegrowers, 2002). With this expansion has come the emergence of significant regional concentrations in production. While some pre-existing wine areas, such as Auckland, Marlborough and Hawkes Bay, have expanded, other pre-existing concentrations have become relatively less important (most notably, Gisborne) (New Zealand Winegrowers, 2005), and some new production areas, such as Otago, have emerged, up from 100 hectares in 1994 to 1 100 hectares in 2002 (Statistics New Zealand, 2002). However, the average vineyard in New Zealand remains only 39.7 hectares and, out of 398 wineries, only three have annual sales of more than 2 million litres (New Zealand Winegrowers, 2005).

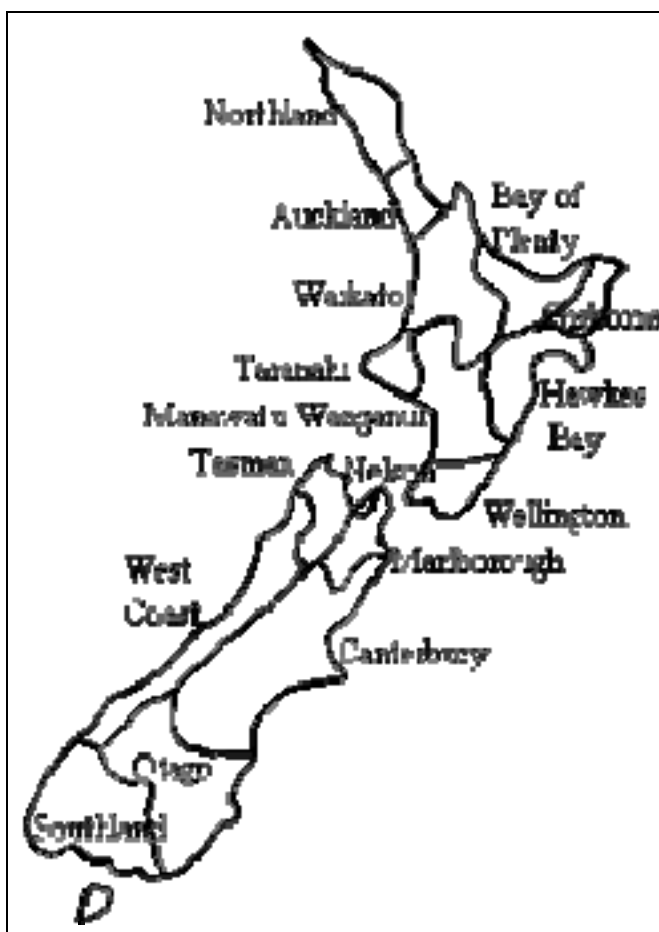
The package of reforms implemented in 1984 also included removal of the protection and promotion of specific types of land-use, notably agriculture. The combination of relatively low world prices for wool and meat, and, particularly since the late 1980s, relatively high prices for timber, resulted in a tree-planting boom in the 1990s. This boom contrasted with earlier periods of planting, both in terms of the greater rate of planting and the extent of planting on former agricultural land (Roche, 1996). However, the 1990s' boom still resulted in much less tree-planting than had been anticipated by government and less than the economic signals might reasonably have been expected to generate. To this extent, the free operation of the market model failed to generate the land-use change to forestry at the rate expected, predicted or required. Smith, *et al.* (2005) have presented evidence explaining this in terms of the social discount rate identified by different land-users, and by the different benefits and costs valuations associated with different cultural or social groups.

While the environmental and social costs of the policy restructuring were still evident a decade later (Smith and Saunders, 1996), by the mid-1990s rural land values were rebounding to pre-1984 levels and by 1995 fertiliser inputs were also back to their pre-1984 levels (Statistics New Zealand, 1996). It is worth re-emphasising that this reversal occurred under the free operation of the market and within the context of a very different pattern of land-use. In addition to the shifts in land-use discussed, as the economy rebounded there has also been a considerable expansion of hobby farms. The profile of landowners has also changed as, in response to an open-doors policy to foreign investment, there was (and continues to be) a massive sell-off of coastal land and high-country/mountain land to foreign owners.

## The impact on regional development

When implementing the 1984 agricultural policy reforms, no consideration was taken of the probable regional impact or of the wider implications for rural development. Again, the assumption was that rural development would best be determined by market forces. Responsibility for residual rural development policy was devolved to regional governments as part of a broader devolution of power. The long-term consequence has been a continued fragmentation of policy and policy results which vary regionally (Figure 1).

Figure 1. New Zealand Regions



In a relatively recent study of sustainability among hill farmers in the North Island (Rhodes, Willis and Smith, 2000) individual farmers stated, almost without exception, that they believed that their holding was economically and environmentally sustainable, but that they were uncertain that they could or would remain on their farm if the community infrastructure continued to decline. Lack of access to local health facilities, schools, sports clubs, banks and the like were seen having had a significant detrimental impact on the community's social cohesion and the long-term viability of rural life.

There is no question that the withdrawal of agricultural subsidies hit the entire rural community hard. In addition to the psychological impacts of adapting to a neo-liberal economic model (Fairweather, 1989), farmers' lack of capacity to spend on commercial inputs such as labour, fertiliser and equipment resulted in a rapid increase in unemployment in the supply sector. It is difficult to assess the impact of the removal of subsidies on the provision of farm-related services in rural communities. What can be determined is that between 1987 and 1989, throughout New Zealand there was a relatively small (-1.3%) change in the number of agricultural service business units (Ministry of Agriculture and Forestry, 1992). However, if this change is examined regionally, it becomes apparent that predominantly rural areas suffered a much more

severe loss of such services. The East Cape region, for example, witnessed a 15.8% decrease in service units, which was mirrored by decreases of 9.3% in Taranaki, 10% in Manawatu and 8.9% in Wairarapa. Likewise, in the South Island, the West Coast witnessed a decrease of 7.1% and Aorangi 8%.

Some of the decline in services has been attributed to changes other than the removal of agricultural subsidies: “Modern business methods and easier travel have decoupled the farm from the local community which has hastened the decline in rural services” (Ministry of Agriculture and Forestry, 2000).

The example of the closure of post-offices is particularly revealing with regard to the impacts of rationalisation and corporatisation on the viability of rural communities. Post-offices were valued by both rural and urban populations for a number of reasons, relating both to their core functions and other, less obvious, attributes. The value of their core functions lay in their “accessible network of 911 district post-offices, which also provided banking facilities, and 351 agencies” (Le Heron and Pawson, 1996). As a result, after their reincarnation as a state-owned enterprise in February 1988, following the loss of subsidies to postal services, 432 post offices were closed throughout the country. At the stroke of a pen this reduced access to banking and postal services in a comparable number of communities.

Rural hospitals were also closed in large numbers as a result of similar subsidy removal. Many hospitals were closed as Regional Health Authorities sought to “rationalise their purchasing arrangements by centralising facilities” (Le Heron and Pawson, 1996). Such centralisation based on an ideological vision of efficiency meant that many well-run hospitals in rural areas were closed or had their services reduced (Le Heron and Pawson, 1996). The result was less accessibility to medical care, especially surgical care, particularly with relation to access for the less well-off. Rural schools were also closed and schooling centralised. With their closure, communities lost what they regarded as an important common space for a range of different community activities (Ministry of Agriculture and Forestry, 1994).

While there has been an evident decline in service provision and community facilities, farmers themselves acknowledge the fact that their own shopping patterns and ability (and willingness) to commute long distances to sporting and cultural activities have often compounded their own problems. Even where a regional population has increased in response to the expansion of tourism, subdivision for hobby-farms or some other activity, the result has frequently been the fragmentation of the rural community and an increasingly beleaguered farm community. This has been reinforced by a government emphasis on the need for high-tech, value-added economic development which has undermined farmers’ confidence in themselves and their ability to adapt. To an extent, this has been balanced more recently by good economic conditions and a shift in political rhetoric in favour of agriculture.

In 1999 with the election of the Labour/Alliance Government there was a renewed attempt to engage with regional – and, in a less specific way – rural, communities as a means of redressing some of the emerging developmental consequences post-restructuring. The Ministry of Economic Development has initiated a specific regional development unit which “advises on regional development issues and co-ordinates and manages, across the public sector, policy issues related to regional economic development” and “works closely with regional groups and other agencies to develop and manage specific regional development policies and strategies” (Ministry of Economic Development, 2005). This unit has been involved in developing and implementing

strategy specific to those regions which have suffered most since the reforms of the late 1980s. A specific example of this is the Tairāwhiti Development Strategy, which brought together central government and the local Wairoa and Gisborne District Councils. This regional development strategy focuses on economic development as a means of reinvigorating these communities. Much of the focus of regional development operations has been on empowering Māori groups, such as the Ngāti Porou forestry projects (Le Heron and Pawson, 1996). Again, social and political necessity has required some backtracking on the earlier, narrow economic arguments.

## Conclusion

The evidence suggests that the radical shift in agricultural land-use and the restructuring of farming subsequent to the withdrawal of subsidies, including the experimentation in new land-uses, the development of new farm types, the retirement of marginal land and extension of the forested area were, for the most part, underway prior to 1984. In the post-1984 period these trends accelerated. One might conclude that the pre-existing policies had slowed and discouraged change but had not totally thwarted change in line with market demands. This could also be observed with patterns of regional demographic growth and decline. However, the speed and dramatic nature of change in the last 25 years have highlighted the social cost of change and, with it, generally confirmed patterns of regional well-being and deprivation.

In some instances, local initiatives have prompted a community-based (and funded) response to a decline in service provision. There is at least one example of a farm community taking over control of a grocery store threatened with closure due to lack of sales. With this initiative went a community commitment to buy from the store rather than commute to more distant (cheaper) urban outlets. This community agency has also been seen in the development of a community co-operative to retain a local petrol station. Elsewhere, communities have taken-over and administered the local hospitals threatened with closure *via* community health trusts (Barnett and Barnett, 2003). Just as farmers have responded to the new economic and social environment with their own individual initiatives, so, too, have other levels of agency responded to fill emerging gaps in service provision.

Any full-scale reversal of free-market policies remains unlikely. Few, if any, farmers admit to wanting a return to state subsidisation. At the same time the “down-side” of free-market policies is being highlighted to the wider public, which expresses concern over the selling-off of prime coastal land (often farmland) to foreign buyers. A similar concern is evident concerning the sale of prime scenic agricultural properties, particularly those in proximity to the Southern Alps. This trend may be accelerated by an on-going review of tenure in the high country which could increase the capacity of farmers to sell to developers. There is increasing public and political awareness that not all environmental management needs can be left to the market, just as there is also political acceptance that the market is often inadequate in ensuring service provision or in promoting regional development.

As elsewhere in the world, natural disasters (and the longer-term threat that such disasters may increase in number and intensity) help concentrate the mind. February 2004 brought severe weather to much of New Zealand, with the worst of this impacting on the Manawatu region over 14-16 February. Flooding occurred across large swathes of the Manawatu/Wanganui region, including areas that had not experienced flooding in living

memory. The event was classified as a 100-year storm by commentators (Ministry of Agriculture and Food, 2004). The total damage was estimated at almost NZD 400 million.

The immediate response suggested by the Ministry of Agriculture reflected the minimalist approach of the last 20 years – a token payment for counselling support/services (NZD 25 000). This was immediately over-ruled by the Cabinet and millions of dollars were allocated to flood recovery and remedial work. This appears to indicate a significant shift in government policy determined by recognition that the market isn't always an adequate mechanism to maintain economic activity and social harmony (or votes). An example of this is the East Coast Forestry Project, which suggests a similar acceptance by government that environmental needs may require specific financial support by taxpayers. This particular need is accentuated by the particular social and political demands in an area dominated by Maori land ownership.

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## Chapter 11. Impact of Agricultural Policy on Rural Development in the Northern Periphery of the EU: The Case of Finland

Hilkka Vihinen<sup>1</sup>

### **Abstract**

*Rural marginalisation is a significant problem in many less-favoured and remote European regions. In this paper, the effect of the Common Agricultural Policy and national agricultural policy on rural development in Finland is discussed. Finnish agriculture is heavily subsidised. Of particular importance are agri-environmental schemes, compensation payments to less-favoured areas and nationally funded investment aid. Examples of a study on land abandonment and on rural policy at municipal level are used to show what kind of problems the design of the current agricultural policy may cause, and what kind of creative solutions could be found on regional and local level to overcome the shortcomings of disintegrated policies.*

### **Introduction**

Finland is a northern country at the border of the European Union, located far from global market centres and characterised by “big” countryside and “small” agriculture. It is also a country with a long tradition of scattered settlement, where rural policy is fairly well established as an independent field of policy. This paper will focus on the impact of the ten years of EU membership and the Common Agricultural Policy (CAP) on rural development in Finland. Before joining the EU, Finnish agricultural policy resembled that of Norway: the market was sheltered, with high prices and a subsidy system with clear regional policy objectives.

When Finland joined the EU in 1995, the Union gained a northern member state whose community and regional structure differed considerably from the EU average. In central Europe the countryside is an area between dynamic urban centres which is dominated by farming, but in Finland dynamic urban centres are few and scattered (Annex Figure 1). Even in rural areas, farmers are not the largest population group. Most people living in rural areas work in the more densely populated areas (45% of the employed labourforce in the countryside in 1996). In 2002 about 42% of Finns were still living in rural areas, but agriculture is disappearing from large areas. Only about 10% of the whole rural population works in agriculture, and its share of the active workforce in rural areas is 19%.

In this paper, the design of agricultural policy in Finland is described first. Then the structural change in agriculture and development of rural areas since Finland joined the EU will be reviewed. The paper concludes with examples of recent research showing

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1. MTT Economic Research, Helsinki.

what kind of problems agricultural policy has caused in the countryside, and how to overcome disintegrated policy.

## Agricultural policy in Finland

### *Support policy*

In Finland support for agriculture, both in terms of its nature and amount, plays a central role in different parts of the country and types of production. The share of support payments in producer income is more significant than in any other EU country. Most of the subsidies paid in Finland come from the so-called second pillar of the CAP, and they are legitimised by the positive environmental impact of agriculture and by its contribution to the viability of rural areas.

In 2004 support payments formed 45% of the total return on agriculture and horticulture (EUR 3.97 billion), while in 1994, when Finland was not yet a member of the EU, direct payments represented less than one-fifth of the total return. Finland pays 56% of the support needed for agriculture from national funds, while only 44% of the support comes from the agricultural budget of the EU. At the same time, agricultural income has been falling: calculated in fixed prices, agricultural income was almost 34% lower in 2004 than in 1994.

In 2005, support under the CAP to Finnish agriculture totalled EUR 1 260 million (Table 1 and Figure 1). This consists of the CAP support for arable crops and livestock (EUR 515 million), compensatory allowances for farming in less-favoured areas (LFAs) (EUR 423 million) and environmental support (EUR 322 million). These forms of support are funded either by the EU alone or are co-financed by the EU and Finland (for a more detailed description of Finnish agriculture, see Niemi and Ahlstedt, 2005). CAP support is fully funded by the EU budget, and the EU contributes about 32% of the compensatory allowances and 55% of environmental support. The rest is paid from national funds.

CAP support paid on the basis of the arable area and number of animals constitutes a central element in the common agricultural policy. Because the support for arable crops is based on regional yield levels, in Finland the area payments remain well below the EU average. The area payment for arable crops is determined according to historical reference yields.

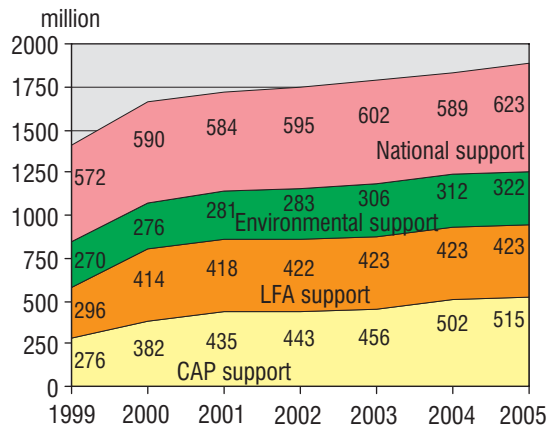
Compensatory allowances (LFA support) are paid to rural regions that have been defined as LFAs. The purpose of LFA support is to ensure the continuation of farming in these regions and to maintain the population. In the accession negotiations it was agreed that 85% of the arable area in Finland was to be covered by LFA support, but in June 2000 Finland became the first EU country in which all farmers in all parts of the country were eligible for LFA support, subject to the usual conditions. This support covers the whole cultivated area of 2.16 million hectares (ha).

In 2004 the LFA support paid to Finnish farmers totalled EUR 423 million. The EU contributes 50% of the compensatory allowances in Objective 1 areas and 25% in the other parts of the country. The average EU contribution is 32%. The per-hectare LFA support is highest in the north.

**Table 1. Agricultural support based on the CAP in Finland (financed in full and part-financed by the EU) (EUR million)**

	2000	2001	2002	2003	2004 (preliminary)	2005 (estimate)
<b>TOTAL</b>	1 072	1 134	1 148	1 185	1 237	1 260
<b>CAP income support</b>	382	435	443	456	502	515
Support for arable crops	327	345	345	345	362	351
Other area-based support	9	10	10	10	10	10
CAP support for livestock	46	80	88	101	130	154
Compensatory allowances	414	418	422	423	423	423
<i>EU contribution</i>	128	130	131	137	137	137
<i>National financing</i>	286	288	291	286	286	286
<b>Environmental support</b>	276	281	283	306	312	322
<i>EU contribution</i>	155	157	158	167	171	177
<i>National financing</i>	121	124	125	139	141	145
EU financing, TOTAL	665	722	732	760	810	829
National financing, TOTAL	407	412	416	425	427	431

Source: Niemi and Ahlstedt (eds) (2005).

**Figure 1. Agricultural support in 1999-2005 (EUR million)**

Source: Niemi and Ahlstedt (eds), (2005).

The Agri-environmental Support Scheme is part of the Agri-Environmental Programme of the EU drawn up in connection with the CAP reform of 1992. Environmental support compensates farmers for additional costs and loss of income resulting from the adoption of environmentally friendly farming techniques that go beyond usual good farming practice.

The support consists of basic measures, additional measures and special contract measures. In terms of the environment, the main emphasis is on water protection, but efforts are also being made to reduce emissions into the air, decrease the risks due to pesticide use, and take care of the rural landscape and biological diversity. In 2004 environmental support paid to Finnish farmers totalled EUR 312 million. On average, the EU contributes 55% of the environmental support.

### *National support policy*

CAP support alone is not enough to keep the Finnish farming sector alive under current market prices. Thus, Finland has negotiated the right to pay extra, nationally financed support.

The principles to be applied in determining the level and regional distribution of the national aid were agreed in the membership negotiations. The aid may not be used to increase production, nor may the total amount of support exceed the level in existence prior to EU membership. Nationally financed support comprises the aid to the north and to the south; national supplements to environmental support and compensatory allowances and certain other forms of support. It aims to ensure the viability of Finnish agriculture in different parts of the country and use different types of farming practices.

In 2004 national aid for agriculture and horticulture totalled EUR 589 million (Table 2). Aid is paid on the basis of the area, the number of animals and additional support price for milk. The aid for horticulture is paid as storage aid, area payments for horticultural production in the open and aid for greenhouse production. Finland has been divided into seven support areas for the allocation of the support.

**Table 2. National aid for agriculture in Finland, EUR million**  
(aid per production year)

	2000	2001	2002	2003	2004 (preliminary)	2004 (estimate)
Northern aid	354	354.9	353.8	357.6	387.0	332.5
National aid for southern Finland	141	134.9	133.6	130.8	127.0	100.0
National aid for crop production	76	80.5	93.0	98.7		
National supplement to environmental support					60.00	55.00
National supplement to LFA support						120.3
Other national aid	19	13.2	14.3	14.7	14.7	14.7
<b>TOTAL</b>	<b>590</b>	<b>583.5</b>	<b>594.7</b>	<b>601.8</b>	<b>588.7</b>	<b>622.5</b>

Source: Niemi and Ahlstedt (eds) (2005).

The Accession Treaty of Finland (Article 142) allows the payment of national northern aid to areas north of the 62nd parallel and adjacent areas, which represents 55.5% of the cultivable arable area in Finland.

National aid for southern Finland is based on Article 141 of the Accession Treaty, and has been a source of continuous discussion between the Commission and Finland. This Article has allowed the payment of aid due to the serious difficulties resulting from accession to the EU, but it does not define the concept of “serious difficulties” in any more detail or limit the duration of the measure.

The Finns have interpreted the Article as giving authorisation to the payment of aid over the long term, while the Commission has seen it as a temporary solution. The Commission considers that Finland should increase farm size to improve competitiveness, so that eventually national aids will no longer be needed.

Every few years, Finland has to negotiate with the Commission continuation of the aid based on Article 141. According to the outcome of the negotiations reached in October 2003, Finland may grant both national direct aid and raised investment aid for livestock production and horticulture in southern Finland until the end of 2007. However, when the Commission approved continuation of the aid under Article 141, it insisted that by 2007 the aid must have been gradually reduced by 30% compared with the 2003 level. On the other hand, Finland is allowed to pay higher compensatory allowances (LFA support) to farmers in southern Finland, as of 2005. The decisions made in October 2003 mean that no final solution was found regarding the interpretation of Article 141. The aid scheme will be reviewed on the basis of information that Finland will deliver to the Commission in 2006.

The uncertainty of the aid for southern Finland increases insecurity in southern rural areas and causes tension among farmers in different support regions of the country.

A national supplement to environmental aid was paid from 1997 until 2003. From 2004 the aid for crop production has been paid as a national supplement to environmental support. As from 2005, a national supplement to compensatory allowances (LFA support) is to be paid across the whole country. The supplement will be paid on a per-hectare basis.

## **The impact of agricultural policy on rural areas**

### ***Rapid structural change***

The structure of Finnish agriculture has changed rapidly in recent years. Before joining the EU, there were over 100 000 farms in Finland: now, ten years later, about 71 000 are left (Table 3). The number of farms has fallen by more than 3% a year. In livestock production the decrease has been even more rapid: for example, the number of farms specialising in dairy husbandry has decreased by almost 7% a year. The declining number of farms has affected the countryside unevenly. Proportionally, the number of farms has decreased most rapidly in eastern Finland and least rapidly in northern Finland.

As the number of farms has fallen, the average size has increased. In between 1995-2004 the average size of active farms grew by 38%, from 23 ha of arable land to over 31 ha. About two-thirds of this has taken place through land leasing. In 2004 the total cultivated area of farms receiving agricultural support was 2.24 million ha, of which approximately 33% (746 000 ha) was leased. The number of milk producers was slightly over 17 000 – about half the number in 1994 – while the average herd size grew from 12 to 19 cows.

Yet, even if the structure has changed quite rapidly, the development of agricultural productivity has been relatively slow. In 2004 the same use of production inputs yielded about 12% more than in 1992. The new economic environment, with significant, mainly nationally-paid, investment aid, has not promoted the profitability of agriculture, as had been expected.

**Table 3. Number of active farms and agricultural income in 1994-2004**

	Number of farms	Change from previous year (%)	Change from 1994 (%)	Agricultural income at 2004 prices (EUR million)	Index (1992-94=100)
2004	71 100	-1.3	-31	1 175	73
2003	72 000	-1.9	-30	1 126	76
2002	73 386	-2.7	-29	1 161	78
2001	75 384	-3.2	-27	1 131	76
2000	77 896	-5.2	-24	1 086	73
1999	82 142	-4.1	-20	1 024	64
1998	85 690	-3.0	-17	980	69
1997	88 370	-3.2	-14	1 191	80
1996	91 281	-4.5	-11	1 236	84
1995	95 562	-7.2	-7	1 415	96
1994	103 000 <sup>1</sup>			1 615	109

1. Estimate of the MTT Economic Research, Agri-food Research.

Source: Niemi and Ahlstedt (eds), (2005).

Changes in the production structure of agriculture are reflected in the use of arable land. The decrease in the number of cattle farms has led to a reduction in the grassland area. In 1995, the grassland area was 754 600 ha; by 2004 this had fallen to 620 000 ha. Another reason for this decrease was a change in the relative prices of different types of feeding stuffs, to the advantage of artificial feeding stuffs.

Since joining the EU in 1995, Finland's cereal area has increased, and now almost equals the level reached in the latter part of the 1980s. In 1995 the cereal area was 978 000 ha and, in 2004, 1 221 000 ha. The production area of bread cereals, in particular, has been expanding steadily since Finland joined the EU. Growth has been achieved through changes in support for crop production, development of market prices and a change in the production structure of farms.

At the beginning of 1995, market prices for cereals fell by 50-60%, and since then the prices of all cereals have been decreasing. In the future, prices for butter and milk-fat are also going to decrease considerably in the EU, which may entail a further reduction in Finnish dairy farming and, in consequence, changes in the economic activity of the countryside, in its landscape and biodiversity.

### *Countryside in transition*

Rural areas reflect the continuous process of change in society as a whole, driven by the development of technology, policy changes and a changing global economy. The changes would probably have been quite similar, but probably not as deep, if Finland had

not joined the EU in 1995. It could be argued that the CAP has had a more profound impact on the Finnish countryside than national agricultural policies.

Quantitatively, at the local level, the change that has taken place in rural areas is visible in the concentration of both human and physical capital to centres. At the regional level, both financial and human capital are moving away from northern and eastern Finland and concentrating in the south and the west. At the national level, the population is becoming concentrated in expanding urban areas and their rural surroundings and, at local level, in rural areas, ranging from remote villages to local centres.

The inter-regional differences in Finland are growing significantly. An indication of this is the regionally uneven distribution of new employment opportunities. Finland's position in the north-eastern corner of the EU has greatly influenced the development of the eastern part of the country. Most of eastern Finland is sparsely populated, and lags behind the other parts of the country, according to almost all socio-economic indicators. Apart from its peripheral location in the EU, its poor development has been due to the collapse of the Soviet Union and the slow recovery of the Russian economy. The development indicators for northern Finland are somewhat more positive: however, both settlement and the industrial bases are very thin.

In terms of population figures, eastern Finland is clearly losing the most, while in northern Finland the population trend is more even. In eastern Finland the number of people aged over 65 is clearly the highest (18%), and the level of the employed labourforce is the lowest (Table 4). Economic development has been poorest in eastern Finland, clearly below the average for the country as a whole. Southern Finland is by far the leader in economic development, while both western – and especially northern – Finland are also below the national average.

**Table 4. Development of the main regions in Finland, 1995-2002**  
(1995 = 100)

	<b>Southern Finland</b>	<b>Western Finland</b>	<b>Eastern Finland</b>	<b>Northern Finland</b>	<b>Whole country</b>
Population	105	100	96	100	102
Employed labourforce	118	111	107	115	115
Value added at current prices	154	141	127	137	146
Share of all farms in 2002	30.9%	35.0%	18.0%	13.6%	
Change in the number of farms, 1995-2002	-24.2%	-25.6%	-28.6%	-23.6%	-25.5%
Share of farmers over 65 years of age, 2002	14.6%	16.8%	18.0%	14.1%	15.3%

Source: Niemi and Ahlstedt (eds) (2005).

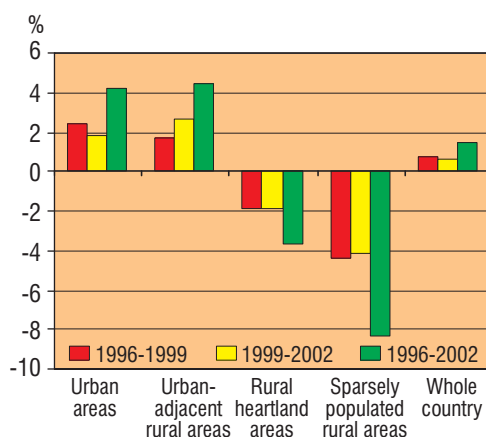
The number of farms has decreased markedly in all parts of Finland: in between 1995-2004 more than a quarter of Finnish farms ceased production. The number of farms fell most sharply in eastern Finland (29%) while, in northern Finland, the number of



farms ceasing production (21%) was slightly below the national average. In western Finland (where 35% of Finnish farms are located), the change has been close to the national average and in southern Finland it has been slower. The spatial concentration of farming is demonstrated by the fact that only about 18% of Finnish farms are located in eastern Finland and 13.6% in the north.

Measured by all indicators, the economic viability of eastern Finland is declining. Both eastern and northern Finland represent the large, sparsely populated rural regions faced with very difficult structural change. All in all, about half the surface area of Finland is sparsely populated and developing these areas is a very challenging task. Thinly-populated regions also exist in western and southern Finland.

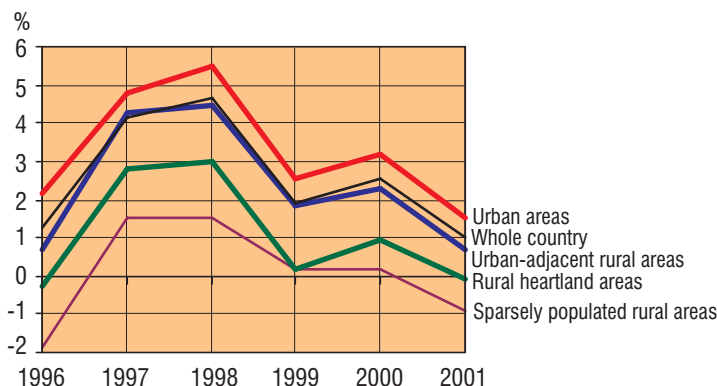
**Figure 2. Development of the number of people in different types of rural areas in 1996-2002**



Source: Niemi and Ahlstedt (eds) (2005).

If the structure of Finnish rural settlement is compared to the period prior to EU accession, in 1996-2002 the growing regions were smaller and depopulation affected larger regions than in the early part of the 1990s (Figure 2). The total number of jobs in the countryside has remained about the same during the years following Finland's accession (Figure 3).

**Figure 3. Number of jobs in different types of rural areas in 1996-2001**



Source: Niemi and Ahlstedt (eds) (2005).

There have been significant changes between sectors. The largest job losses occurred in agriculture and forestry, but there has also been a decrease in the manufacturing industry. However, employment in services and building has increased. All in all, the population and employment levels are not decreasing in all rural areas – most remain largely unchanged – while in some rural areas the population is growing and new settlement is being created.

The main problem is that the job losses and the decline in the industrial base are concentrated in the sparsely-populated areas. The basic settlement created by farming in eastern Finland is weakening to the extent that it already constitutes a threat to the regional economies. On the EU level, conclusions can be made concerning the living conditions in the other peripheral regions at the border of the Union. Finland's and Sweden's membership of the EU underlines the socio-geographical diversity of the Union's member states. From the perspective of a comprehensive rural policy, the farm-oriented rural policy of the EU is insufficient in sparsely populated, remote areas.

### **Agriculture, rural marginalisation and possibilities**

An EU-funded research project (EUROLAN) has analysed rural marginalisation processes in Finland – ecological, social and economic (Vihinen and Tapio-Biström, 2005). According to this study, in terms of agricultural development there is a clear trend of declining numbers of farms and, in some regions, also a decline in utilised agricultural land.

There is also a distinct change from more economically remunerative and labour-intensive milk production, to grain production which, in the adverse production conditions of the north, would require very large areas of cultivated land in order to provide an adequate income. Where the fields are small, stony and separated from each other by lakes, rocks and forests this is not feasible (forests and woodland, together with water areas, dominate the landscape in many parts of Finland).

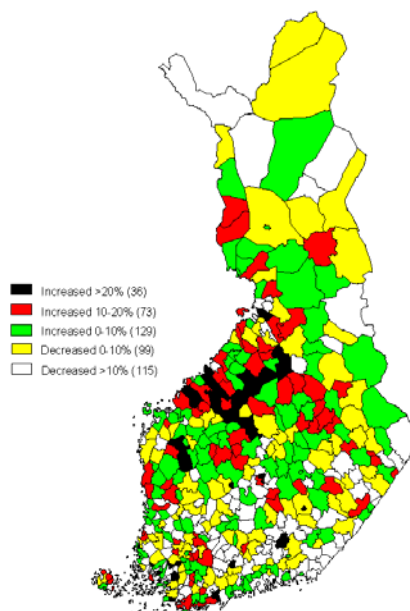
Pyykkönen (2001) analysed the change in milk production per municipality (Figure 4) and the amount of marginal agricultural land in Finland (Figure 5). The research was carried out by studying all the farms where farmers retired during 1996-99. It shows the percentage of agricultural land that became available for lease or sale, but in which no one expressed any interest. Based on his analysis, Pyykkönen concluded that 10% of all Finnish agricultural land is marginal land, mainly located in eastern and northern Finland – although remote fields which no-one wishes to cultivate are also to be found elsewhere in the country.

According to the EUROLAN study, 10% of agricultural land is either marginalised or under threat of marginalisation (mostly in eastern and northern Finland); about 8% of farms are threatened by marginalisation (see Peltola, 2003); and elderly farmers with smaller-than-average-sized farms are those most likely to be marginalised. The heavy regional concentration of dairy farming in a few areas and arable farming in others pose the greatest threat to soil quality, biodiversity and landscape.

The EUROLAN case study revealed that, in eastern Finland, there is a sense of empowerment among the local people, who maintain a positive attitude towards general development of the area and also maintain a belief in agriculture, despite falling

agricultural income. One should thus be cautious when labelling certain areas impossible for modern farming – people are, in practice, innovative, particularly in combining activities (and thus managing to keep their farms viable).

**Figure 4. Changes in milk production per municipality, 1995-2000**  
(number of municipalities)



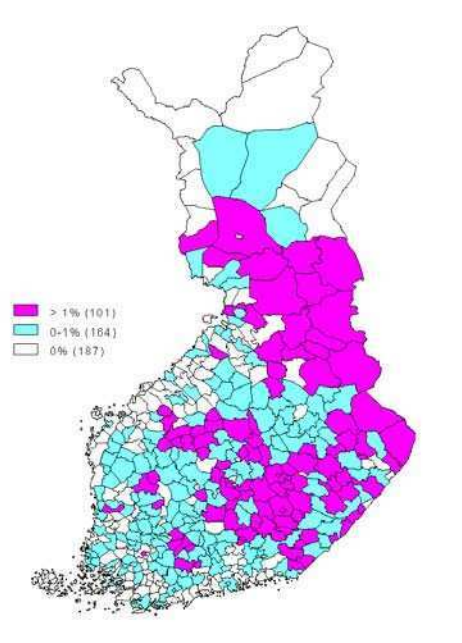
Source: Pyykkönen (2001).

In a country with a sparse population and poor production conditions, the operationalisation of multifunctionality is crucial. As shown above, Finland makes full use of the EU policy measures which are designed for environmental or rural aims, and yet large rural areas are becoming more and more fragile. New practices, contracts and compensation modalities that would compensate for tending the landscape and maintaining biodiversity have to be considered. In the EUROLAN case study, local people suggested that they would be ready to pay for someone to keep the fields cultivated and the scenic landscape open, but that their interest in paying reduces in the case of a field in the middle of a forest where hardly anyone passes by. In particular, lakes and open fields along the roadsides were highly appreciated. It would be possible to chart the interest locally, and commit the local actors to policies and strategies which will better maintain the connection of agriculture to the attractiveness of the rural area.

Another study conducted on the municipal level (Mustakangas, *et al.*, 2004) reported how, in a remote north-eastern municipality, a local bottom-up counter strategy of agriculture could be designed. The local producers decided jointly not to enlarge their farms by taking out large loans and fighting each other out of production, which is the trend taking place nationally. Instead, they chose to cut expenses and increase production only in small steps, if at all. Pluri-activity has remained the main survival strategy, combined with low costs of production. This example indicates that there is still some

room for manoeuvre at a local level, even in agriculture. In the Finnish case there are some signs of not using the EU policy measures for diversifying rural economies fully, because of the strong political pressure to focus on full-time farmers and on the promotion of their future at the expense of the larger rural economy.

**Figure 5. The share of marginal land of all agricultural land per municipality**



Source: Pyykkönen (2001).

## Conclusions

Under the current agricultural policy regime, only very few farms can be viable in Finland. Marginalisation of the landscape and the loss of biodiversity will continue under present policies, since the cultivated area is decreasing and cultivation of the remaining fields is becoming more monocultural due to the decrease in milk production and consequently, in pasturing. A severe development trend is the simplification of agricultural production, with all its impacts on soil quality, landscape and biodiversity and on the attractiveness of the countryside.

The present policy measures do not take sufficient account of the particular difficulties experienced by Finland – a large, sparsely populated country, situated in a remote northern location. The policy-enhanced process of concentrating production on fewer farms and in fewer – in all respects more prosperous – regions, counteracts efforts to attain balanced territorial development and cohesion. In the case of Finland, most of the subsidies farmers receive are either compensatory allowances to LFAs, environmental measures or national support based on specific geographic difficulties. The rationale behind these measures is connected to regional balance and multifunctionality. However, they seem unable to prevent the marginalisation process.

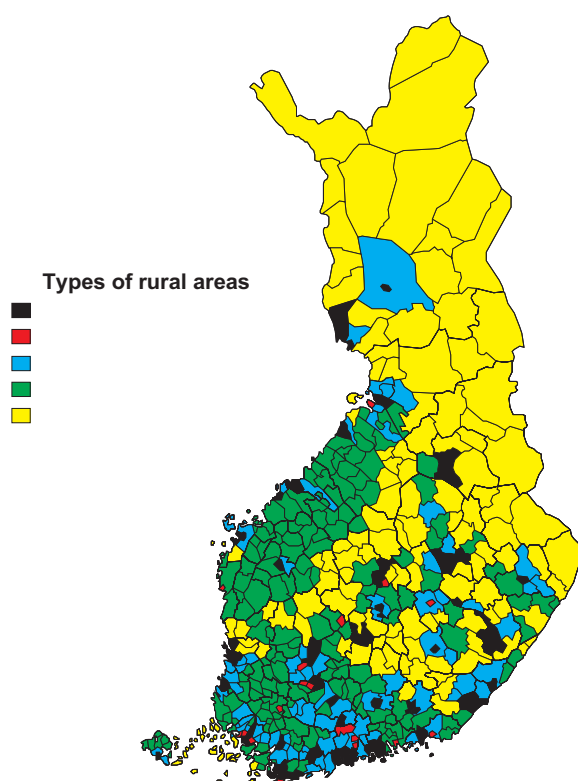
Current EU agricultural policy marginalises areas that are naturally handicapped and distantly located from the centre of Europe's main consumer market. Scale enlargement and concentration are not in all circumstances the keys to success. In addition to scattered settlement, rural areas in Finland have a long tradition in earning a living from various sources. In both agriculture and forestry – and in rural areas generally – it has always been quite common that, both within the family and at different stages of life, wage income has been combined with agriculture, forestry and other entrepreneurship. Pluriactivity has proven a functioning practical solution in areas where both settlement and resources are scarce and where the timing of different activities depends on the climate and is subject to great seasonal variations.

If agriculture is to be sustained in the future in all areas in the EU, regions should be allowed to tailor their farming in such a way that the old, pluriactive tradition can continue and become better connected to the demand for open landscape and biodiversity. In such areas, more should be invested in creating the kind of agriculture that is more closely connected to the local rural economy than to the vertical chains of global food production. Multifunctionality should also be operationalised closer to those who experience it.

The destiny of agriculture on the periphery of the EU does not lie solely in the hands of the CAP: better integration of other policy sectors, including regional policy and Structural Funds, is also required. In the ESPON Project 2.1.3 (Shucksmith, *et al.*, 2005), it has been aptly stated that it is now generally understood that a purely sectoral approach is less successful in enhancing and stabilising the performance of a region, whether rural or urban.

The high level of social capital which has been developed in local action groups and in the village movement must be secured by continuing to support these activities. The new programme period starting in 2007 should safeguard opportunities for this and try to offer more sophisticated tools in order to integrate the development efforts at local-economy level with those of civil society. Even though Finland is among the leading member states in mainstreaming the LEADER-type activities, the connection to general local and regional development could be improved.

The lesson to be learnt from the northern periphery of the EU is that agriculture should not be viewed as an autonomist phenomenon – its destiny is increasingly determined by its interactions with other users of rural space, and with the activities arising from other economic and social structures. This should also be reflected in the design of the policy.

**Annex Figure 1. Distribution of different types of municipalities in Finland in 2000**

Source: Kajaani Research and Development Centre of the University of Oulu and Finnish Area Research, FAR.

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## Chapter 12. Links between Agricultural Production and Rural Development: The Norwegian Experience

Frode Lyssandtræ<sup>1</sup>

### **Abstract**

*From an historical perspective, the rural areas in Norway have been very dependent on agricultural activities. The agricultural sector in Norway is now undergoing a period of change and employs fewer and fewer people. Up until now the arable (productive) land from the farms that leave the sector has, to a large extent, been farmed (rented) by neighbouring farms. Grazing land and other, extensively used land has not been rented out to neighbours to the same extent. Farmhouses change from being permanent houses to becoming holiday homes. How do these changes influence factors such as the agricultural landscape, the rural economy and the rural society?*

*The Ministry of Agriculture and Food has developed policies in order to ease and help create new jobs and new businesses in the rural areas. Many of these new businesses are either linked to farms, farm products or the agricultural landscape (i.e. these factors are important parts of the business plan). Lately, the tourism industry in Norway has shown increasing interest in supporting the maintenance of agricultural landscapes and rural settlements. Many tourists seem to choose Norway as their holiday destination because of the scenic landscapes of wild nature combined with rural and agricultural settlements and landscapes. How strong are the links between the agricultural landscape, the actual farm and the new rural businesses?*

*In this paper, the Norwegian case will be used as a starting point in exploring the links between agricultural production and rural development. Some examples of how agricultural policies can be used to achieve Norway's rural development policy goals will also be given.*

### **Facts about Norway and Norwegian agriculture**

In order to understand the Norwegian policy framework regarding rural policies and agricultural policies, knowledge about Norway and Norwegian countryside and agriculture is essential. Norway is the northern-most country in Europe. It reaches from 58° to 71° Northern latitude, a distance of 1 750 km (*i.e.* longer than the distance from Oslo to Rome). The Norwegian mainland measures 323 758 km<sup>2</sup> (385 155 km<sup>2</sup>, including Svalbard and Jan Mayen), which is about the same size as the state of New Mexico in the United States of America. It has a total population of 4.6 million people and the second-lowest population density in Europe (Statistics Norway, 2005). Approximately 23% of

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1. Advisor, Ministry of Agriculture, Oslo.



the Norwegian population lives in rural areas, *i.e.* Norway is less urbanised than many other developed countries.

Approximately 3% of Norway's land area is cultivated agricultural land. Productive forest area covers 23% and the rest consists of mountains, unproductive forest, lakes, built-up areas, etc. About 30% of the cultivated land can be used for grain production (with a reasonable yield). Norway has approximately 56 000 farms (2004). The average farm size is 20 hectares, and the average size of a dairy herd is 17 cows.

As in most other countries, the number of farms and the number of farmers have declined rapidly over recent decades. In 1959 there were close to 200 000 farm holdings in operation, compared to approximately 56 000 in 2004. The total employment (in man-years) carried out in agriculture was more than 250 000 in 1959, falling to 70 000 in 2004 (Rogstad, 2005). These changes, together with an even stronger rationalisation in the fisheries sector, have increased the pressure on rural communities.

These changes have occurred in a situation with high transfers to the agricultural sector in Norway, compared to other sectors or other countries. This has been a great challenge for rural parts of the country. In some rural communities agriculture is still the main source of income, and the communities have few other alternative business opportunities.

## Urbanisation

Norway is, as described earlier, a country with low population density compared with other European countries. Norway is also, from a European perspective, a rather rural country, even though approximately 87% of the Norwegian population was living in what are termed city regions in 2003. In 1980 the corresponding figure was 85% (White Paper on Regional Policies, 2005). The definition of urban includes larger areas around cities and towns, and some of these settlements could be considered rural in statistical surveys in other countries. Norway is a not mature country as defined in migration theories (Selstad, 2004). That means that Norway is still experiencing a rather strong rural-urban migration (urbanisation) in a western context. The urban-rural migration is low in Norway compared with many other European countries. Norwegian regional policies and Norwegian agricultural policy have had an important role in "slowing down" urbanisation in Norway. To have a stable settlement structure has been a political goal in Norway for decades. Another factor is the industrialisation of Norway, which has been based on hydro-energy, with most plants being located in rural areas. During the last two decades the general rural/regional support in Norway has been reduced. Historically, agricultural policies have been an important part of rural development policies and, because of the reduction of the general rural economic policies, the importance of agricultural policies has become even stronger.

## General agricultural policies

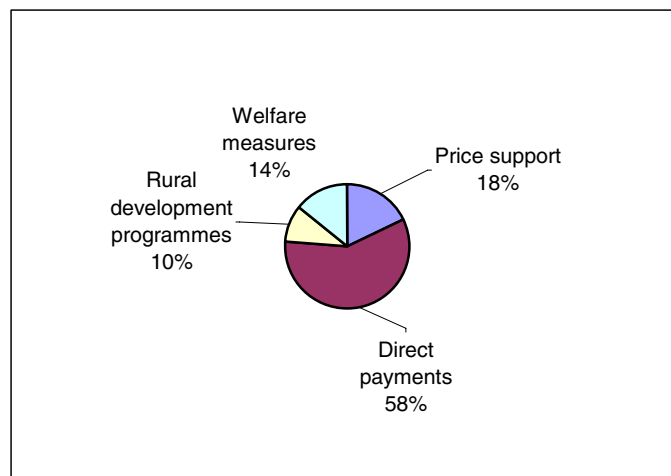
The main focus of Norwegian agricultural policies has developed from productivity, food security and income development for farmers in the post-war period, towards a broader scope. These changes mainly took place during the 1980s and 1990s. Environmental issues and rural development became more important parts of the policy (Almås, 2004). The goals for the new policy are to:

- produce safe and healthy food of high quality to satisfy consumer preferences;
- produce other goods and services indicated by the overall resources of the industry; and to
- produce public goods, such as viable rural communities, a broad range of environmental and cultural benefits/values, and long-term food possibilities (sustainable resources use).

In short, this is what is often called multiple goals for agriculture or multifunctional agriculture.

In the mid-1990s the nature of agricultural support changed from being mostly price support, to being based more on a system of direct payments to farmers. Environmental and rural development schemes were introduced. Figure 1 illustrates the distribution of money between the different types of measures in Norwegian agricultural policy. The environmental support is both a part of the direct payments and a part of the rural development programmes.

**Figure 1. Distribution between types of agricultural support, 2005**



Source: Ministry of Agriculture and Food, Oslo.

Price support mainly takes the form of the border protection, but there are also a few schemes that are related directly to the price of an agricultural product. Direct payments are being paid per acreage of agricultural land and per headage of livestock. Acreage support is closely linked to environmental goals, but support for livestock, such as payments for extensive grazing, is defined as an environmental payment. The welfare measures are meant to ensure farmers similar social policy rights to those of employees in the private and public sectors. The rural development measures and the environmental measures were introduced in the late 1980s and, in 1995, the LUF (Agriculture Development Fund, a fund handling investment and environmental support in agriculture) was created. This was, and still is, mainly for investment grants.

## New ideas and new strategies – “Agriculture Plus” and “Agriculture – More than Agriculture”

The policies for rural development have been changing over the years. With the new Minister, in 2001, a new strategy was developed.

*The increase in efficiency of Norwegian agriculture will proceed. Simultaneously, we will arrange alternative economic development with a starting point in the individual farm, and render living in the rural districts more attractive. This strategy is called Landbruk Pluss (Agriculture Plus).*

Lars Sponheim, Minister of Agriculture and Food, 2001-05

The main areas for the strategy were:

- a new and enhanced economic development with greater focus on the market throughout the country;
- increased local authority and responsibility at the local level;
- Good housing and living conditions: “the property policy of agriculture” (stimulating “life-style farming” and getting people to want to live on farms instead of turning them into holiday homes);
- cultural change towards innovation and an innovative mentality;
- stimulation of innovation through science and new knowledge; and
- simplification of regulations.

Most of the items do not deal with subsidies or payments from the government. Many of these ideas relate to information and changes in attitude. The strategy has been followed up in many different ways. Simplification of regulations has been an important part of the job within the Ministry. Delegation of responsibility to local authorities and local governments has also been important in order to give the people living in the rural areas more power in deciding on matters that affect them. There has been delegation of both payment schemes and regulatory decisions.

More authority regarding the control of measures and regulations has also been given to the regions of Norway (18 counties plus Oslo). In Norway the state has a representative body in each county (Fylkesmannen). This body has co-ordinated the different regional authorities and interest groups in developing regional strategies for rural development.

The strategy has also been followed up by different pilot projects where new ideas have been (and continue to be) tested. The pilot projects have several different objectives, including testing new ways of organising the authorities and structures, and testing new innovation systems and new business ideas.

In 2005 the Ministry of Agriculture and Food published a more in-depth strategy as a follow-up to the Agriculture Plus Strategy. The new strategy is called Agriculture – More than Agriculture. The strategy goes into more detail on how to develop the possibilities that lie within agriculture and within the rural areas in general. The strategy is divided

into different categories under agriculture and forestry. They are: food, wood and fibre, bioenergy and tourism linked to agriculture. Goals are recognised for each category.

### **The links between agriculture and rural development in Norway**

Employment in rural areas in Norway has historically been very dependent on the agricultural sector. However, the number of people employed in the agricultural sector has decreased dramatically over the last 30 years, and this drop has been largest in the most remote areas. However, agriculture is still the most important sector, counted as a share of total employment at municipality level in the rural and remote areas (Orderud, 2003). In the 1970s and 1980s the loss of employment in the agricultural sector was, to a large extent, compensated by large growth in the public sector, especially within the school and health-care systems. These sectors are not expected to have the same growth in the future, and it is therefore unlikely that these sectors will continue to substitute for new losses of jobs in agriculture.

Agricultural policy and agricultural support schemes have to a large extent (directly or more indirectly) rural development as a goal. Rural development is also one of the multifunctional aspects of agriculture. Hegrenes (Hegrenes, *et. al.*, 2002) analysed the regional component of the agricultural economic measures. The direct regional measures are small compared to the total support level, but there are many indirect measures. An important observation is the distribution of support between different agricultural sectors in Norway. Milk and sheep farming are the agricultural sectors in Norway with the highest level of support, and they are both typical productions located in less-favoured areas. This again indicates that changes in the agricultural regimes in these productions could have a great impact on the less-favoured rural areas in Norway. Norwegian farmers have always been involved with additional work besides their main agricultural activity. Historically, the coastal farmers went fishing and inland farmers worked in the forest during winter (Almås, 2004). These extra jobs no longer exist, and farmers need to find other types of additional jobs in order to earn an acceptable income.

The rationalisation of mainstream agriculture is considered to be rapid in Norway, but the new strategy and efforts are producing alternative jobs. After decades of mainstreaming in the food market, a new trend and an increased interest in Norwegian food culture and an increased variety of products have given new life to the Norwegian food market. After approximately 10 years of alternative incentives there are now close to 500 different cheeses and a series of new, small-scale food-processing firms. The increased interest in cultural and historical events and alternative accommodation has also resulted in new jobs in rural areas.

Over the last few years, the spending power of Norwegian households has increased. This has led to a growing interest in owning summerhouses or mountain cottages. This has become an important industry in many rural areas along the coast and in the mountains. Many farmers, as well as being landowners, are active in building the new huts and houses. They also provide services such as snow-clearing, firewood deliveries and acting as general caretakers of the huts and houses. This gives spin-off effects in these places, because it increases sales at the local grocery, restaurant, petrol station, etc.

The Norwegian tourism industry accounts for 4% of gross domestic product and employs more than 6% of the Norwegian workforce. The tourism industry has more than 20% of the value added in 20 rural municipalities (Innovation Norway, 2005). These results indicate that tourism is a growing industry in Norway. There are several projects

where farmers and the travel industry co-operate to deliver “full package deals” to tourists with accommodation and planned activities (Sponheim, 2005).

Another success story for the alternative use of farms is the adaptation of farms for medical or visiting purposes. This effort is called “Into the Farmyard”. More than 1500 farms in Norway are now involved in some kind of “open farm” business. This can take many forms, such as being an open farm for kindergartens and schools, or being a part of a training programme for the mentally ill.

Norwegian farmers also usually own some smaller forest areas. In the mountain areas the farmers have large commons (areas where farmers own the land as defined groups). In the forest and on the commons the farmers own the hunting rights. Farmers along the rivers usually own the right to fish in their part of the river. Salmon fishing in the best rivers in Norway represents, for many farmers, a very important and significant source of income.

As described above, there is a new strategy within the Ministry of Agriculture and Food which aims to create an agricultural/rural policy for all 200 000 agricultural holdings, and not just for the 50 000 active farms. This policy has already resulted in an increased interest in living on farms. There is an increasing interest from city-dwellers to buy small farms for recreational purposes and, most importantly, for a new way of life in the rural areas. This trend is strongest in areas that are within reasonable distance from the city. However, if people are going to live in the countryside they need to create their own business. These lifestyle farmers will bring new ideas and optimism to rural areas. However, this policy would in many countries be classified as strictly rural, and not an agricultural policy. The Norwegian case might therefore be unique in this respect.

### ***Agricultural landscape: a public good and an infrastructure for new businesses***

In Norway, the agricultural landscape is seen as a valuable side-effect of agricultural production. Landscape is, in most western countries, a public good, since people are usually able to enjoy it without paying. Norway also has laws regarding rights of free access that strengthen the public-good nature of landscapes. Norwegian tourist organisations and larger tourism companies, such as the cruise ships *Hurtigruta* and others, have become very interested in their symbiotic relationship with agriculture and rural Norway. The main product of this tourism industry is to show tourists the wild and beautiful Norwegian nature and a living countryside (Innovation Norway, 2005). Without the living countryside the product becomes less attractive.

Norwegian agricultural policy today is organised so that payments and regulations maintain the landscape that people value, and policies make sure that the free access to the landscape is secured. However, the landscape can also be seen as an infrastructure that can be used for new businesses. Organised excursions, where the living countryside is the main experience, are an important part of Norwegian tourism. Using the landscape in the advertisement of products is well-known worldwide. Cheeses, hams, potatoes and apples etc. are given an extra dimension by presenting them as *fjord* apples or mountain potatoes. They are often sold in packages with photos of beautiful agricultural landscapes. These products are filling niches in the market. However, they are unlikely to replace standardised products as the main volume of Norwegian agricultural production.

However, the agricultural landscapes are located in both central and rural areas of Norway. Landscape is therefore not, therefore, a strictly rural interest. Agriculture, both in central and rural areas, can have important environmental value. Various surveys of people's preferences regarding landscapes have shown that they have a tendency to rank traditional farm buildings and landscapes more highly than modern and more efficient farming systems. Trying to fulfil both goals simultaneously is, of course, a challenge for Norwegian agriculture (Orderud, 2003). There is no one-size-fits-all solution in this respect, and it is important to make room for a variety of options for the farmers and the rural population.

### **How strong are the links between agricultural production and rural development?**

This paper has shown that agriculture is important for many of the rural areas in Norway. However, the percentage of the workforce and agriculture's share of value added have been significantly reduced over the last 30 years. The rural areas do not seem to attract new businesses to the same extent as central areas. The distance to the market, the difficulty of attracting well-qualified staff and the lack of local capital often put rural areas at a disadvantage. New businesses are therefore often located in the cities. Today there are strict international regulations (especially within the European Economic Area) regarding payments or other forms of support in many sectors. This reduces the possibility for other sectors to adjust due to the economic disadvantage in the rural areas. It is probably not possible to replace agricultural support by support to other types of businesses (Hegrenes, 2003). The political possibilities to compensate rural areas for their disadvantage in the market are therefore limited.

The tourism industry, however, is an industry that is growing in rural areas. Norway is an attractive destination because of its nature, landscape and fishing and hunting possibilities (*i.e.* the traditional attractions of rural areas). However, this paper has also shown that the tourism industry is reliant on the agricultural landscape and a viable countryside. It is important to realise that the tourism industry cannot rely on "museum agriculture". Tourists want to see real landscapes and a genuine countryside where people live and work. Because of this strong cross-sector dependency, the Norwegian Government sees agricultural policy as an integrated part of the development of the tourism industry in rural areas, both now and in the future. In co-operation they have a larger potential to be sustainable, and this co-operation will be beneficial to both the agricultural sector and to tourism.

### **Conclusion**

Agricultural production is an important upholder of rural communities and the Norwegian countryside. It is unlikely that other industries can replace agriculture's role in this respect. However, agriculture has a potential in developing niche products, and increasing its co-operation with the tourism industry will make both industries more viable.

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## Chapter 13. Interactions between Agricultural Policy and Multifunctionality in Czech Agriculture

Tomáš Doucha, Dušan Vaněk<sup>1</sup>

### **Abstract**

*The development of multifunctionality in agriculture (including its links to rural development) belongs among the pillars of the European Model of Agriculture supported by the Common Agricultural Policy of the European Union. However, links between the agricultural policy and the development of multifunctionality in agriculture are not unambiguous. The policy measures have interactions with farms and other stakeholders. The farm structure influences to what extent the policy goals are really filled. This paper defines the multifunctional roles of agriculture and briefly recapitulates the development of Czech agricultural policy during recent years with respect to supports for the multifunctional roles of agriculture. Based on the latest data sources, impacts of policy on the development of multifunctionality in Czech agriculture are also analysed. In the Conclusion, problems related to the further development of the multifunctional character of Czech agriculture are discussed. The solution to these problems will become one of the objectives of the National Strategy of Rural Development and related programmes under the European Agricultural Fund for Rural Development for the period 2007-13.*

### **Multifunctional roles of agriculture**

The multifunctional roles of agriculture are realised in the form of positive externalities (non-commodity outputs of farms) and farm services for the public, particularly in the following fields:

- land management in relation to the environment (water, soil, biodiversity);
- land management and management of other agricultural assets in relation to the recreational potential of rural areas;
- creation of job opportunities in rural areas (including diversification); and
- agriculture and the development of human and social capital in rural areas.

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1. Research Institute of Agricultural Economics, Prague.



## Stimuli of Czech agricultural policy and other conditions to the development of multifunctional roles of agriculture

In principle, the following phases of development in Czech agricultural policy can be distinguished:

- Transformation policy (1990-99), when – based on property restitution, transformation of co-ops (de-collectivisation) and privatisation of state non-land assets – a specific Czech farm structure emerged.
- Pre-accession policy 2000-03 (or to 30 April 2004), including pre-accession EU support under SAPARD (the Special Accession Programme for Agriculture and Rural Development) and a “crystallisation” of ownership relations in agriculture.
- Post-accession policy (2004-06).
- Policy prepared for the period 2007-13, especially measures under the European Agricultural Fund for Rural Development (EAFRD).

The distribution of policy supports<sup>2</sup> after 1995, according to sources (analogically with the categories applied after EU accession) and according to long-term goals (defined in *The Conception of Czech Agricultural Policy after EU Accession for the Period 2004-13*) and, separately, the distribution of supports related only to the environment, are shown in Table 1.

The nominal level of supports in 2004 doubled in comparison with the period 1995-99. Direct payments and market price supports, forming Pillar I of the CAP, represented more than half of all support in 2004. In that year, almost 70% of support was committed to farm income supports (*i.e.* including less-favoured area [LFA] payments), with particular detriment to investment support for restructuring. However, the multifunctional role of agriculture has received indirect support since eligibility for income support has (in certain cases) become available only on conditional terms (*e.g.* good farming practices and cross compliance in the future for direct payments; LFA payments only on grassland).

Following EU accession, support aimed predominantly at environmental goals reached about 10-11%, of which most (about 42% of environmental support) was granted to animal welfare/crop health (a reflection of the BSE crisis). Support to rural development originating from agricultural policy has been negligible (2% of all support in 2004 under the SAPARD programme).

Besides financial support and trade measures, the development of the multifunctional role of agriculture has been influenced by other factors mainly as a part of the institutional background of the applied agricultural policy. There is a question especially of:

- instability of agricultural policy, particularly in the period 1995-2000 (frequent changes in the measures, or changes in the conditions for receiving support);

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2. Only supports from the side of taxpayers (not consumers) are considered.

- environmental legislation: nearly 25% of the Utilized Agricultural Area (UAA)<sup>3</sup> in the Czech Republic is located in environment/landscape-protected areas (including nitrate-sensitive areas, but excluding the area under *Natura 2000*);<sup>4</sup>
- legislation concerning the individual segments of the Czech land market (state land, land in national parks, private land) and to the realisation of land consolidation in cadastres;
- legislative conditions and impacts of the property transformation in agriculture (particularly “the three generations” indebtedness of farms);
- other conditions (e.g. conditions on the input/output markets, including the still weak enforcement of contracts).

**Table 1. Czech agricultural support by sources and goals**

Source	CZK million			Share (%)		
	1995-99	2000-03	2004	1995-99	2000-03	2004
Direct payments/supports	745	2 705	12 487	5.92	13.79	44.91
HRDP	2 218	2 869	4 033	17.62	14.63	14.50
OP/SAPARD	1	184	1 682	0.00	0.94	6.05
State aid	7 214	11 371	7 136	57.30	57.98	25.66
Market price support	2 412	2 485	2 467	19.16	12.67	8.87
<b>TOTAL</b>	<b>12 589</b>	<b>19 613</b>	<b>27 805</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>
Goal	Share (%)					
Development, restructuring	42.17	25.78	15.36			
Farm Incomes	37.01	50.51	67.38			
Environment	5.40	10.57	8.99			
Non-food use of production	4.45	11.40	4.24			
Food safety and food prices	10.96	1.74	2.13			
Rural development	0.00	0.00	1.91			
<b>TOTAL</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>			
Environmental Measures	CZK million			Share (%)		
Water and soil management	86	215	539	23.39	26.10	32.68
Biodiversity	142	180	217	38.43	21.86	13.14
Animal welfare/crop health	62	142	692	16.70	17.25	41.93
Grassland and afforestation	53	109	37	14.33	13.19	2.26
Ecological farming	26	178	165	7.16	21.61	9.99
<b>TOTAL</b>	<b>369</b>	<b>825</b>	<b>1 650</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>

Source: Database of Agricultural Policy 1995-2004, RIAE.

3. The Czech UAA is equal to the acreage of the agricultural land eligible for the EU direct payments (about 3.6 million hectares). It is the different category than the total acreage of agricultural land according to the Czech Cartographic Office, based on the land ownership registration (about 4.3 million hectares).
4. The Czech regions can be classified by their agro-environmental sensitivity and related categories of supports to farms to comply with the environmental restrictions (without supports, compensations, stimulations).

## Impacts of agricultural policy and other conditions on the development of the multifunctionality of Czech agriculture

Up until now, the transformation of Czech agriculture has resulted in a specific type of farm structure and relationship between land-usage and land-ownership (Table 2):

**Table 2. Share of individual subjects in the Czech UAA (2004)**

Owners or users – farms	State	Municipalities	Farms – OE	Farms – LE	M/O – LE	Other private persons <sup>1</sup>	Total 000 ha	Total %	No.	Avg. (ha)
Subsistence			40				40	1.11	19 189	0.2
Family	30	5	205			185	425	11.81	30 231	14.1
Individual	320	10	65	60		1 150	1 605	44.58	3 704	433.3
CF-M	125	5		40	75	395	640	17.78	668	958.1
CF-O	110	5		20	180	540	855	23.75	667	1 281.9
Others	35						35	0.97	180	194.4
Total 000 ha	620	25	310	120	255	2 270	3 600	100	54 639	65.9
Total %	17.22	0.69	8.61	3.33	7.08	63.06	100			
No.	1	6 000	2 000	28 000	50 000	3 000 000	3 086 001			
Avg (ha)	620 000	4.17	155	4.29	5.10	0.76	1.17			

PE/LE = physical/legal entities; M/O-LE = land leased by members/owners to owned LE; CF-M/O = co-ops and joint stock companies; M = managerial types; V = ownership types; other private companies included in the category of individual farms.

1. This includes land leased by PE to categories of farms other than M/O-LE.

Source: Agrocensus of the Czech Statistical Office; the Czech Land Fund; estimates by RIAE.

- About 80% of the UAA is used by about 6% of farms (a strongly dual structure); about 88% of the UAA on farms is leased (only about 12% of the UAA is owned by farmers);
- The category of family farms (together with subsistence farms) occupies only 13% of the UAA. More and more land is used by large individual farms which, together with farms registered as limited liability companies, already occupy nearly the half the UAA. Collective farms occupy about 40% of the UAA, but each year the share of co-ops and joint stock companies, with a real economic power in the hands of their managers, has been growing.
- For the development of multifunctionality it is important that about two-thirds of the UAA are used by farms with the prevailing “profit/business” orientation; the remaining part of the UAA is used by farms with the prevailing “income/self-employment” orientation. This distribution influences the level of participation (“willingness-to-participate”) in many agro-environmental and diversification-

oriented programmes, and even the level of compensations or stimuli linked with these programmes.<sup>5</sup>

How the farm structure presented has reacted to the stimuli of the agricultural policy and to other institutional conditions to develop the multifunctional role of agriculture, is approximately presented in Tables 3 and 4.

**Table 3. Indicators of multifunctionality for Czech agriculture**

Indicator	Unit	1989	1995	2004	Index 2004/1989
Abandoned land	000 ha	300	300	300	100.00
Share of arable land in UAA	%	75.00	73.00	71.70	95.60
Share of land endangered by erosion	%	35.00	33.00	33.00	94.29
Share of ecological farming in UAA	%	0.00	1.00	5.97	x
- of which on arable land and permanent crops	%	0.00	0.50	7.70	x
Number of cows (dairy, suckler cows)	000 heads	1248	768	574	45.99
Number of sheep	000 heads	399	80	140	35.09
Number of agricultural workers	000 pers.	533	222	141	26.45
Share of non-agricultural incomes in total incomes	%	30.00	20.00	16.00	53.33

Source: Reports on the Czech agriculture, Czech Ministry of Agriculture (RIAE, 1994-2004).

**Water quality:** After the 70-80% reduction in the consumption of fertilisers and pesticides at the beginning of the reform period, due to price liberalisation, the consumption of these inputs has been growing again. However, the EU's nitrate regulations define about 40% of Czech UAA as Nitrate-Sensitive Areas.<sup>6</sup> However, point pollution in the surroundings of large livestock units still remains a problem. Intensive fishing, together with the leakage of nutrients from fields, causes the serious eutrophication of water, thus significantly reducing the recreational potential of rural areas.

**Water retention and erosion:** The continuing problems in this area are multiplied by almost yearly catastrophic floods or droughts. In spite of policy supports (including LFA payments) the share of arable land has remained almost unchanged during the transformation period (the decrease is of about 3 percentage points compared with 1989).

**Biodiversity:** Measured by the number of wild animals in fields, there has been a mild improvement mainly due to a reduction in the use of chemical inputs. However, only a very small number of farms participate in special agro-environmental schemes. The persisting pre-reform structure of fields of enormous size without natural boundaries (balks, hedges, etc.), accompanied by soil compression caused by heavy machinery are the main obstacles to improving biodiversity. The situation looks better in cadastres, where land consolidation has been completed. It is, however, feasible to expect some improvements following the implementation of *Natura 2000*.

5. About 33 % of the UAA is involved in agro-environmental programmes in 2004-06, of which 62% in the maintenance of countryside by pasturing, 20% in ecological farming (mainly on grassland) and 17% in interim crops, that is in programmes with relatively low environmental effects, but with low transaction costs for their implementation.
6. Consumption today reaches about 100 kg of pure nutrients/ha, which roughly represents half the level of pre-reform consumption.

Table 4. Characteristics of farms by legal status

Indicators - 2003+2004	coops and JSC	LLC	PE to 100 ha	PE with more than 100 ha
<b>Deviation from the survey average (%)</b>				
Net Value Added/AWU <sup>1)</sup>	-4.92	21.14	-24.97	52.19
Production/ha	8.44	-16.09	-24.10	-43.73
AWU <sup>1)</sup> /100 ha	10.97	-25.00	-10.01	-57.17
Interim consumption/production	-0.12	2.03	-3.28	-3.07
Depreciation/production	-0.80	-15.34	67.86	57.56
Operational subsidies/ha	-0.35	4.91	-26.77	-10.15
Share of arable land in total acreage	3.60	-6.99	-3.17	-11.19
LU of ruminants/100 ha	9.00	-20.21	-23.43	-50.93
Share of LFA in total acreage	-3.41	-3.72	-2.21	14.13
Share of non-agricultural incomes in total incomes	-1.81	30.26	-46.45	-68.17
Share of non-agricultural production in total production	-0.25	17.78	-55.63	-46.86
<b>Absolute values</b>				
Net Value Added/AWU <sup>1)</sup>	221082	281675	174472	353873
Production/ha	35201	27238	24638	18264
AWU <sup>1)</sup> /100 ha	4.22	2.85	3.42	1.63
Interim consumption/production	73.70	75.29	71.37	71.52
Depreciation/production	7.73	6.60	13.09	12.28
Operational subsidies/ha	3377	3555	2481	3044
Share of arable land in total acreage	83.30	74.79	77.86	71.41
LU of ruminants/100 ha	35.59	26.05	25.00	16.02
Share of LFA in total acreage	48.30	48.14	48.90	57.07
Share of non-agricultural incomes in total incomes	15.53	20.60	8.47	5.04
Share of non-agricultural production in total production	6.95	8.20	3.09	3.70

JSC = joint stock companies; LLC = limited liability companies; PE = farms as physical entities.

1. AWU = Annual work unit.

Source: FADN-CZ data 2003-2004, RIAE.

**Ecological farming:** This category of farming has developed relatively quickly, covering about 6% of the UAA at present. However, a “qualitative” stagnation is evident at present, because the largest number of ecological farms is oriented towards the (extensive) livestock production on grassland; only about 8% of the UAA under ecological farming is used for crop production (including permanent crops). The supply of domestic bio-products does not correspond with the increasing acreage dedicated to ecological farming.

**Rural employment:** Agriculture has ceased to be a sector that exercises a decisive influence on rural employment. The number of workers in agriculture dropped from 533 000 in 1989 to 141 000 in 2004 and the exit of a further 30 000-to-40 000 workers can be expected in the near future, due to further increases in labour productivity. Table 4 shows a large variation in the labour input among farm categories: large individual farms employ about 1.6 Annual Work Unit (AWU) per 100 hectares, whilst collective farms (with larger livestock production<sup>7)</sup> employ over 4 AWU per 100 hectares. On the other hand, the prevailing profit orientation of farms does not sufficiently stimulate them to create new non-agricultural job opportunities for the released workers (Tables 3 and 4

7. Nevertheless, according to the data from the international IFCN network (FAL Braunschweig, Germany) the technical efficiency of labour just in livestock production on the Czech farms is about 50% compared with efficiency on EU-15 farms.

show the declining share of non-agricultural incomes in total farm incomes and their present low share in total farm incomes).

In summary: collective farms still generate more job opportunities in rural areas than other categories of farm, but this is to the detriment of their effectiveness. (As shown in Table 4, there is a difference of almost 60% in the level of the net value added per worker between the larger individual farms and the collective farms.<sup>8</sup>)

**Agriculture and rural infrastructure:** This relation shows large local variations. In many localities there are good (even “illustrative”) examples of farm activities in balance with rural society, with positive impacts on rural development. On the other hand, there are localities where farming deteriorates rural recreational potentials (farm’s “brownfields” in villages, the destruction of, for example, cycling paths and greenfield strips by soil erosion, the negligence of cultural heritage, the reduction of the recreational value of rural water, etc.). In addition to this, the development of the rural human and social capital is not sufficiently supported by the large “profit-oriented” farms. The face of the Czech village and its demography have been undergoing a change: conversion into a “dormitory” for hired workers is accompanied – in spite of relatively high levels of rural unemployment – by the arrival of hired agricultural workers from abroad.

## Conclusions

Following EU accession, Czech agriculture will orient itself on the implementation of the European Model of Agriculture (EMA), based on the development of its multifunctionality in relation to rural development. However, after 15 years of the transformation, this goal is being fulfilled relatively slowly.

Agri-environmental programmes are mainly preserving a “*status quo*” in the relationship between agriculture and environment and the changes it is necessary to make to land-use are not being sufficiently stimulated. At the same time, the preservation of the “*status quo*” shows to be too costly, with over-compensation being made in certain forms of support, which are frequently reflected by farmers’ claims for direct payments. The over-compensation is also caused by a lower level of the “internalisation” of negative impacts of farming on farms with the prevailing profit orientation and with almost 100% of leased land. A greater improvement has been gained in the field of water quality: however, the large increase in income supports under the CAP might increase risks.

The LFA payments are largely absorbed by extremely large farms (often in the hands of non-agricultural/foreign capital), with a very low level of labour inputs, which maintain the countryside but do not increase its diversity. These farms are real “winners” of EU accession, but their beneficial effects on well-being in the rural community are small.

The necessary conversion of arable land into grassland, particularly in hilly regions, has barriers in the enormous fragmentation of land ownership and in the unwillingness of landowners and sometimes even managers of large farms (embedded in “old paradigms” with an exclusive orientation on primary production and whose average age is about 54) to change. On the other hand, the restructuring of land-use is facilitated by land consolidation. However, this process – in spite of many policy declarations – is very

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8. However, this percentage comparison based on the FADN data should be completed in a more detailed factor analysis to avoid simplified interpretations.

slow, due to the lack of sufficient public funding (only 400 cadastres out of a total of about 13 000 have completed their land consolidations up to 2004).

The relationship between agriculture and rural employment has been influenced by more policy failures after 1989. The still-continuing reduction of labour in agriculture is not sufficiently accompanied by the creation of new non-agricultural on/off-farm job opportunities. In many localities industrial farming does not contribute to the development of rural recreational potentials.

In summary, agricultural policy (including related legislation and institutional background) should: a) reflect more new farm and land ownership structures emerging during the transformation, and b) address the real problems in rural areas. In this area we can legitimately expect to see a growing discrepancy between policy efforts to stabilise the standard of living of the whole rural population and pressures from some farmer associations to grant supports mainly to agriculture. However, the benefits of the CAP (*i.e.* flat area payments) might be concentrated on the owners of the large farms.

The preparation of the new financial framework for the CAP for the period 2007-13 is an opportunity for changes in the relations between Pillar I and Pillar II of the CAP, in market price supports under the present marketing orders and particularly in structural supports under the newly established EAFRD. First experience from the preparation of the National Strategy for Rural Development and related EAFRD programmes shows that the realisation of the necessary changes will not be easy. It will require more intensive discussions leading to a mutual understanding of the decisive stakeholders (representatives of NGOs and local governments) under the “positive” authority of the responsible ministries. Although – thanks to the pre-accession SAPARD programmes and the LEADER programmes – the institutional framework of rural areas has been improved, the most influential group still remains the well-organised, large farm managers. If public money invested in agriculture to strengthen its relationship to rural development is to be more effectively used, the priorities and conditions for support under the EAFRD should be more strongly oriented towards multifunctional criteria. Finding a general consensus on the percentage distribution of financial sources among the EAFRD axes is one of the key issues to be decided. Another necessary precondition is a territorial approach to rural development in the Czech Republic, based on a well-adjusted typology of rural areas.<sup>9</sup> The effectiveness of EAFRD supports and synergic effects cannot be assessed without a definition of “demarcation frontiers” between the EAFRD and other structural supports from the EU or national sources, between agricultural policy and related policies, particularly in the social, health, transport, culture, energy and tourism sectors.

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9. Besides the official OECD typology, a more detailed typology in the relation to the so-called remote rural areas has been developing in the framework of the TERA project (under the 6<sup>th</sup> EU Framework Programme).

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## **Part V.**

# **The Second Pillar of the European Union's Common Agricultural Policy: Country Experiences**

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## **Chapter 14. The Second Pillar of the CAP: Insights from the Mid-term Evaluation of the Rural Development Regulation in France**

Bruno Vindel<sup>1</sup>

### ***Abstract***

*Complying with the legal framework of EU Rural Development Regulation 1257/99, the implementation of the rural development pillar of the CAP in France takes over several measures which were already in existence under previous programmes, and institutes significant innovations, reflecting both the evolution of French rural territories and the political choice of a more sustainable and multifunctional agriculture. In particular, its implementation takes the form of a large national programme, called the Plan de Développement Rural National, associated with the integration of certain rural development provisions under the Objective 2 Single Operational Programmes. Having a clear overall objective in sustainable rural development, the PDRN appears relatively agriculture-centred; besides classical measures such as compensatory payments to less-favoured areas or for support for setting-up young farmers, the PDRN encompasses three major innovations: integration of forestry measures; importance given to agri-environment; and enforcement of the Contrat Territorial d'Exploitation, a scheme designed to foster the multifunctionality of agriculture (the "Contrat d'Agriculture Durable" scheme replaced the CTE as from 2003). The mid-term evaluation of the PDRN, carried out in 2003, shows its clear effect on guiding agriculture towards more sustainability, and its importance for LFAs. Detailed insights on socio-economic impacts, as well as on the environmental effects of PDRN, are given in the paper. Thanks to its participatory methodology, the evaluation also gave the opportunity of building up a collective expertise on rural development and its future.*

### **Main features of the French *Plan National de Développement Rural* (PDRN) and adaptation to local dynamics**

#### ***The evolution of French rural zones is based on multi-sectoral dynamics***

In the past, rural territories in France were considered globally as "the countryside" with an essentially productive function, in which agriculture was the leading (and often the sole) economic motor. Since the middle of the 1970s, and more notably since the early 1990s, new functions have emerged, along with new dynamics in demography and population trends:

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1. Ministry of Agriculture, Food, Fisheries and Rural Affairs, Paris.

- a residential function, with a strong trend of peri-urbanisation (between 1990 and 1999, an increase of 3.5 million inhabitants in peri-urban areas);
- a recreational and touristic function;
- an environmental function, encompassing protection of natural resources and biodiversity, protection against natural risks, and maintenance of landscapes ;
- a renewed and diversified productive function, with industries (mainly small-to-medium-sized enterprises), social jobs linked to the residential function, and, of course, agriculture and forestry.

Agriculture is no longer the main economic activity in terms of employment (2% of the active population at national level) and of value added. But it remains central in the structuring of the national territory, shaping landscapes and occupying soils, as well as, from another perspective, in food production and food security (Table 1).

All these trends, linked to the geography of France, have led to a great diversity of rural zones, which can, however, be grouped into three categories:

- rural zones linked to towns (*i.e.* rural zones having a predominantly residential function – for commuters – or having both residential and productive functions);
- fragile rural zones, with low population density, regressive trends in demography and little diversity in economic activities (this category of rural zones encompasses one-third of France);
- rural zones in transition, seeking a new equilibrium, with a variety of trajectories, from new industries to a boom in tourism, with agriculture always present and performing different functions from crop and livestock production for local food industries to environmental amenities.

**Table 1. Use of national territory**

	1980	2002 p
	(000 hectares and %)	
Agricultural area	31 744 57.8	29 587 53.0
Forestry area	14 615 26.6	15 394 28.0
Uncultivated agricultural area	2 757 5.0	2 816 5.1
Non-agricultural and non-forestry area	5 804 10.6	7 122 13.0
<b>TOTAL</b>	54 919 100.0	54 919 100.0

p = provisional.

Source: Agreste – *Statistique agricole annuelle*.

### ***New EU legal framework and new concepts at work to anchor rural zones in the future***

Based on principles formulated at the Cork Conference on rural development (1996), *Agenda 2000* set clear objectives for the EU's Common Agricultural Policy (CAP): agriculture should be modern and competitive, sustainable and of benefit to the welfare of rural communities. Two pillars of the CAP were therefore distinguished: commercial policy, on the one hand, and rural development policy on the other, with the special mission of “complementing the market policy and taking care that expenditure for agriculture will play a greater role in land planning and protection of nature”. This is why EU *Rural Development Regulation* (No. 1257/99) groups, in a single legal instrument, the provisions of nine pre-existing regulations, with appropriate additions. Needless to say, this regulation does not exhaust the numerous aspects of rural development, such as access to schools or public health services, roads and communication infrastructures, drinking water and sanitation, to mention just a few. Being the legal base of the CAP's second pillar, Regulation 1257/99 is “by conception” agri-centred.

Parallel to *Agenda 2000*, and somehow interactively, new reflections and orientations were developed in France about the multifunctionality of agriculture, and about the means to take it into account, support and develop it. These reflections led to the notion of contract between the agricultural sector and the society as a whole, the latter asking the former not to be exclusively a food producer but also to provide environmental amenities and contribute to social well-being. The French law on agriculture of 1999 (the *Loi d'Orientation Agricole*), created this new type of contract between farmers and the State: the *contrat territorial d'exploitation* (CTE), which was replaced by the *contrat d'agriculture durable* (CAD) in 2003.

These elements explain why the application of EU *Rural Development Regulation* 1257/99 in France took the form of a multi-faceted national programme, matching the diversity and specificities of rural zones with a series of targeted provisions (modernisation of farms, rejuvenation of the farming population, development of agri-environment, etc.), and all with a strong emphasis on the multifunctionality of agriculture.

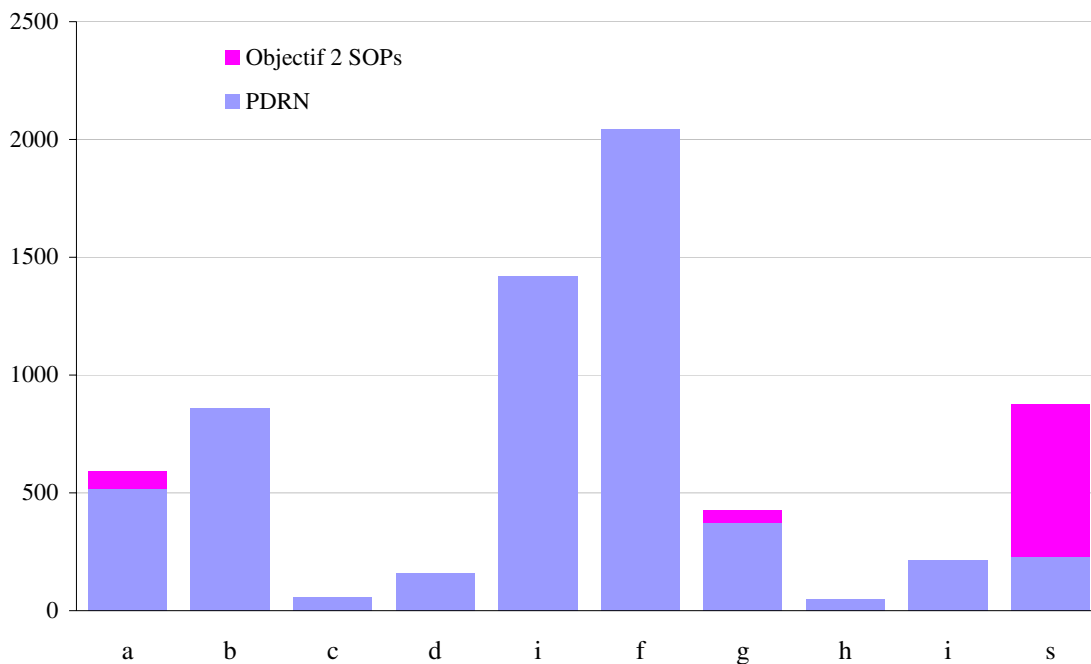
### ***Implementation of Regulation 1257/99 in France: a multi-faceted national plan and parts of regional “single operational programmes” (SOPs)***

In applying Regulation 1257/99, France opted for a large national programme, the *Plan de Développement Rural National* (PDRN), which groups 90% of the available financial resources. This choice was justified by concerns of territorial equity from a national point of view, and by the perceived necessity to pilot the implementation of the two major innovations of the programme (CTE and forestry measures). Besides the national PDRN, some of the EU Regulation 1257/99 provisions were integrated into the “Objective 2 SOPs”, in order to stimulate synergies with European Structural Funds (*i.e.* the European Regional Development Fund and the European Social Fund): this led to the creation of 20 regional strands to be financed from the EAGGF within the several SOPs; some provisions can appear in both the PDRN and the SOPs.

The articulation between the two programming instruments was rather complex, and all the more so as it was decided to implement all 22 provisions of Regulation 1257/99: 17 in the framework of PDRN and 5 accessible through SOPs (see the list in Annex 1). It should also be noted that some regions are concerned by Objective 1 SOPs (Corsica, Hainaut and overseas territories) financed from the EAGGF Guidance.

Briefly, the structure of the PDRN is well reflected in Figure 1, where the different measures (or sets of measures) are classified according to their respective financial weight.

**Figure 1. Structure of PDRN and Objective 2 SOPs**  
(million EUR)



See Annex 1 for the definition of labels. Data include modulation.

Source: Ministry for Agriculture, Food, Fisheries and Rural Affairs, Paris.

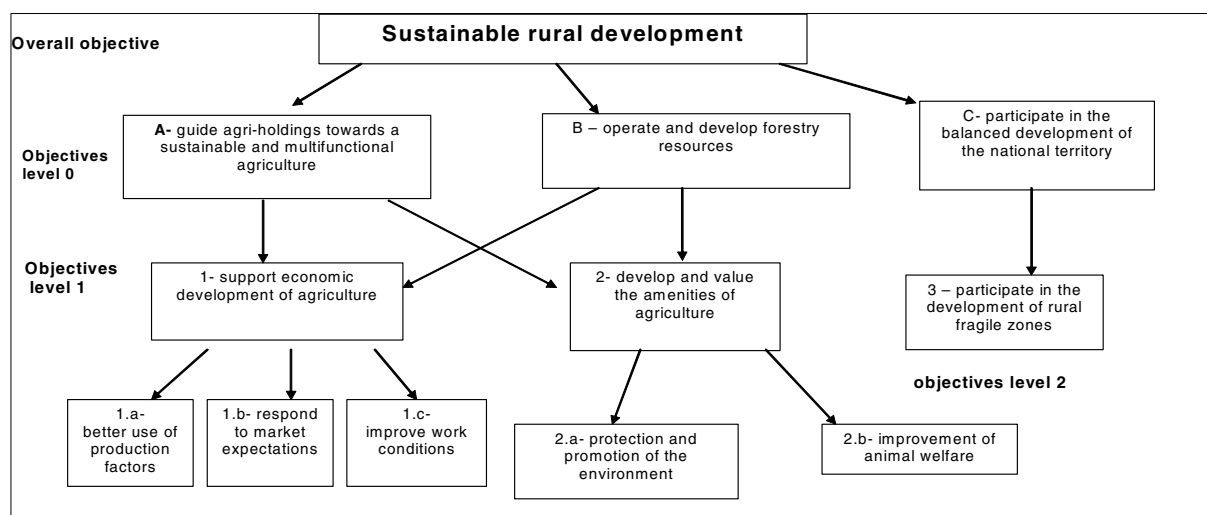
At the time of drafting the PDRN (second semester 1999), five priorities were formulated:

1. orientation of farms towards a multifunctional and sustainable agriculture;
2. development and sustainable operation of forestry resources;
3. raising the value added and quality of agricultural and forestry products;
4. more balanced use of national territory and reduction of economical inequalities by fostering employment;
5. protection and sustainable use of the ecological heritage.

These priorities were then translated into a logical framework, more convenient for carrying out the mid-term evaluation (Figure 2). The overall objective is clearly a contribution to sustainable rural development and the originally defined priorities are linked in a consistent way. The objectives formulated here match those of *Agenda 2000*.

It is interesting to note that there is no direct correspondence between specific measures and detailed objectives, as each measure, through its content and conditions of eligibility of beneficiaries, is meant to contribute to several objectives, even if one appears predominant for a given measure.

Figure 2. Logical framework of PDRN



### *A set of significant innovations to guide agriculture towards more sustainability*

Although many of the measures included in the PDRN are a direct continuation of previous programmes (investments in agricultural holdings, setting-up of young farmers, investments on food industries, less-favoured areas [LFAs], etc.), three main innovations should be described here. The CTE is the main tool for the orientation of farms towards a sustainable agriculture, while expressing its multifunctionality, through a global project at farm level. A five-year contract, the CTE consists compulsorily of two parts (economic and environment-territorial), associating specific measures of the PDRN corresponding to the farmer's project (or to the project of a group of farmers). These projects are meant to reflect local/territorial concerns and orientations, and therefore are supposed to be discussed with other stakeholders. This means that the CTE scheme is not compulsory for farmers; they can apply on a voluntary basis, while the territorial dimension is granted, at least in theory, through a common reflection of various actors around territorial stakes (e.g. environmental concerns, quality of products, employment at farm level). An important evolution of this system took place during summer, 2002, as CTEs in their original form were replaced by the CAD. This new system, which was progressively enforced in 2003, keeps the main features of the CTE, such as the contractual aspect: but it limits the cost of each individual contract and simplifies the implementation (the economic part is no longer compulsory; for each territory or region, or for each contract-model, two environmental stakes must be defined, with three actions each, as a maximum). The agri-environmental measures represent the only compulsory provision of Regulation 1257/99. In comparison with previous programmes, the PDRN organises a considerable enlargement of the number of such measures, and makes the whole French territory eligible. As a consequence, the financial share of the agri-environmental chapter



appears to be the largest (Figure 1): moreover, the budgetary revenue of the modulation of first-pillar aids (implemented in 2000 and 2001) was concentrated on agri-environmental measures. An important feature to note here is that, with the exception of two “mass” agri-environmental measures (aid to keep long-term green pastures and aid to crop-rotations), the rest of these measures are only enforced, and paid to farmers, within the framework of a CTE/CAD.

The third main innovation of PDRN consists of the inclusion of forestry measures in the plan, in addition to the more traditional aid to afforestation of agricultural soils. This does not represent a large share of the financial scheme (Figure 1) but means considerable modifications of procedures (as the measures were previously nationally financed), and stronger links between agriculture and forestry, in a territorial perspective.

## Framework and methodology of PDRN evaluation

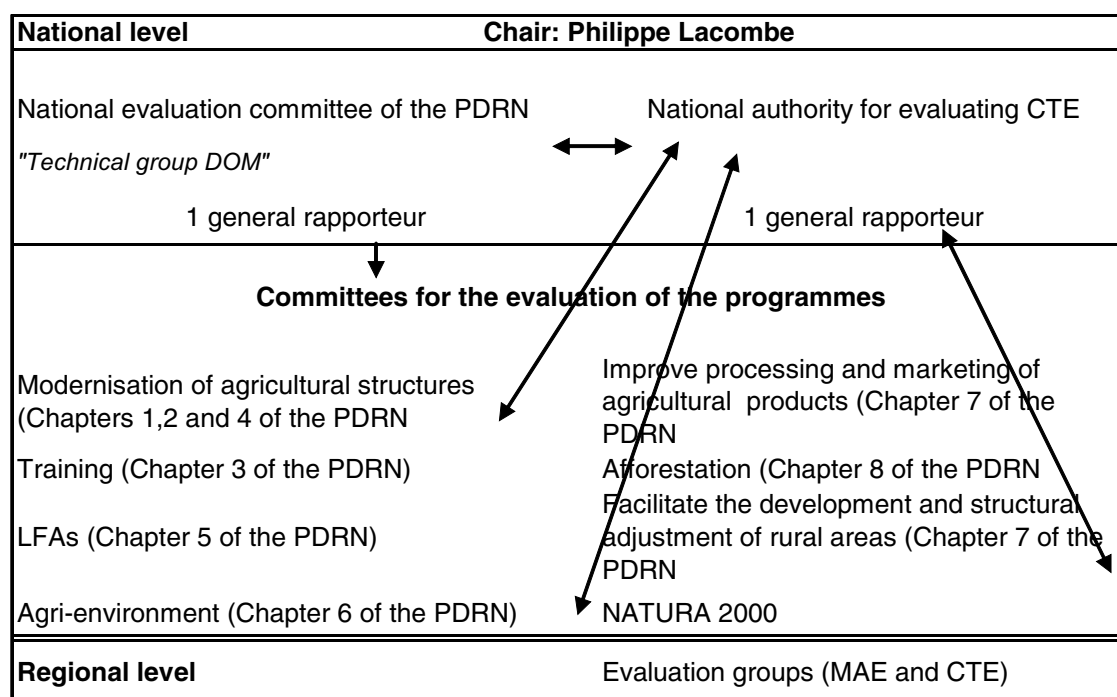
### *The organisation of the PDRN evaluation*

In order to ease the huge evaluation of PDRN, the Ministry of Agriculture, Food, Fisheries and Rural Affairs (MAAPAR) decided to structure it in 10 thematic blocks (including *Natura 2000*), in addition to the synthesis block, in charge of the transversal common evaluative questions (Figure 3). The work of each block was managed by a national steering committee, the synthesis being managed by the *Comité national d'évaluation du PDR* (CNE), in which the chairpersons of the thematic national steering committees were members. A special case was made for the evaluation of the CTE scheme, as it did not correspond directly to an identified chapter of Regulation 1257/99. For the sake of coherence, the “*Instance Nationale d'Evaluation*” of CTE was chaired by the same person as the CNE, namely Dr Philippe Lacombe, Scientific Director at INRA (the Institut National de la Recherche Agronomique).

Moreover, it was considered useful to carry out evaluation work at the regional level, for the specific Chapter VI (agri-environmental measures) and CTE scheme. The aim was to draw larger and richer information from the field, for the corresponding national levels of evaluation, as well as to make more people aware of the evaluation of PDRN.

It ended up with a very “open” way of management, as approximately 300 people were involved (100 at national level and 200 in regions), among whom were researchers and academics, representatives of farmers' associations and environmentalist lobby groups, members of Parliament and of local councils, experts from the payment agency (CNASEA) and civil servants from MAAPAR and from the Department of Environment. Following the deontological principles of evaluation, departments of MAAPAR in charge of the day-to-day management of PDRN were invited to sit on the committees but were not responsible for the exercise as a whole. Concrete work was carried out by independent experts, contracted after tenders.

Figure 3. Organisation of PDRN evaluation



The global budget for this mid-term evaluation amounted to EUR 3.6 million, that is to say, somewhat less than 0.03% of the total foreseen expenditure of PDRN (over the period 2000-06): 50% was dedicated to regional evaluations. Starting in January 2002, the whole process lasted two years with the following phases:

- first semester 2002: committee meetings; first exchanges of views; formulation of France's evaluative questions; drafting of documents for tender;
- second semester 2002: tenders and contracts with independent experts;
- first semester 2003: evaluations at regional level; thematic evaluations at national level; beginning of synthesis work;
- second semester 2003: committees discuss and adopt thematic reports (including CTE synthesis); completion of synthesis.

Regional evaluations of agri-environmental measures and CTE lasted approximately six months; thematic evaluation nine months; and the synthesis eleven months.

### ***Methodological difficulties encountered in answering common evaluative questions***

In general, thematic and regional evaluations are essentially based on:

- treatments of available statistical data, from the national agriculture statistics system and from administrative databases (mainly CNASEA) ;
- surveys (pooling of beneficiaries, questionnaire mailings or interviews);

- case studies carried out in diverse territories;
- synthesis of the twenty-one regional evaluations reports, with a common grid, for agri-environmental measures and CTE.

The evaluators experienced several methodological difficulties, especially regarding administrative databases which are conceived (and built) more as book-keeping instruments than as monitoring tools. For instance, it is not always possible to characterise the beneficiaries of given aid in every detail because the administrative database does not include sufficient technical information. A second source of difficulty was the absence of a baseline at the beginning of the PDRN, which made it difficult to measure a change from a starting point; it also ought to be said that many agri-environmental measures are relatively easily described in terms of achievements (length of hedges, for instance), but hard to evaluate in terms of impacts (protection of birds nesting in those hedges). However, this baseline difficulty was partially solved thanks to the data of the 2000 agricultural census and of the 2001 farm practices survey; the results of the French FADN (Farm Accounting Data Network) on farm incomes; and recent works carried out on demography and localisation of the French population. These data allowed the experts in charge of the synthesis to re-construct a socio-economic and agri-environmental baseline for the common evaluative questions. Eventually, the PDRN, approved in 2000, entered into action very progressively, and some measures were only implemented from 2001 or 2002 onwards (Article 33 of Regulation 1257/99), making any measurement of impacts in 2003 impossible. This methodological limit appears, of course, in any mid-term evaluation, but was emphasised here because of the slow start of the programme (see below).

The synthesis itself consisted of four parts:

- analysis of the use of financial resources (inputs of PDRN) and of conditions of implementation ;
- six territorial case studies, illustrating both the main farming systems in France and the categories of rural zones referred to above;
- comparisons with the implementation of Regulation 1257/99 in other EU member states;
- synthesis work, based on thematic evaluation reports, on the six common cross-cutting evaluative questions given by the European Commission's guidelines, and on the four national evaluative questions (Annex 2).

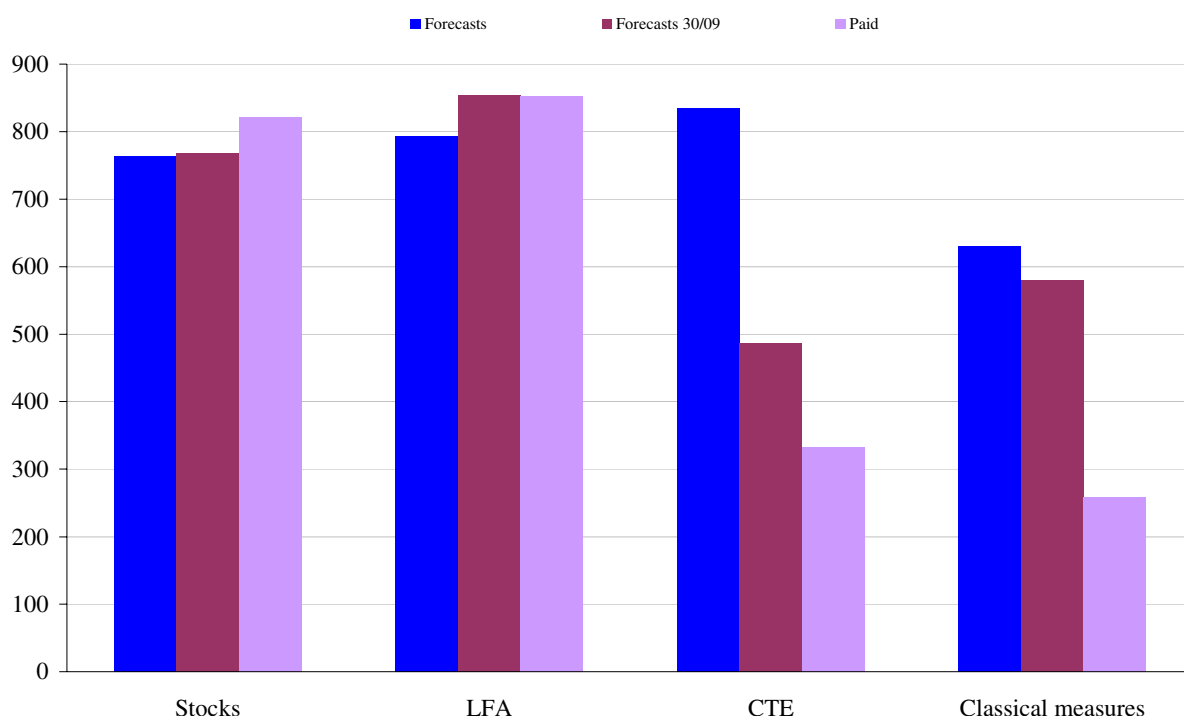
## Findings and lessons learned from the evaluation

### *Achievements to date do not match forecasts in terms of public expenditure*

In spite of the fact that many elements of the PDRN were a continuation of pre-existing measures, the programme witnessed a relatively slow start, and the total cumulative expenditure reached 78% of what was foreseen for 2000-03, at the end of 2003. Figure 4 shows clearly the reasons for this under-absorption: while “stocks” (payments related to the previous programmes 1994-99) and the compensatory allowances in LFAs were, by nature, relatively easy to forecast, aids to investments (investments in agricultural holdings, setting-up of young farmers, food industries and diversified measures for rural development – “Article 33” of the regulation) were below

expectation: moreover, the innovative character of the CTE scheme implied a very progressive enforcement, in spite of very ambitious objectives.

**Figure 4. Use of financial resources according to the sets of expenditure (2000-03)**



Source: Ministry of Agriculture, Food, Fisheries and Rural Affairs, Paris.

It also ought to be mentioned that whereas the previous “socio-structural” measures were financed against EAGGF-Guidance, the administrative services of MAAPAR and of CNASEA (the payment agency) had to adapt to the procedures of EAGGF-Guarantee, which involve more management constraints, as well as more controls. EAGGF-Guarantee procedures, conceived for annual payments of aid pertaining to the first pillar of the CAP, led to a re-definition of the respective roles of the payment agency and the MAAPAR services based in the field, the latter being responsible for processing the applications. The reflection, and consecutive decisions, have not yet been completed in France, and this situation adds to the complexity in the implementation of PDRN.

### ***Socio-economic impacts are noticeable but unequal***

- a. At the first level of analysis, the effect of PDRN on agricultural factors’ productivity appears rather weak; however this is logical due to the relatively short period between investments made in 2000 or 2001 and the date of evaluation (mid-2003). The real productivity improvement impact of measures a, b and d of Regulation 1257/99 (Annex 1) should be assessed over a longer period, and with a larger number of beneficiaries than the present one (37 452 cases for a total of roughly 660 000 farms in France).

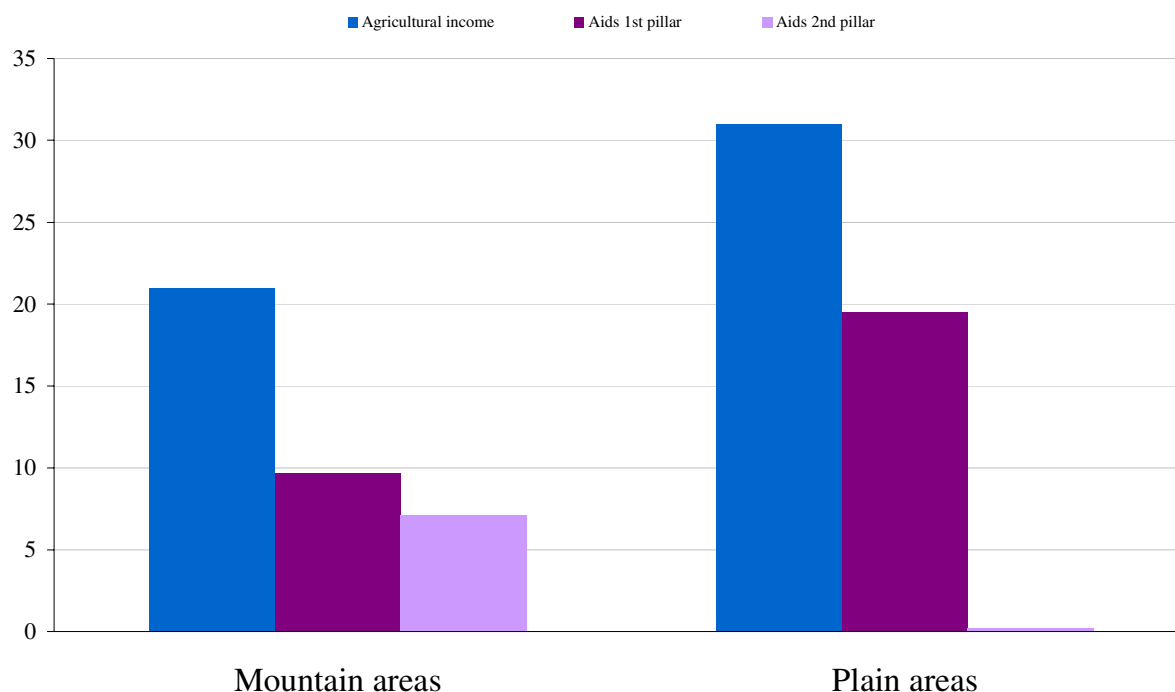
- b. More noticeable is the impact of PDRN on the value added of the agricultural sector, in particular through the payments (the “wages”) for environmental amenities. On the basis of the different territorial case studies, it can be seen that diversification of farm production or of alternative activities (15% of the CTEs) and food quality or organic farming (18% of the CTEs) are also two noticeable domains for value added increases at farm level. At national level, these orientations remain modest, and less important than in other EU member states. The evaluation concludes that innovations and diversification towards off-farm activities being always risky, the classical measure “investments in agricultural holdings” of Regulation 1257/99 may not be well adapted: in future, non-material investments and technical assistance, especially for new entrepreneurship, ought to be taken into consideration.
- c. The impact of PDRN on agricultural incomes appears much more significant because of the volume of farm support (12% of CAP direct payments). This is all the more concentrated in LFAs, and particularly in mountainous regions, where nearly all farmers are beneficiaries of compensatory payments, these payments representing 44% of agricultural income (Figure 5).

This effect also appears in other LFAs, although it is heterogeneous, depending on the farming systems concerned (livestock *versus* crops). In fact, there is a strong concentration of the income impact on animal husbandry, especially bovine- and sheep-oriented farms. PDRN aids, which are complementary to first-pillar aids, account for 29% of income of bovine-oriented holdings and for 47% of income of ovine-oriented holdings. It is thanks to these supports that livestock farms are economically viable, although their income (EUR 18 600-18 880 per farm) remains far below the national average (EUR 27 600 per farm). From a more theoretical point of view, the income effect of PDRN, with its concentration in LFAs and in livestock farming systems, emphasises the need in the CAP for re-distributive aids, managed at national level, to correct market effects, in order to achieve the objective of a balanced occupation of the territory.

- d. One of the common evaluative questions was related to the effect of PDRN on rural employment (No. 2 in Annex 2). The evaluation shows that this effect was indirect and was essentially a consequence of the income effect described above. The PDRN in itself induces few new jobs, with the exception of forestry measures (where jobs are, in general, of a temporary nature). Investment support to food industries allows maintenance of employment in the beneficiary plants or in the up-stream agro-food sector. From a more qualitative perspective, investment measures (in holdings, in food industries and especially in the forestry sector) lead to the improvement of working conditions.

A special mention should be made here of the setting-up of young farmers support (measure b of Regulation 1257/99, see Annex 1). First, the number of young farmers eligible for setting-up aid is limited by the evolution of demography, with a low level of retirement nowadays, following a massive wave of retirement in the previous period (1990-2000). It is for this reason that only 5 693 applications for the setting-up support for young farmers were considered by the PDRN by the end of 2002, although an objective of 8 000 had been put forward at the beginning of the plan. Secondly, the economic environment at local level (skills in technical assistance, nature of food industries or trading chains), is more favourable to the reproduction of existing farming systems than to innovative orientations, and does not induce new jobs.

**Figure 5: Impact of direct PDRN aids on agricultural income in mountainous and plain areas (000 EUR)**



Source: FADN.

This does not mean, of course, that the policy for setting-up young farmers is meaningless. Not only has it a strong political dimension, but its role in the rejuvenation of the farming population is essential for the economic dynamism of rural zones. The PDRN evaluation shows that one should not consider the absolute figures of the number of young farmers having newly set up, but the ratio between the rate of retirements and the rate of setting-up. This indicator was relatively low in 1988-2000 (34%), this value being linked to a significant dwindling in the number of farms: it reaches now 45% and should reach 52% in 2008. The high capitalistic intensity of the transfers of farms will need to strengthen the setting-up policy in the near future.

To conclude on the employment issue, the PDRN helps to maintain or limit the decrease in the number of jobs for the sectors concerned by the programme; this effect is more noticeable in less-favoured and mountainous zones.

- e. The PDRN's basic document, drafted in 2000, recognises that nowadays the evolution of the rural population does not depend on the evolution of the farming population: however, the PDRN, due to agri-environmental measures, was expected to have had some impact on fragile rural zones and, more generally, on increasing the attractiveness of rural zones. This was not shown by the mid-term evaluation, and it can be said that the impact of PDRN on the rural population has, so far, been very weak.

Several reasons explaining this situation, beyond PDRN itself, can be cited:

- the dynamics of population trends, described earlier, are certainly stronger than any effect of the PDRN, which is mainly centred on agriculture and forestry: in

particular the standards of social services and infrastructures in rural zones are undoubtedly crucial;

- the improvement of the attractiveness of rural territories resulting from landscape management and/or valued biodiversity will be a long process, and it is too early to evaluate it.

However, it has yet to be measured accurately whether the supports granted by the PDRN to maintain or create economic activities do contribute to a positive demographic evolution in vulnerable rural zones (demographic decline) or in zones sensitive to farm employment (because agriculture remains the main economic activity).

### *Environmental impacts*

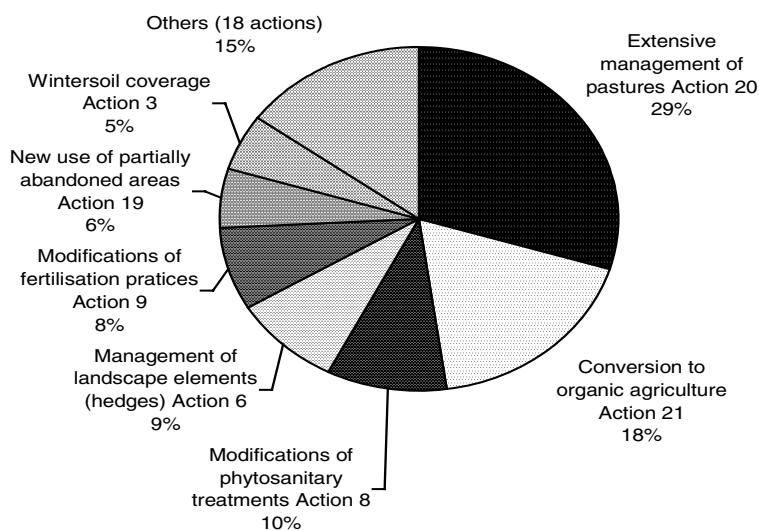
- As explained earlier, a shift of agriculture towards more environmentally friendly practices was an explicit objective of the PDRN. That is why a huge effort was made at national level in 1999 and 2000, for the conception and design of 25 sets of agri-environmental measures, totalling 175 single measures. These were meant to be adapted to local peculiarities, through “regional agro-environmental syntheses”. This resulted in the offer of 2 650 provisions/measures. Financial provisions in the PDRN budget were accordingly settled (Figure 2). This represented a significant increase, and a considerable change in operation scale, in comparison with the 1994-99 period, during which 270 measures (called “*operations locales agri-environnementales*”) had been agreed and financed, concerning 760 000 hectares. In addition, it is important to note the distinction made between:

- mass measures in favour of pastures, which are relatively easy to implement from an administrative and technical point of view; and
- measures implemented through the CTE scheme, which need several technical and administrative steps before agreement, being felt by some farmers more as constraints than as assistance to a re-orientation of their farming system.

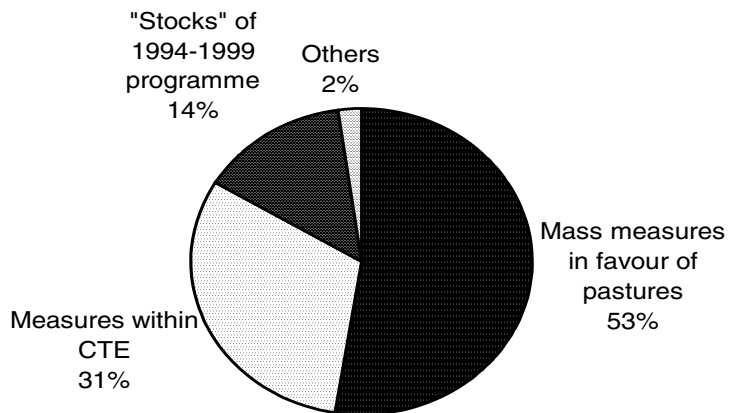
As a whole, the PDRN agri-environmental provision covers, after a three-year implementation period, roughly 7 million hectares (24% of France's agricultural land), 3.65 million hectares of which (13.6% of France's agricultural land) is covered through the CTE scheme. Figure 6 shows that, among the large choice of measures, 7 of the 25 sets referred to above account for 85% of the payments in 2002, with a predominance of Action 20 (extensive management of pastures) and Action 21 (conversion to organic agriculture). Regarding areas concerned, Action 20 is also predominant (26%), followed by Action 9 (22%) and Action 8 (17%). Conversion to organic farming only accounts for 5% of the areas concerned.

**Figure 6. Agri-environmental payments by measure**

**Figure 6.1. Agri-environmental payments within CTE by measure, 2002**



**Figure 6.2. EAGGF payments (2000-03) by chapter of agri-environmental measures**



Source: Ministry of Agriculture, Food, Fisheries and Rural Affairs, Paris.



More detailed analyses carried out during the evaluation showed that the regional agri-environmental syntheses did not play their expected role regarding targeting and financial incentive. As a consequence, territorial targeting on local environmental stakes remained too soft in the CTE scheme (it is now improved with the CAD scheme). In parallel, cross compliance on CAP first-pillar direct aids was limited during the three first years of PDRN implementation, and the concept of “good agricultural practices” remained rather unclear for a majority of actors (this situation changed after the 2003 reform of the CAP, in which cross compliance is extended and implies financial consequences).

- b. These elements have led to the following effects of PDRN on the environment:
- **water quality:** the effect is so far too limited to really reverse negative trends in vulnerable zones, for two reasons: the absence of targeting of the efficient measure on the appropriate zones, and too little implementation of pasture-favourable measures in plains;
  - **biodiversity:** the evaluation notes a small effect, thanks to the management and maintenance of hedges and to the preservation of natural pastures; the *Natura 2000* system started too recently to produce any measurable effect to date;
  - **landscape preservation:** the impact is ascertained in mountainous regions, as well as in zones where *husbandry* based on long-term natural pastures is predominant; however, methodological aspects and meaningful indicators remain insufficiently mastered to help in the formulation of real local/regional strategies on landscapes; this situation also impedes a well-informed dialogue between farmers and other stakeholders (environmental lobbies and local councils) on the matter;
  - **soil quality:** the PDRN has certainly helped to a global awareness of the problem of soil quality and some measures (in favour of long-term pastures, or hedges) have proven their relevance and effectiveness; more targeting is needed in vulnerable areas.
- c. A special mention should be made here of the CTE scheme (transformed in 2003, as indicated above, into CAD), as it was the vector of the majority of agri-environmental measures, together with other PDRN measures, in an innovative form of contract. The number of CTEs signed in July 2003 was 49 368, representing 12% of French professional farmers. The rate of contracting is higher in the east and south of France, and even higher in less-favoured zones, a good point from the re-distributive point of view.

In spite of its administrative and technical complexity, the CTE scheme has favoured environmentally friendly practices in agriculture and a real awareness of the “environment issue” by farmers and their organisations. In that sense, it has been the key instrument for the expression of the multifunctionality of agriculture, and for the positive attitude of farmers as regards sustainability. On the other hand, the employment impact of CTE has remained weak. It appeared difficult to reconcile individual projects of farmers and territorial collective stakes. Although interesting cases are recorded, the connection of the CTE scheme with other territorial policies was limited, for many reasons, varying from one region to another (dialogue between farmer organisations and environmental lobbies, implication of local councils, uneven capabilities and routine of extension services, etc.). The CTE scheme was reformed at

the end of 2002, giving place to the CAD, which encompasses conditions of better agri-environmental targeting, and maintains the direction towards the sustainability and multifunctionality of agriculture.

## Conclusion

The mid-term evaluation of the PDRN gave the opportunity of building a collective expertise thanks to the high number of people, and of their respective professional circles, involved. It also produced a considerable amount of analyses, very partially reflected in this modest presentation, based on figures or field evidence. Finally, it led to recommendations for the improvement of the PDRN (improvement of databases for monitoring and measuring impacts, reformulation of measures and simplification of procedures, implication of local councils), as well as valuable insights for the future, to be shared with other EU member states.

With its strong focus on agriculture (and forestry), the PDRN has a more noticeable economic impact in regions where agriculture remains critical in terms of economic activity. Effects on employment through job creation are small, but the improvement of working conditions (through farm investments or forestry aids) appears undeniable. The income effect is certain and well documented, with a special concentration on LFAs. All these features show the legitimacy of rural development aids within the CAP. In that sense, the PDRN has an important impact in favour of a more balanced development of the national territory, allowing inhabitants to remain in many zones which would otherwise be desertified and impoverished. Although several aspects need to be improved, the PDRN has succeeded in making farmers more sensitive to environmental questions, and helped a significant portion of them to express (and take advantage of) the multifunctionality of agriculture. This opens opportunities for rural development, as it may strengthen the attractiveness of many zones. The PDRN has a clear guidance effect on agriculture, which is certain to be strengthened with the implementation of the June 2003 CAP reform, as it improves coherence between the two pillars. Finally, efforts need to be made in order to increase the involvement of farmers and their organisations in territorial development strategies. One solution may be to conceive a more decentralised implementation system, although keeping a distinction between allocative measures and re-distributive supports.

## Annex 1.

### List of measures and chapters of Regulation 1257/99 (additions were made after 2003)

Number of measure	22 measures of RDR	Chapter	Programming
a	Investments in farms	I	SOP/PDRN
b	Start-up assistance for young farmers	II	PDRN
c	Training	III	PDRN
d	Early retirement	IV	PDRN
e	Less-favoured areas and areas with environmental restrictions	V	PDRN
f	Agri-environment and animal welfare	VI	PDRN
g	Improvement of processing and marketing of agricultural products	VII	SOP/PDRN
h	Afforestation of agricultural land	VIII	PDRN
i	Other forestry measures	VIII	PDRN
j	Land improvement	IX	SOP/PDRN
k	Reparcelling	IX	SOP/PDRN
l	Farm advisory services, farm relief services and farm management services	IX	SOP
m	Marketing of quality agricultural products, including setting-up of quality schemes	IX	SOP/PDRN
n	Basic services for the rural economy and population	IX	SOP/PDRN
o	Renovation and development of villages and protection and preservation of the rural heritage	IX	SOP/PDRN
p	Diversifying agricultural activities and activities close to agriculture to provide multiple activities and alternative sources of income	IX	SOP/PDRN
q	Agriculture water resources management	IX	SOP/PDRN
r	Improvement and development of infrastructure connected with the development of agriculture	IX	SOP
s	Encouragement of tourist and craft activities	IX	SOP
t	Protecting the environment in connection with agriculture, forestry and landscape management and improving animal welfare	IX	SOP/PDRN
u	Restoring agricultural production potential damaged by natural disasters and introducing appropriate prevention instruments	IX	SOP
v	Financial engineering	IX	SOP

## Annex 2.

### Synthesis Evaluative Questions

#### A. *Cross-cutting common evaluative questions*

1. To what extent has the programme influenced the population level, composition and distribution in rural areas?
2. To what extent has the programme been conducive to securing employment both on and off holdings?
3. To what extent has the programme been conducive to maintaining or improving the income level of the rural community?
4. To what extent has the programme improved the market situation for basic agricultural/forestry products (diversification, quality, competitiveness)?
5. To what extent have environmental concerns been integrated in the programme so as to improve environmental aspects of activities (especially agricultural activities) in rural zones?
6. To what extent have implementation arrangements contributed to maximising the intended effects of the programme?

#### B. *Evaluative questions specific to France*

7. To what extent has the programme helped in guiding agricultural holdings towards a sustainable and multifunctional agriculture, main priority of the programme?
8. To what extent has the programme helped supporting rural development, main scope of the EU regulation?
9. Relevance of the geographical levels of programming (national plan and elements of SOPs), in comparison with other EU member states?
10. Coherence of the programme with CAP first pillar measures? Complementarities? Contradictions?

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## Chapter 15. Impact of Rural Development Policy on Agriculture: The Austrian Experience

Ignaz Knöbl<sup>1</sup>

### **Abstract**

*In the European context, rural development policy is the second pillar of the EU's Common Agricultural Policy, but the impacts of this policy on agriculture may be different among the EU member states. Austria is a key player among these countries and places considerable emphasis on rural development measures. As regards the implementation of the CAP, two-thirds of total public expenditure (both from EU the contribution and national co-financing) are spent for the second pillar in Austria. In this respect, rural development policy contributes essentially to the income of Austrian farmers. However, the reason behind this rural development policy is certainly not to support agricultural production, but to remunerate the wide range of services which are delivered with agricultural production. The main task of the common rural development policy is to ensure multifunctional agriculture according to the European Model of Agriculture.*

### **Impacts of rural development policy on agriculture: the Austrian experience**

The definition of the expression “Rural Development” first needs to be clarified before describing the impacts of rural development policy on agriculture. In this paper “Rural Development” exclusively comprises all the measures which are defined under the second pillar of the Common Agricultural Policy (CAP).

What is the function of the second pillar of the CAP? For the period 2007-13 the second pillar will contribute to the objectives proposed by the European Commission, and subsequently adopted by the EU Ministers of Agriculture, as follows:

- improving the competitiveness of agriculture and forestry by means of support for restructuring, development and innovation;
- improving the environment and the countryside by means of support for land management; and
- improving the quality of life in rural areas and encouraging diversification of economic activity.

The first objective is directly addressed to agriculture and forestry as a competitive economic sector. Within the framework of the second objective, sustainable and environmentally friendly land management, as well as the maintenance of landscape, is

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1. Federal Ministry of Agriculture, Forestry, Environment and Water Management, Vienna.

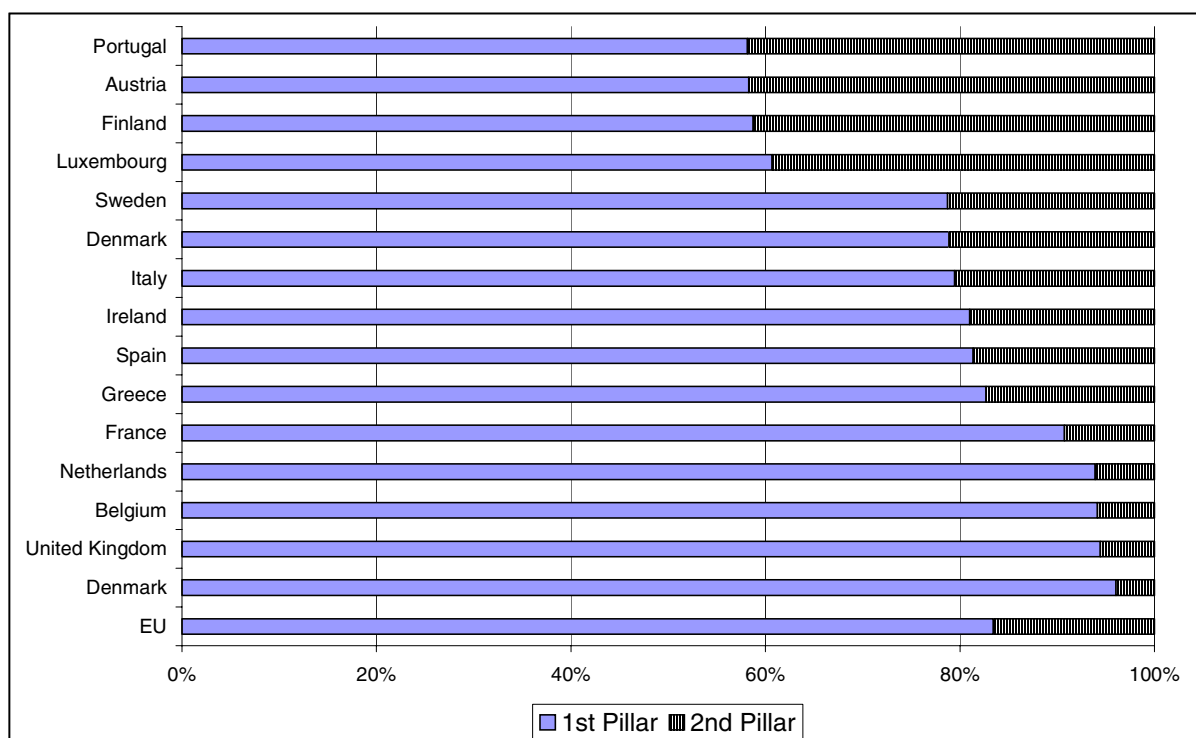
remunerated. Therefore, it has a direct impact on the income of land managers – principally Austria's farmers and forestry workers. The third objective goes beyond agriculture and forestry, aiming to contribute to the diversification of the rural economy and improve the quality of life in rural areas.

The policy measures to achieve these three objectives are not new, having their basis in earlier reforms of the CAP, including the 2003 CAP reform and in the EU's Structural Policy. A new aspect is the financial contribution to each of the three objectives, the so-called balance between the objectives. In order to attain each objective, a certain minimum payment must be provided.

Of course, such a policy may not cover all the needs of rural development in a comprehensive way and additional instruments may be required. However, such a policy within the framework of the CAP will have direct impacts on agriculture. Of course, the extent of the impacts depends very much on the available resources.

On the European level, the financial resources for rural development are still moderate in comparison to total CAP spending. In 2003 just 17% of the CAP budget (or EUR 7.8 billion) was allocated to rural development measures. The proportion between first and second pillar varies considerably across EU member states. In the United Kingdom, Denmark and the Netherlands the expenditure for the second pillar amounts to only 5% of the CAP budget, whereas in Portugal, Finland and Austria 40% of the EU expenditures for agricultural policy are directed towards rural development (Figure 1). Taking into account the fact that the second pillar has to be co-financed (at least 25% in Objective 1 regions and at least 50% in regions outside Objective 1), there is a considerable leverage effect of the EU fund for rural development.

**Figure 1: Relation between 1<sup>st</sup> and 2<sup>nd</sup> Pillars of the CAP in EU-15 members (%)**



### ***Basis of the orientation in Austria***

In Austria about two-thirds of total public expenditure for agriculture is provided for rural development measures. In this sense, the second pillar of the CAP becomes the first pillar in Austria. Why does Austria belong to the group of countries with a high amount of the rural development support?

Together with Finland, Austria became a member of the EU at a time when the CAP reform discussions gave birth to the concern for rural development. The 1992 CAP reform brought the accompanying measures. In the first year of EU membership, Austria implemented an agri-environmental programme, covering the whole territory of the country. The share of less-favoured areas (LFAs) is very high in Austria, which is a mountainous country. From the very beginning of the EU membership, the compensatory allowances for LFAs have been a very important factor in ensuring the income of Austrian farmers in mountainous areas.

Before accession to the EU Austria has already had a long tradition of income support and the development of rural regions. The opportunities of the programmes within Objective 5b and the Community initiative LEADER ensured the continuation of that tradition. From the moment of accession onwards, Austria has been in favour of encouraging these measures, which have been summed up as “rural development” in the *Agenda 2000* CAP reform. The accession was not seen as a breach of the existing support of multifunctional agriculture in Austria, and, moreover, the continuation of the national strategy was guaranteed by EU funds. The overall objective of the policy – of a sustainable, multifunctional and competitive agriculture and forestry sectors in viable regions – did not change with the accession.

In Luxembourg in 1997 Ministers of Agriculture agreed on the European Model of Agriculture, which focuses on the terms “multifunctionality, sustainability and competitiveness”. A firm commitment to LFAs and to the viability and quality of life in rural areas is also part of the European Model of Agriculture. Also, at the following European summit, the heads of the EU member states recognised the Model as binding for the future reform of the CAP. The adoption of *Agenda 2000*, in particular the conclusions of Göteborg in 2001, as well as the Lisbon-Agenda, have been characterised by the Model.

Austrian rural development policy has been confirmed by the European Model of Agriculture. With all due modesty, Austria sees itself as a key-player in the field of rural development. The concrete measures may be summed up into three groups:

- Measures similar to direct payments in nature. These measures have the same effect as the direct payments of the first pillar of the CAP, which contribute to income generation in the agricultural household. The payments compensate farmers for concrete services. In the next period these kinds of measures will contribute to the second objective, mentioned above.
- Measures desired to encourage investment in the agricultural holdings, the forestry sector and the food industry, as well as in rural areas and the environment. These measures contribute to the improvement of the agricultural structure, quality of life in rural areas and to the enhancement of the environment.
- Measures which involve the consultation, information and engagement of citizens in rural areas to develop their own local strategies.



### *Rural development in Austria, 2000 to 2006*

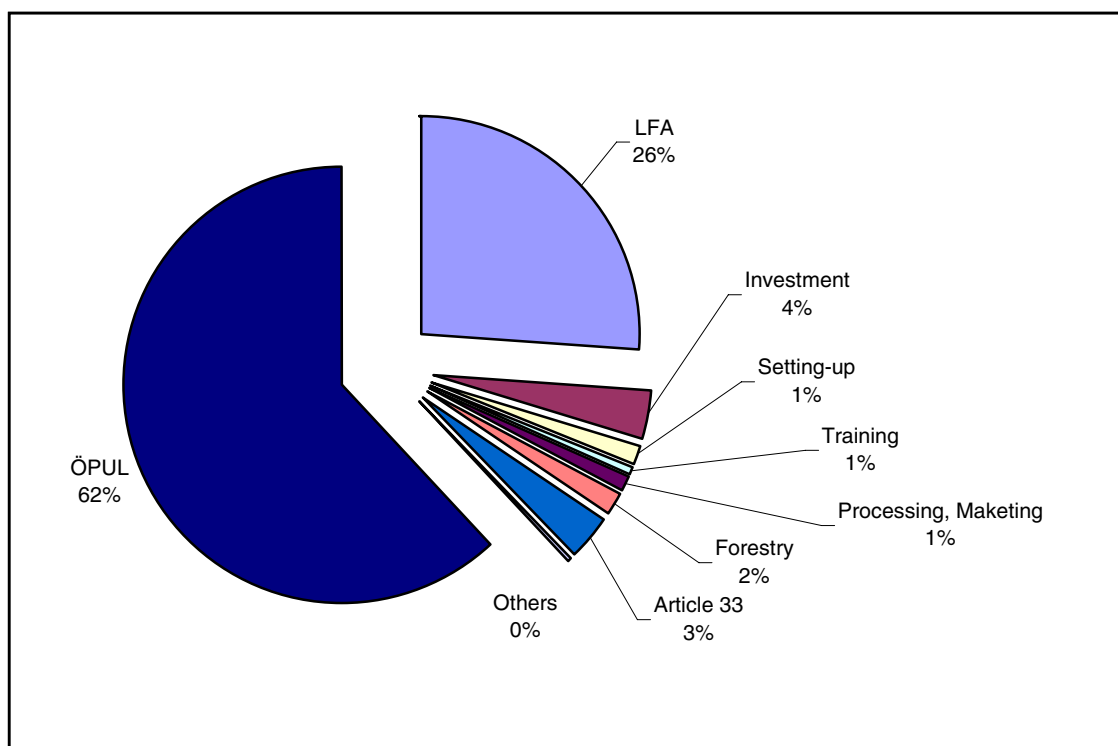
In the period 2000-06 these measures will be applied within the framework of the following programmes:

- the Austrian Rural Development Programme, with a budget of approximately EUR 7 billion of total public expenditure, which equals EUR 1 billion per year;
- in addition, there are the European Agricultural Guidance and Guarantee Fund (EAGGF) Guidance Section-funded measures under the Objective 1 programme of Burgenland; and
- the Austrian LEADER+ Programme.

Table 1 shows the distribution of the public resources of the individual measures of the Austrian Rural Development Programme (Figure 2):

- the agri-environmental measures (ÖPUL) are on top, amounting just over 60% of total public expenditure;
- the compensatory allowances for the LFAs require more than one-quarter of the public resources of the programme;
- the rest of the financial resources will be used for all those measures of Regulation (EC) No. 1257/1999, which supports investments in agriculture and the forestry, food industry and rural areas. The real expenditure for these measures is of course much higher, as a considerable amount of private resources are involved.

**Figure 2: Austrian Rural Development Programme, 2000-06**  
(%)



**Table 1. Expenditure for rural development in Austria, 2000-06**

Measure	Reg. (EC) No. 1257/1999	Total public expenditures (mill. EUR)	EU contribution (mill. EUR)	Share in public funding (%)
Investment in agricultural holdings	4 to 7	265.67	132.73	3.79
Setting-up of young farmers	8	95.21	47.59	1.36
Training	9	44.59	22.30	0.64
Less-favoured areas	13 to 21	1 830.85	659.47	26.14
Agri-environment	22 to 24	4 358.62	2 140.05	62.22
Improving processing and marketing of agricultural products	25 to 28	89.56	44.46	1.28
Forestry	29 to 32	119.42	59.82	1.70
Promoting the adaptation and development of rural areas	33	201.41	100.69	2.88
Total Rural Development Programme		7 005.33	3 207.11	100.00
Objective 1-Programme		57.52	43.15	
Additional national funding for Objective 1		73.02	0.00	
Total Objective 1		130.54	43.15	
LEADER+ Programme		105.3	76.8	
<b>TOTAL</b>		<b>7 241.17</b>	<b>3 327.06</b>	

Why do agri-environmental measures dominate the Austrian programme?

The agri-environmental programme is the central support instrument of Austrian agriculture. At first glance it is a complex programme comprising in total 31 measures. These measures can be summed-up in following main categories:

- the baseline is the basic subsidy;
- beyond that, several steps of extensive production methods for grassland and arable land cultivation form the next category, including the renunciation of yield-increasing inputs;
- the next category comprises the support of environmentally friendly production systems for fruits, wine and vegetables;
- on top of the pyramid is organic farming, which in Austria occupies a leading position in Europe.

Whereas all measures within the pyramid are valid for the whole farm, area-based measures are also offered:

- support for alpine pastures and herding, as well as maintaining the cultivated landscape on sloping sites;
- projects in favour of protecting and improving water quality (keyword: Water Framework Directive);

- numerous nature-conservation projects, in particular those orientated towards the achievement of *Natura 2000* objectives.

From the very beginning the agri-environmental programme ÖPUL has been very well accepted by Austrian farmers (Table 2). At the moment about 75% of farms participate in the programme, covering 88% of the total agricultural land in Austria. Of course, these measures play a very important role for the farmers in terms of income effectiveness.

What about their contribution to rural development? On the one hand, the contribution of these measures is given by an all-land-covering approach of ensuring and maintaining the cultural landscape, which is the asset of the rural areas in Austria. Landscape is the baseline for the tourism sector, which is very important in Austria. On the other hand, low production intensities have a positive impact in LFAs in the same way that specific nature conservation measures do for ecosystems.

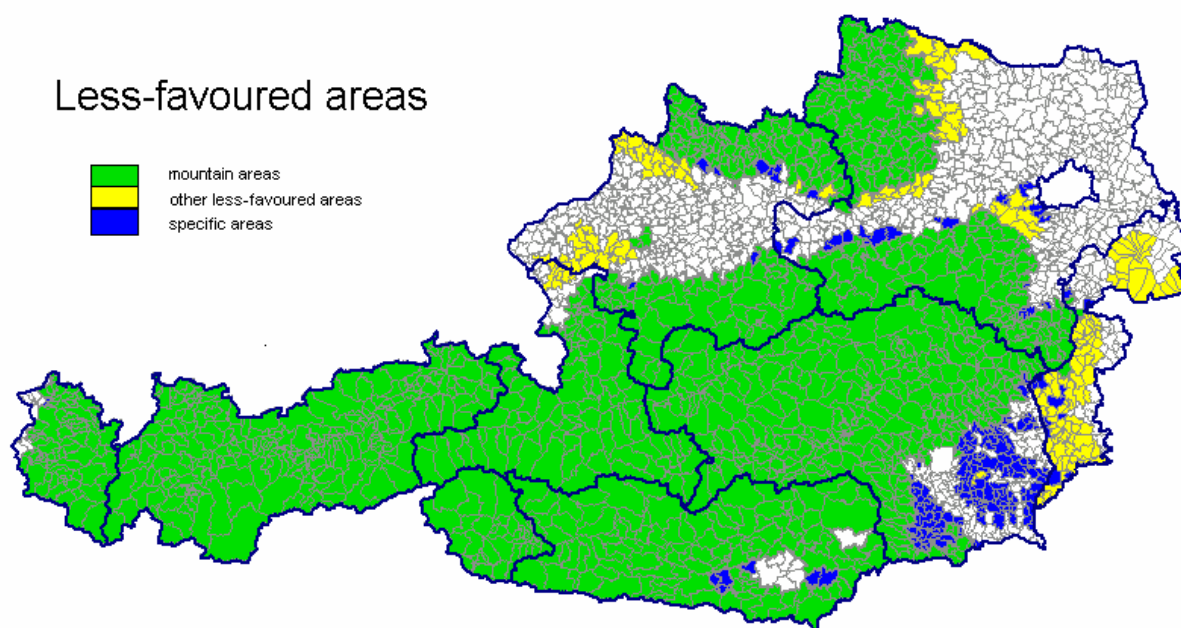
**Table 2. Agri-environmental programmes in 2003**

Type of measure	Number of participants	Area (hectares)	Public expenditure (million EUR)
Basic subsidy	119 981	1 973 816	100.23
Extensive production methods	60 826	487 337	77.59
Renunciation of yield-increasing inputs	85 828	814 035	96.37
Environmentally friendly production systems for fruit and vegetables	16 785	67 530	21.62
Organic farming	17 591	294 932	86.00
Support for alpine pasturage and herding and cultivated landscape on sloping sites	61 410	690 069	64.80
Preventive water protection	6 162	151 578	17.41
Nature conservation projects	26 225	71 409	26.78
Measure for erosion control	82 827	1 225 753	107.39
Other			30.29
Total without double counting*	135 175	2 743 709	628.48

\* One hectare of land can be under contract in different agri-environmental measures.

The second measure of particular importance is specific support for LFAs, the compensatory allowance.

The delimitation criteria of the EU show the picture of LFAs in Austria (Figure 3). In total, 70% of agricultural land is considered as LFAs, with the mountainous areas dominating the Austrian landscape.

**Figure 3. Less-favoured areas**

Under the second pillar of the CAP, the compensatory allowance is the only measure which is reserved for LFAs. The compensatory allowance allows compensating the higher management costs caused by natural handicaps. The up-keep of a certain minimum level of land cultivation in LFAs fulfils some important functions:

- preservation of the landscape, through land management;
- guaranteed settlement, with all its positive effects for infrastructure;
- protection against natural disasters such as avalanches, landslides and floods, through a minimum level of land management, particularly in exposed alpine sites.

Austria makes full use of the possibilities which Regulation (EC) No. 1257/1999 offers for shaping the compensatory allowance. From 2001 onwards Austria has implemented the compensatory allowance scheme with differentiating elements:

- the natural and economic handicap of farms situated in mountainous areas, in particular those characterised by high production costs and low yields, is assessed by a system of points, which enables well-targeted compensation for the handicaps;

- the rate of compensatory payments is highest for the first six hectares and is progressively reduced from 60 to 100 hectares (this system favours of small farms and thus contributes to safeguarding such holdings);
- the compensation that exists for natural-handicap areas is differentiated on the basis of the type of farm. Such a system provides an incentive for maintaining extensive cattle-production units. Keeping cattle on farms is an imperative condition for the preservation of the landscape in the alpine regions in Austria.

The compensatory allowance constitutes an important component of the agricultural income for mountain farmers. Depending on the natural handicap, the compensatory allowance amounts to about 14-37% of farm income. This form of support for mountain farmers has the approval of all of Austria's political parties. Indeed, the compensatory allowance is very successful with regard to the objectives of this measure according to Regulation 1257/1999, in that the structural change of agriculture in Austria's mountainous areas has slowed down. Even on extreme sites, where abandonment of farming has very negative impacts, the number of farms remains more or less constant.

The direct payments of the second pillar of the CAP in Austria are extremely important in relation to those of the first pillar. The direct payments of the farms which are represented in the accounting network RICA amounted to an average of EUR 6 000 per farm for the first pillar, whereas the compensation payments for agri-environmental measures and the compensatory allowance were, on average, EUR 9 000 per farm. Agri-environmental payments are distributed evenly amongst the non-mountain farmers and those in the mountains. In comparison to that, there is a big difference in the direct payments under Pillar I of the CAP amongst non-mountain farmers and mountain farmers (which amounted to EUR 7 400 and EUR 4 600, respectively). Compensatory allowance is the instrument which provides for distribution equity in Austria. In total there is a good balance between public money transferred to agricultural holdings in mountainous and in favoured areas in Austria (Figure 4).

With regard to the impact of income generation there is no difference between the direct payments under the first and second pillars. However, there is an essential difference concerning the reasoning behind the transfers. The direct payments of the first pillar constitute the income policy for European farmers. The payments are granted in order to compensate for low prices caused by globalisation. And the payments have to meet obligatory European standards for production, social aspects and the environment, the so-called cross-compliance standards. Direct payments offered under the second pillar in Austria are granted for concrete services delivered by agricultural holdings. Such payments also have production conditions attached to their services, but there is no link to production. The direct income transfers of the second pillar represent the compensation of the multifunctional services of agriculture and forestry.

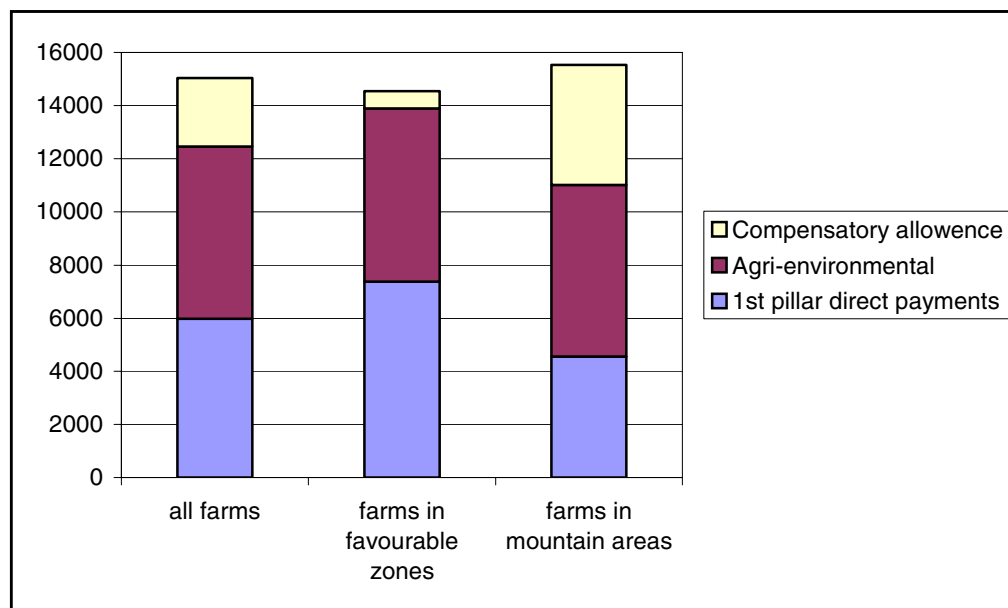
### ***Investment in rural areas***

Out of the group of the investment measures, the support of investments improving the structure of agricultural holdings dominates in the current programme period. Including the setting-up of young farmers, which is granted in connection with investments in taking-over holdings, approximately EUR 400 million is spent, which represents 5% of total public expenditure. This support produces a volume of investment of about EUR 2 billion. The investments undertaken are not only directed towards the

improvement of competitiveness – environmental and animal welfare aspects are also targeted. Three-quarters of the supported investment projects are considered as “green” investments.

Support to the food sector plays a minor role, amounting to 1.3% of total public expenditure. However, this does not constitute a standstill in the improvement in competitiveness of the Austrian food industry. However, the food sector has attracted significant investments from 1995 to 1999.

**Figure 4. Relative importance of direct payments**  
(EUR per farm)



Within the framework of the chapter “Adaptation and Development of Rural Areas”, corresponding to Article 33 of Regulation (EC) No. 1257/1999, Austria applies only those measures which are in line with Axis 3 of the new Regulation. The current very low share of 3.1% of EAGGF-resources (2.87% of total public expenditure) is a big challenge, as are the new opportunities for rural areas in the next 2007-13 rural development policy period, because of the requirement that a minimum of 10% of resources should be spent for Axis 3.

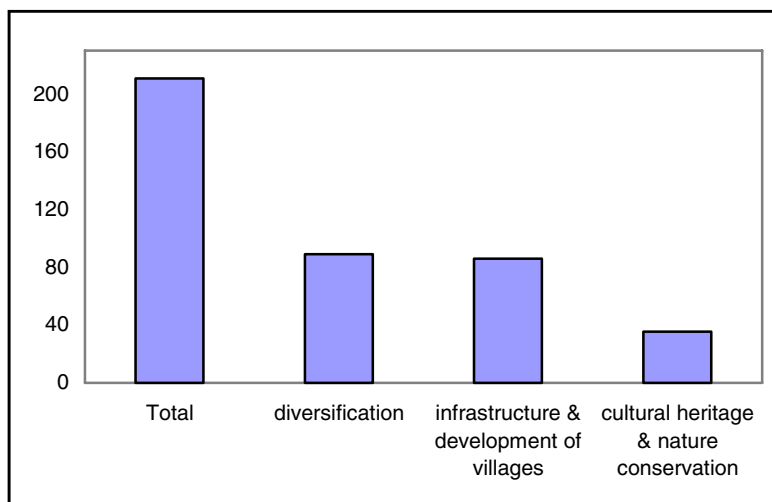
The projects to be committed in this period concentrate on three priorities (Figure 5):

- diversification of agricultural activities;
- improvement of the infrastructure and of villages in rural areas; and
- improvement of the environment through investments in cultural heritage and nature conservation projects.

Within Article 33 the nature conservation projects make an important contribution to the implementation of the *Natura 2000* network in Austria. The nature conservation plans developed under Article 33 are the pre-requisite of nature conservation contracts, which are offered and implemented under the agri-environment scheme.

In Austria, a country where tourism plays a very important role, the diversification activities of the agricultural holdings comprise the tourism and leisure sector, as well as the direct marketing of high-quality agricultural products. Out of the projects committed from 2000 to 2004 within Article 33, the share of tourist diversification projects is more than 30%.

**Figure 5. Article 33 measures**  
(million EUR)



Projects of the small-scale energy supply from renewable resources (wood) constitute another priority within the implementation of the rural development policy in Austria. A total of 450 projects, comprising EUR 126 million, have been committed as of end-2005. Such methods of generating and distributing energy are CO<sub>2</sub>-neutral and therefore relevant to the Kyoto protocol. Projects like these maintain purchasing power in the regions as this is where the source of energy originates. In addition to this, jobs are generated in the regions. The use of public money within the frame of rural development (38% of the investment costs from 2000 to 2004) contributes to a distinct European added value.

In connection with the adaptation and development of rural areas, the EU's LEADER initiative represents an important element of motivation. Local Action Groups are to be found everywhere and there is not only a remarkable economic development to be observed, but also a kind of new local identity. On the basis of the provisions in place and their allocation, the LEADER in Austria is focused on the local management, training activities and improvement of the quality of life for the local population. The support of innovation and development of new activities (role of laboratory and experimenting) is the actual basis of LEADER. Where bigger investment projects are developed they are supported by other programmes, in particular through Article 33 of the Rural Development Regulation. In this way, the LEADER approach could become the main development strategy of the second pillar for all developments going beyond the direct agricultural area.

## Conclusions

The services which agriculture is delivering for the whole of society and which are going beyond the production of agricultural products were appreciated and supported by Austrian agricultural policy even in a period when the expression “multifunctional agriculture” was unknown in the political and scientific discussion in Europe. In a number of Austrian regions the structural change in agriculture does not lead to an increase in competitiveness, but to a loss of attractiveness and social capacity which are both leading to the loss of economic strength. However, the multifunctional services delivered by agriculture can only be maintained in a sustainable manner when they contribute to the income of the farmer. Briefly put, there is no multifunctional agriculture without compensation for services.

Therefore, we are facing a financial question as well. The answer to this question is given by the CAP. The definition of rural development as the second pillar of this policy provides the possibility for Austria to compensate in a very focused manner the multifunctional services delivered by the agricultural sector and by forestry. These compensations have enabled agriculture to remain a key sector in rural areas. However, this does not mean that agriculture is the driving power for other sectors like tourism. Nevertheless, it is true that agriculture and forestry are the basis of tourism and the development of this sector. Moreover, the mix of measures contributes to the development of vital rural areas.



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## **Chapter 16. Evaluating Structural, Territorial and Institutional Impacts of Rural Development Policies in Italy: Some Lessons for the Future Programming Period (2007-13)**

Francesco Mantino<sup>1</sup>

### ***Abstract***

*This paper aims to answer two main questions: a) which kind of impacts are generated under the EU's rural development policy?; and b) what are the main factors influencing the nature and the direction of effects which are generated under the rural development policy? In order to address the first question, the main effects of some important rural development programmes funded by EU and national/regional sources are summarised on the basis of 1994-99 and 2000-06 experiences. For the second issue, which, despite its importance, is frequently under-evaluated because of the relative difficulties in exploring such factors and the predominant tendency of undertaking partial analyses, the role of three key factors is explored: a) the institutional and managing structures that are involved in governing and implementing rural development policy; b) the so-called “first pillar of the CAP”, that is, a group of policies addressed to market and to direct supports to farm income. These policies play a significant role in governing and interacting with impacts generated by rural development policies. Although conceived within a common framework at European level, these policies are implemented through separate and sometimes conflicting modalities and structures at national and regional level; c) the dynamism of the social and economic local context, which plays a role on the side of the policy demand. The paper, on the basis of the scenarios deriving from the EU Financial Perspectives for the 2007-13 period, also raises some conclusions on the potential role that rural development policies can play in the future and on the likely economic and social impacts on the evolution of rural areas.*

### **The debate on rural development policies and their impacts: are such policies justified by economic and social considerations?**

There is intense debate on the role and the effectiveness of rural development policies in the enlarged EU. The implementation of these policies still raises a lot of doubts on the cost-benefit ratio of administrative and procedural burden of these policies. Due to this criticism, these policies were one of the main objectives of the last two reforms of EU policies (2000-06 and also the future reform for the 2007-13 period).

Another very important source of criticism derives from the strong unbalanced ratio between the two main pillars of the CAP: on one side, market policy and, on the other side, rural development policies. Many authors and practitioners underline that the

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1. National Institute of Agricultural Economics (INEA), Rome.

financial weight of the second pillar within the EU budget is not really consistent with the ambitious objectives that the juridical framework and EU strategies give to it.

These two types of problems both have a real basis. But the first one is especially used by those who raise serious doubts about the role of Rural Development Programmes (RDPs), while the second is underlined by those who believe in the importance of such policies and ask for more financial resources to be devoted to them.

The evaluation of policies is a very important tool to answer to these doubts and to reply to the questions on the efficiency and effectiveness of public interventions in rural areas. For this reason the role of evaluation has been stressed and reinforced by the latest EU reforms. A lot of important results have been obtained by the evaluation reports. The RDPs have been changed and adapted in the light of the evaluation results. So nobody can raise doubts over the importance of evaluation within the programming and the implementing process. The presence of programme evaluation has also brought about an improvement in the monitoring system, which is a fundamental and necessary tool for all stakeholders involved in the evaluation process (state, regions, independent evaluators, etc.). Unfortunately, the evaluation of RDPs still presents some relevant problems: evaluations are still heterogeneous in different programmes; they very often lack comparability and adopt partial approaches which do not permit an understanding of the global impact of RDPs. Evaluation reports do not reveal the territorial impact on the different areas of a given region. Consequently, it is very difficult to estimate or simply to reflect on the cohesion effect of RDPs.

This paper aims to answer two main questions: a) which kind of impact is generated under the EU's rural development policy? b) what are the main factors influencing the nature and the direction of the effects which are generated under the rural development policy?

In order to address the first question, the main effects of some important RDPs in Italy funded by EU and national/regional sources are summarised on the basis of 1994-99 and 2000-06 experiences.

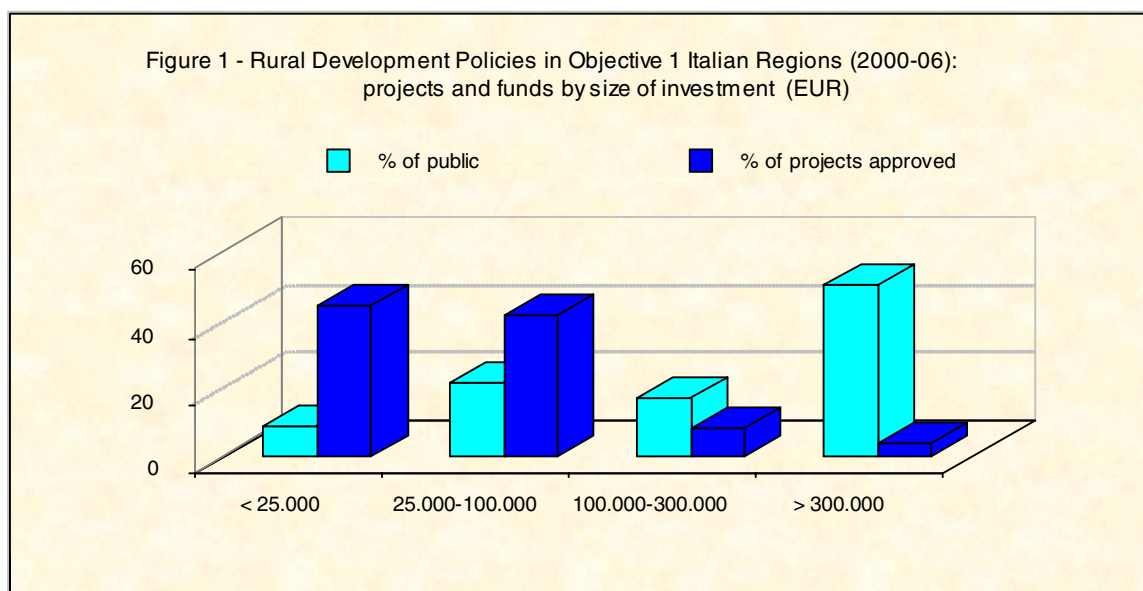
Three main effects are taken into consideration: a) effects on farm holdings; b) territorial effects (on disparities between different regional areas); and c) institutional effects (on regional and local governance and capacity building). Among the effects on farm holdings, this paper will show that there are several positive changes in labour productivity, the net farm income per unit of labour, the quality of the agricultural production, and the intensity of generational change within the farm. Some interesting results come from the analysis of the Farm Account Network (FADN), and particularly from the Italian farm sample.

This paper, on the basis of the scenarios deriving from the 2007-13 period, also raises some issues on the potential role that rural development policies can play in the forthcoming programming period and on the likely economic and social impacts on the evolution of rural areas.

## **The effects of rural development policies on farm holdings**

What are the main effects on farm holdings? These are the simplest effects to estimate, although little attention is usually devoted to them in the evaluation reports. In this paper the most important effects on the farm labour productivity, the net farm income per unit of labour and the quality of farm production are considered.

Before analysing such effects it is important to take a look at the size of the project financed by RDPs. This paper considers those individual agricultural projects funded by Objective 1 regions since the beginning of the current programming period (2000-06). These projects have been approved by Objective 1 regions for farm investments, processing and marketing activities by agro-industrial firms, infrastructures, aids to setting-up young farmers and diversification of economy in rural areas. The size of investment differs according to the region and typology of projects.<sup>2</sup> The paper has identified three classes of project size (Figure 1): most of them are small projects, whose impact on the structure of agriculture is undoubtedly really minimal. Almost half of them are very small (below EUR 25 000) and about 90% are small (below EUR 100 000). This result, clearly shown in Figure 1, suggests two important conclusions: a) there is a re-distributive effect that comes from a compensatory approach, with minor implications on the structural and long-term problems; b) only a minority of farms substantially benefits from the structural measures activated under the second pillar heading, in the sense that receives the amount of resources necessary for restructuring and introducing innovations. In fact, it should be noted that 4% of the financed projects receive just over 50% of the global amount of committed public resources. There is also an 8-9% of the projects gaining medium/medium-high average support from RDPs and receiving 18% of the public resources. In this case the probability of a positive impact of farm restructuring can be considered high as well.



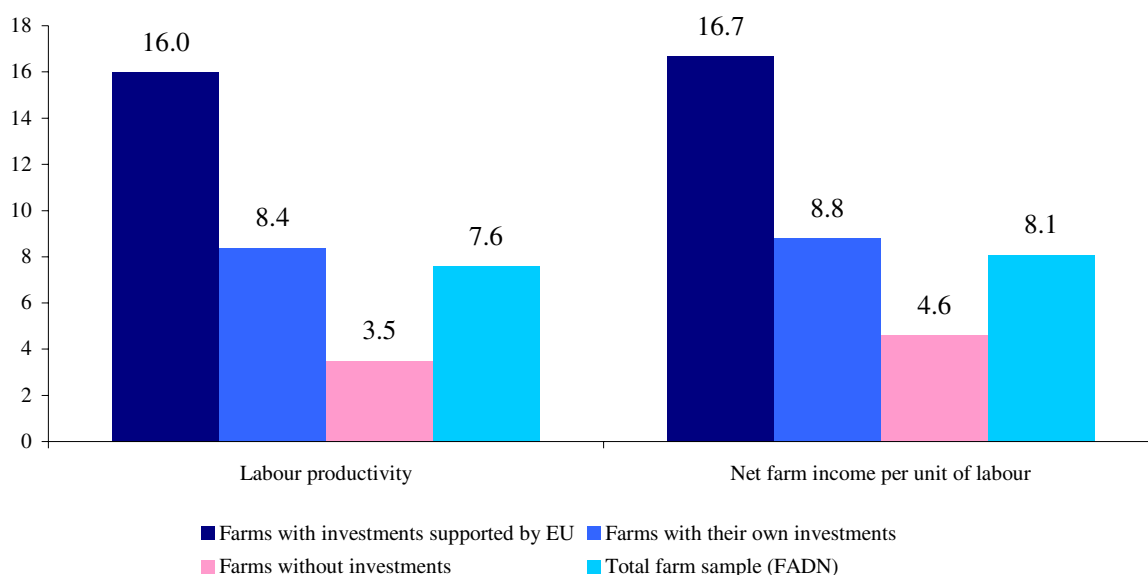
Previous considerations do not mean that RDPs have merely re-distributive functions. On the contrary, analysis of public investments delivered by RDPs in the 1994-99 period shows the significant effects of farm productivity and incomes (Figure 2). If changes in labour productivity and net income per unit of labour on farms supported by RDPs are compared with other groups of farms, it will be noticed that the benefits of the former are higher than for any other type of farm holding. As a term of comparison, both farms with their own investments and farms without investments are used. Farms supported by RDPs

2. The size of the project is identified by the public investment. That means, in the specific context of Objective 1 regions and given the rate of public co-financing, that the global investment (public+private quota) should be approximately double.

at the end of the 1994-99 period have reached a level of productivity and income per unit of labour substantially higher than the *ex-ante* level (+16%) than farms with autonomous investments.

These results emphasise the importance of structural policies and their potential role in improving the viability of farm holdings. Analyses at EU level (Agra Ceas Consulting, 2003) confirm these considerations, stating that in five member states “... income amongst beneficiaries was either higher or improved compared to non-beneficiaries or national average”. In any case, they also raise caveats on these findings: they suggest that these results may be influenced by those farms applying for funds rather than actually resulting from the investment made. These evaluations also suggest that there can be deadweight losses: it is always possible that some proportion of investments would, in any case, have been made in the absence of support.

**Figure 2. Effects of EU support to farm investments in Italy over the 1994-99 period**  
(% change after investment)

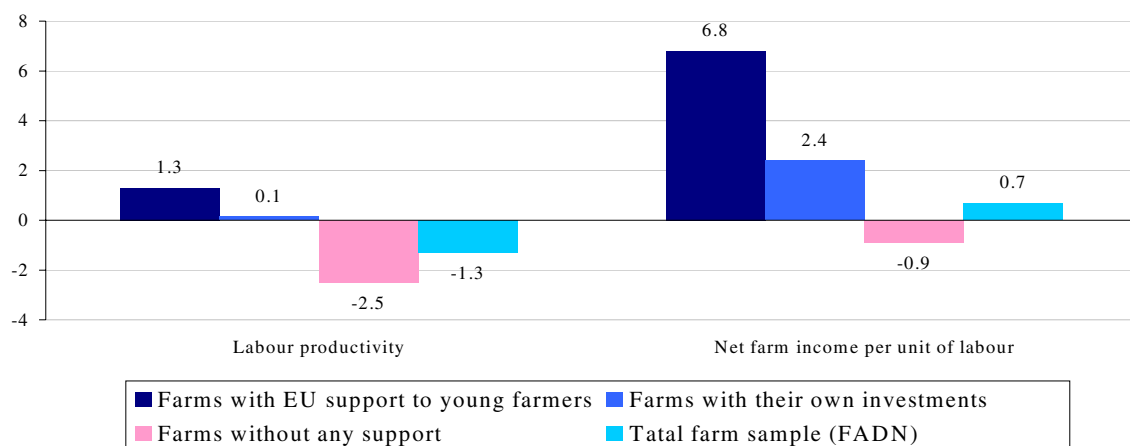


Previous considerations can also be confirmed when the effects of two other structural measures are analysed: aids for setting-up young farmers and for processing and marketing investments in agro-industry firms (Figures 3 and 4).

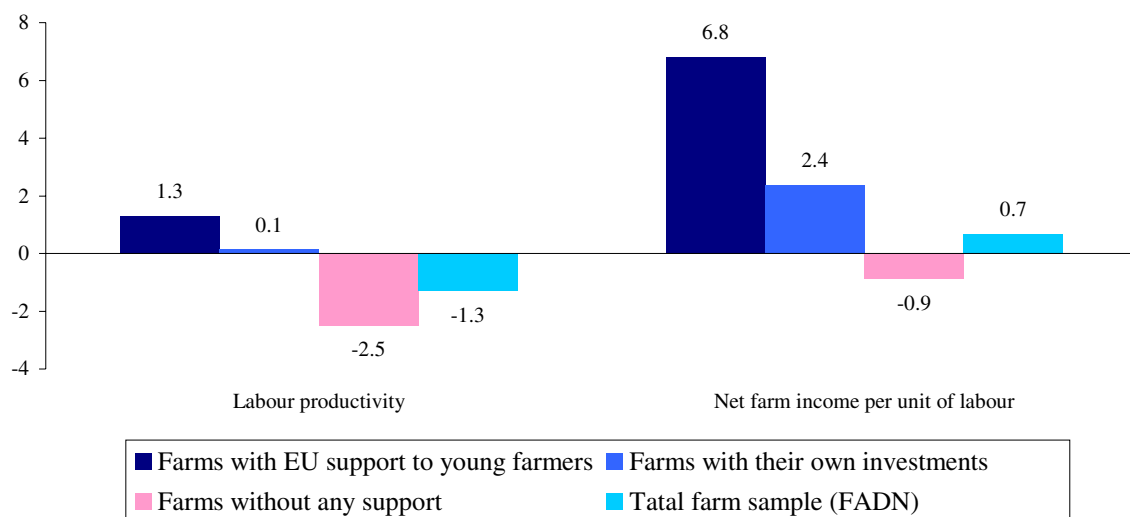
The evidence concerning the impact of aids for improving quality production in Europe is ambiguous.<sup>3</sup> In any case, the data presented here are, to some extent, controversial when the effects by type of production are examined (Figure 4): for some types of production there is no effect, for others (cereals and olive oil) the change is relevant, but on the whole quality production accounts for less than 10% of total production. For fruit and vegetables the role of RDPs was positive, but not so strong.

3. The term “quality production” is used here to encompass a wide notion of production participating not only in food-quality schemes (EU regulation concerning quality), but also in regional or national schemes.

**Figure 3: Effects of setting-up support for young farmers in Italy, 1994-99**  
(% change after giving support)



**Figure 4. Effects of EU support to agro-food industry in Italy, 1994-99**  
quality production / total production (%)



On balance, looking at the global effects of these measures supporting investments in agriculture it could be said that:

- some doubts can be raised about the effects at the aggregate level, due to the relatively low weight of resources delivered by RDPs in relation to the overall level of subsidy the farmer received *via* market policy;

- these measures can have a specific role in improving efficiency and incomes at the micro-level, and most likely in a group of farms which are already in the efficiency area, but which need support to continue the restructuring and innovating process more quickly;
- these measures are partly used to compensate temporarily low incomes deriving from the farm. This is not simply the case of measures aiming at this objective (like compensatory payments to less-favoured areas), but also of measures directly supporting farm investments.

## The territorial effects of rural development policies

These kinds of effects are usually under-valuated or even neglected. That is because most of attention of main stakeholders and policy makers is focused at the farm level and, more generally, on sectoral objectives. But the territorial effects of RDPs are progressively becoming more important. They have to be evaluated on the light of two relevant circumstances:

- rural development is potentially an important component of cohesion policy, and it should aim to reduce economic and social disparities among regions. It is essentially for this reason that the rural development measures have been kept within Cohesion Programmes in the 2000-06 period, funded by EAGGF-Guidance and by Structural Funds;
- a specific characteristic of rural development policy is the “territorial dimension”, given by the importance of the regional programmes in most of EU countries and of area-based integrated projects. This is a substantial difference compared with the agricultural policy under the first pillar.

The objective of reducing territorial disparities implies a fundamental pre-requisite in policy design: the need to focus public interventions on the poorest areas, or in areas where restructuring agriculture is urgent. Rural development policy assumes this objective implicitly when it stresses the importance of improving competitiveness in rural areas and especially when it assumes the maintenance of population as a fundamental resource for the survival of economic activities in rural areas.

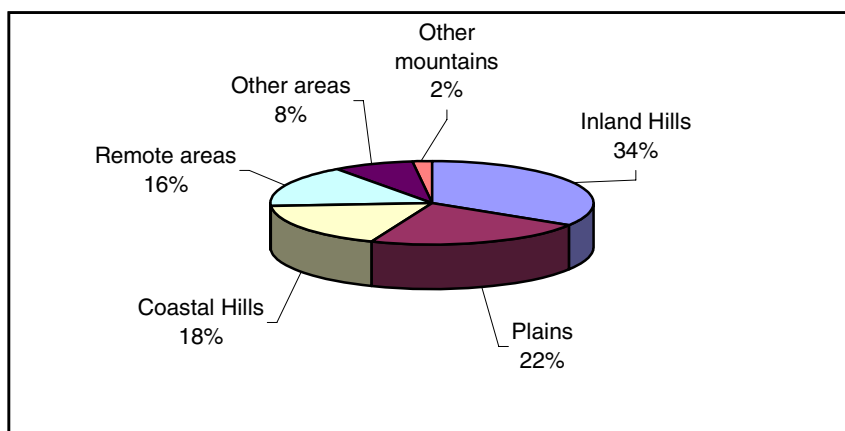
The analysis of data suggests that the public effort to achieve this objective was insufficient. If the amount of public expenditure made by RDPs by type of area is considered (Figure 5), it can be seen that the mountainous areas on the whole receive about 18% of the resources, that is somewhat below their relative importance in the economy of Objective 1 regions (mountain areas represent 17% of farm holdings, 10.5 % of total population and 26% of the total agricultural surface).

But criticism comes more from the territorial profile of investments than territorial distribution (Figure 6). Obviously, moving from the poorest areas to the richest ones, this profile changes: in mountain areas investment on infrastructure absorbs more than 50% of global resources, while in other areas investment on farm and agro-industry firms increases and compensates the low weight of infrastructures. This different profile according to the area shows two complementary results:

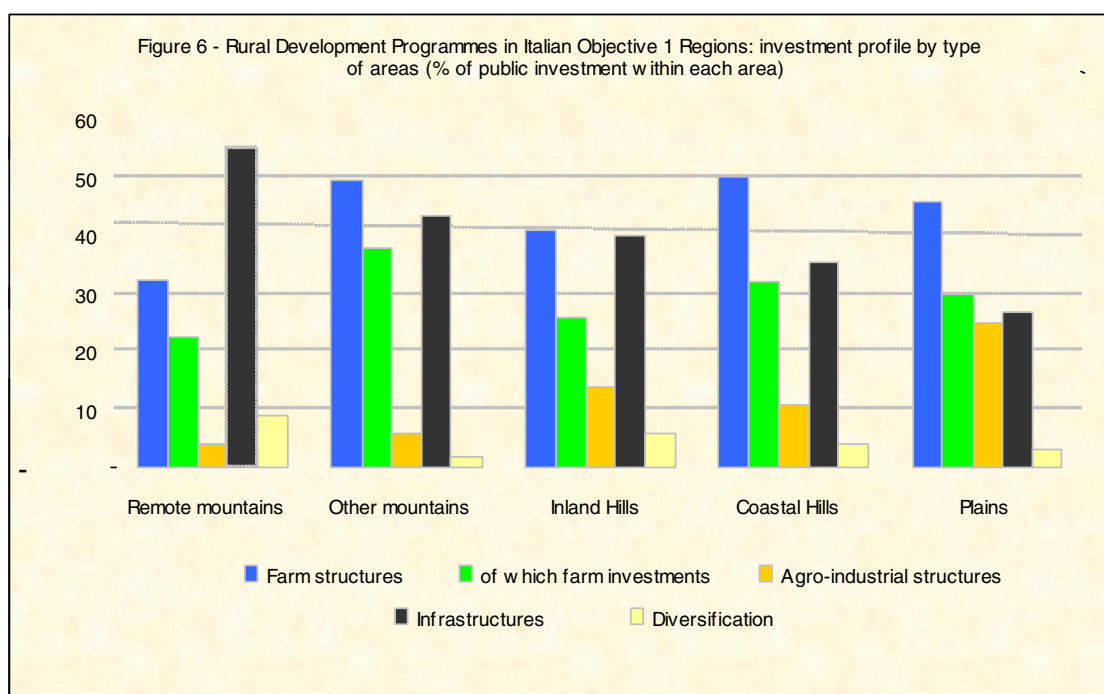
- that a different demand emerges from the areas and the profile is simply the result of the different level of development;

- that the profile is the result of the public response to the actual demand of the areas and that the supply of policies does not try to stimulate the potential demand for support for development that is hidden by various factors.

**Figure 5. Rural Development Programmes 2000-06 in Italian Objective 1 regions:**  
(distribution of public investments by area, %)



**Figure 6 - Rural Development Programmes in Italian Objective 1 Regions: investment profile by type of areas (% of public investment within each area)**



The analysis of economic and social performances of Objective 1 regions and of the different areas confirms that disparities among regions and among areas within regions are still going on, even after the implementation of rural development policies and regional policies in previous years.



## The institutional effects of rural development policies

These effects are often neglected in the evaluation process or merely mentioned (*e.g.* stating that RDPs produce a strengthening of capacity building). It should be stressed that these effects are one of the main sources of added value of RDPs in Europe and that these institutional improvements are part of the global impact of these policies. Sometimes they can be considered as intangible assets for new policies, sometimes they can be quantified through concrete indicators of institutional improvement.

In this paper and elsewhere (Mantino, 2003) an attempt has been made to clarify what institutional effects really mean. An attempt is made here to identify them and, at the same time, it should be stressed that there is important and crucial work to be done in measuring them. These effects are globally positive for the governance system at every level (EU, national, regional and local). On the contrary, policies under the first pillar of the CAP are less able to produce positive institutional effects. These policies have negative or nil effect because their working rules and procedures are established entirely at the European level and possibilities for national/regional adaptation are very limited.

It can be said that there are fundamentally two types of effects:

- effects on the capacity of policy design; and
- effects on administrative and management capacity.

The first type of effects are identified with a better ability in programming; in establishing effective selection criteria for projects and selecting innovative projects; in giving technical support to local institutions; and in defining projects at local level which are consistent with national/regional objectives. This also contributes to identifying at local level those projects that have the highest impact on local needs. All these effects, in conclusion, are translated into high-quality programming and projects. They concern mainly the effectiveness of policies. They also imply an improvement in human capital at every level, better relations within partnerships and networks which support the preparation of programmes and projects.

The second type of effects are identified by a better organisation of public bodies involved in the governance; better co-ordination of the various levels of governance; simplified procedures; and a better knowledge of rules at the local level. These aspects concern the efficiency of delivering and implementing policies. This efficiency can be identified by a series of effects; some of them can be quantified by specific indicators:

- shorter times in delivering funds;
- increase in the number of eligible projects;
- improvement in the system of control and monitoring;
- reduced number of irregularities in using public funds;
- more transparency in public choices.

As with the first type of effects, there is also in this case an improvement in human capital and also in structures involved in policy management, at every level. In both cases such improvements are transferred through local institutions.

## Some reflections on the coherence between agricultural and rural development policies

In the definition of the likely effects of RDPs nobody can deny the importance of taking into account their relation with the first pillar of the CAP. The first pillar has structural effects on agriculture and rural areas, which sometimes could be stronger than those of the rural development policies.<sup>4</sup> These effects interact with RDPs and influence their likely results.

Main interactions to be considered here are on the following aspects:

- ***The structure of production of agriculture:*** the Single Farm Payment, decoupled from production, was introduced following the reform of the CAP in 2003. Its current implementation in Italy is causing the abandonment of significant agricultural surface from some commodity production. Recent surveys in Italy show the clear reduction of cereals (especially wheat in the most inland areas). Recent simulations also foresee reductions of dairy cattle in small- and medium-sized farms (Giacomini, 2004; Giacomini and Boatto, 2004).
- ***The territorial distribution of support:*** recent research findings show that CAP subsidies under the first pillar are concentrated in the richest areas of European agriculture (Dax, 2005). This pattern of distribution is not followed by the rural development policy in Italy, as has been seen from the analysis of projects financed in Objective 1 regions.
- ***Financial interdependencies:*** the first pillar is blocking the re-distribution of resources within the CAP in favour of rural development policies. The modulation mechanism introduced by the Fishler Reform makes a very modest contribution to the increase of the second pillar. The hypothesis of co-financing the first pillar (Buckwell, 2005), that could make available more resources, was rejected within the recent negotiating process on the EU Financial Perspectives for the 2007-13 period. This could imply the further reduction of rural development resources (Mantino, 2005).
- ***The relative level of support:*** some Common Market Organizations (CMOs) also include ***structural*** measures in their system of support: this is the case of aids to renovate olive trees and vineyards in olive and wine CMOs, and the support to investments made by fruit and vegetable producers' associations. These measures are implemented through a rate of public contribution more favourable than the measures of RDPs. This caused a sort of crowding out effect on the same measures of RDPs.

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4. Incidentally we have stressed a sort of paradox: rural development policies, which usually have a long-term strategy, can result in actually having less influence on structural changes in agriculture and rural areas.

How can these problems be treated in future? It is argued that possible solutions should be found in the governance of the two policies. The possibility of co-ordination of these policies was enlarged by the recent reform of rural development. Co-ordination could be pursued in different ways:

- a new strategic vision which encompasses agricultural policies, rural development policies and cohesion policies within a unique national framework (the Strategic National Programme);
- a territorial approach able to define territorial priorities and to combine different policy tools for different contexts;
- contractual agreements between public administration and the farmer in which the former makes financial commitments assuring the necessary support *via* different measures and the latter uses the different measures and funds in order to pursue objectives defined by public programmes.

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## Chapter 17. Impacts of Agricultural Policy on Rural Development in Belgium: Case Study of the Flemish Region

Koen Carels, Patricia De Clercq, Dirk Van Gijsegem<sup>1</sup>

### **Abstract**

*In Belgium the regions (NUTS 1) are the competent authorities for the agricultural and rural development policy. This paper will focus on the case of the Flemish Region. Urbanisation is the key problem of the countryside in Flanders. Immigration of city dwellers and the increased interest in the countryside as a “consumption area” entails increasing land prices and new demands and pressures on agriculture. The challenge for this densely populated countryside is developing a viable agricultural sector meeting all these new demands.*

*The Flemish Agricultural Programme 2000-06, based on EC Regulation 1257/1999, is mainly focused on agriculture. The measures in this Agricultural Programme can be divided into three main categories: economic (i.e. investment support, on-farm diversification, setting-up of young farmers, training; environmental (i.e. agri-environmental payments); and social (i.e. non-agricultural aspects of the countryside, such as village renewal). The Agricultural Programme's mid-term evaluation, conducted in 2003, showed positive impacts on revenues and an increased environmental awareness of the policy's main target group, the farmers. The Agricultural Programme also has an impact on the existing governance structures for rural development. Because of the need for a more integrated and wider approach, a new forum, the “Intergovernmental Rural Consultation Group”, was installed in 2005.*

*The paper first discusses the specific characteristics of the rural areas and the agricultural sector in Flanders. The policy in Flanders is then discussed. Based on recent studies on Flanders, the impact of agricultural policy on rural areas is illustrated for investment support, diversification and landscape appreciation. Finally, some overall conclusions are drawn.*

### **Characteristics of rural areas**

Flanders has a densely populated countryside. In contrast with most rural areas in the world, the problem is not remoteness or a low population density, but over-pressure. Together with ten other European regions in eight EU member states, Flanders is one of the Peri-Urban Regions Platform Europe (or “Purple”<sup>2</sup>). The goal of this platform is to

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1. Flemish Agriculture Administration, Brussels.
  2. See [www.newbalance-eu.org/default.aspx](http://www.newbalance-eu.org/default.aspx).

recognise the specific peri-urban agenda in the European regulations on rural development and structural funds. Table 1 presents some characteristics, such as population density, surface and the average price of land in the Flemish region in comparison with the Wallonia region.

**Table 1. Characteristics of Flanders and Wallonia**

	Flanders	Wallonia
Population	5.9 million	3.4 million
Density	437/km <sup>2</sup>	200/km <sup>2</sup>
Surface	1 350 000 ha	1 684 400 ha
Average price of land	61.99 EUR/m <sup>2</sup>	21.14 EUR/m <sup>2</sup>

Source: NIS (2003, 2001).

Applying the OECD threshold of 150 inhabitants per square kilometre in Belgium gives a picture as shown in Figure 1. The map is drawn at the NUTS 4 level. For the sake of clarity, Flanders and Wallonia have been graphically separated. The non-coloured area can, then, be considered as the rural area. With this perception, the northern region, Flanders, has hardly any rural areas, but also, in the south, in Wallonia, a conglomerate of towns and urban sprawl appears.

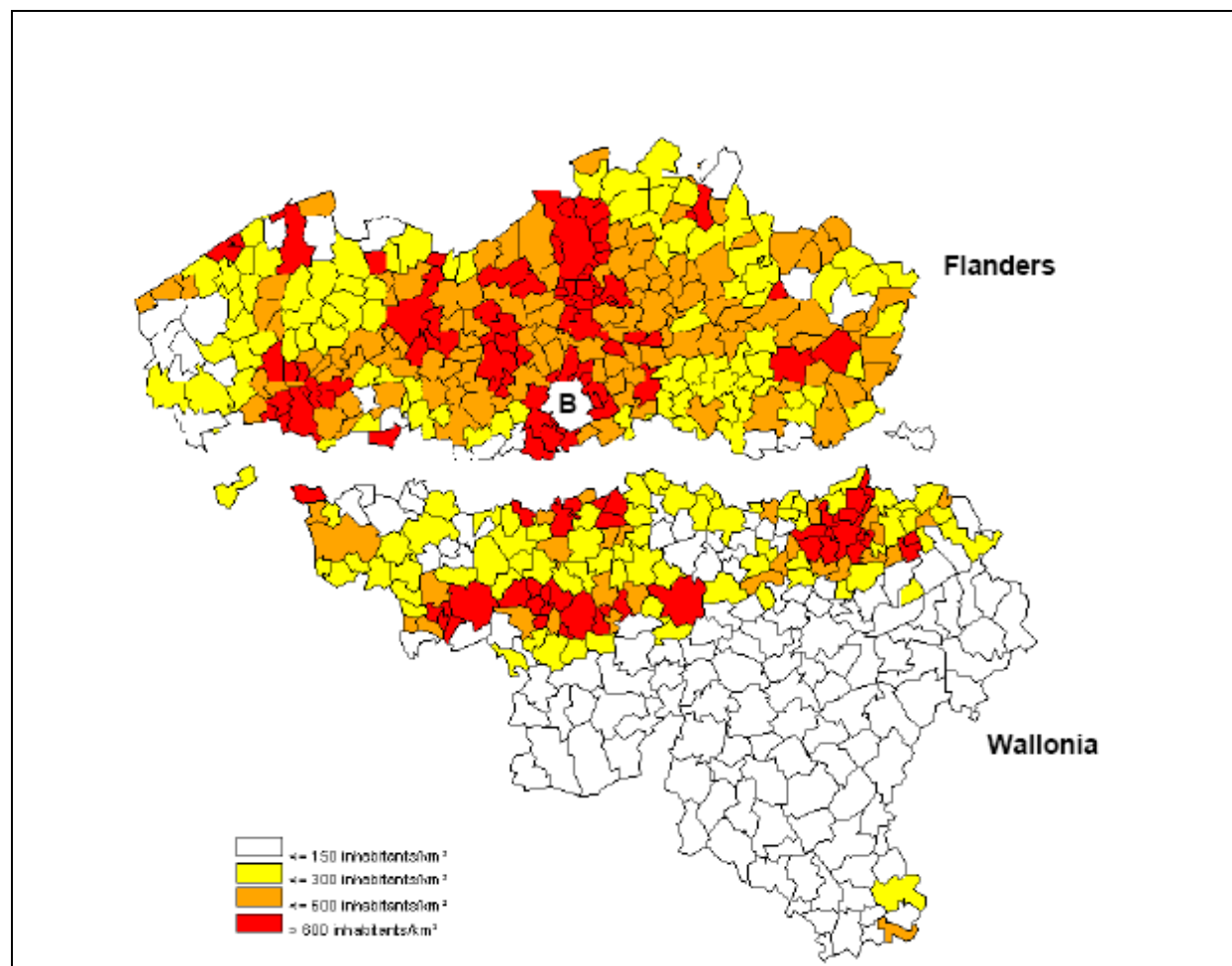
According to the OECD criterion, only 12% of the Flemish surface area can be considered rural. This does not correspond to local perceptions. Moreover, agriculture occupies about 50% of the total Flemish area, so only a small part of Flemish agriculture will be found in rural areas. Recent Belgian research by Lauwers, *et al.* (2005) showed that a new approach is possible. Results, based on a misallocation analysis, reveal that the local perceptions of rurality are associated with much higher population density thresholds than the one used in the OECD definition. For Flanders, a population density threshold of about 600 inhabitants per km<sup>2</sup> is proposed.

The research concludes that the population density remains a worthy proxy indicator: only the threshold values have to be adapted to local realities. Appropriate thresholds can easily be detected with a scientifically sound method instead of fixing rather arbitrary values. The approach to identify the threshold of population density that minimises misallocation of rural/urban area with reference to an “*a priori*” local perception of rural should then lead to different thresholds for different countries.

## Characteristics of the agricultural sector

Although Flanders has a densely populated countryside, the agricultural sector uses about half of the surface. About 35 000 farms occupy more than 600 000 hectares of farmland. Because of the limited surface, farms focus on high yields using external inputs. Consequently, the average price for farmland is high compared with Wallonia (Table 2). Also, environmental pressure is very high and has only recently begun to decrease. In Wallonia, agriculture is less intensive and less specialised. Most of the intensive livestock (pigs) and dairy farming and horticulture are found in Flanders, whereas cattle breeding and industrial crops are more frequent in Wallonia (Table 3).

Figure 1. The OECD's delimitation criterion used on Belgium



Source: Lauwers, *et al.* (2005).

Table 2. Characteristics of agriculture in Flanders and Wallonia

	Flanders	Wallonia
Farmland (in use)	633 678 ha	759 924 ha
Average price of farmland	1.95 EUR/m <sup>2</sup>	1.05 EUR/m <sup>2</sup>
Number of farms	35 303	17 771
Average surface of farm	17.94 ha	42.76 ha
Full-time labour (persons)	68 811	28 889

Source: NIS (2003, 2001).

**Table 3. Type of cultivation in Flanders and Wallonia**

	Flanders	Wallonia	Belgium
<b>Percentage of Farmland</b>			
Grassland	29.0	46.1	38.3
Cereal	22.3	23.4	22.9
Fodder crops	25.5	11.5	17.8
Industry	7.4	11.6	9.7
Horticulture	7.8	1.9	4.6
<b>Percentage of Farms</b>			
Cattle	53.7	73.9	60.5
Pigs	19.8	6.4	15.3
Poultry	8.9	15.6	11.2

Source: NIS (2003).

### Characteristics of agricultural and rural development policies

In 2001, the Federal Ministry of Agriculture ceased to exist. Agricultural policy, which is in large part an EU-directed policy, is now set at regional level. Close consultation between Flanders and Wallonia is, however, important, since the EU considers Belgium and not the regions as its counterpart.

Most of the instruments for a rural development policy are competences of the regional governments. But where agricultural policy is co-ordinated at regional level (NUTS 1), rural development policy involves many different policy levels involved (regional, provincial, municipal, etc.).

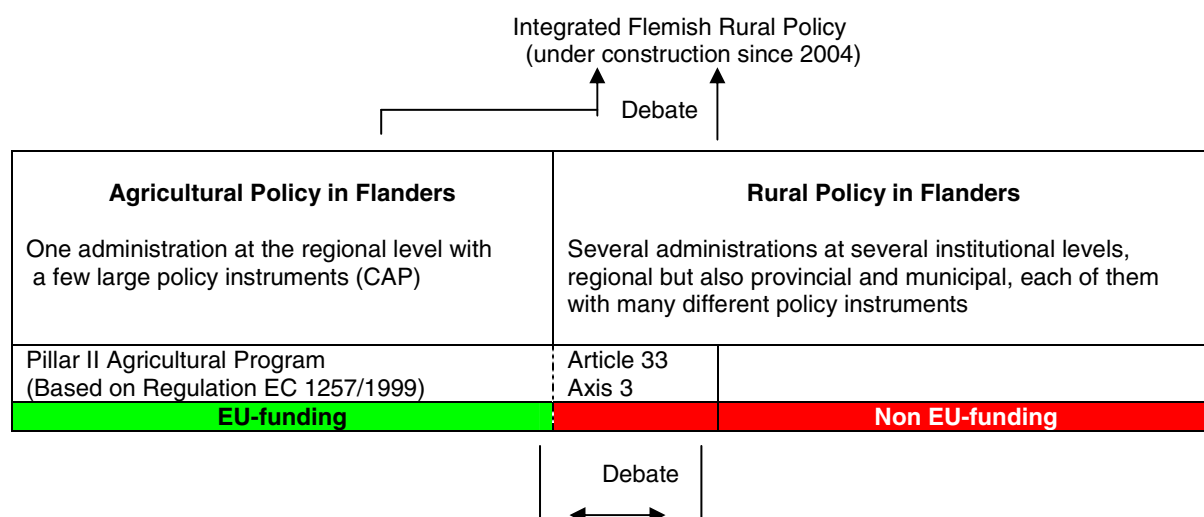
The agricultural policy in Flanders concerning the further development and reorientation of the agricultural sector is written down in the “Flemish Rural Development Programme 2000-06” or RDP (“Pillar II of the CAP”). However, this name is somewhat misleading because the programme is in fact an Agricultural Development Programme using EU-funding with only some minor rural development components in it. To avoid confusion with the rural development policy, this EU-based RDP as it is applied in Flanders, will be called the “Agricultural Programme” in this paper.

An integrated rural development approach at regional level did not exist in Flanders until 2004. Since then, preparations have been underway to develop the so-called integrated “Flemish Rural Policy”. The difference with the programme of Pillar II (the Agricultural Programme) is that this programme is not only EU-based and consequently not fully dependent on EU-funding. Its scope is much broader and agricultural policy is only seen as a component of rural policy. Figure 2 gives an overview.

For decades, rural areas in Flanders were seen as residual space where the agricultural sector was the only player. Agricultural policy consequently focused on increasing and intensifying agricultural food production. Changing demands in society shifted agricultural policy away from the production focus. The sector has been strongly influenced by the introduction of environmental objectives (e.g. the Nitrate Directive) and

the liberalisation of the world markets (decreasing prices). Furthermore, a lack of spatial planning in Flanders in the past resulted in a densely populated countryside with high pressures on the remaining open space from economic drivers (industry, commerce, transport, recreation, services), city dwellers and environmentalists (*e.g. Natura 2000*).

**Figure 2. Agricultural and rural development policy in Flanders**



Agriculture still uses most of the open space in Flanders, but nowadays it has to respond to new demands and compete for the open space with other players who perceive the countryside as an attractive place to settle, or to enjoy recreational activities and spend leisure time (the countryside as a “consumption area”). The new economic drivers, city-dwellers and environmentalists have a positive impact on the rural economy as a whole. But on the downside, there is the loss of specific characteristics and the identity of the rural areas.

Efforts are being made to introduce functions of nature, landscape and environment into the farming core-business through a diversity of instruments and incentives. Agricultural policy in Flanders consists of many components:

- price and income support (CAP Pillar I);
- development policies (CAP Pillar II, the Flemish Agricultural Programme); and
- environmental and spatial policy in Flanders, which has an indirect influence on the agricultural sector.

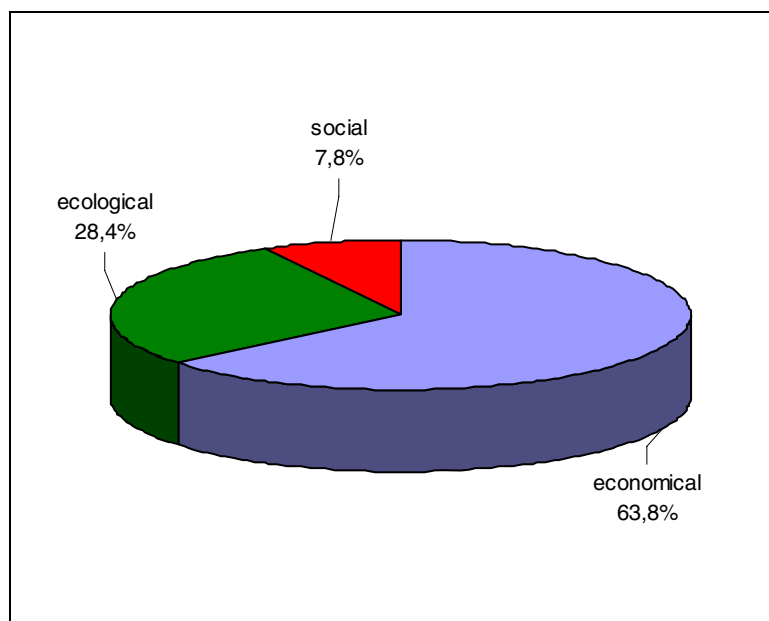
While price and income support aim at maintaining the agricultural activity in the countryside, the development policy (the Agricultural Programme 2000-06) aims primarily at improving the economic viability of the agricultural sector. In this Programme special attention is given to the diversification of activities in the agricultural sector and the increased care for the environment. In fact, the challenge for this densely populated countryside is developing a viable agricultural sector capable of meeting all these new demands.



The measures in the Agricultural Programme can be divided into three main categories: economic, environmental and social. Economic-orientated measures are investment support (*e.g.* diversification, setting-up of young farmers) and training actions for (young) farmers. The second category consists mainly of agri-environmental payments to farmers, while the third category focuses on the non-agricultural aspects of the countryside, *e.g.* village renewal. The total budget of about EUR 500 million is not equally distributed. Most of the expenses are consumed by economic measures (64%), while ecological (28%) and social measures (8%) consume a smaller part (Figure 3).

A lot of economic-orientated measures do, however, have an ecological element. For instance, the more environmentally friendly investments are, the higher the support will be. Instruments focusing only on the environment are the agri-environmental schemes. There were about 90 000 contracted hectares in Flanders in 2003. However, several agri-environmental measures (AEM) can be applied to the same parcel, so the real surface under one or more AEM is estimated to be about 60 000 hectares, or 10% of the Flemish farmland. The two main management agreements provide support for soil cover and for water-related management agreements as part of the manure policy. The total number of hectares and expenditure data per measure are given in Table 4.

**Figure 3. Percentage of ecological, social and economic expenses in the Flemish Agricultural Programme in 2003**



Source: Mira-T (2004).

**Table 4. Number of hectares and expenditure for AEMs in the Flemish Agricultural Programme in 2003**

Measure	Contracted surface (ha)	%	Expenditure (000 EUR)	%
Soil cover	39.582	43.26%	1.978	12.15
Mechanical weeding	2.627	2.87%	346	2.13
Reduction of fertilisers and pesticides in ornamental plant cultivation	767	0.84%	72	0.44
Conservation of genetic diversity of local species threatened by extinction*	3.704	4.05%	200	1.23
Management of meadow birds	499	0.55%	227	1.40
Management of field edges	308	0.34%	225	1.38
Restoring, planting and maintenance of small landscape elements	5.602	6.12%	186	1.14
Botanical Management (Nature Management)	1.934	2.11%	612	3.76
Reduced fertilisers compared to the standard : "Vulnerable area water" (Water Management)	30.709	33.56%	10.540	64.77
Conversion of traditional to organic pig farms	6	0.01%	5	0.03
Organic farming	2.861	3.13%	667	4.10
Integrated fruit production	6.613	7.23%	1.214	7.46
<b>TOTAL BUDGET</b>	<b>91.508</b>	<b>100.00 %</b>	<b>16.272</b>	<b>100.00</b>

Source: Ministerie van de Vlaamse Gemeenschap (2003).

## Impact of agricultural policy

### *Impact of investment support on farm income and on the environmental situation*

The Agricultural Programme's mid-term evaluation, conducted in 2003, estimated the earliest programme impacts. It showed positive impacts on revenues and an increased environmental awareness of the policy's main target group, the farmers. Conclusions were based on Farm Accountancy Data Network (FADN) calculations and a survey among dairy cattle farmers.

#### *Example: dairy cattle farmers*

Investment support in the Agricultural Programme is available for almost every farming type, as long as the criteria for support are fulfilled. To answer the evaluation questions on investments, the evaluator focused on only one type of farming, specialised dairy farming. Out of the Flemish FADN, 87 farms for which data were available for the period 1995-2001, were selected. In that period, 32 farms made investments and therefore received investment support, 26 farms made investments but without investment support and 29 farms made no investments at all.

Investment support is a measure that has been in existence since 1994. Because insufficient data were available for the period 2000-02 (no data for 2002 were available) and because the measure now included in the Agricultural Programme does not differ greatly from the one before 2000, data from 1995-on were taken into account to answer the Agricultural Programme evaluation questions.

Because of the large amount of data in the FADN, it was possible to calculate almost all economic indicators at farm level concerning the three groups. Table 5 gives an example of a calculation of revenues from milk and meat production per hour worked. All figures are statistically significant and show the economic advantages of investment support.

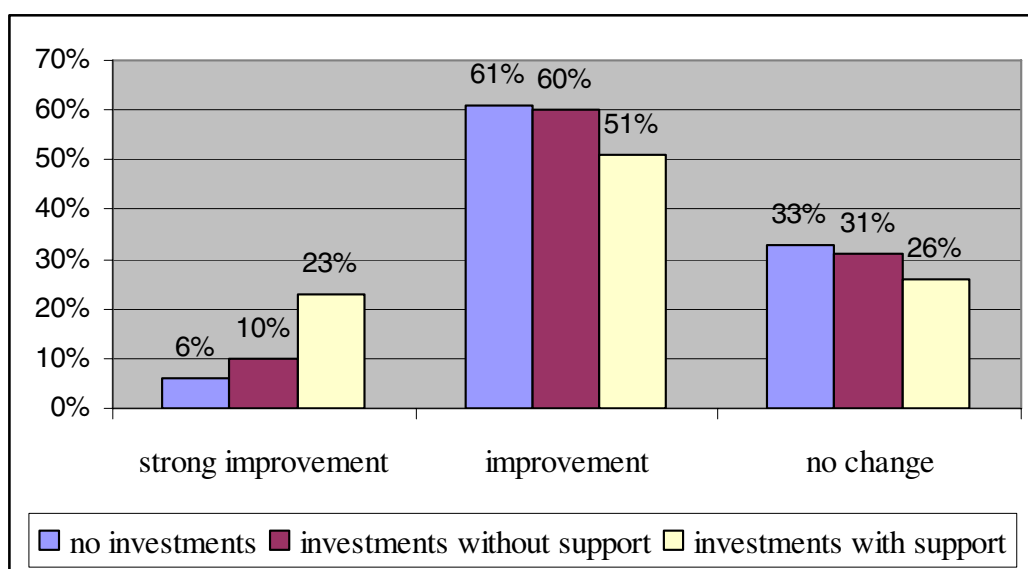
**Table 5. Revenues from milk and meat per hour worked for three groups of farmers**  
(EUR/hour)

Revenues of milk and meat per hour worked (EUR/hour)	1995	1998	1999	2000	2001
Investments with support	26.95	30.37	30.84	32.23	34.53
Investments without support	24.10	29.25	28.61	30.52	30.09
No investments	22.85	25.04	24.79	24.96	26.43

Source: Mid-term Evaluation Agricultural Programme, Flanders, 2003.

Because these farmers were also part of a survey, they were asked how their environmental situation had changed since 2000. Although not all investments are directed at the environment, Figure 4 gives an indication of the positive impact of the Agricultural Programme's investment policy on the environment, according to the farmers' perception.

**Figure 4. Perception of environmental improvement for three groups of farmers**



Source: Mid-term Evaluation Agricultural Programme, Flanders, 2003.

### ***Impact of support for diversification of farm activities on rural areas***

In Flanders, diversification of farm activities has been supported since 2000. The Mid-term Evaluation conducted in 2003 already showed positive impacts. This was confirmed in 2005 with an in-depth analysis.

In the most rural province of Flanders, a large survey and a detailed follow-up of 30 farms during one year was conducted. According to the survey, about 18% of the farms were involved in diversification activities. Being a new activity, the contribution of diversification to the rural economy was estimated to be almost 1 000 jobs. Turnover of diversification activities of farms was calculated to be EUR 100 million (Calus, *et al.*, 2005). Extrapolating these numbers to the whole agricultural sector in Flanders gives diversification a share of 10% in total turnover of the agricultural sector.

Analogous research in the urban fringe around Brussels showed that the number of farms adopting diversification activities is even higher. About 26% of the farms has developed diversification activities in order to increase their income. Comparing the results between a more rural province and the urban fringe around Brussels could lead to the conclusion that diversification of farm activities is more frequent in more urbanised areas.

### ***Impact of agricultural policy on rural landscapes: a first attempt to measure landscape perception***

Most people expect the countryside to be a place for relaxation and recreation, where wildlife can flourish, where historical and archaeological sites are preserved and where one can enjoy quietness. As such, the expectations about agricultural territories are essentially the same as those about other territorial components such as forests, nature reserves and historic landscapes.

In order to comply with these new demands in Flanders, it is necessary to determine public expectations concerning rural landscapes. Furthermore, it is essential that public expectations and the perceptions within the farming communities can be matched. This is what the Belgian research of Rogge, *et al.* (2005) is about.

Based on a pilot area in Flanders, a method for objective and reproducible methodology for the assessment of landscape perception, was developed. This study focuses on the differences in perception between several target groups: farmers, country-dwellers and landscape experts.

First results show the demand for a multifunctional landscape by country-dwellers and landscape experts. Farmers should see these (new) demands as an opportunity rather than a threat.

### ***Towards a better integration of rural policies***

Since the start of the Agricultural Programme, there has been a political debate on how the Flemish countryside should be further developed. While the Agricultural Programme clearly showed the new role of agriculture in the countryside, it was not clear exactly how that countryside should be developed. The Agricultural Programme's mid-term evaluation (2003) stated that a more integrated approach for the Flemish countryside was needed.

Therefore, for the first time, in 2004, a minister responsible for rural policy was installed. Flemish rural policy aims at the sustainable development of rural areas in Flanders. Consequently, it targets the economic, ecological and socio-cultural aspects of the rural areas. The main challenge is to get the different sectors in these areas to become more closely knit and geared to one another, while maintaining and stimulating the vitality of these areas. This vitality is being created by a growing economy; a good standard of living and a service level that is adjusted to the needs of the rural inhabitants; a dynamic social structure and a strong perception of cultural identity; a healthy living environment and an attractive landscape. The needs and opportunities of rural areas vary, therefore it is necessary that the scale of the rural policy and the content match the needs of the targeted area. In this respect, it is imperative that local and provincial governments are closely involved in rural policy. The choice for this inter-governmental approach arose not only from this constant interaction between sectors, but also from the fact that the policy of every government level intervenes in/has an influence on the development of the rural area.

To realise this, the Inter-governmental Rural Consultation Group (IRCG) was set up. The IRCG groups all ministers of the Flemish government, the deputies responsible for rural areas in the provinces and local government representatives. This concept is a way of getting rural areas and related issues onto the political agenda at different levels of government. The IRCG will facilitate the exchange of information, the stocktaking of bottlenecks and the search for solutions. Concrete actions will be delimited and the consultation will directly and indirectly give new drive to the development perspectives of the rural areas.

The tasks of the IRCG are:

- follow-up of the implementation of the Flemish Rural Policy;
- formulation of policy proposals and advice for the Flemish government and the Flemish parliament;
- promotion of inter-governmental co-operation and cross-policy fields co-operation in rural areas;
- better tuning of regulations, instruments and initiatives that have an impact on the rural area and its inhabitants;
- provision of information on the implementation of European programmes in Flanders, such as the Agricultural Rural Development Programme (Pillar II of the CAP) and the cohesion policy; and
- mapping and evaluation of the financial instruments destined for rural areas.

The IRCG is supported by three working parties, which are discussing bottlenecks and developments of the three main functions of the rural area: working area, living area and recreation and leisure area. These working parties are composed of experts, civil servants and representatives of social organisations and, of course, delegates from the IRCG itself. The discussion in these working parties will result in the formulation of advice on specific or general needs, problems or opportunities in rural areas, or in policy recommendations in which a well-defined question or assignment is put before the Flemish government or parliament. The advice and recommendations can result in research, further discussions and pilot projects, or in concrete propositions towards different policy levels.

The different policy levels involved have, of course, different objectives and tasks. The Flemish government sets the frame and has a range of instruments at its disposal. These can be new, specific instruments for the rural areas, but they can also be existing sector-related instruments, such as land consolidation, existing structures for sub-regional socio-economic policy, instruments of spatial planning and mobility planning. The municipalities are responsible for the quality of life in rural areas. The provinces stimulate and substantiate area-targeted policy processes. Provinces negotiate with the rural actors in order to have a differentiated application of the instruments and an optimal integration of the different social sectors.

## Conclusion

Urbanisation is the key problem in the Flemish countryside. Immigration of city-dwellers and increased interest in the countryside as a “consumption area” entails rising land prices and new demands and pressures on agriculture. The challenge for the densely populated countryside is to develop a viable agricultural sector that can meet all these new demands. Therefore, the current Flemish Agricultural Programme (based on EC Regulation 1257/1999) is mainly focused on agriculture.

First results show positive impacts of diversification activities of farms. There is a significant contribution to farm income, labour and turnover for the whole rural area. Agriculture also has an important impact on landscape. The challenge will be fulfilling society's new demands. The most important impact of the agricultural policy, however, is a political one. In 2004, a broad discussion of the future of the rural areas in Flanders was begun. In 2006, this should lead to an integrated Flemish Rural Policy.

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## Chapter 18. Setting-up of Young Farmers and Farm Modernisation as a Fundamental Element of Rural Development: The Spanish Case

Eva Blanco<sup>1</sup>

### *Abstract*

*The Spanish Government regards the policies concerning the setting-up of young farmers and modernisation of farms as a fundamental component in rural development policies, with the objective of contributing to a reduction in the tendency towards depopulation and economic decline of wide areas in many Spanish regions.*

*The Spanish agricultural population is very elderly (53% of farmers are over 55 years old), so the generational change in the next ten years is bound to bring about a drastic reduction in the number of farmers. Generation renovation needs to be encouraged as a means to conserve the competitive farms, the ones which can provide jobs and sufficient income, so that the rural tissue provided by agriculture will not be destroyed. In this way, agriculture will be able to continue as an essential part of the economic vitality of many rural areas, building up jobs and demand, thus contributing also to the territorial balance and the preservation of the environment.*

### Structural change

The Spanish agricultural sector underwent a radical structural change during the period 1960-90. One of the main causes was that the number of people working in agriculture suffered a drastic reduction due to the rural exodus that took place in those years, as Table 1 shows.

The reduction of the active agrarian population, a process that lasted many decades in other countries, took only about thirty years in Spain. At the beginning of the period, during the 1960s and 1970s, it was mainly the agricultural employees and unpaid family workers (mostly women) who left the sector, which had little or no effect on the number of holdings or their average size. But the process was extended subsequently to farm owners and, between 1989 and 1999, around 500 000 farmers abandoned their farms, liberating more than 2 million hectares.

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1. Ministerio de Agricultura, Pesca y Alimentación, Dirección General de Desarrollo Rural, Madrid.

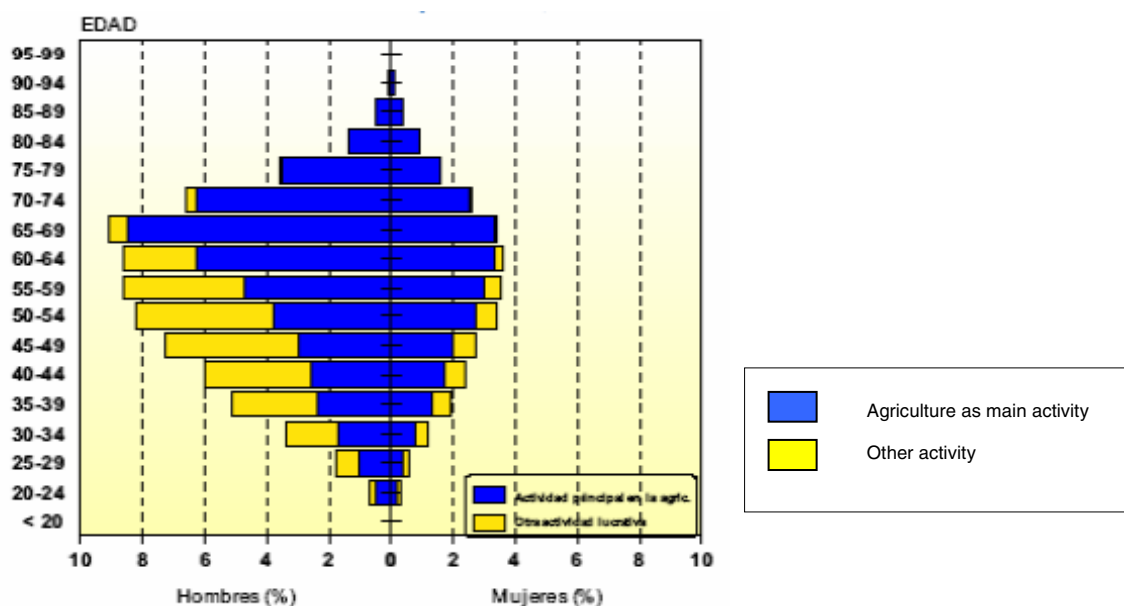


**Table 1. Rural population and active agrarian population**

	Population (millions)	Rural Population (millions)	Active agrarian population	
			(millions)	(% / total)
1960	30.53	17.46	4.8	40.0%
1990	38.87	13.60	1.3	9.8%
2003	42.57	14.93	0.8	5.1%

Source: National Institute for Statistics, (INE), Madrid.

In total, over a period of 40 years, the active population in agriculture fell from nearly 5 million people to roughly 800 000 in 2003. Notwithstanding these changes, currently 53% of farmers are over 55 years old, with a pyramid of ages, as shown in Figure 1.

**Figure 1. Structure of heads of holdings by gender and age**

### The need to promote generational renewal: setting-up support for young farmers and farm modernisation

In the next ten coming years the agricultural sector is likely to suffer an even more drastic structural change. Projections made in the *White Book of Agriculture and Rural Development* (2003) indicated that, in the period 2000-09, the number of farmers will decrease by 39%, abandoning more than 400 000 holdings and nearly 4 million hectares. These projections assumed that two out of three farmers who will retire will have a replacement, *i.e.* they will have a successor.

This assumption was probably over-optimistic. In effect, the number of young farmers installed in recent years is proving insufficient to replace two out of three farmers who retire or abandon the agricultural sector, even when an installation policy has been implemented by the Spanish government since 1987.

If a competitive agriculture is to be maintained, it will be necessary to encourage generational renewal and to contribute to the economic vitality of rural areas, especially through job creation. At present, in the EU, setting-up of young farmers support is the main policy specifically designed to encourage young people to replace in sufficient numbers those who retired. Together with the support towards farms modernisation, they are the main measures in rural development strictly directed towards the agricultural sector, aiming at adapting the human capital and the competitiveness of farms towards the new functions which agriculture has to fulfil. They are traditional measures, contemplated in previous programmes and in the present programming period (2000-06), and they are also included in the next programming period (2007-13), according to the European Council Regulation on Support for Rural Development by the European Agricultural Fund for Rural Development, as approved in September 2005.

These measures can be compared to those established in other sectors to facilitate jobs for people entering the labour market, or to encourage investments in different sectors to improve productivity and efficiency, although the latter are not so structured.

Table 2 shows the number of installations done under the setting-up of young farmers regulated in European Council Regulation 1257/1999, on Support for Rural Development by the European Agriculture Guidance and Guarantee Fund, and in Spain by Royal Decree 613/2001.

**Table 2. Number of young farmers installed under Regulation 1257/1999 with a setting-up aid**

Year	Number of young farmers	Aid per farmer (000 EUR)
2000	3 561	15.7
2001	4 298	18.9
2002	4 083	21.4
2003	3 866	21.4
2004	2 919	21.4
2005	1 326	26.4
<b>TOTAL</b>	<b>20 053</b>	<b>20.2</b>

Source: Data from the Rural Development Department, Ministry for Agriculture, Fisheries and Food, Madrid.

However, not all young farmers who get installed in agriculture do it with a setting-up aid. It has been seen that many of them get installed without resorting to this aid and then, later on, proceed to use the farm modernisation aid in order to make the necessary investments. The number of young farmers in this situation is reflected in Table 3.

**Table 3. Number of farmers receiving modernisation support under Regulation 1257/1999 without having received setting-up support**

Year	Number of young farmers	Aid per farmer (000 EUR)
2000	1 796	15.5
2001	1 914	19.2
2002	1 510	23.7
2003	864	22.5
2004	1 184	23.0
2005	346	22.6
<b>TOTAL</b>	<b>7 614</b>	<b>20.3</b>

Source: Data from the Rural Development Directorate, Ministry for Agriculture, Fisheries and Food, Madrid.

As Table 3 shows, only around 30% of young farmers have opted for this solution. The explanation could be that the Spanish Regulation for the setting-up of young farmers is particularly demanding, and many people entering as heads of farms prefer to ask for modernisation support. Farm modernisation support gives them more flexibility in their investment decisions, and requires different and easier-to-comply-with conditions, although the amount of support they can receive is, in this case, theoretically lower.

As regards where those young farmers are set up, the number of beneficiaries of the set-up aid for young farmers was classified according to the rurality index by areas of the Regions classified as Objective 1 (ten out of seventeen in Spain), more specifically:

- Predominantly rural, when at least 75% of the population lives in an area with less than 120 people per km<sup>2</sup>;
- Significantly rural, when the proportion is between 50% and 75%;
- Significantly semi-rural, when the proportion is between 25% and 50%;
- Semi-rural, when the proportion is between 25% and 15%; and
- Not rural or urban, when it is less than 15%.

The results are shown in Table 4.

**Table 4. Setting-up support<sup>1</sup>**

Area	Number of young farmers	Aid (million EUR)
Predominantly rural	8 342	161.6
Significantly rural	1 192	24.4
Significantly semi-rural	1 949	30.9
Semi-rural	722	16.3
Not rural or urban	1 875	44.8
<b>Total Objective 1 regions</b>	<b>14 080</b>	<b>278.0</b>

1. For the Objective 1 regions over the period 1 January 2000-31 August 2005.

Source: Data from the Rural Development Directorate, Ministry for Agriculture, Fisheries and Food, Madrid.

According to these results, the majority of the beneficiaries of the setting-up support are young farmers working in predominantly or significantly rural areas. This suggests that these young farmers really play a role in helping to keep a territorial balance, maintaining the rural economic fabric that is still mainly provided by agriculture in those rural areas, especially affected by de-population – a problem in many Spanish zones – and also contributing to the preservation of the environment.

Agriculture in many rural areas is still the main job-creating activity. Job creation by these measures is one of the main aspects which came under review in the medium-term evaluation of the Rural Development Programme. It is worth noting that in the 2003 Report the capacity of the setting-up support for young farmers to create new and stable jobs was recognised. It was also indicated that the aid was essential for the installation and investment in approximately 65% of the cases studied, although the percentage varies for the different regions.

Even if the job creation aspect of agriculture is important, it cannot be forgotten that as an economic sector, it also has to respond to consumer demand by being able to produce good quality products at competitive prices, and to be able to resist international competition in an increasingly open market. Consequently, in this restructuring period investments will also be crucial in increasing competitiveness and productivity.

## Diversification

Rural areas increasingly depend on a diversified economy. This diversification is also an incentive for young people to stay in rural areas, and rural households increasingly seek to complement their income outside the agricultural sector, and the tendency is intensifying, for several reasons:

- The structure of Spanish agricultural holdings (50% of farms generate income lower than the minimum wage) also favours the necessary diversification, leading to pluri-activity,
- A high proportion of farmers' spouses look for jobs outside the agricultural sector. Only 14% of women living in rural areas work in the agricultural sector, although the percentage can vary depending on areas and productions.
- In many rural areas tourism and provision of services, especially environmental services, are growing and becoming an important source of job creation and diversification.

Thus, the policies for setting-up young farmers and farm modernisation need to be balanced with diversification in rural areas.

## Adapting these measures into the general context of rural development

Facing the perspectives for the new programming period 2007-13, the complementarities with the rest of the rural development package should be identified. This would suggest that the following factors should be considered:

- more flexibility in the support for young farmers;

- better adaptation of the conditions of these forms of aid to different regional characteristics;
- adaptability to the new economic conditions of rural areas and reinforcement of diversification and of new activities;
- development of knowledge and training, in order to maintain a professional agricultural sector;
- integration of farmers into the provision of environmental services in rural areas in order to contribute to the preservation of the environment and to job diversification;
- modernisation of farms can be extended to include some farm diversification and innovation projects.

### **Coherence between rural development measures and market measures**

The application of the Single Farm Payment, which in Spain will take place in 2006, is going to bring about a radical transformation of traditional agriculture, and new challenges will arise:

- How farmers will face decoupling and how this will affect the number of new installations and investments will be important for the future of agriculture and rural areas.
- Whether payment entitlements facilitate or hamper new installations and investment remains to be seen.
- State intervention will be needed in order to administer national reserves of payment entitlements. In this respect, a policy favourable towards young farmers will be possible, taking positive action in their favour in respect to these payment entitlements, when the case arises.

However, general rural development policies complement other types of policies, such as market and income support policies. The following questions are particularly relevant:

- The need for a stable economic environment, in order to encourage young people to stay in the agricultural sector and to invest in their farms. The 2003 CAP reforms have created some uncertainty, which has probably influenced the number of people installed in agriculture.
- Agricultural policies usually translate into higher land values: this is harmful for newcomers to the agricultural profession and makes the transmission of farms more difficult, sometimes burdening young farmers with high levels of debt.
- Rural development policies encompass activities other than agriculture, supplementing incomes for rural households. This rural household income perspective is increasingly interesting to study and follow.
- Rural development policies can be adapted to regional characteristics, while market policies are applied uniformly.

- Rural development measures are not subject to WTO reduction commitments under the Uruguay Agreement for Agriculture, but many of the agricultural policies are, and this situation is going to persist. How that will influence their respective interaction and evolution remains to be seen.

## Conclusions

Agricultural policies will not be able to provide sufficient incentives to maintain at least a part of the agricultural population in many rural areas, as we have seen in the past. In the future, for the EU, where the single decoupled payments have been regulated, the situation could only get worse. Spain has chosen, in most of the sectors, the least decoupled possibility, to help to prevent the abandonment of the agricultural activity and population.

However, this will not be sufficient, and other policies are needed. An integrated rural development policy is crucial at this stage. Among rural development policies, the first to be envisaged are the setting-up of young farmers and modernisation of farms, as the necessary policies to renew and make the agricultural sector more competitive. Policies aiming at the setting-up of young farmers and modernisation of farms have followed contrasting trends in Spain, especially in the 2000-06 programming period for rural development in the EU, as data show. Some adaptations in the programme for young farmers seem to be necessary.

Agriculture no longer being the main economic activity in many rural areas, income for many farmers is not going to come only from agriculture. The diversification of activities is also a question to be considered in the setting-up of young farmers and when taking investment decisions, and the conciliation of such activities with agriculture and agricultural support needs to be looked at. Some of these activities could come from the provision of the services required by agricultural policies, mainly environmental preservation, so both policies are intertwined.

Coherence with agricultural policies is necessary, so that young farmers may have access to production rights. Increased land prices, partially induced by agricultural policies, are also a limiting factor to the setting-up of young farmers. Equity in the distribution of agricultural support will also encourage young people to join or continue in the agricultural sector and make the necessary investments. Rural development policies are adapted to the different regional characteristics, while agricultural policy is uniform: how best to conciliate and increase the synergies among them at regional level is an important factor in increasing the economic and social effect they can have.

Even if only some agricultural and rural development policies have been considered in this paper, these are only a component, albeit an important one, of an integrated rural development policy. The maintenance of the economic activity and hence, the population, in many rural areas, is also dependent on many other factors, especially the infrastructure of communications (all kinds of communications) and the services provided for in these areas. An integrated approach to rural development is thus needed, of which the measures considered here are only a part.

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**Part VI.**  
**Rural Development Policies and Agriculture:**  
**Country Experiences**



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## Chapter 19. Collaborative Governance Frameworks and Processes to Enhance Coherence between Agriculture and Rural Development Policies: Lessons Learned from the Canadian Rural Partnership (1996-2005)

Ian Matheson<sup>1</sup>

### **Abstract**

*This paper documents changes in the policy, programming and governance landscape for rural development in Canada: rather than having rural communities rely on agriculture for growth and development, there is growing recognition that strong rural communities are essential for agricultural transition and renewal. After defining “rural”, the Canadian federal context and Canada’s current agricultural and rural policy frameworks and programmes will be described. A brief discussion of the policy development process will set the stage for lessons learned from the horizontal and vertical governance frameworks and processes established under a key programme, the Canadian Rural Partnership. In this way, it will be demonstrated that the way the CRP introduced a rural community perspective is increasingly informing the federal government’s overall approach to Canada’s rural areas. While both agriculture and rural policy frameworks were developed through collaborative processes, this analysis focuses on some preliminary lessons learned from the collaborative and inclusive policy development processes of the CRP. Such collaborative policies, supported by governance frameworks that reflect the needs and priorities of rural Canada, all levels of government, and key civil society stakeholders, are becoming increasingly helpful mechanisms for improved policy coherence.*

### **Rural Canada**

There are a number of ways to define “rural” in Canada.<sup>2</sup> While often using the OECD definitions of rural,<sup>3</sup> the Rural Secretariat (RS) also uses the Rural and Small Town (RST) definition.<sup>4</sup> The RST definition permits an assessment of the varying

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1. Director, Research and Analysis Unit, Rural Secretariat, Agriculture and Agri-Food Canada, Ottawa.
  2. Consult Statistics Canada (2001) for a more detailed discussion.
  3. *Predominantly rural*, if more than 50% of its population lives in rural communities; *intermediate*, if the share of the population living in rural communities is between 15% and 50% and *predominantly urban* if less than 15% of the population lives in rural communities.

degrees of “rurality”, which is important for two reasons: first, for better understanding the challenges facing rural communities; and second, to enable other federal-level government departments (OGD) and their provincial and territorial counterparts to develop more effective collaborative policies and programmes supporting sustainable rural communities.

Sustainable rural communities are the long-term goal for many (but not all) Federal/Provincial/ Territorial (FPT) departments which have policies and programmes targeting Canada’s rural areas. Key elements of a sustainable rural community include: solid traditional networks and support systems; new economic opportunities and ability to take advantage of them; sustainable population base; and accessible services.

### ***Context***

Rural Canada’s demographic, social services accessibility and economic characteristics are changing. While some rural communities have steady or growing populations – especially those adjacent to metropolitan areas – others, in remote regions, have declining populations. Demographic changes associated with ageing and leaving populations (including youth), will produce new requirements for health, social, education and economic services. Rural regions contain much of the environmental wealth of Canada and make a strong contribution to the vitality of Canada’s resource-based sector – an important source of employment for rural citizens. Much innovation also comes from rural regions in the form of new business start-ups and the development of value added and niche products. Building on the use of new technologies, especially broadband and the internet, will allow rural communities to export their products to urban markets and improve their standards of living. Historically, socially, environmentally and economically, rural Canada has played a critical role in Canada’s past development and present prosperity. Rural communities’ ability to effectively respond and adapt to on-going challenges will ensure their continued and future success.

### ***Challenges***

Rural Canada faces both external and internal challenges. External factors can have a large impact on rural communities, as is the case with factory and mill closures; increased agricultural productivity through technology replacing labour; natural resource depletion; increased international competition; loss of markets for certain natural resources such as softwood lumber and cattle; climate change; and outcomes associated with the World Trade Organization (AAFC, 2002a).

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4. RST refers to the population living in towns or municipalities *outside* the commuting zone of larger urban centres (*i.e.* outside the commuting zone of centres with a population of 10 000 or more). These individuals may also be disaggregated into zones according to the degree of influence of a larger urban centre called Census Metropolitan Area and Census Agglomeration Influenced Zones (MIZ).

In addition to external factors there are internal factors which affect a rural community's ability to adapt to change, as identified in the 1998 National Rural Workshop, which included: demographic trends,<sup>5</sup> access to educational and health services, particularly in the north, and availability of information on federal government programmes and services (AAFC, 1998).

How a rural community adapts its economic base in the light of these trends is important. Federal policies and programmes seek to address this through programming which focuses on: value added processing, niche markets and products, new businesses based on resource-based sectors, and new activities associated with the knowledge-based economy.

## Current federal policy framework

In the Canadian context, an explicit federal rural policy is a fairly recent phenomenon: historically, sector-specific policies (*e.g.* agriculture, forestry, mining and fishing) were the primary mechanism through which the federal government could influence or affect rural areas. Since the late 1990s, there has been an increased understanding at the federal level of the importance of “place-based” policies and programmes, which emphasise the region or community, rather than the sector, or industry, or specific producers. An important change is the framing of issues from a rural community perspective, which is increasingly influencing the policies and programmes of Canada's FPT governments.

### *Canada's federal context*

The Canadian federal context involves three levels of government: federal, provincial/territorial and municipal. There are areas of jurisdiction that are separate and areas of jurisdiction that are shared among governments. Agriculture is a responsibility shared between the provinces and the federal government. Provincial legislatures can make laws in relation to agriculture for their respective provinces as long as the laws do not conflict with an act of Parliament. The responsibility for rural development follows closely the legislative arrangement of agriculture and is increasingly becoming a shared FPT responsibility. The implication of this shared responsibility is that federal policies and programmes targeting rural areas affect many levels of government: FPT governance processes, structures, instruments, mechanisms and processes are therefore now being seen to play an important role in ensuring policy coherence.

Working efficiently at the federal level involves “horizontal” collaboration with a number of OGDs. In fact, the Canadian Rural Partnership (CRP) was one of Canada's first “horizontal” initiatives<sup>6</sup> and was awarded a public service prize by Treasury Board in

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5. In 2001, in rural non-metro adjacent regions, 24 of communities had growing populations, 30% had stable populations and 46% had declining populations (Statistics Canada, 2005). Further, 64% of communities in rural northern regions were facing a demographic decline. Interestingly, declining communities have a relatively high share of employment in primary industries, and derive a lower share of their aggregate income from earnings and investment income.
  6. Annual Reports by the RS are available on this link: [www.rural.gc.ca/annualreport/index\\_e.phtml](http://www.rural.gc.ca/annualreport/index_e.phtml).

1996. In recent years at the federal level, efforts have been made to better co-ordinate “cross-cutting issues” which implicate more than one department.<sup>7</sup> A recent analysis of horizontal collaboration (Bakvis and Luc, 2004) by the Canada School of Public Service suggests that, as the number of significant cross-cutting issues grows, it becomes increasingly important for departments to develop effective mechanisms and processes; the paper provides lessons learned and offers recommendations for improved horizontal management processes. In areas of shared jurisdiction, as is the case for agriculture and rural, “vertical” collaboration involves working with all three levels of government.

### ***Agriculture and Agri-Food Canada policies: vision and expected results***

Agriculture and Agri-Food Canada (AAFC) promotes the development, adaptation and competitiveness of the agriculture and agri-food sector. The vision of AAFC is to have an innovative and competitive Canadian agriculture and agri-food sector, whose partners work in unison to be the world leader in the production and marketing of food and other agricultural products and services that meet global consumer needs in a way that respects the environment and contributes to the best quality of life for all Canadians (AAFC, 2001). AAFC’s strategic outcomes have been grouped in five different policy areas including business risk management, food safety and food quality, environment, innovation and renewal and international issues. ***Business risk management*** encompasses enhancing the individual producer’s capacity to manage risk, and increase the sector’s viability and profitability. The ***food safety and food quality*** component seeks to minimise the risk and impact of food-borne hazards to human health, increasing consumer confidence and improving the sector’s ability to meet or exceed market requirements for food products. Achieving ***environmental sustainability*** of the sector and progress in the areas of soil, water, air and biodiversity are important environmental priorities. The ***innovation and renewal*** objective is to equip the agriculture and agri-food sector with new business and management skills, bio-products, knowledge-based production systems and strategies to capture opportunities and manage change. The renewal outcome emphasises enabling new and established farmers to acquire the skills and expertise to manage their business and adapt to consumer preferences and new scientific advances. Efforts on renewal include engaging individual farmers to upgrade their skills, providing farmers with the strategic management skills needed to be profitable and providing farmers with a wide range of choices to enhance the quality of life. ***Enhancing international opportunities*** for the Canadian agriculture and agri-food sector is also a departmental priority and encompasses gaining recognition and building markets, improving market access, overcoming technical barriers, and contributing to international development efforts through the Canadian International Development Agency (CIDA). In 2003-04, close to CAD 4.7 billion were committed toward AAFC’s

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7. Treasury Board has defined a horizontal initiative as one in which partners (other federal departments or agencies, other national governments, provincial and territorial governments, municipal governments, non-governmental organisations, private sector organisations, first nations, and other organisations) from two or more federal organisations have established formal funding agreements (*e.g.* Memorandum to Cabinet, Treasury Board Submission, federal/provincial agreement) to work toward the achievement of shared outcomes (*i.e.* an outcome that partnering departments plan to achieve as a result of their collective programming efforts. A shared outcome should contribute to the achievement of the partners’ strategic outcomes).

strategic outcomes, with CAD 4.1 billion designated for security of the food system, CAD 218 million allocated for health of the environment, and CAD 425 million appropriated for innovation for growth (AAFC, 2004).

The Department of Agriculture and Agri-Food have developed an FPT initiative called the Agricultural Policy Framework (APF). Ministers agreed that the APF be designed to move the Canadian agriculture sector forward in the 21<sup>st</sup> century in order to improve its prosperity and sustainability. Reflecting the strategic outcomes of AAFC, the APF framed its policy from a sectoral perspective. As jurisdiction over agriculture is shared, AAFC used a “vertical” collaborative mechanism to develop the APF so as to ensure policy coherence amongst FPT partners at all levels. The APF is implemented through bilateral agreements between the federal government and individual provinces and territories, with funding for specific programmes based on cost-sharing between FPT partners.

It is increasingly recognised that success in the agricultural sector depends on a strong rural economy: the share of off-farm income as a percentage of total farm family income increased from 72% in 1980 to 87% in 2002 (AAFC, 2005). The policy implication of this is that a strong local economy would reduce the need to develop and manage, for example, income stabilisation programmes. Therefore, while agriculture is almost always rural, rural is much more than agriculture: focusing on the needs of rural communities will also help the agricultural sector. Based in AAFC, the RS is mandated to develop, co-ordinate and implement a national, co-ordinated, cross-government approach to better understand the issues and concerns of rural Canadians, and to encourage federal departments and agencies to make adjustments to their policies, programmes and services to reflect the unique needs of rural and remote communities. Between 1998 and 2002, the RS, under the CRP administered four contribution programmes aimed at supporting rural community development.

### ***Rural policies: vision and expected results***

In the mid-1990s the government recognised the need to frame its first rural policy in an integrated way, incorporating all of its economic, social, environmental and cultural policies in order to enhance the quality of life for rural Canadians. This represented a new policy approach towards the rural areas. Generally, federal intervention in the rural economy had been largely “top-down,” sector-focused, and directed towards investment in large-scale infrastructure and industry (including agriculture) projects, which generally failed to create long-term sustainable jobs. When the economy had a downturn, these sector-based resource industries relied on federal transfer payments (including income stabilisation), which actually may have slowed the restructuring of the rural economy, inhibiting entrepreneurial innovation and adaptation.

By contrast, the Government envisaged that the CRP would shift reliance from government to the market by investing in the capacity of the local community to develop “local solutions to local problems.” The CRP policy approach promoted locally-driven (or “bottom-up”) economic growth, based on community self-reliance and supported by a more integrated set of mechanisms and tools to enable rural communities to make decisions about their own future; developing rural policy in this way was seen as being a much more sustainable approach. In addition, it was expected that this approach would ensure that the rural economy would continue to make an important contribution to the national economy. This new way of developing rural policy, which emphasised an integrated place-based approach to rural development based on the distinct demands and

assets of rural places, was recognised at the March 2004 Rural Policy conference, organised by the OECD and other partners as a key approach to ensure that rural regions can compete effectively in rapidly changing global markets.<sup>8</sup>

The expected result of the CRP was to strengthen the federal government's commitment to rural Canadians, by shifting from supporting sectors to supporting community capacity to adapt and change. The establishment of a Rural Dialogue with rural Canadians helped the government identify 11 priorities,<sup>9</sup> many of which were addressed by several small contribution programmes managed by the RS. These programmes helped provide access to tools, information, skills, science and technology, infrastructure and services so that rural Canadians could make informed decisions, take full advantage of the opportunities for development and become full partners in the knowledge-based economy and society. Between 1998 and 2002, in support of these outcomes, the CRP received CAD 20 million in funding. Most of the focus of the CRP has been to influence how the policies and programmes of thirty-four federal departments and agencies contributed to rural development, through horizontal integration, collaboration and partnerships, so that the full range of federal policies, programmes, and services would necessarily become a suite of tools to respond to the challenges facing rural Canadians.

The draft National Rural Framework (NRF) builds on the principles and values of the CRP. FPT partners have negotiated and agreed on the principles and objectives of the NRF. The proposed framework is based on six guiding principles: community is the cornerstone of rural development; collaboration across and among governments can help achieve a shared vision of rural Canada; government flexibility in policies, programmes and services is required to address rural diversity; a multi-faceted approach is necessary to realise a community's potential; the development of local leadership is necessary to foster a culture of community engagement; and business and entrepreneurship, both corporate and co-operative, are essential components of building strong rural, remote and northern communities. The three strategic objectives are: supporting community capacity-building; renewing the economic and social base of rural communities; and enhancing collaboration among governments to the benefit of rural communities. Work is on-going to formalise the framework.

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8. At the conference, the Federal Reserve Bank of Kansas City, the Countryside Agency and the Rural Policy Research Institute: "Participants agreed that new policy approaches are needed to help rural regions compete effectively in rapidly changing global markets. This will demand a shift away from past reliance on subsidies focused on a single sector, namely agriculture, towards an integrated place-based policy for rural development. This shift will allow rural regions to contribute to overall economic growth by seizing new opportunities (OECD, 2005a).
  9. The 11 rural priorities were: access to federal government programmes and services; access to financial resources for rural business and community development; more targeted opportunities, programmes and services for rural and Aboriginal youth; rural community capacity-building, leadership and skills development; infrastructure for community development; skills and technology to participate in the knowledge-based economy; economic diversification in rural Canada through more targeted assistance; access to health care at reasonable cost; access to education at reasonable cost; strategic partnerships to facilitate rural community development; and, promotion of rural Canada as a fine place to live, work and raise a family.

The OECD rural policy conference noted that both the CRP and draft NRF were seen as examples of:

*... the adoption of a holistic approach that integrates scattered policy initiatives into a comprehensive framework, showing a shift towards “new rural governance” based on consultation, negotiation and partnerships among government, businesses and communities ... [both the NRF and the CRP are] shifting away from a past reliance on subsidies and towards promoting new investments in countryside renewal. The common theme in many of these policy innovations is their emphasis on exploiting underused assets, releasing potential, fostering entrepreneurship and mobilising private investment. There is an increasing awareness in governments of the need to use a “rural lens” to safeguard the interests of rural residents and businesses.*

(OECD, 2005a)

### ***Rural development policies and agriculture: tensions and synergies***

Tensions exist between rural development and agricultural policies; these tensions arise because each has a different focus. As mentioned earlier, agriculture focuses at the sector level and does not take into account the broader development issues for the rural community. Agricultural policies, which aim at increased efficiency (in a strict economic sense), have had a detrimental impact on rural communities; the substitution of machinery for labour has been pursued diligently, resulting in the reduction of smaller, often family-owned farms, in favour of large capital-intensive farms, many of which are still family-owned (Statistics Canada, 2003a). Or, as employment in agriculture decreases and if the community does not find new goods and services to export, there can be a corresponding decline in the economic vitality of rural communities, with respect to spending/purchasing local goods and services, as well as affecting the overall tax base (Brodie, 1990). Finally, the focus on international markets and exports may result in product/crop/livestock specialisation that can further affect the economic diversity within rural communities (Statistics Canada, 2003b).

On the other hand, rural development tends to be more holistic, providing stakeholders with an opportunity to move to a place-based or community approach; examining agriculture and agri-food within the context of the rural community would likely result in a different policy and programme focus. For example, recent trends suggest that employment in the agri-food sector (beyond the farm-gate) is growing faster than the overall Canadian economy. While offsetting the decline in employment on the farms, much of the growth in agri-food processing has tended to be in rural areas adjacent to urban areas (Statistics Canada, 2003a). Supporting the establishment of rural-based agri-food industries could respond directly to the challenges facing rural communities, and could be one mechanism to address the broader policy outcomes of both the APF and the CRP/NRF.

Synergies between agriculture and rural development can be found, both at the policy level and in terms of collaborative approaches. Within the first area, the APF includes a focus on environmentally responsible agriculture and emphasises the importance of environment as an economic and social good for all rural communities. This policy focus resonates well with the CRP. The renewal focus includes skills development, which can include helping to forge links between agriculturally-based businesses and the broader community, and recent work has been done within AAFC to assess the social impact of



sectoral policies.<sup>10</sup> The challenge for both the APF and the CRP is to help communities see the benefits of environmentally responsible agriculture that, at times, may be viewed as government interference. The second area of strong synergy between agriculture and rural is recognising the importance of collaborative policy-making and implementation processes across and amongst all levels of government.

### ***Policy development processes: agriculture and rural***

The policy development process starts with how one frames the issue in relation to a problem statement; governance structures, instruments, mechanisms and processes tend to reflect how an issue will be framed. In the case of agriculture<sup>11</sup> and rural,<sup>12</sup> efforts were made to frame their issues in order to address specific problems; and both ensured that each reflected the common interest of participating FPT partners. Both then formulated their strategic objectives, or outcomes. Agriculture, using strategic outcomes, was able to find clear links between itself and the work of specific departments, such as the Food Safety and Quality team and the work of Health Canada; the environment team and Environment Canada; and the Innovation and Renewal team and the work of Industry Canada. The RS, on the other hand, formulated broad economic and social objectives focused on the well-being of rural communities.<sup>13</sup> This broader approach translates into a much larger set of federal stakeholders: as mentioned earlier, the RS currently liaises with thirty-four OGDs, each of which has a “footprint” in rural.

As mentioned earlier, how issues are framed also has implications for the nature, number and type of structures, instruments, mechanisms and processes established with OGDs, as well as external stakeholders and sector-specific interest groups. It is interesting to note that the 2000-02 agricultural policy development process followed a collaborative process with key stakeholders similar to that established by the CRP during 1996-98. While for agriculture, commodity-focused value-chain roundtables were excellent mechanisms for obtaining the views and feedback of its horizontal and vertical stakeholders involved in the sector for the APF, the rural work developed broad and quite complex collaborative structures and instruments that, by definition, involved many more horizontal and vertical stakeholders (AAFC, 2003).

### **Governance structures, instruments, mechanisms and processes (*i.e.* national and local institutional arrangements)**

Before discussing governance structures and instruments it is important to discuss the concept of “*governance*”. Governance is an all-embracing concept that is based on key

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10. For example, in 2002 AAFC assessed the social implications of consolidating grain handling and transportation.
  11. As documented in Section 2 of a recent analysis of the AAFC transformation and policy development process (Treasury Board, 2003).
  12. See, for example, the language used in key programme approval documentation.
  13. While under the CRP the focus was on support the capacity to adapt and change, the NRF frames the issue in terms of five policy areas (sustainable livelihoods, environmental stewardship, smart approaches to infrastructure, engaged population and institutions and demographic adaptation).

principles and practices of government officials and civil society actors. The OECD suggests that governance involves a number of key principles, including transparency and accountability, fairness and equity, efficiency and effectiveness, respect for the rule of law and high standards of ethical behaviour (OECD, 2005*b*). Canada's 2005 Budget focused on good governance practices by government officials:

*... Canadians rightly expect a lot of their public sector. They expect the Government to pursue policies and programmes that take into account and are responsive to public priorities. They expect the Government to operate in an open, transparent and accountable manner. They want to know that government programmes and services are well managed. Above all, they want assurances that they are receiving good value for their tax dollars.*

(Treasury Board, 2005*a*).

However, as noted by the Institute on Governance, "Governance is not synonymous with government." In their view, governance is a *process* that focuses on who takes decisions, who is involved in taking these decisions and who is held to account.<sup>14</sup> Governance is also "about how governments and other social organisations interact, how they relate to citizens, and how decisions are taken in a complex world" (Graham, *et al.*, 2003). The governance process requires *structures* and *instruments*. Structures include the major stakeholders involved in developing, managing and being held to account; and instruments include policies, agreements or conventions which document the expected governance processes.

### ***Horizontal and vertical governance***

The CRP provides an interesting picture of functioning horizontal and vertical collaborative governance structures. The CRP is horizontal, in that it seeks to ensure policy coherence amongst all thirty-four federal departments with a footprint in "rural". When the CRP was launched, the Government made the following undertaking in relation to horizontal policy coherence: *Greater awareness and understanding of the impact of policy and programme decisions on rural areas should become an integral part of the policy process if rural Canada is seen to play an important part in the future of the Canadian national economy ... mechanisms will be developed for federal departments and agencies to ensure that rural considerations are also integrated into OGD policy and programme formulation.* The CRP is also vertical, in that it has both translated effective approaches from its Provincial-Territorial (PT) and even community partners to its federal partners, and has developed collaborative structures for programme implementation.

Analysis of the CRP also demonstrates how the federal government used standard instruments, but adapted its hierarchical structures into processes and mechanisms that were more responsive to local conditions and local preferences. This approach has recently been commended by Donald Johnston, the Secretary-General of the OECD, as a "best practice" (OECD, 2005*a*).

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14. "Governance is a process whereby societies or organizations make their important decisions, determine whom they involve in the process and how they render account" (Graham, *et al.*, 2003).

### *Organisational structures*

The organisational structures for effective horizontal and vertical co-ordination and leadership are provided by the RS under the direction of the *Parliamentary Secretary* for Rural Development. The CRP is managed by the RS, in co-operation with an *Assistant Deputy Minister Steering Committee*, an *Interdepartmental Working Group* with representatives from thirty-four federal departments and agencies involved in the rural agenda, and thirteen Rural Teams, one in each province and territory.<sup>15</sup> This horizontal policy and programme co-ordination has occurred at the political, senior management and working level. While the political and senior management of participating departments set the strategic objectives, based on shared vision and principles (*i.e.* framing the issue in a neutral way), the working level of each participating partner OGD managed the implementation of the policy framework, under the co-ordination of the RS.

As the CRP was included in the 1996 Throne Speech, it was a Prime Ministerial and therefore Government-wide priority. A senior minister, in this case the Minister of Agriculture, was the lead, with assistance from some of the higher-profile ministers in Cabinet, including the Ministers of Industry (responsible for Regional Agencies), Natural Resources and the Treasury Board. Having high-profile “champions,” including one from a Central Agency, supported by a new Secretariat headed by an Assistant Deputy Minister (ADM), ensured that the CRP had a solid and collaborative start. This high-level political structure was supported by the ADMs, while senior officials were involved in the development and management of CRP instruments, mechanisms and processes. While lessons learned from other horizontal initiatives (Bakvis and Luc, 2004) suggest that a key success factor would be to ensure that the initiative was managed by the Privy Council Office,<sup>16</sup> there was, at the outset of the CRP, sufficient high-level involvement at the political and bureaucratic levels to ensure that the instruments represented a cohesive federal approach to the issues and challenges of rural Canada. As time passed, however, such high level support declined as other priorities engaged the attention of the participating departments.

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15. Comprised of the federal departments in the region, also include members from the provincial or territorial government and/or civil society stakeholders. By using a cross-government approach, the Rural Teams provide regional forums for horizontal collaboration where government and increasingly civil society partners to come together, build partnerships and collaborate to address community needs.
  16. The Privy Council Office is the Prime Minister’s department and the Cabinet Secretariat. It is a focal point of action in the Government of Canada’s public service. It requires close and continuous contact with other federal departments and agencies to support their ability to work effectively and to ensure overall consultation and co-ordination. PCO provides non-partisan advice and support to the government, and leadership, co-ordination and support to the departments and agencies of the government (Bakvis and Luc, 2004).

It is at the level of the RS and its six units<sup>17</sup> that most of the work for the CRP is being done. RS staff develop instruments and manage the horizontal and vertical collaborative mechanisms and processes. Regular internal management committees with full decision-making power ensured effective co-ordination of all horizontal and vertical activities. The Secretariat was allocated resources to effect the necessary co-ordination, both at the working level and senior levels. A proactive ADM, as well as a solid relationship with the ministers, ensured effective high-level horizontal management of the CRP. The “Rural Lens” team actively monitors the policy development of partner OGDs. Policy influence is exercised along a continuum, from a broad base of opportunities with many partners at the outset of the process, to the final Interdepartmental prior to the Cabinet Submission, and finally at Cabinet where the final decisions are made. The Rural Lens team works along that entire continuum; where there are strong synergies the team participates actively throughout OGD policy development processes (*e.g.* infrastructure). Most of the team’s input focuses on Interdepartmental and Cabinet meetings.

RS activity with PT partners includes both vertical and horizontal co-ordination: vertical in that the federal partners are at the table working with their partners at the other two levels (*i.e.* PT and municipal); horizontal in that all FPT partners work collaboratively at their level, through formal and informal processes and mechanisms (see below), to achieve consensus and agree on a way forward which is eventually captured in the instruments (see below).

The Rural Teams, now composed of representatives from different levels of government and key stakeholders, were developed in 1997 as a vehicle for supporting federal collaboration in the regions by sharing information and research, supporting dialogue on rural issues, conducting broad-ranging consultation with citizens and other key stakeholders, performing policy analysis and contributing to programme development, delivery and special initiatives. Initially a “top-down” process, with time, due to the highly consultative nature of these Teams, they developed into valuable “bottom-up” and “top-down” structures, facilitating a flow of information to and from Ottawa and the rural communities. There are currently thirteen Rural Teams across the country. Many are co-chaired by FPT representatives. Some, like Quebec and Ontario, have only federal chairs. In recent years, some Rural Teams include participation of key rural non-governmental organisations (NGOs). Aside from providing a forum for PT officials at the regional level, the Rural Teams also try to provide a forum for government and community organisations to meet.

### ***Governance instruments***

The governance instruments utilised by the CRP are fairly standard. These instruments basically capture, in documentary form, the commitments and accountabilities of key FPT stakeholders, and include: policy documentation (*e.g.* key programme approval documents or the Federal Rural Action Plan); intra- and inter-governmental framework agreements; memoranda of understanding; and Terms of Reference and work plans/matrices for the Rural Teams. Some of the common features of

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17. [The Rural Lens: Rural Dialogue; Regional Co-ordination; Programmes; Research; and the Canadian Rural Information Service.](#)

these instruments include: a shared vision and principles; articulation of key rural priorities and challenges; a list of the programmes and services offered by each participating federal OGD which target rural Canada; and some discussion of the governance mechanisms and processes, both horizontal and vertical.

### ***Governance mechanisms and processes***

Governance mechanisms and processes can be both formal and informal. Formal mechanisms and processes are documented in the instruments (see above). These formal mechanisms and processes are, in effect, structured and regular inter-governmental fora where stakeholders can focus on collaboration, building a consensus on key issues and a way forward, which, while time-consuming, results in a stronger, more focused and integrated approach to rural issues and needs. For example, Rural Teams meet annually to decide on their priorities within the context of broad RS priorities. This is usually done by analysis of regional rural issues and of government/ NGO priorities, and by focusing on the cross-cutting opportunities that emerge (and mostly where there is energy by the membership to partner), *i.e.* the “rural lens.” At the federal level, the “Rural Lens” is a process managed by RS staff; they regularly assess government-wide initiatives, to ensure, where appropriate, that the aspirations of Rural Canadians are properly reflected in all federal policies and programmes. Rural Lens interventions are made with their federal partners, either bilaterally or as part of the inter-departmental or inter-governmental process.

A final formal mechanism of the CRP are programme funds managed by the RS, which supported pilot initiatives and a Models Programme that demonstrate best practices in terms of approaches and tools in support of participatory community capacity-building and rural development. Programme funds enable the RS to tap into existing community based partnerships which are piloting different tools and approaches for effective community development. By working with these organisations and communities, the RS will document evidence-based knowledge and approaches of community capacity-building and rural development for the purposes of influencing other FPT policies and programmes.

Informal mechanisms and processes are often the most effective because they are more flexible and less structured. More importantly, these informal mechanisms ensure that the voice of the rural communities is heard both by the Parliamentary Secretary (PS)/Minister and by RS staff. They include, for example, the Rural Dialogue as well as bilateral meetings with specific FPT stakeholders. For example, to iron out an issue with the NRF a bilateral was held with one specific province to ensure that their concerns were adequately reflected in the final draft framework. Some Rural Teams operate quite informally. Through various informal mechanisms, they have provided a constant rural focus in the regions and been a rural lens for governments and NGOs on rural issues.

Rural Roundtables, which provide face-to-face contact between the PS and rural citizens and their community leaders and, in some cases, academics, are also another important informal mechanism for ensuring that policy and programmes remain place-based and focused on the needs and priorities of rural communities. There have been three National Rural Conferences which have provided an important informal mechanism for rural communities to table their concerns and issues to FPT stakeholders; Box 1 provides an overview of the partners and issues discussed at the most recent Rural Roundtable.

### Box 1. The Hanna Alberta Roundtable

The Hanna Alberta Roundtable on sustainable and viable communities, held from 15-16 August 2005, was jointly organised and co-hosted by the federal and Alberta governments. Participants included community and academic leaders, economic and social development officers, aboriginal and youth representatives, and members of the federal, provincial and municipal governments. Discussions were focused on the challenges to community viability, the role of governments in assisting communities to meet their challenges and on the priorities which should shape government activities over the next three to five years. While a variety of issues and suggestions were put forward during the session, participants underlined the importance of community-based solutions and the need for governments to work together with communities to develop long-term, integrated and flexible approaches, policies and programmes. Retention of core community services and facilities, capacity-building, the need to attract new people and businesses, and the importance of partnerships were major themes. The challenges and priorities identified during the Hanna Alberta Roundtable discussions will help guide the federal and Alberta governments as they continue to explore opportunities for co-operative and joint action in support of rural community viability.

## Lessons learned

*Highly effective FPT governance approaches and processes have been developed, but a more comprehensive approach would have maintained the initial momentum of the CRP*

One of the most encouraging results of the CRP has been the development of highly effective collaborative FPT processes. These processes have helped develop meaningful approaches to, and partnerships for, developing and ultimately implementing rural policy and programmes which benefit small Canadian communities throughout the country. Although some impressive steps have been taken in outlining collaborative governance structures, instruments, mechanisms and processes for the CRP, a more comprehensive approach would have helped maintain the initial momentum. A focused framework, with clear results and indicators, as well as roles and responsibilities and clear accountabilities, would be one way to effectively guide horizontal and vertical collaboration, including Regional Agencies<sup>18</sup> and Federal Councils,<sup>19</sup> to ensure a broader focus beyond process issues.

*An ability to better communicate the value of using community assets and a collective approach would have resulted in more federal programmes targeting communities rather than individuals*

As part of supporting more effective horizontal and vertical policy coherence, an improved understanding of the importance of using community assets and a collective approach as the driver for rural adaptation, would have facilitated even greater FPT take-up of the notion of “rural”. Many FPT departments and agencies still try to establish new individual entrepreneurial businesses, rather than adopting a more comprehensive

18. There are four Regional Agencies, each of which has been designed by the Federal Government to help address the needs of specific regions: [Atlantic Canada Opportunities Agency](#); [Canada Economic Development for Québec Regions](#); [Federal Economic Development Initiative in Northern Ontario](#); and [Western Economic Diversification Canada](#).

19. Federal Councils comprise senior officials for the federal departments and agencies in each region or Province and Territory. As well, hundreds of regional managers and staff are involved in the work of Council Sub-committees on a wide range of management and policy issues.

community-focused approach. Framing the issue from a community perspective provides a sounder mechanism to consider the interconnected and interdependent elements required for sustainable, viable rural communities, which, in turn, is a strong predictor for improved individual income levels. It will take more time to ensure that all stakeholders with a “footprint in rural” share the same vision, policy and programming approach; this is one of the main priorities of the proposed NRF.

*Sharing knowledge of best practices/tools and approaches to community development can help inform OGD policies and programmes, while enhancing RS credibility*

Another mechanism to improve horizontal policy and programming coherence is to gather and disseminate best-practices/tools and approaches for community development. The CRP Models Programme explicitly focuses on developing *evidence-based* tools and approaches. Quite apart from enhancing RS credibility, the ultimate objective is to spread knowledge of what works best for sustainable rural community development, so that the RS can influence OGDs with significant programming funds.

*High-profile champions are key*

Having a high-profile champion(s) in each collaborating department ensured that the CRP got off to a strong start. Over time, however, due to competing government priorities, high-level support for the CRP declined, introducing new challenges to effective horizontal and vertical collaboration. In the regions, however, the rural file has maintained a solid political and senior official profile.

## **Impact of the CRP**

Although the RS itself is a relatively small organisation, the combined weight of applying the “rural lens” to thirty-four OGDs, based on a shared vision and approach for rural Canada, has produced some interesting results. In general, an evaluation by the Review Branch of AAFC in 2002 found that the CRP was making progress in key areas such as building partner support, research and analysis, horizontal collaboration, and engaging rural partners and citizens in rural issues (AAFC, 2002*b*). The evaluation highlighted a need to develop and promote a clear, integrated policy framework to guide shared federal objectives and initiatives aimed at strengthening rural Canada, which is what the proposed NRF is positioning itself to do.

Most of the commitments in the 1999 Federal Rural Action Plan<sup>20</sup> are either underway or complete. This is quite a significant accomplishment and is a strong

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20. The Rural Action Plan documents more than 50 items for the Government of Canada to follow and act on, including the expanded network of Community Development Corporations in many parts of Canada, new flexibility in the programmes Farm Credit Canada can offer, and an equitable share of Infrastructure dollars finding their way to rural and remote communities. One of the highest priority priorities was to involve our youth in shaping the future of rural Canada. It does not contain a policy framework but identifies issues that have yet to be resolved and states priorities (11 at the time) and should be used as a guide for federal departments when developing new initiatives.

indication of the effectiveness of the CRP governance structures, instruments, mechanisms and processes.

In terms of horizontal policy coherence, more OGDs now reflect a better understanding of rural than had been the case before the establishment of the CRP. For example, the First Nations Forestry Programme, jointly funded by Natural Resources Canada and Indian and Northern Affairs, has successfully enhanced the capacity of participating First Nations communities to manage their forests in a sustainable manner.<sup>21</sup> More recently the “rural lens” team worked closely with Industry Canada to design the CAD 105 million Broadband for Rural and Northern Development Pilot Programme.<sup>22</sup> Designed to help address the Government’s commitment to ensuring high-speed internet access for all Canadian communities by 2005, priority was given to First Nations, northern, rural and remote communities. A total of 1 380 communities have been selected for this programme. There are many other excellent examples of FPT collaboration, including the Fraser Basin Council initiative<sup>23</sup> and the Model Forests Programme.<sup>24</sup> While the RS was not directly implicated in either programme, both empower participating rural communities and rely heavily on strong FPT networks.

The RS explicitly chose the “soft power” of persuasion, rather than a budget to “buy” rural add-ons to new and on-going programmes. As mentioned in the AAFC Evaluation, by bringing to the table the community-oriented focus, the RS was able to obtain consensus and then develop collaborative consensual policy and programme implementation relationships with participating FPT partners (all of whom remain fully accountable for their own programmes, while the RS remains accountable for the efficacy of its horizontal and vertical policy co-ordination and management approach). However, despite these encouraging results at the federal level, a challenge remains: although the proposed NRF reflects AAFC priorities, the RS will continue to stay involved in preliminary discussions on future agricultural and rural policies to ensure that the economic needs and challenges of rural communities will be better reflected in future programmes.

Vertical governance of the CRP has produced some solid results. For example, in 2003 the Department of Infrastructure developed the Municipal and Rural Infrastructure Fund (MRIF). Designed to support smaller-scale municipal infrastructure projects that improve the quality of life, sustainable development and economic opportunities (particularly for smaller communities), the MRIF also includes a component addressing the infrastructure needs of First Nations communities. At least 80% of the CAD 1 billion funding under the MRIF will be dedicated to municipalities with a population of less than 250 000. The MRIF will be cost-shared, with the Government of Canada contributing, on

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21. [First Nations Forestry Program.](#)
  22. The Rural Secretariat was also actively involved in the work of the National Broadband Task Force, established in 2001 by the Minister of Industry, which set out a vision for broadband connectivity across Canada, spurring the creation of the BRAND pilot programme.
  23. [The Fraser Basin Council.](#)
  24. [The Model Forests Program.](#)



average, one-third of total project eligible costs. Provinces and municipalities will contribute the remainder.

PT and civil society/private sector are now engaged, through the Rural Teams, in the design and implementation of more effective and efficient rural programming. Effective partnerships with provincial, territorial and municipal governments have been developed. For example, as indicated in Box 2, the Province of Alberta, which was a strong and committed partner in the development of the NRF, has recently developed a Rural Development Strategy which, while not directly referencing it, embraces all of the principles of the CRP.

Although effective partnerships for developing rural policy and implementing programmes (FPT) have been developed during the CRP, more FPT and civil society/private sector stakeholders are being involved to ensure sustainability of those programmes. For example, in 2001, the Bayline Regional Roundtable (BRRT), comprised of six communities along the railway line in northern Manitoba, got involved in the CRP. Assisted by the Rural Development Institute from Brandon University, BRRT worked with a Steering Committee, which included federal, provincial and community servicing agencies. As a result of this collaborative process, the BRRT is still going strong, having secured multi-year funding through the Food Security in Northern Manitoba Programme financed by its new federal and provincial government partners.

#### **Box 2. Alberta's Rural Development Strategy**

Alberta's Rural Development Strategy, deliberately entitled "A Place to Grow", reflects the traditional ties of rural Alberta to the land and looks beyond to growing a future with new opportunities and new ideas. The four pillars of the strategy include: promoting economic development; building community capacity, quality of life and infrastructure; improving access to health care; and expanding learning and development opportunities. Creating a strong voice for rural Albertans through a Rural Dialogue process will ensure that rural perspectives are heard. The Alberta Rural Youth Council will provide a forum for young people to be actively involved in the development of policies and programmes at the provincial level. Steps will be taken to expand access to apprenticeships and post-secondary institutions in rural communities, including the establishment of a rural development institute which will act as a repository for research, training, and human resource development. Support will be provided to municipalities to ensure that all businesses and homes have high-speed internet access, so that they may seek out new markets for their products and services. In the future, the provincial government will modify the rural development strategy based on the advice provided by its rural citizens. The strategy is not designed to be the solution to every challenge in rural Alberta, but to act as a catalyst for action in rural communities that will sustain a way of life that will be vital to the future.

Finally, impressive results have also been produced from the community capacity-building components of the CRP. Boxes 3 and 4 demonstrate how community mobilisation can result in remarkable achievements.

### Box 3. The Nishnawbe First Nation Youth Council

The Nishnawbe Aski First Nation (NAN) represents 49 northern and remote First Nations communities covering a large portion of northern Ontario. Over the past fifteen years, a total of 238 young lives have been lost to suicide. As part of a strategy to effectively address the problems of young men and women, including youth suicide, in NAN communities, the NAN Chiefs declared the years of 2001 to 2010 as the NAN Decade for Youth Development. Young people at various suicide prevention conferences have repeatedly asked for a seat at the NAN Tribal Government in order to address, among others, youth suicide issues through direct representation and youth leadership. The purpose of the *Nishnawbe Aski First Nation Youth Council* project was to host a NAN Youth Leadership Forum to establish a NAN-wide Decade Youth Council and to provide community-building skills to NAN youth in every NAN community. In 2002, the Leadership Forum sought youth delegates from all 49 member communities. Responding to the call for delegates, 31 of 49 member communities sent youth delegates to the forum. The delegates elected 22 young people as their representatives for the Youth Council. By 2005, all 49 NAN communities had signed onto the project and are now active participants in the NAN Youth Council. The Youth Council has now become the voice of NAN youth, providing an effective means for NAN youth to become active in the decisions that affect them and resulting in improved youth self-esteem. The Youth Council has used the skills it gained through this experience to build a network of active youth and to conduct its own strategic planning sessions. The Youth Council is currently seeking funding through the use of partnership arrangements, with the purpose of establishing a trust fund to which NAN youth councils and youth groups can apply for assistance in running activities and other youth initiatives. The NAN Youth Council has been such a success that it is now being incorporated and is seeking charitable status. The community capacity built from the *Nishnawbe Aski First Nation Youth Council* project has enabled NAN youth to become part of the solution to the on-going challenges it faces.<sup>25</sup>

### Box 4. AgraRoots

Many members of the communities of the Boundary District of southern British Columbia have faced continued socio-economic challenges and declining standards of living due to uncertainties associated with standard agricultural production in the region. These communities are in the process of transition from standard agricultural practices to value added agricultural and organic food products. The purpose of the project was to create a community network of agricultural and small, value added agricultural businesses. The *AgraRoots* project operated in four phases. First, the project identified what local stakeholders would gain from the establishment of a community network and second, the project used GIS mapping to identify where all the farms were located in the region. Third, the project created a website for the community network and lastly the project conducted extensive promotion of the network. The *AgraRoots* community network was successful in establishing a network of 102 active members, including producers/processors, retailers, organisations and consumers. A website was launched in 2001 and included 32 member pages. Further, a business directory was established and distributed to over 3 000 locations within the Boundary and neighbouring regions. Through the use of internet technology, *AgraRoots* has introduced 16 member businesses and their products to Small Potatoes Urban Delivery (SPUD), which has developed into the largest internet organic foods home-delivery business in Canada. The *AgraRoots* community network has also introduced member businesses to Urban Harvest, an organic home-delivery service based in Kelowna, British Columbia. The *AgraRoots* project has been successful in developing the capacity of the target community to respond to the continued challenges faced by the agricultural sector through the development and marketing of value added agricultural products. Through this project, small business owners have increased their access to economic opportunities, improved their standard of living, and have become more visible both within and outside their region.<sup>26</sup>

25. For more information on NAN youth, its achievements and its future initiatives, visit: [www.nandecade.ca/article/1.asp](http://www.nandecade.ca/article/1.asp).

26. For more information on *AgraRoots*, its products and achievements, and its future initiatives, visit: [www.agraroots.org](http://www.agraroots.org).

## Conclusion

This paper has demonstrated that collaborative FPT governance processes can: produce improved appreciation of the relationship between the broader community or place-based focus of rural development policies and agricultural (*i.e.* sector-specific) policies; develop meaningful approaches to and partnerships for developing (and ultimately implementing) rural policy and programmes which benefit small Canadian communities throughout the country; and support improved capacity of local communities and their partners to find and implement local solutions to local problems. Although many challenges remain, including a better alignment of agriculture and rural policies, much progress has been made. The draft NRF has been designed to help ensure that a place-based approach will continue to influence FPT stakeholders, including AAFC, so that challenges facing rural Canadians will be addressed through a tool-chest of programmes and services that specifically respond to the needs of Rural Canada.

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## Chapter 20. Active Regions – Shaping Rural Futures: A Model for New Rural Development in Germany

Dirk Schubert<sup>1</sup>

### *Abstract*

*Rural areas in Germany are very diverse. They differ, for example, in terms of landscape, local natural conditions, regional traditions and cultural heritage – and, predominantly, with regard to their economic situation.*

*There are rural regions in Germany that are distinguished by strong economic development and very low unemployment. On the other hand, there are many rural regions that battle with high unemployment, a lack of prospects for young people and thus depopulation, particularly of the younger and better educated. In areas like these, it is doubtful whether opportunities for the future can be opened up by merely attempting to follow the development pathways taken by regions that are now prospering. Often, the prerequisites for this are lacking, due to, for instance, lack of market proximity, low population density or a deficient economic tradition.*

*In earlier decades, agriculture was a major factor in the structure and economies of rural regions, but today its importance has lessened considerably. Therefore, rural regions need to be considered holistically. In addition to agricultural production, other employment opportunities and sources of income such as tourism, crafts and trades and businesses must also become the focus of attention of a policy for rural areas that is prepared for future challenges.*

*In response to these circumstances, the Federal Ministry of Consumer Protection, Food and Agriculture launched the “REGIONEN AKTIV – Land gestaltet Zukunft” (ACTIVE REGIONS – Shaping Rural Futures) programme on 10 September 2001. Its aim was that the participating model regions reveal how the population’s demands on agriculture can be better taken into consideration than has previously been the case, and suggest what new pathways are possible in rural development. Eighteen model regions were selected in a two-tier process. The paper discusses in some detail the approach of the programme and its main principles. The implications for the development process and structures in the model regions are also examined.*

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1. Federal Ministry of Consumer Protection, Food and Agriculture (BMVEL), Bonn.

## Initial situation

### *Previous promotional policy*

On the national level, the Joint Task for the Improvement of Agricultural Structures and Coastal Protection (*Gemeinschaftsaufgabe "Verbesserung der Agrarstruktur und des Küstenschutzes"* [or GAK]) is of primary importance for the promotion of rural areas in Germany. The Federal Ministry of Consumer Protection, Food and Agriculture is in overall charge of this Joint Task.

The GAK has various individual funding fields, each of which is considered separately. They include:

- water management measures;
- market structure improvement;
- organically produced agricultural products;
- regionally produced agricultural products; and
- forestry measures.

Until 2004, land reorganisation, road construction, development of agricultural structures and village renewal were also individual funding fields within the scope of the GAK. For example, the aim of promoting land reorganisation is to improve agricultural production conditions with a more rational allocation of agricultural areas. Promotion of rural road construction, too, primarily serves to improve the production and working conditions in agriculture through better development of areas used by farms.

Previous objectives under these principles have been very focused on agricultural production. Alternative projects for rural development, which could, for example, arise from linking agricultural and non-agricultural activities, were not eligible for funding. Projects that could make a major contribution to securing rural incomes and employment often fail because they do not suit the sector-specific structured promotional scheme.

Furthermore, the objectives are attained to very differing degrees. In particular, the fact that investments and measures are implemented separately from each another means that the measures cannot always reach their optimal effect. The benefit is frequently limited to the individual recipient of the funding. It is rare that further-reaching stimuli are generated for regional development.

In addition to the GAK, other instruments are of significance for rural areas, *e.g.* the *Joint Task for the Improvement of Regional Economic Structures*, for which the Federal Ministry of Economics and Labour is responsible.

Overall, the existing policy is characterised by a very sector-specific approach, in which, for example, agriculture, tourism and crafts and trades are funded separately and independently from each another.

### *Subsidies for agricultural products put to the test*

Funds for subsidising agriculture are being put to the test on both the EU level and the national level for a number of reasons. For one, public funds are becoming tighter and Germany is among the EU member states that wish to limit the contribution of member states to the EU budget to a maximum of 1% of the member states' gross value added.

Secondly, EU subsidies for agricultural products are disputed in the international negotiations on liberalising world trade (World Trade Organization –WTO). However, the WTO does not demand reduction of non-trade-related subsidies for social issues, environmental protection, regional development, etc.

### *Decreasing importance of agriculture for rural regions*

In earlier decades, agriculture was a major factor in the structure and economies of rural regions, but today its importance has lessened considerably. This is evident in its sinking share in the gross domestic product (GDP) and in decreases in agriculturally utilised area, in the number of farms and of persons employed in agriculture. Therefore, rural regions need to be considered holistically. In addition to agricultural production, other employment opportunities and sources of income such as tourism, crafts and trades and business must also be moved into the focus of attention of a policy for rural areas that is prepared for future challenges.

## **REGIONEN AKTIV: a new approach**

The Federal Ministry of Consumer Protection, Food and Agriculture initiated the competition “*REGIONEN AKTIV – Land gestaltet Zukunft*” (ACTIVE REGIONS – Shaping Rural Futures) under these circumstances: its aim was that the participating model regions reveal how the population’s demands on agriculture can be better taken into consideration than has previously been the case, and what new pathways are possible in rural development. The intent is to put a process into motion within the regions that can become self-sufficient in the future and thus serve as a model for all rural areas and as a rural-urban link.

The realignment of consumer and agricultural policy is another background of the competition. Consumer interests are the starting and focal points of the new policy. The realisation of this policy is of decisive significance for the regions and their economically viable, socially balanced and ecologically compatible development.

### **The competition**

The competition “REGIONEN AKTIV – Shaping Rural Futures” was launched on 10 September 2001 in Berlin. Eighteen model regions were selected in a two-tier process.

### ***Phase 1: Applications from 206 rural regions***

In the first phase of the competition key regional interest groups, in particular consumers, agriculture and forestry, environment, retail, crafts and trades, business, health, regional authorities, education and science, were asked to develop a joint vision for the future development of their regions. The competition proposals were required to focus on the following four objectives of REGIONEN AKTIV:

1. *Strengthening rural areas and creating additional sources of income*
  - Expanding the region’s value chains and strengthening regional production, processing and marketing structures;



- drawing up tourism schemes that are based on natural and cultural landscapes and farming culture and that strengthen the marketing of regional products;
  - developing new products and services in agriculture and forestry, such as in the production of renewable energies, in ecological construction or in nature conservation agreements;
  - strengthening opportunities for women and training possibilities for young people.
2. *Nature-friendly and environmentally compatible land management*
- Strengthening system-certified farming, agricultural environment measures and nature conservation agreements;
  - producing special quality foods;
  - increasing organic farming.
3. *Consumer-oriented food production*
- Strengthening quality products that are produced transparently and in the consumers' interests;
  - improving marketing and reinforcing the demand for special quality foods;
  - training measures and information for producers, processors, retail and end consumers.
4. *Strengthening rural-urban connections*
- Co-operation between rural and urban institutions in research, education, tourism and the arts;
  - expansion and further development of holidays and local recreation in the countryside;
  - marketing rural products to visitors to the countryside and directly in the city;
  - educating the public on the contributions made by rural regions towards ensuring the quality of water, soil and air, as well as maintaining attractive landscapes and unspoiled nature.

In addition, the plans were required to contain the following chapters:

- Justification of the project's restriction to the respective region;
- the actual future vision for the region; and
- the composition and formation of the partnership.

During the first phase, there was a very large response: 206 applications were submitted.

## ***Phase 2: Selection of the 18 model regions***

An independent jury comprising representatives from agricultural professions, associations, regional authorities and science first selected 33 regions. The winners took part in the second phase of the competition, in which they were given the task of developing *integrated Regional Development Plans* (RDPs). The plans had to spell out the objectives and the fields of action for the region's sustainable development, as well as describe the jointly resolved sponsorship, the organisational structure, the control system of the implementation process and initial model projects. For this task, each participant was granted EUR 5 000.

From these contributions, the jury chose 18 model regions as winners of the competition on 20 March 2002. The jury selected 6 regional plans from the eastern German *Länder* and 12 from the west German *Länder*. The winning regions all mirror the diversity of Germany's rural areas, which range from particularly weak-structured, isolated regions to rural areas with favourable conditions for development. Some of the model regions stand out because of their strong links with urban areas.

## ***Phase 3: Implementation of the Regional Development Plans***

The third phase of the competition involves the selected model regions putting their integrated development plans into practice. The co-operation structures that were created in Phase 2 provide the basis for implementation. Financial backing of EUR 50 million will be provided by the BMVEL during the period 2002 to 2005. Agreements between the Federal Ministry and the model regions provide the framework for the overall project. The RDPs designed by the partnerships are binding for the use of funding.

## **Five principles**

REGIONEN AKTIV is testing the application of principles with which social development processes can be steered more efficiently and with more targeted precision. Innovation, knowledge and learning should form the nucleus of continuous further development. Five principles are utilised, which are valid for both REGIONEN AKTIV as a whole and each of the model regions.

### ***1. Competition***

Competition takes place on two levels in REGIONEN AKTIV: the 18 model regions were selected in a competition procedure. The best regional development plans were rewarded. In each of the model regions themselves, the project ideas compete for the funding as well. The use of the competition principle in REGIONEN AKTIV serves to intensify efforts for improvement. The aim is to promote the more innovative and promising plans and projects.

### ***2. The region as decision-making level***

In REGIONEN AKTIV, decisions on the development objectives of the model regions and the promotion of concrete measures are made on the regional level. All the same, the objectives and projects must cohere with the REGIONEN AKTIV programme objectives. The 18 model regions have decision-making responsibility not only when it comes to content, however, but also financially. Their own regional budgets allow them

to approve of funding for selected projects on their own responsibility. REGIONEN AKTIV pursues the aim of utilising the informative head start of the local people so that the rural challenges can be met with more targeted precision and efficiency.

### 3. *Integration*

REGIONEN AKTIV pursues the principle of sustainable development, which is centrally based on the integration of economical, ecological and social concerns. The limited regional and the spatial approach allow the model regions to grasp the actual way these three areas are linked and consider them in plans and projects. By regarding regions as a whole and involving interested representatives from the different sectors, integrated solutions can be found for problems and synergies can be developed between previously separately acting fields. The integration principle in REGIONEN AKTIV promotes holistic, region-specific approaches and innovative solutions that are the consequence of new constellations of local brainpower.

### 4. *Partnership*

All major decisions are made in the REGIONEN AKTIV model regions on a partnership basis. The key interest groups and assets are represented in the local decision-making bodies, the regional partnerships. On the national level, the partnership principle in REGIONEN AKTIV is demonstrated when courses need to be set. Here, decisions are made in negotiation processes between the model regions, the BMVEL and the panel of experts. The partnership co-operation in REGIONEN AKTIV gives schemes and measures broad acceptance, reduces conflicts in implementation and increases the freedom to take action. In the model regions, this involvement also activates region-specific knowledge and promotes innovative solutions.

### 5. *Know-how*

REGIONEN AKTIV supports and promotes accompanying training and further education for all participating actors. Networking and training seminars at the federal office convey additional knowledge to the representatives of the model regions and allow them to learn from each other as partners. Moreover, the evaluation of process and project progress supplies the regions with the know-how they need to steer their development successfully. The aim is a continuous learning process so that the regions can move from being passive funding recipients to becoming active and dynamic shapers of their own development. Networking the regions and documenting their experiences also allow REGIONEN AKTIV to record the lessons learned and make them available to all regions in Germany. Ultimately, the knowledge gained by the model regions will be used to further develop the regular nationwide funding schemes for rural areas in Germany.

### ***A new political control approach***

REGIONEN AKTIV pursues a new approach for controlling social processes, which combines hierarchical steering, market-economy incentives and negotiation-related regulations. The model regions are provided with framework objectives. In order to allow for diversity and the region-specific characterisation of ideas and plans, the federal government does not control details of content. Plans and projects compete for limited

funds. Objectives and strategies are set and projects are selected in local consensus negotiations.

## The participants and their tasks

### *Regional actors*

Four partners closely co-operate in the implementation of REGIONEN AKTIV in the 18 model regions: the regional partnership, regional management, the project sponsors and the administrative partner.

The *regional partnership* is the central decision-making body in the model regions. It evaluates the projects and makes strategic decisions. The relevant social groups of the region are involved in the partnership. Often these are representatives from agriculture and forestry, from the regional authorities, from environmental protection and nature conservation, crafts and trades and business, as well as education and science. The regional partnership offers actors from various fields the opportunity to work together constructively across disciplines.

*Regional management* is the engine and interface for implementation of the REGIONEN AKTIV change process. As a service provider for the regional partnership, management co-ordinates the overall process. Its tasks range from setting up the regional network, to project consultation and development, to public relations and dialogue with other regions. The extent of the tasks requires a variety of process and specialised skills. Depending on the size of the region, two to three people deal with the management tasks.

The *project sponsors* use their projects to put the ideas and the vision of the regional development plans into practice. The projects must always be aligned to the objectives and fields of action contained in the development plans. After over roughly three years' duration, the number of current and completed REGIONEN AKTIV projects is approximately 550. This large number demonstrates the creative and innovative potential in the rural regions.

Finally, correct budgeting administration of the activities in the model regions is ensured by the *administrative partners*. This task is taken up by public law bodies in the regions. Today, the regional administrative partners possess extensive skills in competition law and in European legal matters, as well as in the assessment of promotional programmes of the federal and *Länder* governments.

### *National actors*

On the federal level, a panel of experts and the BMVEL are involved in REGIONEN AKTIV. The task of the *REGIONEN AKTIV panel of experts* is to provide implementation with specialised guidance. In addition, the panel makes decisions on the course the implementation process should take. The panel of experts evolved from the independent jury that selected the 18 model regions during the competition phase. It is comprised of representatives from the agricultural professions, from associations, regional authorities and academics. The *Federal Ministry* initiated REGIONEN AKTIV; it finances, supervises and controls the initiative. The Ministry restricts itself, however, to giving the model regions framework requirements, so that the content of the projects can be tailored to the specific problems and potential in the regions.

### *Support structures*

Operation of REGIONEN AKTIV is given technical and organisational support from the office and monitored by external academic institutions. The **Federal Office** forms an important interface between the model regions and the Federal Ministry. It supports the flows of information between these partners in matters concerning the control of REGIONEN AKTIV or issues of content. The office organises seminars to help network the model regions and train the actors. The interactive model regions' website ([www.modellregionen.de](http://www.modellregionen.de)) and the regular REGIONEN AKTIV newsletter are other instruments used by the office to network all involved actors for national public relations.

During the implementation phase of REGIONEN AKTIV, **associated research activities** are carried out to record general findings on the sustainable development of rural regions from which all rural regions in Germany can profit. Moreover, the research provides additional findings from practice for further developing the policies for rural areas.

## **Evaluation and success factors**

### *Evaluation of REGIONEN AKTIV*

In rural development processes, evaluation and systematic assessment can provide valuable information on strengths and weaknesses. The compiled detailed information can be used to optimise processes. In REGIONEN AKTIV, evaluation methods are utilised to control the activities in the model regions and to develop the overall competition. At the same time, the initiative aims to further develop and carry out practical tests on the methods because the use of evaluation methods is relatively new in the area of rural development.

The 18 model regions are obligated to subject their processes and projects to constant assessment. In order to increase the incentive for the regions, the evaluation and optimisation process was linked with the granting of a performance-related share of the existing funding. The self-assessment method was chosen to intensify the learning effects in the model regions. Evaluation by a selected group of local actors and a defined questionnaire offers the 18 regions an important basis for optimising their processes through learning experiences. This method was combined with an extensive reporting system and external assessment by the REGIONEN AKTIV panel of experts.

### *Increasing efficiency and target precision*

The type of evaluation employed has proven a successful instrument for promoting the learning process. Initially, some actors criticised the effort required for evaluation. Yet soon it became evident that the method provided new stimuli for optimisation in almost all of the regions. Moreover, the method contributed to the efficiency and target precision of regional management bodies, since it made it possible to define local challenges transparently.

### ***From processes to effects: putting objectives into operation***

Analysis of the reports enables all model regions to build on their strengths and diminish weaknesses. In addition to process and project management, the quality of the development objectives is also examined, based on the results achieved. An important approach towards further optimising REGIONEN AKTIV is to concretise and make operational the regions' objectives.

### ***Success factors as the basis of evaluation***

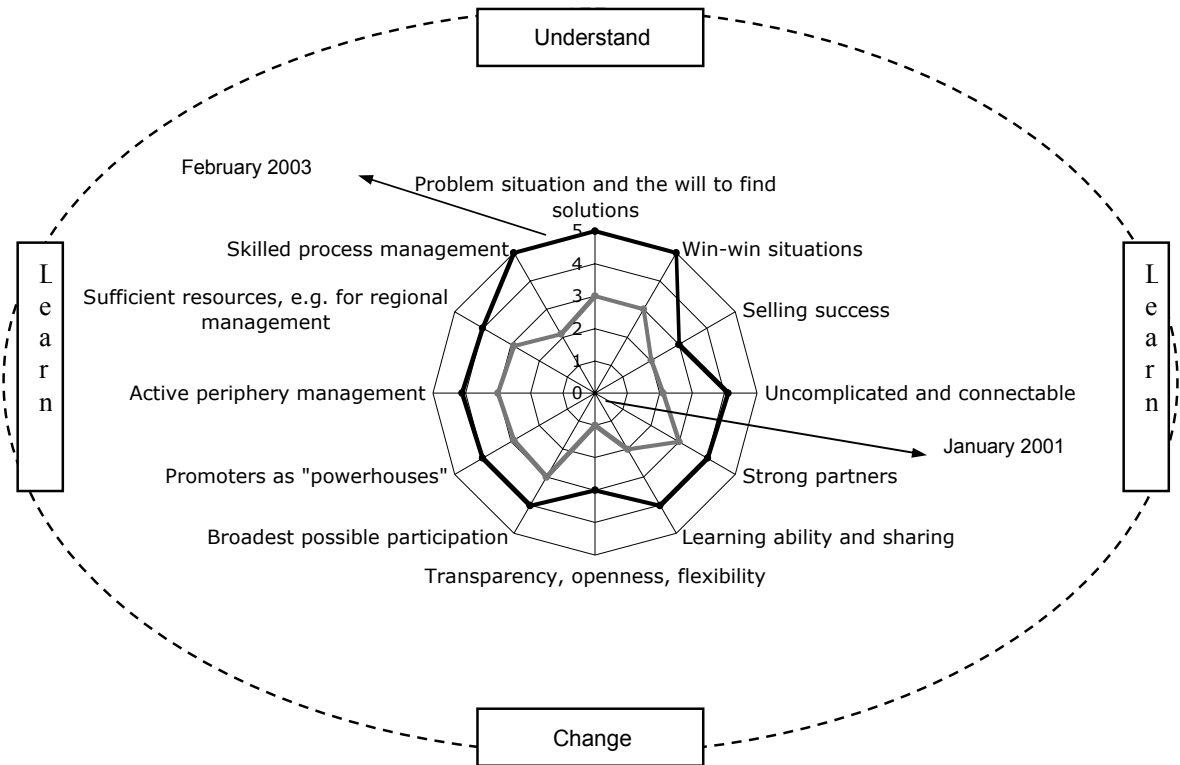
The self-assessment method employed by REGIONEN AKTIV is based on so-called "success factors" (Figure 1). These factors help in understanding and steering the implementation process of REGIONEN AKTIV, and in identifying the soft effects. One of the strengths of the method, for example, was that it led to targeted discussion about strengths and weaknesses in the regions. This method is suitable even when the process is still in a relatively early stage and the tangible effects of the projects are not yet fully apparent.

Success factors are concurrent factors that favour successful change, regardless of the great diversity of starting-up conditions in the regions.

In REGIONEN AKTIV, these factors play an important role in the analysis and optimisation of the model regions' development processes. The factors are based on the control theory, the negotiation theory and the network theory and were tested and further developed in practice in successful integrated rural development processes of the European innovation programme, LEADER+.

For self-assessment, the actors analyse their own situation using a comprehensive questionnaire. As a result, a median value is determined for each success factor and portrayed as a net diagram. This makes it easier to recognise where strengths and weaknesses lie. The causes of possible problems can be better understood and one can set about solving these problems in a targeted way. The method is also suitable for individuals, but its greatest potential is for use in groups. It is important to set off a continual learning process in order to achieve further sustainable development. Regular repetition of the evaluation helps reveal how the situation is changing and what further steps are needed for optimal development.

**Figure 1. Success factors for the evaluation of REGIONEN AKTIV**



***Description of some success factors***

*Problem situations and the will to find solutions*

The more people are directly affected by a problem, the greater is their motivation to take action against it. The problem alone, however, is not sufficient for change processes such as REGIONEN AKTIV. Joint understanding of the causes of the problem is needed to generate a solution consensus.

*Selling success*

Nothing is more convincing and motivating than success. Positively communicating what works creates not only acceptance and support, but also strengthens the self-confidence of everyone involved and increases motivation. The communication of success has an important function in all phases of change processes.

*Skilled process management*

Change processes require careful planning and continual adaptation to the changes that transpire. This demands that the participating actors are able to contemplate and learn. Simple functional systems of feedback and success controls (monitoring, evaluation) supply the necessary information. Skilled management ensures the flexibility of the process, which is necessary for implementing the new findings in good time.

*Transparency, openness, flexibility*

Change processes thrive on the creative openness of the participants and their innovative powers with regard to projects, products and processes. The transparency of the decision processes and workflows, as well as the flexibility to react suitably to new approaches, are essential for development dynamics and motivating the actors. At the same time, these factors generate acceptance of change and prevent the formation of ossified structures.

*Promoters as “powerhouses”*

Change processes such as REGIONEN AKTIV are especially successful when individuals identify strongly with the process and demonstrate exceptional commitment. In their role as “powerhouses” or “entrepreneurs in the service of the region”, they push change processes forwards and carry the development even in difficult phases.

*Active periphery management*

Active management of the social and political periphery is another success factor for regional change processes. Development processes like REGIONEN AKTIV are connected with the interests of different associations and groups as well as political decisions and power structures. The importance of public impact should not be underestimated either. Targeted influence on this periphery helps to secure the external support needed for the process and for individual projects.

**Examples from the regions***Bitburg-Prüm/Eifel region**The initial situation*

The identity and physical boundaries of this model region are defined by the geographic region of the Eifel, which crosses the inner EU borders to Belgium and Luxembourg. The region’s weaknesses are continually intensified structural change in agriculture, the drop in employment and poor traffic connections. The region’s potentials lie in the use of the good Eifel image, in its European orientation and in co-operation between agriculture, the retail trade and tourism.

*The objectives*

The jointly defined regional key objective focuses regional development on the unique Eifel cultural landscape, as a working and living location and as a recreational and holiday region. This will be ensured by near-natural land use (“conservation through utilisation”) and through nature conservation agreements. The aim is to solidify regional identity and define a new quality of life in the Eifel.

The multifunctional agriculture approach is pursued by involving both organic and conventional farms in order to preserve and further develop the cultural landscape in the Eifel to an equal extent. A brand will be established and rural tourism schemes designed to market quality products and services from the Eifel. In addition, the production of energy from renewable sources is intended to contribute to income diversification. The



central fields of action continue to encompass the establishment of professional marketing structures and consumer awareness campaigns as well as the networking of actors for rural tourism.

*Example of a field of action: “The Eifel Brand”*

As part of REGIONEN AKTIV, a regional EIFEL brand is being developed to market various products. The chief task involves defining and broadly anchoring quality criteria in a number of sectors, primarily in the areas of agriculture, forestry, crafts and trades and tourism.

The aim is to use regional products combined with the Eifel image to generate higher added value for the region as a whole and particularly for the producers. The shopping basket of the EIFEL regional brand now contains 35 products. These include not only typical agricultural products such as sausage, cheese and eggs, but also fine spirits and honey and even timber and furniture. The brand was expanded successfully to include tourism services at the end of 2004/beginning of 2005, as restaurants and hotels joined a system for quality assessment.

***The East Friesland region***

*The initial situation*

This model region is typified by its coastal location and by the character of its people. The strengths of the model region are its natural geographic potential, the beauty of the landscape and the co-operative willingness of the dedicated and experienced regional actors. Its weaknesses are its dependency on grassland management, low value added and the negative consequences of agricultural structural change. Tourism and the possibilities for horizontal and vertical co-operation offer opportunities to the region.

*The objectives*

The key objective of the model region is to preserve the East Frisian cultural landscape using extensive sustainable agriculture. The main development strategy is to promote the regional economy using regional quality products.

Regional value added will be increased to implement this key objective. In addition, consumer-oriented marketing structures will be established, accompanied by training and educational programmes on alternative sources of income. Hence, the fields of action encompass the areas of initial production, processing and marketing, including education and training for the actors.

*Example of a field of action: “Agriculture and Nature”*

The focus is on the large expanses of the region that are subject to nature conservation requirements and their use – as well as on the people who depend on these areas for their livelihood. The value of the cultural landscape and areas of natural beauty will be promoted on the market, along with quality products and consumer information. This will require related offers to interested customers on the sales side, such as alternative forms

of cultivation, ecological pasture farming or activities in the sphere of agriculture and the environment.

Examples of projects include “nature conservation agreements” (e.g. income for farms that provide areas for wild geese to graze) and “flower meadows” (the planting of flower meadows, which offer additional incomes for farmers in hay and seed business, while also being used for tourism).

### **Example of regional conflicts**

REGIONEN AKTIV initiates changes. Changes always give rise to criticism from those who want to hold on to conventions. Criticism also comes from those who welcome the new approach, yet are disappointed when their (overly) high expectations are not fulfilled quickly enough. The processes this involves and the difficulties that need to be overcome can be illustrated by a few excerpts from the press in the East Friesland region:

*20 April 2005: An MP from the region declares in an interview for the regional newspaper that the money for REGIONEN AKTIV comes from the farmers and therefore should be spent only for agricultural projects: “The farmer’s money is the farmer’s money.”*

*22 April 2005: Under the headline “Active East Friesland threatened by failure,” a regional politician describes the project as a thorough failure. “Sales of regional products will never be widespread enough to free us from global processes.”*

*28 April 2005: The chair of the regional partnership reacts to the criticism. “Those in East Friesland who expect decades-old mutual suspicions to dissolve right away, those who insist that co-operation across the borders of districts and sectors must generate profitable businesses within two or three years are setting their expectations unrealistically high for any region.”*

### **Sächsische Schweiz/Weisseritz district**

#### *The initial situation*

The model region is defined by the similar structures and the close economic ties of the two rural districts it comprises. Their identity is marked by a mutual culture, traditions and closeness to nature. The region’s strength is that its people are rooted in the region and committed to solving problems. This is countered by low economic potential as well as deficiencies in the infrastructure. The development and implementation of an integrated overall plan is considered an opportunity for the region. The development process is threatened by stagnation and depopulation, particularly of skilled and creative young people.

#### *The objectives*

Based on a jointly defined integrated development strategy, the following objectives are pursued in the model region: to maintain and create jobs and training posts, to preserve and increase existing regional potentials and to strengthen competitiveness in the course of EU enlargement in the east. The focus is on strengthening the rural area as a

place for living, working, nature, culture, rest and recreation, as well as to align it to multifunctional agriculture.

These objectives will be achieved, for instance, by the field of action “Agricultural Environment Projects”, which is to expand nature-friendly and environmentally compatible land management and protect and enlarge the forests. The creation of new sources of income will be advocated under the schemes “Tourism Close to Nature” and “Marketing Regional Products.”

*Example of a field of action: “Close to Nature, Green Tourism”*

The aim is to develop an environmentally friendly, year-round and enduringly profitable tourism sector, which takes an equal interest in the region’s inhabitants, guests and tourism businesses while at the same time contributing to preserving the diversity, uniqueness and beauty of nature and the landscape as well as the region’s cultural traditions. For example, a scheme is being drawn up called “Elb Sandstone Experience,” which involves using the natural raw material of sandstone to develop existing and new tourist attractions. Educational and cultural tours on the topic may be booked; thematic hiking and cycling trails have been designed, and signposts and information panels set up. The project and many other projects, such as a mill tour and carriage rides on historic post routes, are part of a general tourism scheme for the region.

## Results and reactions

### *Promoted fields*

The development and implementation of model plans for viable rural development requires financial resources (Figure 2). For the period 2002-05, the BMVEL is providing the 18 model regions with approx. EUR 50 million. The model regions receive these funds as grants for projects employed to realise their regional development plans. A maximum of 20% of the available funds can be used by the regions to finance regional management.

**Figure 2. Possible areas of application for the financial resources in REGIONEN AKTIV**

<b>Regional management, material and human resource costs</b>	
<b>Gaps in the implementation of the Joint Tasks for the Improvement of Agricultural Structures and Coastal Protection and for the Improvement of Regional Economic Structures in the respective federal <i>Land</i></b>	
<b>Specified operational investments</b>	<b>Specified structural investments</b>
<b>Agricultural environment measures</b>	<b>Informational projects</b>
<b>Consulting projects</b>	<b>Educational projects</b>

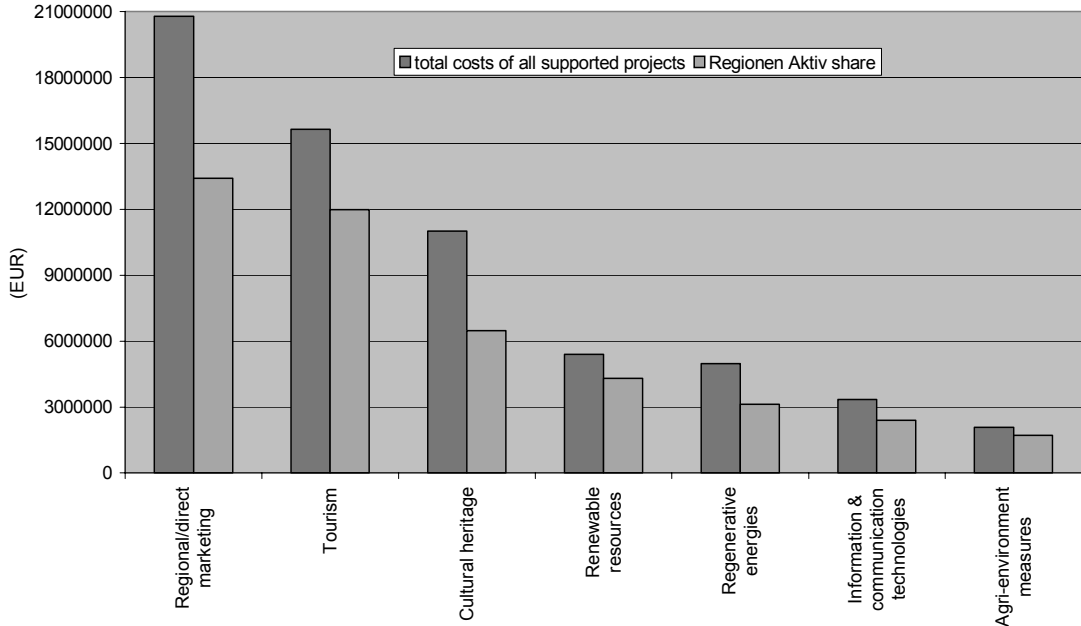
### *Promotion of innovative projects*

The special approach of REGIONEN AKTIV as a model scheme is to promote projects that are not eligible for funding from other programmes. REGIONEN AKTIV aims at projects centred around soft measures, such as disseminating information or acquiring specialised knowledge, but certain investment measures can be funded as well.

### *Region-specific plans – individual projects – mutual focal points*

A regional development plan was drawn up in each model region aligned to the specific conditions of the region. The model regions therefore each have their own combination of self-defined fields of action and a large number of individual, innovative projects. In spite of all their differences, many rural regions have similar problems and comparable development options. Analysis of the use of funds shows that the focal points of the activities in the model regions are regional marketing and tourism (Figure 3).

**Figure 3. Fund allocation by topic (May 2005)**



However, a considerable number of REGIONEN AKTIV projects contribute towards the education and training of the people in the model regions as well. Furthermore, many measures deal with the production and processing of renewable resources, such as timber and vegetable oils, as well as renewable energies, *e.g.* from biomass.

## **Development processes and structures**

### *Progress in the model regions*

During its relatively short duration, REGIONEN AKTIV has contributed to a considerable improvement in the development processes and structures – the “soft” local factors – in the model regions. This created important pre-requisites for more positive changes in the 18 regions. The following accounts are based on an evaluation of the intermediate reports of the model regions made in mid-2004 and the results of the associated research by REGIONEN AKTIV.

### ***Mobilisation and motivation***

In the 18 model regions, REGIONEN AKTIV has been successful in considerably increasing the commitment of the people to their regions and mobilising them to implement the model project. A sense of enthusiasm and expectation and a more optimistic mind-set were generated, particularly in regions that experienced early success. In addition, in many regions the actors' identification with "their" region and regional awareness were intensified. The important driving forces behind this commitment are the new opportunities created by REGIONEN AKTIV for taking action and making change and the possibilities for personal development.

### ***New actors***

With its extensive involvement possibilities, REGIONEN AKTIV gained new actors in the model regions for rural development. The traditional relationships between administration, government and interest groups were broken up in favour of closer partner-like co-operation and decision-making. A broad spectrum of social groups works in collaboration in the regions, including representatives from agriculture, environmental protection, business, tourism, education and consumer protection, as well as administration and government. This involvement makes it possible to take the different interests of business, environment and the social field into consideration and develop new interdisciplinary activities.

### ***New alliances***

REGIONEN AKTIV has made a considerable contribution to the formation of new – and the intensification of existing – alliances in the model regions. These are both project-related alliances and new area-related partnerships, for instance between urban and rural actors. In many cases, co-operation helped to overcome traditional gaps: for instance, in the model region Eichsfeld, joint marketing of conventionally and organically grown products has been established, and farmers and nature conservationists now work hand-in-hand on agricultural environment measures. New interfaces have been developed, such as that between the farmers' association and a health insurance scheme in the Danube valley. Furthermore, established alliances have been expanded, such as that of the consumer association and the Chamber of Agriculture in the Weserland. The partnerships always prove successful when they involve distinct advantages for all sides. Through this co-operation, the regions gained more freedom to act and, in many cases, new stimuli for development.

It is particularly interesting to note that, even in many regions that were not selected as model regions, but which only participated in the competition and the activities, this stimulated processes that led to an improvement in co-operation. Out of the 45 regions that set up new regional partnerships especially for the REGIONEN AKTIV competition, 31 continue to be active.

### ***Continuity deficiency***

One important aim is to anchor the alliances established in the regions in conjunction with REGIONEN AKTIV in such a way that they can be carried on even after REGIONEN AKTIV comes to an end. However, this is problematic for many regions.

For example, funding of regional management after 2005 has only been secured in the East Friesland region. Many other regions are seeking funding through the promotion principle of “Integrated Rural Development”, newly created for the GAK because of the experiences with REGIONEN AKTIV.

### ***New promotional policy in the GAK***

One crucial consequence of REGIONEN AKTIV was the introduction of the new promotion principle of “Integrated Rural Development” in 2004. In future, funding will be available for the design of integrated rural development plans that identify regional objectives and work out region-specific strategies. In order to support the targeted implementation of these strategies, promotion of regional management was also introduced. This makes these two crucial instruments fundable for the first time in the scope of mainstream promotion measures.

According to the new promotion principle, in future regional management can be funded with up to 70% of the costs (up to a maximum of EUR 75 000 per year) for the duration of five years in regions with at least 50 000 inhabitants. The aim of regional management is to support implementation of the rural development plans. The task of regional management is to motivate and involve the actors in the process. Moreover, regional management should supervise the implementation of the content of development plans while encouraging and overseeing the necessary further developments. This encompasses both the development of strategies and the promotion of projects. In the rural development process, regional management plays a key role as the interface between the different actors and interests in a region. This task places great demands in particular on the methodical and communicative skills of staff of regional management.

The grant recipients, both for the development plans and for regional management, are either local authorities, or alliances of such, or coalitions of actors. This clearly reveals the importance of local representatives in the creation and implementation of development plans. The inclusion of governments and administrations on the regional and local level is indispensable for the success of development processes, since they, as politically legitimised institutions, have a major influence on decisions for the future.

In addition to the two new instruments of “integrated rural development plans” and “regional management,” developing and securing village community facilities and co-operation between farmers and other rural partners can help to safeguard employment and income. This co-operation promotion has, for the first time, made it possible to promote meaningful investments that go beyond the narrow field of agriculture and serve to safeguard and create income and jobs.

A special incentive in the form of higher funding rates has been introduced so that individual investment measures no longer stand isolated. Measures designed to implement an integrated rural development plan can be supported with funding rates up to 5 percentage points higher than the regular funding rates of the promotion principle. From 2007, the difference will be up to 10 percentage points.

## Outlook

### *Further development of the promotional policy: GAK*

The introduction of the new promotion principle “Integrated Rural Development” is an important initial contribution towards turning the GAK into an instrument of rural development. Further steps are necessary.

For example, REGIONEN AKTIV could be used as an innovation and experimental workshop for the further development of the GAK. Going beyond the previous promotion principle initiated by REGIONEN AKTIV of “Integrated Rural Development,” this would mean linking the promotion of regional management and the measures to be implemented more strongly together. For instance, it would be conceivable to allocate a regional budget for a specific catalogue of measures in this Joint Task as well. The regions would then have to align themselves to corresponding requirements and criteria in order to be granted funds.

### *Possible continuation of REGIONEN AKTIV*

The aim of REGIONEN AKTIV is to establish a new promotional approach: from the funding of isolated single measures to drawing up and implementing a regional development strategy. This process cannot be completed in less than three to four years.

All in all, the success of REGIONEN AKTIV has been impressive. Most importantly, it was successful in activating the people in the regions themselves and putting a discussion of future rural development into motion. It must nevertheless be noted that there are deficiencies as well. Some of these are that:

- some of the model regions dissipate their energies by doing too many things at once, rather than focussing on their region’s central issues;
- REGIONEN AKTIV is utilised too much as a funding instrument for as many projects as possible, rather than as a driver for a new approach;
- regional management is, in many cases, not viewed as an engine of the region’s development, but merely as a project administration office;
- the degree of willingness in the model regions to share the lessons learned during REGIONEN AKTIV with the BMVEL for further development of its rural policy is quite variable; and
- active expansion of networks both in and between the regions is not pushed ahead with enough dedication.

The Federal Ministry is currently considering extending REGIONEN AKTIV by a second phase in the years 2006 and 2007, rather than letting it come to a stop in 2005 as originally planned. For this second phase, the focus should be on those objectives that make REGIONEN AKTIV a long-term success:

Objectives of the second phase of REGIONEN AKTIV:

1. **Continuity:** the alliances established by REGIONEN AKTIV should be anchored in the regions so that they are continued even after REGIONEN AKTIV ends.
2. **Networking:** *networks* in and between the regions should be optimised. District administrative officers, mayors and businesspeople who are still sceptical should be

included. The regions should work together and learn from each other more than has been the case.

3. **Model:** the lessons learned by the model regions should be made available to the federal and *Länder* governments, so that they can further develop the policy for rural areas and should also be made available to other regions, for which it can serve as an example.

Moreover, the promotion conditions in Phase 2 could be developed further to increase the incentives for the model regions to pursue the desired objectives.

Further development could include the following chief elements:

1. a focus on a few central topics;
2. co-operation between clusters of model regions and work on guidelines; and
3. new requirements for funding.

### **1. *Focus on a few central topics***

REGIONEN AKTIV 2006-07 could focus on themes. The model regions would have to select a topic that suits their particular circumstances. The available topics could be resolved by the BMVEL.

Possible topics are, for example:

- interdisciplinary production, processing and marketing of regional products;
- co-operation between agriculture, nature conservation and tourism;
- urban-rural co-operation;
- outlining solutions for regions greatly affected by depopulation.

Topics that have already been worked on many times and from which few new learning experiences are anticipated would no longer be funded. The actors could consolidate their strengths. REGIONEN AKTIV would then better fulfil its aim to realise region-related strategies rather than “just” funding projects.

### **2. *Co-operation between clusters of model regions and work on guidelines***

Groups of 3-5 regions each could work on the same topic and form clusters. In addition to their regional projects, the regions in a cluster could work on joint guidelines (best practices) containing their experiences and recommendations for best use of the relevant topic for developing rural areas.

### **3. *New requirements for funding***

The promotion of model regions for another two years would be based on a scheme in which each region describes how it would shape the transition to self-supporting regional development and to the working programme the region has set itself for the next two years. The scheme would have to contain information on, for example:



- the topics it will work on;
- how it will finance the required funding contributions;
- the inclusion of previously missing important partners in the regional partnership; and
- the training of the staff employed.

The regions could be obligated to provide a funding contribution of a least 30% in 2006 and at least 50% in 2007 for regional management.

The funding of projects could be restricted to those projects that lie within the focus of the topic selected by the region.

In addition to the selected theme, each region could work on up to two more topics. However, only projects from the selected theme could be financed with REGIONEN AKTIV project funds. The regional management could be fully active for all of the topics. This would emphasise that the task of regional management is not so much project administration, as getting processes moving.

A funding contribution from the region would be required for all projects (at least 20% for each project, at least 30% for all projects and the EU limits of at least 60% would apply for investments). Only those projects that are not eligible for other programmes would be promoted.

The projects would have to:

- be innovative, *i.e.* not a mere repetition of approaches already tested elsewhere;
- be systematically embedded in the overall regional plan;
- make a significant contribution towards networking the existing activities and potentials in the region; and
- make a contribution to the creation of added value and jobs in the region; or
- make a contribution to the solution of critical social or ecological problems.

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*(Extensive updated information is available at: [www.modellregionen.de](http://www.modellregionen.de))*

## Chapter 21. The New Trend of Rural Development Policies in Japan

Yukiya Saika<sup>1</sup>

### *Abstract*

*In Japan the number of farmers is decreasing and nowadays farmers represent an average of only 10% of rural households. Agricultural policies alone cannot effectively combat the difficulties rural areas are currently facing. The Basic Law on food, agriculture and rural areas was passed in 1999 to replace the Basic Agricultural Law of 1961. The food, agriculture and rural plan formulated following enactment of the law emphasises the necessity to distinguish agricultural policies and rural development policies in order to improve their efficiency and effectiveness. In the field of agricultural policies, the plan suggests the introduction of a new direct payment measure in 2007 in order to accelerate the structural reform of Japanese agriculture. As for rural development policies, it emphasises local initiatives and the valorisation of unique local resources. Four directions of rural development policies are indicated: 1) the conservation of rural resources such as land, water and landscape; 2) the revitalisation of rural economies through the valorisation of unique local resources; 3) the promotion of partnership between rural and urban areas; and 4) the provision of the necessary infrastructure to improve rural life. This paper explains a variety of new measures taken according to these rural development policies, and gives several examples of diversified rural economies.*

### Conditions in rural Japan

Although Japan has no zoning system that clearly distinguishes urban and rural areas, the areas of agricultural villages can be considered to represent rural Japan. An agricultural village is defined as a local community formed voluntarily as a base of necessary co-operation among farmers not only for agricultural activities, such as maintaining irrigation facilities and marketing agricultural products, but also for ritual activities, such as funeral services and village festivals. The number of agricultural villages in 2000 was about 135 000. They are not part of the government's administrative units. The administrative system of Japan consists of 47 prefectures and nearly 2 000 municipalities. (Japan is now under-going the process of merging municipalities; their number is expected to be 1 843 at the end of FY 2005.)

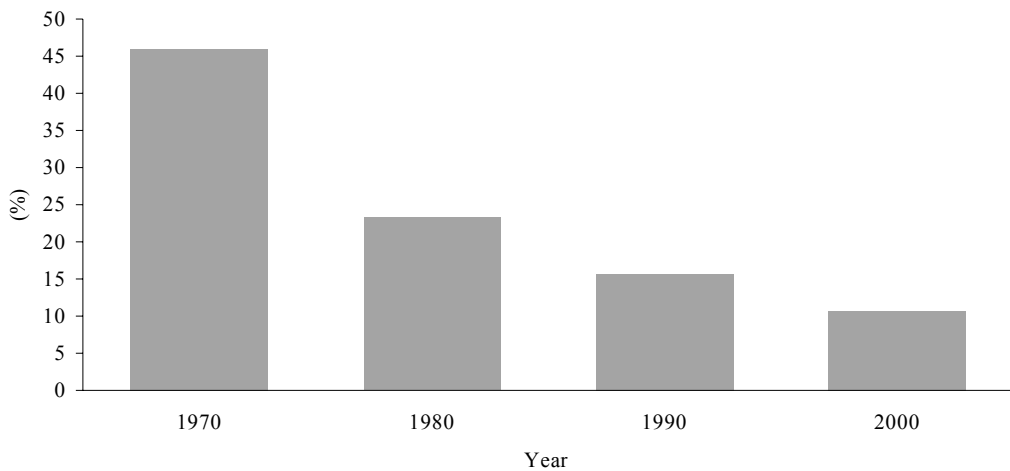
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1. Rural Development Policy Co-ordination Office, Ministry of Agriculture, Forestry and Fisheries (MAFF), Tokyo.

Although farming used to be the dominant activity in agricultural villages, the average ratio of farming households to total households has decreased dramatically. In 2000, an average of only 10% of households in agricultural villages were farming households. However, this ratio varies from mountainous areas to urbanising areas – while the average ratio of mountainous areas is 31%, that of urbanising areas is 4%.

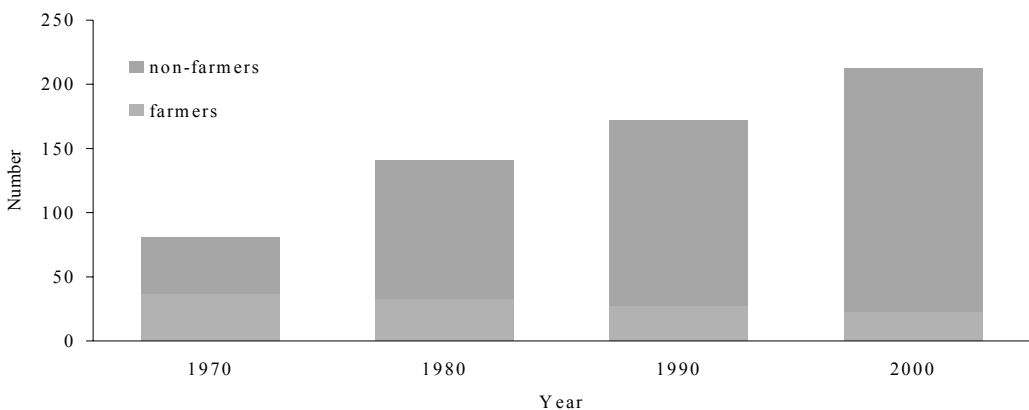
This drastic decline is partly because of the decreasing number of farming households, but mainly because of the increasing number of non-farmers. While the average number of farming households in an agricultural village decreased from 37 in 1970 to 23 in 2000, the average number of non-farming households increased from 44 in 1970 to 190 in 2000.

**Figure 1. Ratio of farming households to total households in agricultural villages (%)**



Source: MAFF.

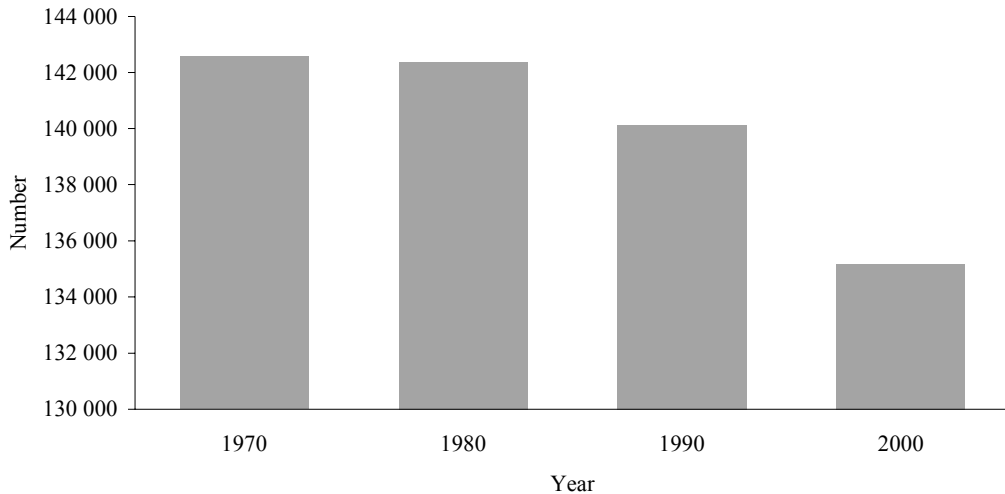
**Figure 2. Average number of farming and non-farming households**



Source: MAFF.

The number of agricultural villages has also been decreasing in the last 20 years. This does not mean that villages have fallen in number, however. The main cause of the reduction is the increased number of retired farmers, and so many villages are no longer defined as agricultural villages.

**Figure 3. Number of agricultural villages**



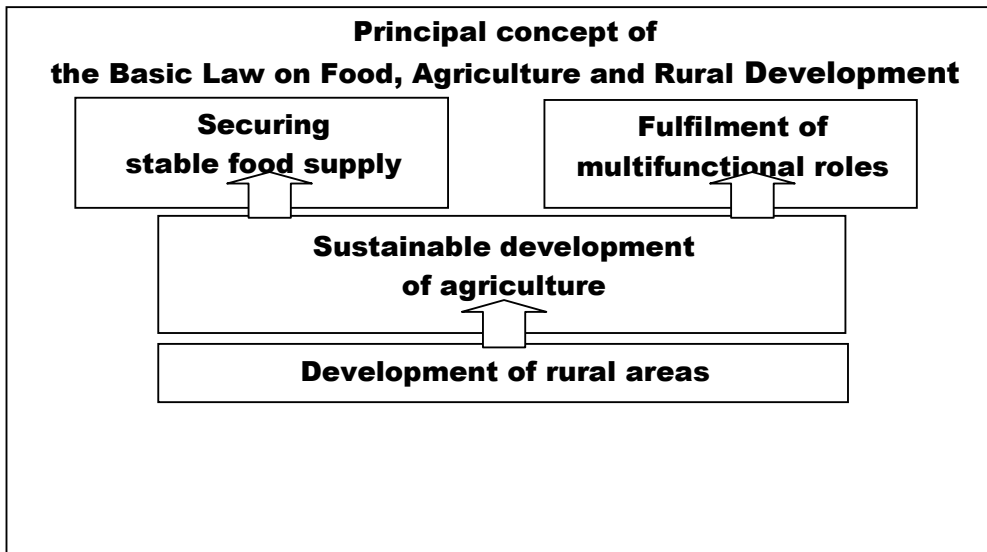
Source: MAFF.

These figures indicate that agriculture no longer dominates the economy of rural Japan, therefore agricultural policies alone cannot effectively combat the difficulties farmers are now facing. On the other hand, ambitious unique activities initiated by farmers or local people, such as exporting high-quality agricultural products and exploiting regional resources, such as biomass energy, are emerging in some rural areas. In addition, reflecting the increased number of non-farmers in rural areas, co-operation between farmers and non-farmers is essential for rural development. Rural policies should be directed towards encouraging these positive attitudes and innovative ideas, and should cover all stakeholders, rather than focussing exclusively on farmers through agricultural policies.

### **New rural development policy**

The Basic Law on food, agriculture and rural areas was enacted in 1999 to replace the former Basic Agricultural Law of 1961. The scope of the new Basic Law has been widened to include the concept of food and rural areas. The main objective of the old Basic Law was to improve agricultural production and to close the income gap between farmers and other workers. However, the decline of the food self-sufficiency rate and the increasing age of farmers and depopulation in rural areas have accelerated during the almost 40 years of agricultural policies based on the old Basic Law. The new Basic Law was therefore formulated to establish new directions to combat the difficulties surrounding not only agriculture, but also the food sector and rural areas. The Law states

two main objectives: securing a stable food supply and fulfilling the multifunctional roles of agriculture. In order to achieve these two objectives the law emphasises the importance of the sustainable development of agriculture and the development of rural areas.



The Law requires the government to draw up a basic plan for food, agriculture and rural areas every five years. Three main directions for rural development are given in the first basic plan: 1) the improvement of agricultural production bases and rural welfare, including infrastructure such as transportation, telecommunications, public health, education and culture, 2) the provision of support for hilly and mountainous areas to compensate for disadvantages in agricultural production conditions, and 3) the encouragement of exchanges between urban areas and rural areas in order to obtain a better public understanding and awareness of agriculture and rural areas.

The first direct payment measure was introduced in 2000 in response to the first basic plan. The direct payment aims to conserve the multifunctional roles of agriculture in hilly and mountainous areas. Less-favoured farms, such as those located on steep slopes or those that are small because of physical constraints, are eligible for the payment. The amount of payment is calculated on the basis of the production cost gap between flat plain areas and those less-favoured areas (ranging from

to JPY 21 000 per 0.1 hectare). In order to receive the payment farmers must agree to continue agricultural production for at least 5 years and undertake additional activities to reinforce the multifunctional roles of agriculture, such as conserving the environment or promoting urban-rural partnerships.

A new basic plan was approved in 2005. The new plan emphasises the necessity to distinguish agricultural policies and rural development policies in order to improve their efficiency and effectiveness. In the field of agricultural policies the plan suggests that a new direct payment measure be introduced in 2007 to accelerate the structural reform of Japanese agriculture. As for rural development policies, a shift away from providing infrastructure to fill the gap between rural and urban areas, towards emphasising local initiatives and the valorisation of unique local resources is being encouraged. Four

directions for rural development policies are indicated: 1) the conservation of rural resources such as land, water and landscape; 2) the revitalisation of rural economies through the valorisation of unique local resources; 3) the promotion of partnership between rural and urban areas; and 4) the provision of necessary infrastructure to improve rural living conditions.

A “bloc” grant system was introduced in 2005 in order to facilitate local initiatives as directed in the plan. The 29 various government grants for rural development are integrated into one grant system to improve flexibility. In this system the authority to select projects and allocate budgets is transferred from central government to local government. The support for business-related activities to enhance the lost functions of an agricultural village (community business), which are not covered by the previous grants for rural development, becomes eligible under the bloc grant. The role of central government is limited to allocating the budget to prefectural governments and evaluating approved projects. The budget for the year 2005 is JPY 46 600 million (USD 426 million).<sup>2</sup>

### Community business

Farmers are often obliged to collaborate on labour-intensive work, such as planting and harvesting rice; the maintenance of joint assets (such as irrigation canals and farm roads); decision-making on the distribution of irrigation water; involvement in festivals and funeral ceremonies, and so forth. An agricultural village functions as a social community through these activities of mutual co-operation among farmers. However, the increasing number of non-farming residents and the decreasing number of farmers, coupled with the fact that farmers, as a group, are ageing, have eroded the functions of agricultural villages. It is thus difficult to maintain a community’s assets, not only physical ones, such as irrigation systems and public land, but also intangible ones, such as social identity and local culture, hence many agricultural villages are losing their vitality.

Community business is vaguely defined as “an activity to resolve local problems by the initiative of local residents applying the methods used in industry”. This new local activity is thought to be able to replace the lost functions of agricultural villages. In fact, many community businesses based on rural resources, such as agriculture and forestry – and also those based on rural landscape and culture – have been emerging. These new businesses are expected to revitalise rural economies and their communities.

MAFF started to support these initiatives through the bloc grant system. A variety of local activities based on agriculture (such as direct sales of agricultural products through the internet, rural restaurants providing local cuisine, tourism utilising beautiful rural landscapes and traditional cultures) are eligible for the grant. The grant will cover 50% of the cost of conducting research, publicity campaigns, symposiums and workshops and establishing local organisations, providing training and information, etc.

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2. The budget of the MAFF for the year 2005 is JPY 2 967 billion, of which JPY 305 billion is allocated for rural development (JPY 220 billion is for infrastructure of rural villages and JPY 85 billion is for any other projects including the bloc grant).

### The features of community business

<b>Main constituent</b>	<b>Local residents, local companies</b>
<b>Objective</b>	<b>To solve local problems</b>
<b>Scope</b>	<b>Not limited</b>
<b>Scale</b>	<b>Scale in which face-to-face communication is possible</b>
<b>Basic theme</b>	<b>For the area, for local people</b>
<b>Resources</b>	<b>Local resources (labour, material, knowledge, techniques, etc.)</b>
<b>Organisation</b>	<b>Non-profit organisation, co-operative, business association, company, etc.</b>
<b>Profit</b>	<b>Appropriate level to maintain the activity</b>

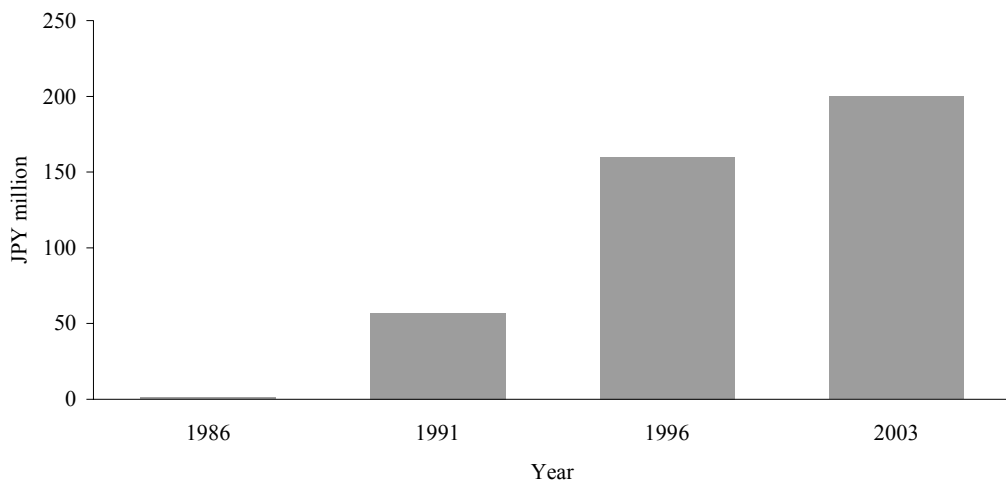
### Examples of rural initiatives

#### *Sales of wood leaves*

Kamikatsu, a town in Tokushima prefecture, is located in the south-eastern part of the Shikoku Mountains. The population has decreased from 6 265 in 1955 to 2 124 in 2000 – a drop of 66% in 45 years. The share of the population over 65 years now exceeds 44%. It is an isolated town where the population is ageing and decreasing in number.

In order to revitalise the declining economy the town started a new business utilising wood leaves available in the area. Wood leaves are used in the more exclusive Japanese restaurants for decorating the dishes. Inspired by the idea that Kamikatsu's wood leaves could be accepted by these restaurants, a town official initiated market research to identify customers' needs.

Figure 4. Sales of Kamikatsu's wood leaves



Source: MAFF.

On the basis of techniques and systems to provide the required wood leaves to the market at the right time, such as techniques to soften the leaves and a system for quickly conveying market orders, sales of Kamikatsu's wood leaves have increased drastically, to JPY 200 million in 2003, nearly 20% of the total agricultural production of the town.

About 180 elderly farmers, with an average age of 67, participate in marketing the wood leaves. Some top farmers' annual sales exceed JPY 10 million (USD 91 000). This new business is revitalising the local economy and attracting people to migrate to the area (161 people in 20 years), thus contributing to the overall development of the town. The business also has a beneficial effect on the health of elderly people through the physical exercise required (such as walking in the mountains to pick up the wood leaves) as well as the mental stimulation provided (such as computer-based market research): the medical expenses of the town are very low considering the high ratio of elderly people.

### ***Rural tourism***

The town of Miyama town in Kyoto prefecture is situated in a mountainous area, two-and-a-half hours' drive, through narrow winding roads, from Kyoto city, the nearest large city. Miyama had no industry except agriculture and forestry and, in common with other rural areas, had the problem of a decreasing and ageing population. The population decreased from 10 035 in 1955 to 5 231 in 2000 – a fall of 48% in 45 years.

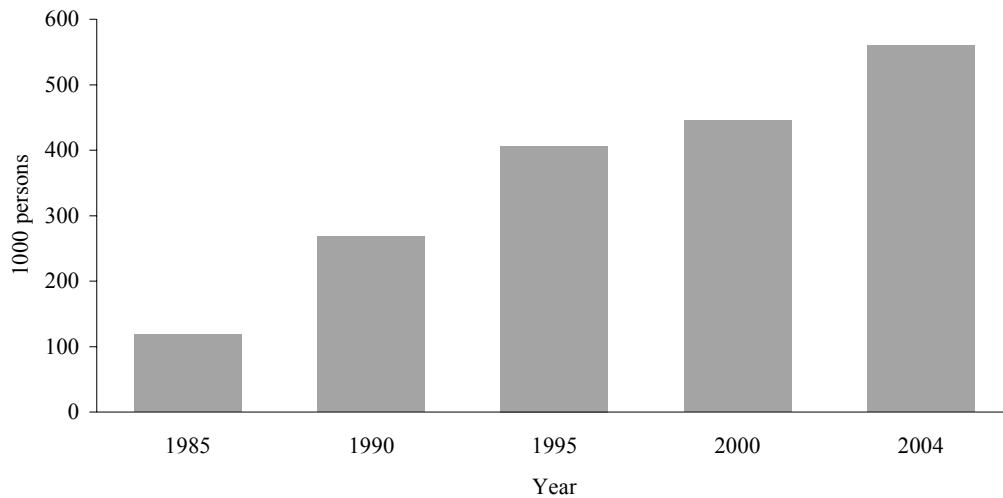
In the village of Kita near Miyama, 29 traditional thatched-roof houses still remain, 18 of which were built by the mid-19<sup>th</sup> century (the oldest one dating from 1796). These old houses, combined with the surrounding scenery with its stone fences, agricultural fields, trees, rivers and mountains, form a landscape reminiscent of the original rural Japan.

In 1990 the village of Kita was selected as an Important Preservation District for Groups of Historic Buildings<sup>3</sup> by the Agency for Cultural Affairs. In the same year the town of Miyama enacted a municipal ordinance in order to preserve its beautiful scenery by restricting development. National and local governments also started a project to subsidise 80% of the cost of re-thatching, up to a ceiling of JPY 5 million.

The strategy to preserve the rural landscape attracts tourists. The number of tourists increased from approximately 100 000 in the 1980s to more than 500 000 in 2002. The town constructed a "Nature and Culture Village" in 1989 to provide opportunities for city dwellers to enjoy the nature and culture of the rural town through camping, hiking, making traditional crafts, experiencing farm work, etc. The number of visitors to the Nature and Culture Village is now about 110 000 a year, and the total revenue from these tourists exceeded JPY 900 million in 2002.

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3. This is the system to protect historic sites, towns and villages under the Law for the Protection of Cultural Properties. Municipalities designate certain areas as Preservation Districts for Groups of Historic Buildings, then the national government classifies those of high value as Important Preservation Districts for Groups of Historic Buildings. The designated area can receive financial support and necessary guidance from the government.



**Figure 5. Number of tourists to Miyama**

Source: MAFF.

## Conclusion

Rural areas play an important role in ensuring a stable food supply and fulfilling multifunctional roles. However, it is becoming difficult to maintain this role because rural areas are losing their vitality due to the decreasing number and the increasing age of farmers who have served in this role for a long time. On the other hand, the Japanese people's sense of values and their way of life have changed over time and their interest in beautiful landscapes and the unique culture of rural areas is now increasing. Today there is a chance to start something new to revitalise rural areas utilising these rural resources. The government is required to encourage such local initiatives and to support their activities. These policies should be tailored to be effective and efficient for rural development, while agricultural policies should concentrate on promoting agricultural production.

## Chapter 22. Rural Development Policies and Activities in Turkey

Enver Aksoy<sup>1</sup>

### *Abstract*

*The main objectives of rural development policy in Turkey under the National Development Plans and of the framework for integration with the European Union are set so as to ensure social cohesion and competitiveness. The Ministry of Agriculture and Rural Affairs is the main body responsible for agriculture and rural development policies. Rural development projects cover areas such as development of agriculture and animal husbandry, irrigation, improvement of irrigated areas, construction of village and forest roads, drinking-water ponds, supply of drinking-water, the increase of agricultural and dairy production, and afforestation. This paper, after providing a brief description of the current situation of agriculture, discusses the main rural development projects implemented since the 1970s and the lessons learned from their implementation. It then it presents rural development projects undertaken within the Ministry of Agriculture and Rural Affairs and in the framework of the preparation for accession to the EU. Finally, the planning of rural development policies is explained and some concluding remarks concerning changes in rural development policies are offered.*

### **Introduction**

Turkey is situated on the borders of Asia and Europe and has an area of 78 million hectares (ha), 36% of which is agricultural land, 27.6% meadow and pastures, 29.8% forest and bush, and 1.5% water surfaces. Of the remaining land, 3.9% is classified as “other land” and 1.1% is categorised as non-agricultural land. According to the results of the *General Population Census* of 2000, Turkey has a population of 67.8 million people, 35% of whom live in a total of 37 366 villages. Approximately 7.6 million people live in 20 482 forest villages located in or near the forestry areas. These villages are the poorest regions of Turkey in terms of their socio-economic situation. Settlement is small and fragmented in the rural areas, resulting in problems in the physical and social infrastructure services.

According to the *2001 Agricultural Census – Agricultural Holdings Survey*, there are 3 021 190 agricultural holdings with an average size of 6.1 ha, and almost all are operated by a single household. The share of agriculture in total gross domestic product (GDP) and in total employment was 11.7% and 33.9%, respectively, in 2004. Although the agricultural sector's share is steadily declining over time, it continues to take the largest

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1. Ministry of Agriculture and Rural Affairs, Ankara.

share in rural areas. The low share of agriculture in GDP and the high employment share in total population are indicative of a productivity problem within the country.

Some of the factors which hinder profitable agricultural production in rural areas can be listed as follows:

- increasing fragmentation of land, due to inheritance laws;
- the small size and large number of agricultural enterprises;
- insufficiency of enterprises for economic production;
- poor infrastructure and mechanisation;
- low efficiency in animal breeding;
- deficiencies of input utilisation in production;
- lack of organisation among producers;
- lack of integration with agricultural industry
- lack of co-ordination among investing organisations;
- low extension services.

Government support to agriculture was approximately (new) TRL 3.5 billion (USD 2.5 billion) in 2004. Direct payments corresponded to 70.5%, premiums and compensatory payments to 10.7% and inputs 8.8% of this support. For the period 2006-10, an “Agricultural Strategy” paper was prepared and adopted in November 2004, in which the strategic goal was to create a highly competitive, sustainable agricultural sector. In this strategy paper, direct payments were decreased to 45%, and new agricultural support instruments were introduced, for example, rural development grants corresponding to 10%, and environmental conservation grants corresponding to 5%, of total agricultural support.

The Ministry of Agriculture and Rural Affairs (MARA) is the main body responsible for agriculture and rural development policies in Turkey: it has centralised bodies in Ankara and serves other regions *via* directorships in the provinces and counties, research institutes and control units. The Ministry works in co-operation with the other governmental organisations, especially the Ministry of Environment and Forestry, the General Directorate of State Hydraulics Works, the South-eastern Anatolia Project Regional Development Administration and the State Planning Organisation, which is charged with preparing the National Development Plans of the country and co-ordinating their implementation. In addition to governmental bodies, many non-governmental institutions are involved in agricultural issues, for example, Agricultural Credit Co-operatives, Chambers of Agriculture, etc.

The main objectives of rural development policy relate to the framework of integration with the European Union (EU), since Turkey is a candidate country, and National Development Plans are set so as to ensure: social cohesion and competitiveness, by increasing the income level of rural communities; to develop human resources in rural areas through expanding training and a participatory organisational approach; and to protect environmental and cultural heritage in rural areas. After the 1960s, with the start of the planning period in Turkey by Five-Year National Development Plans prepared by

the State Planning Organisation, rural development projects, supported by foreign finance, especially from The World Bank and the International Fund for Agricultural Development (IFAD), began to be implemented in accordance with the strategies identified in the Plans.

## Rural development projects

### *The South-eastern Anatolia Project (GAP)*

In the field of rural development, GAP is the most comprehensive project in Turkey. This project (which is, in fact, a package of projects) is a multi-sectoral and integrated regional development plan based on the concept of sustainable development for one of the least-developed parts of Turkey. The region consists of the provinces of Gaziantep, Adiyaman, Sanliurfa, Diyarbakir, Mardin, Batman, Siirt, Kilis and Sirnak, situated in the lower basins, covering an area of 75 308 km<sup>2</sup>. This region corresponds to 9.7% of the total surface area of the country. Agriculture is the dominant economic sector in the region, accounting for about 30% of the gross regional product. Manufacturing industries contribute only 21% to the regional GDP.

The population of the region is increasing rapidly, compared to the average in Turkey. In the period 1990-2000, the average rate of population growth in the region was 2.5% per year, while it was 1.8 % for the country as a whole. According to the results of 2000 Census, the population of the region is about 6.6 million, which corresponds to 9.7% of the total population of Turkey.

The region is rich in soil and water resources, with the Euphrates and Tigris rivers together accounting for approximately 28% of the country's water supply from rivers. In Turkey, 2.1 million ha out of a total of 8.5 million ha of economically irrigated area (20%) is found in this region. The region's development is therefore strongly tied to the development of the irrigation opportunities.

The original initiative consisted of irrigation and hydro-electric energy production projects on the Euphrates and the Tigris rivers. In 1968, the proposed water storage facilities and hydraulic plants and irrigation schemes of the Lower Euphrates Project were begun, and completed in 1970. Meanwhile, work of a similar nature was conducted at the Tigris Basin by the Diyarbakir Regional Directorate of the General Directorate of State Hydraulic Works (DSI). Finally, in 1977, the two projects related to these two basins were merged under the title of the "South-eastern Anatolia Project". Initially, it was envisaged that GAP, with 22 dams and 19 hydro-electric power plants, would be a combination of 13 large-scale land and water resource development projects designed for irrigation and hydroelectric energy generation from the Tigris and Euphrates rivers. However, it was later converted into an integrated regional development project upon completion of the GAP Master Plan in 1989.

The most salient principle in the new plan is human development. This approach is expected to instigate changes in three important areas and make them effective:

- rational utilisation of public resources and potential,
- enhancing people's participation, and
- catching up with targets in the field of human development.

The macro frame of the GAP Regional Development Plan (GAP-RDP) has been drawn up by the Long Term Strategy (Decree No. 697 dated 27 June 2000 and the Eighth Five-Year Development Plan). This frame has recently been further enriched by efforts made under the “*Programme for Transition to a Strengthened Economy*”, prepared as a part of the process for Turkey’s accession to the EU. Today GAP covers sectors such as irrigation, hydraulic energy production, agriculture, industry, urban and rural infrastructure, forestry, education, rural tourism and health.

Its basic aim is to eliminate regional development disparities by raising the population’s income level and living standards; and to contribute to national development targets such as social stability and economic growth, by increasing rural productivity and employment opportunities in the rural sector. The project is based upon the concept of sustainable development. Equitable development, participation, protection of the environment, employment generation, spatial planning and infrastructure development are the basic strategies of GAP.

The mandate of conducting GAP within the framework of integrated regional planning and of ensuring the co-ordination of the various activities was given to the GAP Regional Development Administration, which was established in November 1989 under the Office of the Prime Minister. The body authorised to take decisions in relation to the project is the GAP Higher Council, composed of the State Minister in charge of GAP, the State Minister in charge of the State Planning Organisation, the Minister of Public Works and Settlement and the Prime Minister, as the head of the body. The GAP administration has its head office in Ankara and it has also a regional Directorate in Sanliurfa.

Upon the completion of the project, 28% of the total water potential of Turkey will be brought under control through facilities on the Euphrates and Tigris. Furthermore 1.7 million ha of land will be under irrigation and it will be possible to generate approximately KWh 27 billion electric energy annually with an installed capacity of 7 476 megawatts. The high production potential generated in both agriculture and industry by GAP will increase the income level per person in the region by a proportion of 209% and the Gross Regional Product of the region by five-fold. The project will generate opportunities for 3.8 million people living in the region, whose total population is forecast to reach over 8.5 million in 2010.

The total cost of the project is USD 32 billion, of which about USD 16 billion was actually spent by the end of 2002. So far, 12.8% of the agricultural, 75.4% of the energy, 97.6% of the mining, 40.5% of the manufacturing, 30.7% of the transportation-communication, 24.3% of the tourism, 34.5% of the housing, 74.6% of the education-health and 55.5% of the other public services projects have been completed.

The biggest structure in the project is the Ataturk Dam, which is the largest in Turkey and the sixth-largest in the world. The Sanliurfa Tunnels comprise the largest system of tunnels in the world. A total of 881 800 ha will be irrigated by the Ataturk Dam and Sanliurfa tunnels. In 1997 irrigation of Harran fields was begun and farmers now are harvesting their crops, especially high-quality Turkish cotton, which is considered second only to Egyptian cotton. As at 2000, a total of 215 080 ha of land has been irrigated in the Tigris and Euphrates basins, and the construction of the irrigation network is currently on-going on a further 146 317 ha. Before irrigation activities were initiated in the Sanliurfa-Harran Plains, the total gross production value was USD 31.5 million, while the value added generated was USD 18 billion, and the value added per capita was USD 596. In 1995, with the irrigation of 30 000 ha of land, the value of total gross production rose

to USD 65.4 million, and value added generated, and value added per capita, reached USD 49.8 million and USD 1 652, respectively.

MARA carries out its agricultural and rural development activities with five related Research Institutes in Sanliurfa, Diyarbakir and Gaziantep. These Institutes have responsibility for land consolidation and land management in the region, renting land to farmers for farming activities, the improvement of rocky land, land-use planning, development and construction of public facilities in Sanliurfa and Harran plains villages and the agricultural settlement plan of Sanliurfa villages.

### ***The Ordu-Giresun rural development project***

The Ordu-Giresun Rural Development Plan is one of the IFAD-supported projects which was started in 2000 and will end in 2006. The total cost of the project is USD 51.2 million, of which USD 20 million is support from IFAD and USD 12.3 million is from the Islamic Development Bank.

Unlike other previous rural development projects, the activities were undertaken only after the preparation of Village Development Plans, and the farmers were able to follow the activities through the village development committees. The project has been conducted under a participation method, with the farmers' contribution playing an essential role. In all agricultural activities, the participation of farmers has been 20-40%. The sustainability of the project will be realised in this way.

This agricultural development project benefits some 44 000 households in Turkey's Black Sea Region, where more than 80% of the population has no access to safe or adequate water supplies, or opportunities for off-farm income. Severe environmental degradation affects about 4% of the 320 villages involved in the project, mainly in dense forest and mountainous areas. The goal of the project is to enable the rural poor in Anatolia, particularly the women, to improve their incomes and living conditions through the sustainable use of natural resources. The project helps the poorest farmers and livestock keepers to improve livestock, crop and forestry production and encourages them to participate in Village Development Plans. It provides assistance in developing alternative sources of income, such as bee-keeping, and promotes improvements in infrastructure, including roads and village water systems. The project finances 32 small-scale irrigation systems, mainly in dry southern zones and delivers them to the water-users' groups that contributed to their design and construction.

Since its starting date, the project has been a means of farmer development and increased income, especially for people living in rural areas. The aim of the project is to increase the farmer's income by creating new and income-generating resources, first starting with improving the infrastructure, then progressing to some other components such as plant and animal production activities, demonstrations, vocational training, forestry activities. The producers are now better-informed and prefer the higher-quality inputs in their production. There have been evident improvements in infrastructure, in afforestation opportunities, and in the rate of uptake of credit facilities among people in the area. In this framework, low-interest rate credits (plant, livestock or fruit productions) have been used by the farmers, and in Ordu this amounted to USD 2 million, made available to 688 families, and created employment for approximately 3 200 people.

Another important activity that has been carried out in Ordu is the development of kiwi production. The farmers have been taught modern methods of kiwi production and have been provided with the necessary infrastructure. Storage facilities for kiwis have

been established, and kiwi production has become an alternative to the traditional hazelnut production in the area, due to its potential for generating high income.

Greenhouse production has been supported and production of lettuce, fresh onion, cucumber and tomato (non-traditional crops) has been started in the area. The income generation made possible by the use of greenhouses has encouraged the farmers. Some income-generating activities have also been carried out – for example, increasing the yield in potato production by using high-yield seeds, fertilisation and insect control. Developments in the production of wheat and fodder crops have also been achieved. The animal-breeding activities in the area have been improved by artificial insemination and productivity has increased.

In the framework of the project, the Farmer Training Centre has been constructed and farmers have been trained in the use of the new technologies of farming methods by means of demonstrations and other activities. The physical conditions of staff working in the project were improved and they were provided with tools, equipment and vehicles. The number of fields sown with fodder crops has increased considerably and silage-making has become widespread. Animal breeding has been improved. A variety of exchange studies in field plants has been carried out, especially in the project villages to the south of the area, and yields have been increased by 100%.

Extensive credits from a forest village fund (known as the ORKOY fund) have been provided to farmers. Artificial insemination has been carried out widely. Milk-collecting centres have been established to reduce the problems in marketing, and the private sector has begun to develop in this area. Garden facilities with advanced technologies have resulted in the production of kiwis (they had not previously been cultivated in the project area, although the climate and conditions are suitable). In order to eliminate the marketing problems associated with kiwi production, cold storage centres have been provided. Intense extensive programmes and trips for farmers have been organised to allow adoption and dissemination of new technologies.

A survey carried out at the start and mid-term points of the project showed progress in the project area: there was progress of 30-35% in the improvement of village roads; a 50% increase in the production of potato, maize, wheat and fodder crops; and a 10% increase in animal breeding and also in milk production. The use of credits, which is a very important component in the project, increased by 20%.

### ***The Sivas-Erzincan rural development project***

The Sivas-Erzincan rural development project is another IFAD-supported project, planned to be implemented between 2005-10. The cost of the project is USD 30 million: an IFAD loan of USD 13.1 million, together with a USD 9.9 million loan from the Organization of Petroleum Exporting Countries (OPEC) Fund and contributions from the Government and beneficiaries will support the Government's efforts in the area.

The project, which is designed to improve agricultural production, expand employment opportunities and foster community development, will benefit about 200 villages in two of Turkey's poorest provinces. In particular, it targets some 50 000 people in the provinces of Sivas-Erzincan, where rural poverty is widespread.

A key aspect of the Sivas-Erzincan project is community-driven development. The project helps establish various village associations, including development committees, co-operatives, women's farming groups and water users' and grazing associations, and

provides training and technical assistance to their managers and members. It then works with groups to address constraints on agricultural production, such as limited access to basic financial services, marketing opportunities and technical knowledge. It also establishes opportunities for micro-enterprises that allow poor people to diversify their income.

### ***The Anatolian Water Basins Rehabilitation Project***

The Supreme Planning Board adopted a decision in 2004 concerning the training and project design periods of the Anatolian Water Basins Rehabilitation Project, which covers various activities in 28 micro-basins, where the most intensive poverty has been identified, and in the rural parts of six provinces in the central area of Turkey. This project includes activities aimed at the rehabilitation of natural resources, such as soil conservation, afforestation and pasture improvement; income-raising activities, such as the development of animal husbandry, greenhouse farming, small-scale irrigation infrastructure, etc.; and monitoring of environmental pollution due to agricultural activities.

### ***Project for Social Support in Rural Areas***

This project, conducted by MARA and the Fund for Social Aid and Solidarity, was launched in 2003. In the scope of this project, between 2003-2005, 381 co-operatives have used EUR 148 million credit and 25 000 families have benefited.

### ***The Agricultural Reform Implementation Project (ARIP)***

In the context of the agreement signed with the International Monetary Fund in December 1999, the Government implemented the ARIP in 2000 to phase-out the support system of administered output prices and input subsidies and to replace it by *Direct Income Support* (DIS) payments granted per hectare to all farmers. The project is being financed with loans of USD 600 million, including an Adjustment Loan of USD 200 million from The World Bank.

The primary development objective of the ARIP is to help implement the Government's agricultural reform programme and provide agricultural producers and the agro-food sector with incentives to increase productivity in response to real comparative advantage. At the same time, the project is designed to cushion the potential short-term adverse impacts associated with the removal of production-based support, and facilitate the transition to efficient production patterns. Aside from promoting efficiency in the allocation of resources, the reforms are necessary for fiscal stabilisation. The Government's agricultural policy reform programme is described in the March 2000 "Strategy for Reform of Agricultural Support Policies". The agricultural policy reforms are supported financially, in part, by The World Bank under the Economic Reform Loan.

In particular, the Government's strategic objectives can be summarised as follows. First, the Government intends to phase out the unsustainable and distortionary system of subsidies for fertiliser, credit and price supports – which disproportionately benefit large farmers, regressively tax consumers, and together cost over USD 6 billion a year – and to link prices to world market prices. The ARIP will assist the Government to introduce a unified national programme of DIS payments for all farmers, which will be simple, transparent, and which will not distort the incentive structure, as the current system does.



The intention is not to fully compensate every farmer for income lost by removal of the old subsidy system, but rather to cushion the short-term losses and continue to provide adequate support to the agricultural sector, but in an incentive-neutral way. Within the existing legal framework, the DIS payments should be useable as collateral, thereby giving farmers enhanced access to credit. Payments under the DIS will be recurrent, but will eventually become more explicitly targeted (and harmonised with the EU system under the Common Agricultural Policy (CAP) as it exists at the time of accession), or merged with the general social safety-net system. The second initiative under the programme will encourage farmers to cease producing crops which are currently heavily over-produced, by offering one-time payments to cover the cost of switching to alternative activities. The third element of the programme focuses on turning the quasi-governmental sales co-operative unions, which previously administered support prices, into organisations dedicated to serving their farmer members through a process of restructuring and privatisation. This will reduce government involvement in the marketing and processing of agricultural products. Finally, the project will help the government maintain support for the programme by clearly explaining it to the public.

Completing the agricultural reform programme is a medium-term objective. The reforms will assist the Government in its aspirations for accession to the EU by increasing the efficiency of the sector and the economy at large, thereby helping it meet one of the most basic pre-conditions set down by the EU: that the applicant states have economies that are efficient enough to be competitive in the unified market.

The ARIP consists of the following four main components:

- *Design and implementation of the DIS (USD 47.80 million):* cover 25% of eligible farmers by the end of the first project year; 75% of farmers registered and receiving payments by 2002 and 95% of farmers registered and receiving payments by the end of the project; farmers exercise choice regarding crop selection and input use in response to market conditions. In the Farmer Registration System, data on farmers (*e.g.* name, date of birth, TR identity number, etc.) and land (whether he/she is the owner of the land, used area, type of use, produced crop etc.) have been recorded.
- *Farmer transition (USD 180.58 million):* grants paid to about 25% of eligible farmers for conversion to *alternative* agricultural production in the 12 months following project effectiveness, and to the remaining 75% in the second project year; development of agricultural producers' organisations.
- *Restructuring of Agriculture Sales Co-operatives and Co-operative Unions (ASC/ASCU) (USD 152.68 million):* by 2004, all sustainable ASCUs were restructured to function as effective co-operatives owned by, and operating for, ASCs, and the ASCs are fully owned by, and operating for, farmer members; by 2005, poorly performing ASCUs ceased operations.
- *Support services (USD 12.95 million):* effective and timely public information programme in place during the first year of the project to provide accurate and timely information about ARIP; training for MARA extension staff in public relations completed during the first year of the project; timely and well-targeted advisory services provided; effective social and financial monitoring and evaluation established; project co-ordination unit for co-ordination and procurement of financial management support to agencies implementing ARIP established.

In 2004 a new component called the *Participatory Rural Development Programme* was included in ARIP consisting of three sub-components; i) land consolidation, ii) strengthening of farmer organisations and iii) a village-based participatory investment programme. The first sub-component aims at achieving an optimal size of land holdings which are fragmented and scattered across the country. The second one aims at strengthening the institutional capacity of farmer organisations (co-operatives, irrigation unions, agricultural unions, etc.). The last one aims at implementing projects on the following investment areas in 16 pilot provinces:

- maize drying and storage;
- collection, cooling and processing of milk;
- Storage, processing and packing of fruits and vegetables;
- construction of greenhouses using alternative sources of energy (geo-thermal, solar, wind, etc.);
- meat processing, food legumes processing and packing, and bee products processing and packing.

Within the “village-based participatory investment programme” the farmers and farmer organisations will be supported through projects they have, themselves, prepared. Through this component an implementation and procurement guideline and regulation for implementation have been issued, including selection of eligible individuals and private enterprises, eligibility of public investment, qualification of applicants and participants, project expenditures to be funded by the programme, application and evaluation procedure, monitoring and evaluation criteria, grant agreement and implementation procedures. The programme started in mid-2005.

## Lessons learned

***IFAD projects:*** Turkey has attempted to implement five previous investment projects with IFAD loans. These projects have often been plagued by delayed starts and slow implementation.

***Management and co-ordination:*** multi-component, “integrated” rural development projects involving several implementing agencies, each with its separate budget centre, have proved to be unsuccessful in the context of the bureaucratic culture of Turkey. Future interventions should avoid complex design and be more narrowly focused in the choice of activity mix.

***Counterpart funding:*** in a situation of budgetary austerity, lack of counterpart funding has emerged as a major problem. The reason for this is that even when donor funds are available, their use is constrained by the limited spending capacity of implementing agencies due to drastic cutbacks in budgetary allocations, and restrictions on new procurement or the employment of additional staff.

***Non-governmental organisations (NGOs) and community-based organisations (CBOs):*** Innovative solutions need to be found to encourage greater involvement of NGOs and CBOs – not just as providers of project support services, but also as proactive agents of social mobilisation and change management. Because of inadequate rural infrastructure and low productivity levels in the poor provinces, the private sector generally has insufficient incentive to fill the vacuum caused by the gradual curtailment

of the state's direct role in input and service provision in rural development projects. In addition, very few local, and virtually no foreign, NGOs are operating in agricultural and rural development projects and programmes, and none has been directly involved in IFAD work. In the context of rural development, CBOs are thus essentially limited to co-operatives. However, many of these – particularly the sales co-operatives and their unions – are state-controlled and operate at a (usually huge) deficit. Some producer co-operatives have begun to emerge as voluntary associations and may link up with large processing or retailing outlets under various types of “contract farming” arrangements. Such co-operative enterprises need to be promoted more systematically.

**Beneficiary participation:** Policy changes have not yet been reflected in practical project implementation with regard to true participation. Consultation with the village populations has usually been only nominal and has mostly been conducted through the village head (*mukhtar*). Moreover, progress has been limited in organising farmers into water users' associations or other forms of beneficiary groups capable of assuming an active role in decision-making processes and in project implementation.

**Rural finance and credit:** Experience has highlighted the difficulties the poor face in accessing formal rural financial services. To compensate for the unwillingness of the country's major rural finance institution, the Ziraat Bank, to serve poor rural clients, the Government established a number of subsidised lending bodies, including agricultural credit co-operatives and the ORKOY Fund. These bodies were of limited outreach, however, and proved to be financially weak and unsustainable. Furthermore, the operations of the country's financial system have been greatly complicated by the high rates of inflation that have been a feature of Turkey's overall macroeconomic management over the past 20 years. The high cost of commercial credit has greatly diminished the willingness and ability of farmers, especially small and poor farmers, to borrow from commercial sources. The result is that agriculture has been further deprived of investment resources.

## Rural development and EU integration

In addition to the rural development projects implemented in accordance with national strategies and goals, Turkey has been preparing for accession to the EU since 1999, when it was officially adopted as a candidate country by the EU. Within the framework of integration into the EU, studies are being conducted in parallel with the priorities identified in the Accession Partnership Document for Turkey, in which the preparation of the National Rural Development Strategy was a short-term priority, and the establishment of institutional capacity for the implementation of the EU's rural development policy was a medium-term priority.

In this framework, the National Rural Development Strategy has been prepared in conformity with the national, sectoral and spatial policies of Turkey. During the preparatory stages a participatory approach was followed and a working group was established, including all the relevant partners of rural development in Turkey. The National Rural Development Strategy will form a basis for Sustainable Rural Development and will be financed from national funds, EU support and other international financial resources.

For the new programming period 2007-13 the European Commission is working on preparation of a new Instrument for Pre-accession Assistance (IPA) starting from 2007, replacing all the current EU pre-accession assistance instruments such as Pologne,

Hongrie Assistance à la Réconstruction Économique (PHARE), the Instrument for Structural Policies for Pre-Accession (ISPA), the Special Accession Programme for Agriculture and Rural Development (SAPARD) and Community Assistance for Reconstruction, Development and Stabilisation (CARDS). It is envisaged that IPA will be composed of five components, one of which will be rural development. Turkey and Croatia are set as the countries to benefit from this component.

In order to make use of the IPA funds to be provided in the field of rural development, Turkey needs to prepare a Rural Development Plan (IPARD Plan) for the years from 2007 to 2013 which will form the basis for financing the rural development measures under the IPA and establish an implementing/paying agency (IPARD Agency), the structure and functions of which will be similar to the SAPARD Agencies, set up by central and eastern European countries prior to their EU accession.

In order to provide support to carry out the harmonisation to EU requirements regarding rural development policy, two EU-supported projects will be implemented within the framework of the financial co-operation programme. One of them is the Preparation for the Implementation of EU CAP (TR 0402.08), composing two sub-projects, one of which is aimed at the preparation of a Rural Development Plan and the establishment of institutional capacity. The project has two components: technical assistance and twinning. The technical assistance part involves technical support for the preparation of a Rural Development Plan with the support of a technical assistance team. The technical assistance part of the project is envisaged to start in May 2006. The twinning part of the project involves identification of the administrative capacity for the effective implementation of the Rural Development Plan. Within this component, the existing structures for the implementation of the rural development measures of the Rural Development Plan and the necessary structures for effective and sound implementation, financial management, monitoring and evaluation of the IPA rural development plan, will be defined. Reports on the needs of relevant institutions that will be involved in the preparation, implementation, financial management, monitoring and evaluation of the rural development plan in terms of staffing and investments (IT and office equipment, etc.) will be prepared. The legislative and institutional framework required for the implementation of IPA rural development support, and guidelines for the implementation of rural development measures will be prepared. The twinning component of the project started in November 2005.

The second project which was approved within the framework of the financial co-operation programme includes the establishment of a rural development agency (IPARD Agency) which will implement and pay to the beneficiaries the funds coming from the EU. The project has three components: technical assistance, twinning and investment support.

Apart from the work conducted by means of projects supporting harmonisation with EU rural development policy, the Ministry of Agriculture carries out related studies through the Rural Development and Forestry Working Group and in consultation with the European Commission. Within this framework, two missions came to Turkey from the European Commission DG AGRI SAPARD Unit. On the basis of the meetings and discussions held with DG AGRI, it has been stated that the objectives of IPARD are to contribute to the implementation of the *acquis communautaire* concerning the CAP and to contribute to the sustainable adaptation of the agricultural sector and rural areas in the applicant country. So, priority will be given to measures to improve market efficiency,

quality and health standards and to create new employment in rural areas. In order to accomplish these priorities, the nine measures identified within the context of IPARD are:

- investments in farms to restructure and up-grade to EU standards;
- investments in processing and marketing of agriculture and fishery products to restructure and up-grade to EU standards;
- improving and developing rural infrastructure;
- development and diversification of rural economic activities;
- producer groups;
- agri-environment and animal welfare schemes (at pilot level);
- preparation of rural communities to conceive and implement local rural development strategies and integrated rural development strategies through local partnerships (at pilot level);
- training;
- technical assistance.

The most appropriate measures for Turkey's needs will be selected for the IPA rural development plan for Turkey. Two working groups were established, one responsible for drafting the Rural Development Plan and the other for institutional framework and for establishing the IPARD Agency, including the representatives from the relevant institutions on rural development: the European Commission was informed about the working groups.

### ***Agricultural Master Plans***

The Agricultural Master Plans for 81 provinces in Turkey have already been prepared by an FAO-supported project (TCP/TUR/8924) and the agricultural situation for each province of Turkey is now available. The important challenge in the planning of the Agricultural Master Plans was the preparation of the Agricultural Plans by participatory approach and by provincial level through the bottom-up method. In this way, the development strategy in the country has been switched to local planning, resulting in the strengthening of local institutions and provincial administration. In the process of preparation of the Master Plans, governmental institutions and NGOs, universities and the private sector were involved. Within the local planning approach, the local actors related to the agricultural and rural sectors have been encouraged to make plans and to use their own judgement. The Master Plan of each province includes:

- the development conditions, policies and current strategies and plans;
- the main characteristics and current agricultural situation of the province;
- an agricultural resources inventory in which the detailed agricultural resources (renewable and non-renewable natural resources, physical capital resources, human and institutional resources, the applicability of resources and environmental risks) are indicated;
- a review of the agricultural situation, performance and expectations;
- the problems, potentials and restrictions (SWOT Analysis);

- the development of objectives and strategies;
- the applicable projects and programmes for the province.

The Agricultural Master Plans are not only a guideline and reference for the decision makers dealing with agricultural and rural development, but also for the private sector, in determining profitable investments in the province. Furthermore, the local population is aware of the real situation and the solutions needed to increase its economic welfare. In this way the limited resources of the area will be used more efficiently and effectively, and real solutions will reach the people in the area more rapidly than before.

Following the completion of the Agricultural Master Plans of the 81 provinces, the studies to prepare the Regional Master Plans of the Country have been started and are currently continuing. After the completion of the Regional Master Plans, it is targeted to prepare the National Agricultural Master Plan of Turkey, which will identify the agricultural potential, opportunities, restrictions and agricultural advantages of the country compared to other countries. Furthermore, the National Agricultural Master Plan will be the main reference in determining the agricultural strategies and in the preparation of the Agricultural and Rural Development parts of the National Development Plans.

### *Planning of rural development policies*

Five-Year National Development Plans have been prepared by the State Planning Organisation since 1963. Currently, the framework of national social and economic development of the country has been settled by the Long-term Strategy: 2001-23 and by the Eighth Five-Year National Development Plan 2001-05 (FYNDP).

The FYNDP seeks to improve the quality of life for the rural community in the framework of the principle of sustainable development and starting from the goals, principles and policies converting local resources into economic benefit to increase the level of income and employment in rural areas, developing human resources and providing skilled labour, developing non-agricultural income-generating activities and agro-industries, extending and improving infrastructural services, promoting the awareness of civil society and the philosophy of participation, and enhancing the interest of NGOs outside the countryside in rural development.

Within the context of economic and social harmonisation of Turkey to EU standards in the framework of the accession, in order to form the basis for the use of pre-accession financial supports between the years 2004-06, the Preliminary National Development Plan (PNDP) was prepared. The PNDP addresses the issue of rural development mainly in the area of “Increasing the Economic Power of Regions, Reducing the Interregional Disparities of Development and Accelerating Rural Development”, which is the fourth development axis of the plan. In this axis, special importance is attached to rural development and it is envisaged that in rural areas:

- fields of employment should be increased and income-generating activities promoted;
- capacity should be developed for a more efficient use of agricultural land;
- the quality of life for the rural population should be improved through the use of modern agricultural techniques;

- employment should be provided in non-agricultural sectors such as tourism, textiles, weaving and handicrafts; and
- rural development should be promoted by extending non-agricultural income-generating activities in disadvantaged areas.

The developments in the sector and the need to accelerate the reform initiatives implemented by the ARIP brought about the adoption of an Agricultural Strategy comprising the years 2006-10 in which the framework of the development of the agricultural sector within the context of national strategies and objectives was set up.

The PNDP was revised by the First Mid-Term Programme which covers the years 2006-08, aiming at shaping the state policies on the basis of strategic aims and objectives and allocation of resources within this framework. In the Programme, rural development has again been included in the axis of “Regional Development and Reducing the Interregional Disparities of Development”. The agricultural strategies and measures have been included in sectoral policies.

The National Rural Development Strategy has been prepared in conformity with the National Development Plans and within the view of harmonisation for the EU’s rural development policy. The strategy document constitutes a specialised guideline for rural development in which the quantified analysis of rural situation, development opportunities, results of previous implementations, and required strategies and priorities, have been identified. The main target of rural development strategy has been identified as: achieving better living and working conditions for the rural community, in its territories, utilising local resources, and preserving natural and cultural assets. The strategic objectives of the strategy have been identified under four items in which the specific priorities have been settled:

- economic development and job creation;
- improvement of human resources, organisation level and local development capacity;
- improvement of rural physical infrastructure and quality of life;
- protection and improvement of the rural environment.

The Rural Development Plan of the Country in the framework of IPA Rural development Component of EU for the years 2007-13 is currently being prepared and will be approved by the Turkish Government and adopted by European Commission by 2007. The National Rural Development Strategy will form its basis and will be a strategy guideline for the Plan.

## Concluding remarks

Rural development approaches have differed over time in the framework of technological developments and socio-economic conditions, and have displayed variations in practice according to countries’ cultural, social, economic and administrative characteristics. While rural development approaches were dominated by agricultural modernisation and state interventions until the 1980s, concepts such as the free market, sustainable development, participation and governance have shaped rural development policies since then.

The new policies aim to increase the competitiveness of rural areas and to accelerate their economic development by taking their needs and assets as a basis. This requires making use of agricultural and non-agricultural products and the cultural and natural resources of rural areas that are not fully utilised, and encouraging innovation, entrepreneurship and private-sector investments for this purpose, developing human resources and governance mechanisms with public-private sector co-operation, and meeting the infrastructural needs to achieve the integration of rural areas into the economy.

In addition – for reasons such as economic stagnation and retrogression in rural areas, the concentration of poverty in rural areas and the destruction of natural resources – rural development policies have been addressed through approaches with a human and environmental focus. The concept of sustainability has become important. Policies to protect the environment and the natural and cultural resources of rural areas, so that subsequent generations can enjoy these opportunities, have been included in the programming.

The decentralisation concept in implementing the policies has been introduced recently and local administration capacities have been strengthened; the “bottom-up approach” has been adopted in recent policies; and the importance of participation has been emphasised.

The programming of the rural development policies of the country in a plan specialising only in rural development has been introduced in recent years and the National Rural Development Strategy, which will form the basis for the planning, has been drafted.



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## Chapter 23. Mutual Effects of Agricultural and Rural Development Policies

Leticia Deschamps Solórzano<sup>1</sup>

### *Abstract*

*More than a quarter of Mexico's population lives in rural areas. The persistence of high poverty rates in these areas represents one of the most compelling challenges to the well-being of the population. Over the last decade, Mexico has implemented significant reforms, including institutional reforms affecting rural territories. This paper describes and analyses the role of SAGARPA's agricultural and rural development policies and SEDESOL's social policy in rural areas. Particular emphasis is placed on the social dimensions of these policies, such as poverty and equality. Complementary aspects of these two approaches are also discussed and some suggestions as to how to improve their coherence are provided.*

### **Introduction**

Mexico has a rural population of slightly over 26 million, which represents 25% of the country's total population. This population lives in approximately 200 000 towns and villages of less than 2 500 inhabitants. Mexico's rural society has played an important role in the development of the country, not merely as a supplier of foods and raw materials for the strengthening of other economic sectors, but as a valuable source of cultural heritage that has contributed to the preservation of Mexico's national identity. Nevertheless, the incidence of poverty is higher in rural than in urban areas, while levels of income, education and health are lower.

As shown below, in 2004 the level of food poverty – equivalent to extreme poverty – was 11.3% in urban zones, as compared to 27.9% in rural zones. This is indicative of the large gap between urban and rural sectors and the concomitant policy challenges. Rural households are characterised by low levels of human capital and significantly disproportionate access to productive assets, including land, livestock, physical capital and “migration capital” (Taylor, Yúnez-Naude and Dyer-Lea, 2005). Lifting the rural population out of poverty requires the creation of wealth and acknowledgement of the huge potential for economic development in these territories, while taking into consideration environmental, human and social elements.

In recent years, the rural sector has experienced several structural changes of an economic, social and human nature. These changes have been implemented with the aim of increasing development alternatives by closing the inequality gap and promoting integration with the rest of the economy.

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1. National Institute for Capacity Development in the Rural Sector, Mexico.

**Evolution of poverty in urban and rural areas**  
(%)

Classification threshold		Urban			Rural		
Poverty level	Reference	2000	2002	2004	2000	2002	2004
Food Poverty <sup>1</sup>	Household	9.8	8.5	8.7	34.1	28.5	22.3
	Persons	12.6	11.4	11.0	42.4	34.8	27.6
Capacity development <sup>2</sup>	Household	16.2	13.3	14.2	41.4	36.6	29.4
	Persons	20.2	17.4	17.8	50.0	43.9	35.7
Patrimony development <sup>3</sup>	Household	37.4	34.9	34.2	60.7	57.2	48.8
	Persons	43.8	41.5	41.0	69.3	65.4	56.9

1. Income level does not cover basic food needs.

2. Income level covers food needs, but not basic educational and health needs.

3. Income level covers basic food, education and health needs, but does not allow for the building of minimum patrimony.

Source: Technical Committee for the Measurement of Poverty in Mexico, 2005.

In the mid-1980s and early 1990s, Mexico introduced important modifications to its development model, coming up with a new proposal based primarily on an aggressive strategy of international trade and economic integration with other countries. Among other aspects, this required legal, institutional and public policy reforms targeting the rural sector, of which the following are worth mentioning:

- In 1993, a new communitarian Land Ownership Law (*Ley Agraria*) was promulgated, concluding the land distribution process initiated at the beginning of the last century. The purpose of this law was to provide a legal framework that gives landowners greater security, thereby facilitating the exchange and productive use of land, and investment.
- Various international trade agreements, beginning with the signing of the North American Free Trade Agreement (NAFTA), and Mexico's entry into the World Trade Organization (WTO) and the OECD have had a visible impact on trade and market structures for agricultural products, posing both challenges and opportunities *vis-à-vis* the maintenance or strengthening of the sector's productive potential. In the case of NAFTA, duties on most agricultural products were reduced to zero in 2003, although Mexico will maintain duties on corn, sugar, powdered milk and beans until 2008. It is important to mention that corn and sugar have a high social impact, given that they create an important source of employment in rural areas (more than 2 million family farms are engaged in their production) and are basic products consumed by low-income families.
- The dismantling of a wide range of federal government structures linked to the agricultural sector led to the disappearance or privatisation of several state-run companies, and the transformation of support organisations and services, as well as the downsizing and re-organisation of the government's central authorities.

Simultaneously, responsibilities across different levels of government have changed, with state and municipal governments now playing a decisive role in policy design and implementation.

- A radical agricultural policy reform was implemented, which included the phasing-out of subsidies for basic crops (grains and oilseeds, including corn) and a shift to a system of direct payments to producers independent of the production process. The objective of this policy re-orientation was to reduce economic distortions in agricultural markets; achieve more equal distribution of government support; and increase agricultural productivity.

The structure of Mexico's agricultural economy changed drastically as a result of these reforms. This was reflected in a substantial increase in agricultural trade, which has had the effect of modifying the composition of imports and exports. Thus, for example, there has been an increase in imports of basic crops (grains and oilseeds), but domestic production continues to grow at a modest rate, primarily due to a sharp increase in domestic demand for products for human consumption and animal fodder. Nevertheless, in the case of major basic crops, the most adverse factor has been the pronounced drop in prices during the last decade (Antón, Dewbre and Tangermann, 2004).

Livestock farming and fruit and vegetable production were favoured by the liberalisation of trade, the advantage being that these are activities with important economic spillovers derived from employment requirements and complementary services.

In this context, the passing of the Sustainable Rural Development Law in December 2001 constitutes a major success, given the level of consensus achieved among the different actors in the drawing up of this law. In a nutshell, the law seeks to create consistency between multiple policy goals, instruments and executive branches of government, and guarantee consistent policies over time. In FY2005, almost MXN 144 billion were allocated under these programmes. The Sustainable Rural Development Law establishes a series of guidelines for government action and the participation of rural society. Briefly, the most significant aspects of this Law are that it:

- adopts a territorial approach to rural development;
- relies on multi-tier co-ordination mechanisms between federal, state and local governments, and rural citizens;
- creates spaces for democratic planning *via* the setting up of Sustainable Rural Development Councils at the different levels of government, with the participation of government and rural society actors;
- calls for new institutional arrangements and co-ordinated rural policy actions in many areas, including education and training focused on both agricultural and non-agricultural income-generation and employment; access to social security, health and family planning; poverty relief; environmental services and land tenure security, among others; and
- fosters consistency between multiple rural development policy goals and instruments at the three levels of government.

## Agricultural policy

In view of the above, agricultural policy is currently being designed with the aim of:

- strengthening the competitiveness of priority agricultural product systems in Mexico, with a view to achieving greater added value, participation in domestic and international markets and an increase in rates of return for primary production;
- increasing the productivity and competitiveness of the agricultural sector by favouring a progressive shift in production patterns to better reflect comparative advantage;
- promoting productive diversification that, on the one hand, favours more efficient exploitation of available natural resources and, on the other, broadens the variety of productive activities in the sector, thus creating greater possibilities for market integration; and
- encouraging agricultural businesses through the consolidation of economic organisations and rural companies engaged in market-led production activities, thereby increasing income possibilities for the rural population.

Within this framework, Mexico's agricultural policy has two main components. The first of these is the *Alianza para el Campo* (Alliance for the Countryside), which consists of a set of specific measures aimed primarily at improving farming skills and stimulating technological innovation. A key feature of this initiative is the decentralisation of decision-making from the federal to the state level through state agricultural councils, involving state governments and agricultural producers. The Alliance includes the following programmes:

- *Programa de Fomento Agrícola* (Agricultural Promotion Programme), with sub-programmes concentrating on irrigation, mechanisation and the transfer of technology;
- *Programa de Fomento Ganadero* (Livestock Promotion Programme), with sub-programmes for cattle and *milk* production, genetic improvements and the development of integrated livestock programmes; and the
- *Programa de Acuacultura y Pesca* (Fisheries and Aquaculture Programme), launched in 2003.

The data below give a better picture of the scope of the two larger programmes:

Programme	2000		2004	
	Resources (MXN billion)	Beneficiaries	Resources (MXN billion)	Beneficiaries
Agricultural Promotion	3.362	405 274	5.110	631 691
Livestock Promotion	1.671	110 600	2.264	88 700
<b>TOTAL</b>	<b>4.033</b>	<b>515 874</b>	<b>7.374</b>	<b>720 391</b>

Source: IV Government Report, 2001-2006, Mexico.

The other component includes support for the acquisition of inputs and marketing, and direct payments to producers:

- **Support for input acquisition:** involves mainly tax exemptions on diesel used for agricultural purposes (up to a maximum amount); a reduction in electricity costs for irrigation, according to consumption levels; and a fixed payment for each tonne of feed-grain purchased by livestock producers under contracting schemes with grain producers.
- **Marketing support: grants** payments to specific crops and regions. Since 2001, support has been granted directly to eligible producers. The range of eligible products and regions has been extended and a fixed budget granted to each state participating in this programme. In the case of most crops, the government establishes a fixed subsidy on a per-tonne basis, taking into account expected prices during the marketing season.
- **Direct producer support:** this includes three programmes (*PROCAMPO*, *PROCAMPO Capitaliza* and *PROGAN*).

The *PROCAMPO* programme, created in 1994, is one of the main policy instruments for agricultural support. It provides income support for all farmers producing basic crops. Payments under *PROCAMPO* for the 1995-2004 period are shown below (in MXN billions).

1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
5.751	6.787	7.530	8.490	9.369	10.376	10.995	11.850	13.060	13.115

Source: General Systems Directorate, General Co-ordination of Direct Support, *ASERCA*, Mexico.

Cultivated areas benefiting from *PROCAMPO* disbursements in the 2003-04 crop season are as follows:

Crop season	Plots of land	Area (hectares)
Autumn-winter 2003-04	582 577	3 012 728.63
Spring-summer 2004	3 348 816	10 199 521.88
<b>TOTAL</b>	<b>3 931 393</b>	<b>13 212 250.51</b>

Source: General Systems Directorate, General Co-ordination of Direct Support, *ASERCA*, Mexico.

Given the objective of the *PROCAMPO* programme, a significantly wide segment of low-income farming households in rural communities – most of which belong to subsistence producers – are beneficiaries. In fact, prior to the implementation of *PROCAMPO*, these farming households received no support whatsoever, since agricultural support was based on guarantee and input prices for commercial agriculture. Moreover, most other agricultural programmes are primarily oriented towards commercial agriculture and are thus of only minor direct assistance to the poor.

Payments under *PROCAMPO* are made to eligible farmers, according to the area planted during an historical base period (1991-93), on the condition that the land continues to be used for agricultural activities or for an environmental programme. Since the programme is not linked to production, farmers can opt for re-conversion from traditional agriculture to more productive enterprises. Several changes have been introduced over time. First, farmers with an eligible area of less than one hectare now receive payment equivalent to one whole hectare. Secondly, to improve the equality of the programme, since 2003 farmers with non-irrigated production units of less than 5 hectares have received higher *PROCAMPO* payments. Thirdly, the requirement to put eligible land to productive use was abolished in the case of farmers who own less than five hectares. The purpose of these modifications was to provide greater assistance for low-income households in rural areas.

At this point, it is also important to highlight the evolution of the *PROCAMPO Capitaliza* programme. Rules permitting the capitalisation of areas supported by *PROCAMPO* were approved in July 2002 to enable farmers to put these funds to immediate use. Specifically, payments corresponding to one or more crop season(s) up until 2008 may be front-loaded at once to producers, under the condition that resources be applied to a “productive project” directly related to primary production, food processing, input access and the acquisition of capital goods.

Results for the 2003-05 period are illustrated below:

Year	Area incorporated	Producers benefited	Amount (MXN billion)	Total PROCAMPO (%)
2003	61 143		0.281	0.44
2004	747 544	211 772	3.482	5.38
2005	1 357 955	307 017	5.078	9.77
<b>TOTAL</b>	<b>2 165 642</b>	<b>518 789</b>	<b>8.842</b>	<b>15.59</b>

Source: FIRA-Bank of Mexico through 30 September 2005 and Rural Financial through 23 September 2005, Mexico.

## Rural development policy

There are more than sixty different sectoral programmes run by sixteen different ministries, all of which target rural areas. This paper discusses the rural development policy implemented by the Ministry of Rural Development, Agricultural, Livestock, Fisheries and Food (*SAGARPA*) and the social policy implemented by the Ministry of Social Development (*SEDESOL*). *SAGARPA* manages approximately 33% of the total budget allocated to sustainable rural development and *SEDESOL* around 10%.<sup>2</sup> These two federal entities view rural areas from slightly different perspectives, although their

2. These contributions are broken down as follows: *SAGARPA*, 48.3 billion MXN; *SEDESOL*, 14.3 billion MXN; Ministry of Public Education, 21 billion; Branch 33 (state and municipal contributions), 19.5 billion; and 11 other state ministries, 40.9 billion.

objectives are similar. SAGARPA's main goal is to promote the economic transformation of rural areas, while SEDESOL's is poverty relief. There is a strong link, however, between the rural development policies implemented by SAGARPA and SEDESOL and they both:

- Acknowledge that traditional, top-down approaches for the implementation of sectoral subsidies in rural areas have not produced the expected results and that it is necessary to implement policies at a local level to recover the diversity of Mexico's rural territories.
- Encourage local participation and the mobilisation of local resources through District and Municipal Rural Development Councils (*SAGARPA*) and Micro-region Councils or Strategic Community Centres (*SEDESOL*).
- Emphasise the importance of local development agents, referred to as "*promotores*" by *SAGARPA* and "*residents*" by *SEDESOL*.

In light of these similarities, it is relevant to describe the focus, strategies and instruments that *SAGARPA* and *SEDESOL* use to encourage rural development.

### Rural Development Programme: *SAGARPA*

*SAGARPA*'s actions cover a wide range of measures and policies implemented in conjunction with civil society and all three levels of government (federal, state and municipal). Their aim is to achieve a better quality of life for Mexico's rural population, particularly people living in more impoverished areas, and to pay special attention to priority groups, such as women, young people, indigenous peoples, the elderly and the disabled, based on the following principles:

- growth of rural economic organisation;
- strengthening of product systems;
- productive diversification; and
- attention to priority regions and groups.

*SAGARPA*'s rural development policy proposes the promotion of participative processes built up on a daily basis and involving local population. The goal is to broaden the options of local people so they can develop the necessary capacities to live in a productive and creative way.

In addition to providing access to basic services and public goods, this policy promotes alternative ways of creating wealth by generating employment and self-employment opportunities through rural entrepreneurship, which affords citizens the possibility of earning a satisfactory income *via* a wide variety of economic activities besides agriculture, forestry and fishing, such as commerce, tourism, environmental services, crafts, manufacturing, etc.

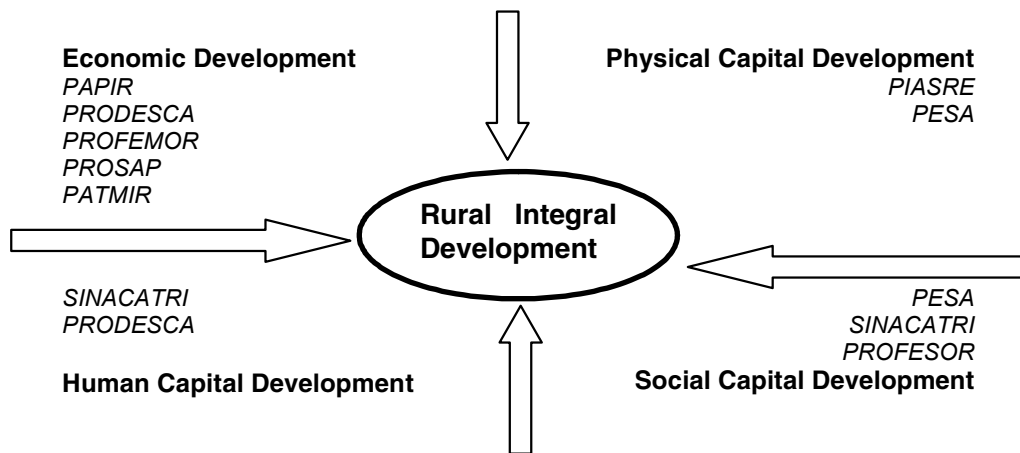
The immediate objective is to achieve greater equality in the distribution of income and an improved inter-regional and inter-sectoral balance, with a direct and sustained impact on combating rural poverty. In addition to increasing economic capacity, this will facilitate access to education, training, information, scientific and technological



development, health, housing, culture and recreation, encouraging society to participate in the public policy decisions that affect rural territories.

### *Rural development model*

In line with the above, SAGARPA has adopted an integral perspective of sustainable rural development in four strategic spheres: economic development, physical capital development, human capital development and social capital development, which come together to give coherence to the group of support instruments available to rural territories.



### *Economic development*

In the sphere of economic development, elements linked to the territories' productive activities can be identified as follows:

- rural entrepreneurship;
- productive links;
- market interaction; and
- rural financing.

In this context, public instruments and actions are geared towards supporting productive investment projects, based on financial, social and environmental feasibility criteria; encouraging more active participation by actors in production chains that incorporate a high percentage of rural society; transferring knowledge and technology; producing added-value goods and services to satisfy consumer demand; and supporting the creation of new financial institutions that meet the needs of the rural population.

As shown in the diagram, the Rural Development Programme encompasses five different sub-programmes. The *PAPIR* sub-programme supports rural investment projects, mainly through the acquisition of capital goods and productive re-conversion, integrating added value to primary industries. The *PRODESCA* sub-programme aims to enhance the

capacity of producer associations, with a view to identifying productive opportunities and developing their capacity to co-ordinate business projects by subsidising the rendering of professional and independent technical assistance and consulting services to producer associations and individuals. The *PROFEMOR* sub-programme aims to incorporate local producers to up-stream and down-stream agro-food chains.

Given the sector's characteristics, economic organisation of the rural population must begin with the acknowledgement that individual households are the basic production unit around which policies should be designed. In this context, the Programme to Support Social, Agricultural and Fishing Organisations (*PROSAP*) and the Technical Assistance Programme for Rural Micro-financing are particularly relevant.

### ***Physical capital development***

The factors that affect the development of economic and social activities in rural areas have been grouped under the following headings:

- natural resources;
- productive infrastructure;
- communications media;
- basic services;
- urban equipment; and
- housing.

For this reason, *SAGARPA* has adopted instruments and actions to promote the proper use and management of natural resources and the productivity and diversification of: 1) agricultural, farming and fishing activities and 2) non-agricultural activities.

Likewise, *SAGARPA* supports the creation, rehabilitation and improvement of basic productive infrastructure. Worthy of special mention is the *Programa Integral de Agricultura Sustentable y Reconversión Productiva* (Integral Sustainable Agriculture and Productive Re-conversion Programme) or *PIASRE*, which mainly targets marginalised regions with high-risk agricultural practices to aid in the management of their natural resources.

### ***Human capital development***

*SAGARPA* has undertaken efforts to promote the development of a wide range of capacities (*i.e.* in and outside the workplace), supporting important learning processes and the transferral of relevant knowledge that can be applied immediately to meet the needs of rural development.

In this context, rural producer processes are closely linked to actions intended to strengthen economic organisation and rural entrepreneurship; the co-ordination of productive chains; economic diversification; the development of a rural financial system and increased social participation, among other aspects. All of these factors are of direct relevance to the sector's development as a whole.

The National Integral Rural Technical Assistance and Training System (*SINACATRI*) is a body that promotes inter-institutional co-ordination among the various public, social and private actors involved.

### *Social capital development*

One of the pillars of integral rural development is social participation geared towards promoting the creation and implementation of development alternatives for rural territories, on the understanding that it is local, public, social and private-sector actors who are most likely to take decisions in keeping with regional needs, based on a shared perspective of their territory.

As such, it is necessary to create an institutional framework for rural territories that gives free rein to social participation by allowing society and government to collaborate on the design, implementation and evaluation of the instruments, programmes and policies of regional development plans.

This social participation, placed in the hands of social organisations, rural enterprises and community representatives, brings us to the co-operation bodies established in the Sustainable Rural Development Law, such as Sustainable Rural Development Councils at a national, state, district or municipal level.

Thus, by playing an active role in their integral development, rural populations are promoting the concept of endogenous development, where government participation is seen as secondary. This, in turn, will help overturn the view that rural populations are dependent on a welfare state.

### *Instruments that support the Rural Development Programme*

To promote the implementation of its rural development model, *SAGARPA* has a series of instruments to support local initiatives. These target strategic aspects are described below:

<b>Sub-programme</b>	<b>Purpose</b>
Productive Investment Projects ( <i>PAPIR</i> )	Provide resources for the acquisition of capital goods or financial guarantees in the setting up or consolidation of rural enterprises.
Capacity Development for Rural Communities ( <i>PRODESCA</i> )	Provide resources to help rural groups or companies pay for the rendering of professional technical, consultation or training services for the design, implementation and development of their projects.
Strengthening of the Business Aspects of Rural Organisations	Provide resources for the payment of professional services within the structure of the organisation or rural enterprise, thereby enabling them to strengthen their planning, production, marketing and administration instruments. Alternatively, resources are provided for the hiring of Rural Development Co-ordinators to assist District or Municipal Councils with planning and administration aspects.

In the application of these instruments, *SAGARPA* has made an enormous effort to further decentralise the distribution of payments through the “municipalisation” of the Rural Development Programme. In the year 2005, 50% of all resources allocated to this programme will be channelled through municipalities. Mexico has a total of 2 451 municipalities, 90% of which are considered predominantly rural. Consequently, support has been provided for local initiatives in the creation of 2 110 Sustainable Rural Development Municipal Councils, which have channelled resources for the hiring of

1 420 co-ordinators to assist them in the drawing up of regional diagnoses and municipal development plans. Similarly, in 2005, 2 393 municipalities will participate in the “municipalisation” strategy, thus directly responding to the needs of populations with higher marginalisation and poverty indices.

An evaluation of the results of the 2004 Rural Development Programme highlights the following figures:

Year	1996	1997	1998	1999	2000	2001	2002	2003	2004
Total investment (MXN billion) <sup>1</sup>	1.443	1.917	2.263	2.590	3.234	3.863	3.951	4.193	4.571
Beneficiaries (000s)	446	1 875	1 742	1 538	1 703	1 376	2 478	1 117	469

1. Includes contributions from SAGARPA, state governments and rural populations.

Source: Total investment: IV Government Report; Beneficiaries: SAGARPA General Office for the Co-ordination of Districts.

### Social policy: *SEDESOL*

Mexico’s 2001-06 social development policy has four main objectives: to

1. reduce extreme poverty;
2. generate equal development opportunities for priority groups in vulnerable conditions;
3. support the development of capacities for people living in poverty; and
4. strengthen the fabric of society by encouraging social participation and community development.

Policy is conducted along eleven strategic lines:

1. promote the socio-economic development of highly marginalised micro-regions;
2. stimulate the development of capacities in rural populations to prevent the perpetuation of poverty;
3. promote income and employment opportunities for individuals and families living in poverty;
4. improve the social security of families and individuals living in poverty;
5. support the building of basic patrimony among families living in poverty;
6. respond to the challenges that women in vulnerable situations face;
7. strengthen the development potential of indigenous peoples;
8. respond to demographic challenges;

9. generate and promote channels that encourage social participation and co-responsibility of the citizen;
10. base social policy on the findings of investigative studies and the evaluation of institutional programmes, and
11. strengthen the institutional framework and promote the decentralisation of actions intended to foster social development.

Some of *SEDESOL*'s most important programmes include the:

- ***Opportunities Programme for Human Development***, which transfers cash resources to the poorest of families, on condition that their children attend school, and provides basic health and nutrition support for children and pregnant women. This programme is currently assisting 5 million families.
- ***Micro-region Strategy***, which aims to reduce territorial inequality. This programme co-ordinates the efforts of several ministries to foster development of the country's poorest rural municipalities through the rendering of social services and technical assistance, and the provision of support for the creation of endogenous development networks. A total of 1 334 municipalities (counties) in 263 micro-regions have benefited from this strategy.
- ***Habitat Programme***, which is geared towards poverty relief and urban development through a series of actions that include improvement of basic infrastructure and equipment in marginalised urban areas; the provision of social services and implementation of community development actions; and the regularisation of land tenure. This programme aims to support, in a variety of ways, urban populations living in conditions of moderate poverty, paying special attention to the needs of women, the disabled, children, adolescents, young adults and the elderly.
- ***Popular Insurance Programme***, which aims to provide social protection through health coverage. The programme benefits around 2.5 million families who are not assisted by social security institutions (*e.g.* IMSS and ISSSTE). It is estimated that the programme will reach 5 million families in 2006.

### **Harmonisation of agricultural and rural development policies**

Considerable progress has been made in reducing poverty since the late 1990s. According to the World Bank (2005), at the national level, extreme poverty dropped from 24.2% in 2000 to 17.6% in 2004. This is mainly attributable to advances in rural areas, where extreme poverty fell by 14.5 percentage points. It is important to point out that increased income in these areas is mainly due to an increase in non-agricultural income, and government and private transfers. Moreover, in the same period, agricultural income decreased in both absolute and relative terms.

A key feature of on-going structural adjustments in rural Mexico is that the composition of income is changing. In particular, the rural population is becoming increasingly reliant on non-agricultural sources of income. As shown in the table below,

the share of agricultural income in the total income of rural households fell sharply between 1992 and 2002, while income derived from non-agricultural activities and transfers, particularly remittances from migrants, increased significantly.

Source of income	1992	2002
	(%)	(%)
Independent farming	39	13
Paid agricultural labour	12	11
Non-agricultural activities	29	42
Public and private transfers, including remittances	7	17
Other sources	13	17
<b>TOTAL</b>	<b>100%</b>	<b>100%</b>

Source: Janvry and Sadoulet (2004).

This clearly suggests that, although agriculture will continue to play an important role in poverty reduction in rural areas, the employment and income needs of the rural population cannot be solved by relying on only one sector. The rural population's own experience in the search for alternative employment opportunities demonstrates a need to guide government action towards an integrated approach that takes into account the economic, cultural and historical heritage of rural territories.

In this context, it is possible to identify the distinguishing features of public policies linked to agriculture and rural development and to establish common ground and complementary actions:

- The current agricultural policy focuses on increasing producer income, improving food security, contributing to the alleviation of rural poverty; and boosting agricultural productivity and competitiveness.
- The rural development policy implemented by *SAGARPA* focuses on two ambitious goals: the development of rural businesses and the consolidation of democratic planning processes to facilitate co-ordination between local governments and citizens in the drawing-up and management of rural development plans.
- The social policy implemented by *SEDESOL* concentrates on the development of more impoverished regions through community work and civil society organisations. It aims to facilitate the provision of public goods and to foster human development with complementary support for productive investment.

Given these characteristics, an approach based on the harmonisation of agricultural and rural development policies should aim to:

- combat rural poverty and foster the generation of wealth by supporting projects conceived by these communities;
- encourage the commitment of actors in rural territories through the participation of society in local planning organisations;

- promote the institutional transformation of rural areas with the active participation of government actors, civil society organisations and local institutions in the planning, co-ordination and development of strategic projects;
- promote economic organisation and co-operative association as a means of increasing productive capacities and the added-value of small producers and rural entrepreneurs;
- view the development of human capacities, in terms of training and technical assistance to increase work opportunities and improve living standards, as the most critical factor in the creation of long-term sustainable rural development processes, based on the appropriation of knowledge by local actors.

This way, even when the entities responsible for designing, implementing and evaluating these policies have their own regulatory guidelines and specific public functions, they will still have the opportunity to share and co-ordinate their efforts. It may be that the alternative is not the creation of common funds or shared programmes, but rather the possibility of combining and complementing programmes that contribute to sustainable rural development, while acknowledging the multi-functionality and multi-dimensionality of rural territories.

In this respect, the strategy adopted by the National Rural Training and Technical Assistance System (*SINACATRI*) may be viewed as an example of an integrated rural training programme that responds to local development priorities. The *SINACATRI* programme promotes collaboration among the various public and social organisations at a central level, as well as with the relevant state and municipal governments. The work starts with the Sustainable Rural Development Municipal Councils, where the municipality training programme is designed with the participation of local organisations and social groups. Once the programme's actions and priorities are established, the required services are rendered by federal, state or municipal government institutions, the relevant education institution, or other local civil society entities.

Another example is the case of the Special Concurrent Programme,<sup>3</sup> created under the Sustainable Rural Development Law, where the various government institutions, in their search for greater effectiveness and efficiency, focus their efforts on plans, programmes and/or projects derived from local rural development initiatives.

## Conclusions

The structural conditions of rural Mexico have a series of characteristics that must be taken into account when designing and implementing public policies to support agricultural and rural development. A starting point should be recognition of the enormous diversity of rural regions in terms of cultural, historical, environmental, economic and infrastructural aspects, which are reflected in their disparate levels of development. Rural areas are also highly diversified between agricultural and non-agricultural activities. It is essential to take into account the heterogeneity of the country's rural household economies in order to understand the impact of policy changes on them, as similar policy instruments can produce diametrically opposed responses and

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3. In this case, "Concurrent" refers to collaboration.

impacts in different rural regions. Thus, it will be necessary to look for specific, local solutions in each individual territory.

Available evidence suggests that extreme poverty in Mexico has declined significantly, particularly in rural areas. This is primarily due to the following factors.

- Individual and family efforts, combined with an economic policy that generates stability, employment and income and that has lifted 6.5 million people out of conditions of extreme poverty.
- An integrated social policy that focuses on the poorest. One example of this is the Opportunities Programme, which helps meet the food, health and educational needs of 25 million people (5 million families).
- Substantial migrant remittances, amounting to almost MXN 18 billion annually.
- Agricultural subsidies and support for rural development: *Alianza para el Campo*, *PROCAMPO*, support for production inputs and marketing have been provided in tandem with support to create an entrepreneurial vision for the farmer.

Notwithstanding these encouraging results, the balance is negative when it comes to equality: Mexico still has the highest income gap in Latin American. This is a worrying factor in itself because of the negative repercussions it has on sustainable development.

Agriculture will necessarily continue to play an important role in reducing poverty, because poorer households still depend more on agriculture than better-off rural households. Nevertheless, it is necessary to foster high-productivity agriculture, which, together with high-performance non-agricultural activities, will favour a reduction in the poverty levels of rural Mexico.

Mexico's agricultural and rural development policies are designed to achieve social equality. For example:

- In *PROCAMPO*, most beneficiaries belong to the poorest segment of rural families and produce for their own consumption. Also, the fact that producers with an eligible area of less than one hectare now receive payment equivalent to one hectare establishes a redistributive effect. Furthermore, women and indigenous peoples in impoverished and highly impoverished rural areas are given preferential access to the programme.
- Rural development sub-programmes provide differentiated and preferential access to highly and very highly impoverished sections of the population, as well as giving priority attention to women, young people, indigenous people, disabled persons and the elderly. This can take the form of differentiated support for productive investment and services, or allocation of a minimum percentage of available resources to priority populations.
- Within the municipalisation strategy, rural development resources are allocated so as to favour marginalised populations, based on a combined formula that takes into account the number of inhabitants, poverty indexes and the level of poverty in the municipality in question.

*SAGARPA's* rural development strategy and *SEDESOL's* Micro-region Strategy complement one another to a high degree. Nonetheless, the challenge remains of improving the co-ordination and coherence of these policies, with a view to:



- boosting the fiscal and financial capacity of the municipal (county) government within the framework of *SAGARPA*'s municipalisation strategy;
- strengthening links between the most marginalised rural territories and more highly developed territories;
- reinforcing the capacities of municipalities, civil society organisations and local institutions in the planning and definition of projects;
- promoting the economic and social transformation of rural territories through productive projects (*SAGARPA* and *SEDESOL*) and production opportunities afforded by social projects (*SEDESOL*);
- fostering social development in rural zones – taking advantage of the fact that ten out of the eleven investment areas considered in the Micro-region Strategy focus on human development – by relocating assets to poor rural areas and facilitating their access to productive assets.

Given the different types of instruments available to government entities in the implementation of agricultural and rural development policies in Mexico, the co-ordination and harmonisation of these policies could well be a determining factor when it comes to optimising local initiatives aimed at combating poverty in rural areas. Some examples include:

- The capitalisation of livestock farming activities, which would allow for technological innovation and product development through projects conceived by regional producer associations. Resources from the following programmes could be combined as illustrated below:

Instrument	Institution
<i>PROCAMPO Capitaliza</i>	Support and services for agricultural trading (ASERCA)
<i>PAPIR</i> o <i>PROGAN</i> (direct payments to livestock producers)	SAGARPA
Productive opportunities (support for regional development production investments and services)	SEDESOL

- The management of employment initiatives in non-agricultural activities that increase the economic diversity of rural territories. Resources could be combined as follows:

Instrument	Institution
Productive opportunities (support for regional development production investments and services)	SEDESOL
Programa 3X1	SEDESOL-Migrants
PRODESCA and PAPIR	SAGARPA

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## Chapter 24. Coherence of Agricultural Policy and Rural Development in Scotland

Richard Wakeford<sup>1</sup>

### *Abstract*

*Like other European nations and devolved regional administrations, replacing production subsidies with support payments linked to public benefits has posed challenges and opportunities to the Scottish Executive, the government of Scotland. This paper addresses what outcomes we should be seeking to secure and how they should they relate to the wider needs for rural development and, especially, asks if we should be helping the farming sector into a transition towards a world of less government financial support? Issues on how farming support can be shaped to serve wider policy goals, especially the creation of thriving rural enterprises and the advancement of nature conservation and other public benefits, are also addressed.*

### **Agriculture in the Scottish context**

Scotland is located at the edge of north-west Europe, and much of rural Scotland is remote even by Scottish standards. About 20% of Scotland's population (of 5 million people) lives in rural areas and about 6% lives in remote rural areas – over 30 minutes by car from the nearest settlement of 10 000 people. These remote areas include the islands to the north and west, much of the Highlands and large areas of hill country in the south of Scotland. Although there is local variation in levels of social and economic deprivation, average incomes in rural areas are no worse than the rest of Scotland. Nevertheless, rural areas are not homogenous and remote Scotland faces different pressures than more accessible areas: this is important in terms of what rural development is trying to achieve.

The land is very variable. Compared with some other parts of Europe, much of it is relatively difficult to farm and summers are comparatively short. Only about 10% of the land grows arable crops; about 50% is used for rough grazing; 17% is forest or woodland; and much of the remaining poor ground is used for sporting purposes, such as deer stalking and grouse shooting.

Along with forestry, agriculture remains an important industry of employment in rural Scotland, particularly in remote rural areas. Table 1 shows that primary industries (including agriculture, forestry, fishing and energy) are the most significant employers in

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1. Head of the Environment and Rural Affairs Department of the Scottish Executive, United Kingdom.

remote rural areas, followed by wholesale, retail and repairs. Direct employment in agriculture is steadily declining (the agricultural workforce has fallen by 10% over the past 20 years) while total employment in rural areas is rising faster than employment in urban areas. This is because increases in service-sector employment (including health care, education, social services, retailing and tourism) has more than offset decline in traditional industries in the primary and manufacturing sectors.

**Table 1. Employment by sector and geographic area, 2004**

<b>Industry</b>	<b>Remote rural Scotland</b> (% of total employment)	<b>Accessible rural Scotland</b> (% of total employment)	<b>Rest of Scotland</b> (% of total employment)
Primary industries	21	9	2
Manufacturing	12	22	12
Construction	9	9	6
Wholesale, retail and repairs	16	14	19
Hotels and restaurants	14	9	9
Transport	5	6	6
Financial services	9	14	27
Education and health	14	16	19

### **The contribution of agriculture to rural development**

Rural Scotland forms an integral part of the country's economy, environment and social fabric. The Rural Affairs Department has adopted the following provisional set of outcomes (see Annex Table 1 for more details):

#### ***Provisional set of Departmental outcomes***

##### *People in Scotland are healthier, with:*

- clean air to breathe;
- safe water to drink;
- all kinds of waste (including nuclear) reduced and disposed of sensibly;
- homes protected from flooding and other environmental hazards; and
- people fitter and refreshed by access to green space.

##### *Rural communities benefit from enterprise and services, with*

- agriculture, forestry and fisheries businesses contributing to local economies, supported by processing and retail sectors;
- rural enterprise benefiting from farm diversification;

- tourism businesses profiting from well-maintained landscapes and Scottish food produce; and
- rural services accessible to those who need them.

*Scotland's natural resource is protected for the long term, with*

- biodiversity stabilised;
- marine and natural resources conserved;
- river basin ecosystems free of unacceptable pollution; and
- Scotland contributing to a more stable climate.

The success of Rural Affairs Department's policies in Scotland for the environment and rural development will be judged in terms of achieving such outcomes as healthier people, thriving rural communities and the conservation of natural resources. The vision is one of a rural Scotland where people matter; where there are prosperous and growing communities, with a decent quality of life; where there is a strong and diverse rural economy and young people are not forced to move away in order to find jobs; where there are accessible public services; and where there is flourishing natural and cultural heritage. Because populations are scattered and deprivation is not always obvious, policies to improve public services and tackle social exclusion face particular challenges. A key priority for rural policy is to help ensure access to first-class public services, such as health, education and transport.

More specifically, five years ago, in *Rural Scotland: A New Approach*, Scottish ministers set out four high-level outcomes for rural policy:

- integral to Scotland's success, dynamic in harnessing its traditional strengths, and with an appetite for change;
- providing opportunity for young people, so they don't have to leave to get on;
- offering a high quality of life to all its citizens, with access to services;
- sustaining and making the most of its natural and cultural heritage.

If these are Rural Affairs Department's principal outcomes, its spending priorities should match them. So where do payments to farmers under the Common Agricultural Policy (CAP) of about GBP 600 million a year fit in? What public benefits do these funds buy for the people of Scotland?

The allocation of expenditure in rural areas is difficult to specify. Some elements (such as CAP expenditure) are exclusively rural whereas much of the expenditure of Scottish Enterprise (the economic development agency that covers all of Scotland except the Highlands and Islands) is directed at urban-based businesses. The Scottish Parliament's Finance Committee recently commissioned a report, *Cross-cutting Expenditure Review on Economic Development*, which gave some indication of spending patterns. While these figures do not include some important areas of expenditure, such as transport and education, they do highlight that public support for economic development in rural areas is not limited to agricultural support (Table 2).

There are several main strands of thinking here. First, whether they are full-time or part-time, farmers remain significant players in rural economies. Whilst direct

employment in agriculture is falling, the industry remains very significant for rural areas. Farmers buy services within the rural economy and produce raw material for the food- and drink-manufacturing industries – also in the rural economy. The precise local contribution that farmers make is not yet known; the Scottish Executive is currently researching how payments to farmers in less-favoured areas (LFAs) flow through the local economy in employment and purchases.

**Table 2. Estimated economic development primary expenditure by the Scottish Executive in Scotland, 2003-04**

Budget heading	Expenditure (GBP million)
CAP and agricultural research	591
Fisheries	46
Forestry	73
Highlands and Islands enterprise	79
Visit Scotland (tourism)	30
Grants to businesses	42
Scottish enterprise	441

Second, farmers (together with foresters and other land managers) help create the rural landscape that attracts visitors to Scotland. Tourism is one of Scotland's biggest industries. If we do not have a thriving farming industry, we start to undermine the tourism infrastructure. And along the way, we also undermine the opportunity for farmers themselves to diversify into other businesses serving visitors.

Third, farmers are frequently critical to the conservation of natural resources for future generations. About one-eighth of Scotland is designated under the European Habitats Directive and 8% under the Birds Directive. We are under clear commitments to conserve these, and other, important natural resources – and, again, land managers have a critical role to play in achieving this.

It is important to establish a thriving and profitable farming industry. This will require heavy investment in farmers and agricultural development, to help them adjust to the long-term structural changes taking place within the industry, driven by global trends. During the 20<sup>th</sup> century, increased agricultural productivity was a major driver of change. Globalisation is likely to exert continued downward pressure on commodity prices. Following CAP reform, the industry now faces the reality of competing in world markets, and so will need to adapt by concentrating on what it can do best. As production subsidies and other forms of market distortion disappear, there is a need to think hard about how Scottish agriculture can compete in world markets, and best meet the future needs of rural Scotland.

The answer is likely to lie in broadening the focus of “efficient agriculture” so that it is concerned not just with simple considerations of productivity per hectare, but also with the anticipation of market trends. For example, is a more discerning and affluent 21<sup>st</sup> century consumer going to be prepared to pay more for tastier food, from known, sustainable sources? Trends such as these may provide important commercial opportunities for the industry of the future, and could fit well with the challenges of landscape and environmental management. Other trends are likely to involve farm

diversification, part-time farming and increased amenity ownership of farms by wealthy individuals who are prepared to pay for land management.

### Implications for agricultural policy instruments

A sustainable and prosperous agricultural industry will continue to play an integral part in rural development and social cohesion, although the nature of this contribution will change over time. The task for policy makers is to use the available policy instruments to help the industry play its part in promoting economic growth and effective environmental management. With its shift away from production support and towards payment for public goods, CAP reform clearly provides a major stimulus. The industry will need to understand supply chains and be focused on producing food and other products for the market. It will need to be a major driver in sustaining rural development, helping rural communities prosper, promoting down-stream economic activity (*e.g.* in food processing) and diversifying (*e.g.* into tourist-related activities). It will also need to be a leading player in the protection and enhancement of the environment. To achieve this, it needs to be keen to embrace change and new market opportunities.

In Scotland, we are designing a new support system to help the agricultural industry make the transition from the production subsidies of the past to a more market-orientated future. Land Management Contracts are the central feature of the CAP support regime in Scotland. They operate at three levels (Box 1).

<b>Box 1. Land management contracts</b>	
<b>Tier 1:</b>	<b>Single Farm Payment and cross compliance:</b> <i>Securing a basic level of income, environmental protection, food safety and animal welfare</i>
<b>Tier 2:</b>	<b>LMC menu scheme:</b> <i>Option payments for additional activities aimed at achieving economic, social and environmental improvement throughout Scotland</i>
<b>Tier 3:</b>	<b>Under development for 2007:</b> <i>Competitive scheme that will target priority areas for economic, social and environmental enhancement</i>

At Tier 1, there is the Single Farm Payment, available to all farmers, and based on the historic (production-based) payments that have now been computed into fixed rates per hectare and require “cross compliance” with important animal welfare, food safety and environmental measures. These Tier 1 payments will provide the financial cushion while farms adjust to new market pressures. Different regions of Europe have adopted different approaches to this. For example, in England there are flat-rate payments for each region, but payments in Scotland are based upon historic claims. Entitlements to payments may be sold (or leased) separately from the land to avoid the problem of having payments that simply inflate land values. The objective of these payments is to help farmers prepare for a challenging future, in a country where there is considerably greater reliance on livestock farming and where there are fewer diversification choices than there would be in a more densely populated country. Essentially, these Tier 1 payments are the Pillar I measures of the CAP, whereas Tiers 2 and 3 are Pillar II measures. As in other regions of Europe, the historical pattern of expenditure has favoured Pillar I (Table 3). An important challenge will be to achieve increased expenditure on Pillar II of the CAP as agriculture adjusts to the impact of CAP reform and the focus of support shifts towards payment for public



goods. Tier 2 and Tier 3 measures will play a significant part in ensuring that this is achieved.

**Table 3. Expenditure on CAP in Scotland**  
(GBP million)

	2001	2002	2003	2004
Pillar I	310	379	395	399
Pillar II	93	85	98	95
<b>TOTAL</b>	<b>403</b>	<b>464</b>	<b>493</b>	<b>494</b>

Tier 2 is a voluntary menu-based scheme that provides farmers with a range of economic, environmental or social options aimed at promoting rural development. The menu has been designed to provide a range of measures that reflect the diversity of agricultural activity and land types throughout Scotland. At present, funding is available under Tier 2 for environmental management, for improving footpaths for public access, for animal health and welfare programmes, for membership of quality assurance schemes, and for training to increase and improve occupational skills and knowledge within agriculture and forestry, in order to promote diversification and increase competitiveness in the rural economy (Table 4).

Through the development of Scotland's Rural Development Plan for 2007-13, much thought is also going into the evolving use of Pillar II measures of the CAP, and the Land Management Contract menu will be refined, with a third, competitive, tier being introduced to deliver more targeted benefits. The suite of agricultural support measures also includes incentives to promote the processing and marketing of agricultural produce and farm business development, as well as support to help maintain the countryside by promoting sustainable farming systems in LFAs.

Under EU requirements, the Rural Development Strategy need only explain how CAP funds will contribute to Scotland's priorities. But the Scottish Executive is considering publishing it within a wider rural strategy that will better explain to everyone interested in rural futures how the Scottish Executive will be working for the whole of rural development and services for communities. That will show how agricultural support contributes to the Scottish Executive's wider goals - the four outcome goals set five years ago.

The Scottish Executive is also looking at how it can increase local influence on how discretionary funds under Tier 3 are used. It seems essential to tie them with other funding, whether through farmers or others, designed to help the rural economy, the rural environment and rural communities. The Scottish Executive is currently experimenting with a new approach to "joined up government" in Scotland, through Community Planning Partnerships. The Rural Affairs Department should play a greater role in these, with the Scottish Executive's rural development instruments being considered alongside local government priorities and the plans of the Local Enterprise Companies.

Ultimately, rural development will take place through the actions of people, rather than as a function of the land. The success of policy measures aimed at promoting change will depend on the response of those who work in the agricultural industry. They can be helped to adapt to new challenges through appropriate education, training and provision

of sound advice. Scotland has a long tradition of excellent agricultural training and education, supported by a network of first-class research institutions. These institutions are themselves moving forward so that they can continue to provide relevant, high-quality, agricultural research and education that will allow the agricultural industry to adapt to the challenges of globalisation, and their agenda is broadening to cover research on non-farming activities.

**Table 4. Uptake of Tier 2 land management contracts in 2005**

Option	Number	Area/Length	Funding (GBP million)
<b>Economic</b>			
Animal health and welfare	4 000		2.5
Quality assurance	7 500		0.85
Training	1 800		0.78
<b>Social</b>			
Access maintenance	2 500	2 400 km	6.6
Access (capital)	1 630		0.28
Farm and woodland visits	406		0.15
Off-farm talks	275		0.05
<b>Environmental</b>			
Management of ditches	2 800	2 350 km	2.35
Rush pasture	1 750	16 500 ha	2.0
Retention of winter stubble	1 050	16 900 ha	0.675
Management of dykes	1 300	5 400 km	0.5
Buffer areas	880	1 400 ha	0.3
Moorland management	230	196 000 ha	0.2
Nutrient management	660	93 000 ha	0.18
Summer grazing cattle	420	173 000 ha	0.17
Wild birdseed mixture	370	490 ha	0.16
Woodland (both measures)	70	3 000-4 000 ha	0.06
Management of hedges	342	466 km	0.046
Biodiversity cropping	58	124 ha	0.007

But this action for rural development through agricultural policy measures must of course fit within a wider picture. For example, one approach will be to help farmers learn skills they need if they are to operate in other sectors – whether full-time or part-time.

One recent initiative in this area is the Scottish Executive’s Green Jobs Strategy for Scotland, which highlights the potential for “green” industries to bring real benefits to rural areas through high-quality job opportunities that help reduce damage to the natural environment. Other examples of non-agricultural policy measures include changes in planning policy to facilitate the development of rural enterprises in suitable locations; measures to promote community regeneration; improvements to service delivery; investment in affordable housing; and provision of modern infrastructure, such as broadband connections. Substantive progress is being made in all these areas in rural Scotland.

Monitoring and evaluation of policy measures is also essential. This takes place within the context of EU requirements (for example, in relation to the Scottish Rural Development Plan) and as part of the normal business of good government. There is also a need to be open to – and, indeed, encourage – external scrutiny of policies by others, including stakeholders and academics. Stakeholder participation is increasingly embedded as a feature of the policy-making cycle, playing a valuable role in ensuring the development, and critical review, of relevant and effective policies. Thus, for example, the Agriculture Strategy for Scotland, originally published in 2001, is being reviewed by key stakeholders, with a view to identifying what more now needs to be done to take forward the development and implementation of agricultural policy in Scotland.

## Concluding remarks

Commissioner Fisher Boel, in her 15 September 2005 address to the European Institute in Washington, summed up the central thesis of this paper very neatly by saying that: “Agricultural policy is about much more than agriculture – it is about social stability and our environment.”

This is becoming manifest as public funding shifts away from production subsidies towards payments for sustainable land management. In Scotland, we were faced with some real choices, given the new freedoms of the CAP. We have set a direction that will see rural policy increasingly concerned with greater integration of sectoral approaches, bringing together agriculture, other primary land-based industries such as forestry, downstream industries, tourism, landscape and environmental management. The “win-win” opportunity is for a market-orientated and environmentally sensitive agricultural industry to capitalise on local distinctiveness and “sense of place”, by capturing new markets, for both food and non-food products and services.

A successful approach will also depend on farming becoming more attuned to the needs of customers. In Scotland, the approach of government is focused on developing quality food that people will trust; and encouraging healthy eating. That way, Scotland’s agriculture will have a distinctive contribution to make within a rural policy designed to sustain its communities and outstanding environment for future generations to enjoy.

**Annex Table 1. ERAD ministers' goals  
(expressed as a set of outcomes for internal management purposes)**

SEERAD OUTCOMES for the well-being of Scotland and its people	EXAMPLES OF HOW PROGRESS TOWARDS OUTCOMES MIGHT BE MEASURED	LEAD SEERAD POLICY DIVISION(S)	PRINCIPAL DELIVERY PARTNERS CRITICAL TO THE DELIVERY OF SEERAD OUTCOMES
<b>All in Scotland acting for sustainable development</b>	<ul style="list-style-type: none"> <li>● full set of sustainable development indicators in preparation</li> <li>● CO<sub>2</sub> emissions per unit GDP</li> <li>● marine, water and land based biodiversity</li> </ul>	● Sustainable Development and Biodiversity	<ul style="list-style-type: none"> <li>● All SEERAD Groups, agencies and NDPBs co-ordinated by Sustainable Development and Biodiversity Division</li> <li>● All SE Departments</li> <li>● Local authorities, other public and private bodies</li> </ul>
<b>1. Clean air</b>	● air quality in areas vulnerable to pollution	● Climate Change and Air	<ul style="list-style-type: none"> <li>● Scottish Environment Protection Agency</li> <li>● Local authorities</li> </ul>
<b>2. Safe, affordable drinking water</b>	<ul style="list-style-type: none"> <li>● supply of clean drinking water</li> <li>● quality adjusted price index</li> </ul>	● Water	<ul style="list-style-type: none"> <li>● Scottish Water</li> <li>● Water Industry Commission</li> <li>● Drinking Water Quality Regulator</li> <li>● Local Authorities</li> </ul>
<b>3. Communities protected from flooding, climate change and other environmental hazards</b>	<ul style="list-style-type: none"> <li>● properties affected by flooding</li> <li>● radioactive incidents</li> <li>● ambient noise levels</li> </ul>	<ul style="list-style-type: none"> <li>● Climate Change and Air</li> <li>● Environmental Futures</li> </ul>	<ul style="list-style-type: none"> <li>● Scottish Environment Protection Agency</li> <li>● Scottish Water</li> <li>● Local authorities</li> <li>● Airport operators</li> </ul>
<b>4. Waste minimised, recycled where possible and otherwise disposed of properly</b>	<ul style="list-style-type: none"> <li>● municipal waste amount and recycling rate</li> <li>● amount of biodegradable waste sent to landfill</li> </ul>	● Waste and Pollution Reduction	<ul style="list-style-type: none"> <li>● Scottish Environment Protection Agency</li> <li>● Local authorities</li> </ul>
<b>5. Rivers, lochs and beaches free of unacceptable pollution</b>	<ul style="list-style-type: none"> <li>● length of polluted rivers</li> <li>● bathing waters failing to meet EU standards</li> </ul>	● Water	<ul style="list-style-type: none"> <li>● Scottish Environment Protection Agency</li> <li>● Scottish Water</li> </ul>
<b>6. Well maintained landscapes and biodiversity benefiting people and business</b>	<ul style="list-style-type: none"> <li>● visitor numbers from Scotland and overseas</li> <li>● landscape character and nature sites in good condition</li> <li>● public value purchased from land managers</li> </ul>	<ul style="list-style-type: none"> <li>● Landscapes and Habitats</li> <li>● Freshwater Fisheries and Acquaculture</li> </ul>	<ul style="list-style-type: none"> <li>● Operations Group</li> <li>● Scottish Natural Heritage</li> <li>● National Parks</li> <li>● Deer Commission</li> <li>● Forestry Commission Scotland</li> </ul>
<b>7. Sustainable agriculture, forestry and fisheries, competitive in markets and contributing to local economies</b>	<ul style="list-style-type: none"> <li>● value of farm, fish and forest production, net of public support</li> <li>● contribution to economies of remote and fragile communities</li> <li>● fish stocks maintained within safe biological limits</li> </ul>	<ul style="list-style-type: none"> <li>● Agriculture and Food</li> <li>● Marine Group</li> </ul>	<ul style="list-style-type: none"> <li>● Operations Group</li> <li>● Scottish Agricultural Science Agency</li> <li>● Scottish Natural Heritage</li> <li>● Fisheries Research Services</li> <li>● Scottish Fisheries Protection Agency</li> <li>● Scottish Natural Heritage</li> <li>● Forestry Commission Scotland</li> </ul>
<b>8. Well treated and healthy domestic and farm animals</b>	<ul style="list-style-type: none"> <li>● number of welfare prosecutions</li> <li>● farm standards passed</li> <li>● outbreaks of exotic animal disease</li> </ul>	● Animal Health and Welfare	<ul style="list-style-type: none"> <li>● State Veterinary Service</li> <li>● Local Authorities</li> <li>● Research bodies</li> </ul>
<b>9. Rural development benefiting communities</b>	<ul style="list-style-type: none"> <li>● growth in regional GDP per head</li> <li>● value of local food processing</li> </ul>	● Rural Development	<ul style="list-style-type: none"> <li>● Operations Group</li> <li>● Marine Group</li> </ul>
<b>10. Access to public services for people in rural areas</b>	<ul style="list-style-type: none"> <li>● core service accessibility</li> <li>● population in remote areas</li> </ul>	● Rural Communities	<ul style="list-style-type: none"> <li>● Other SE Departments, local authorities and service providers</li> <li>● Crofters Commission</li> </ul>
<b>Science fully reflected in planning the future of Scotland's environment, marine and rural affairs</b>	● peer reviewed quality and relevance of science on SEERAD's behalf	● Science and Analysis Group (co-ordinating)	<ul style="list-style-type: none"> <li>● Scottish Natural Heritage</li> <li>● Scottish Environment Protection Agency</li> <li>● Royal Botanic Garden Edinburgh</li> <li>● Scottish Agricultural and Biological Research Institutes</li> <li>● Scottish Agricultural College</li> <li>● Scottish Agricultural Science Agency</li> <li>● Fisheries Research Services</li> </ul>

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## Chapter 25. Rural Tourism Development as a Government Oriented Rural Development Programme in Korea: Case Study of Darengeui Village

Duk-Byeong Park<sup>1</sup>

### *Abstract*

*Rural tourism is an important contributor to economic, social, cultural and environmental enhancement. The objective of this paper is to explore rural tourism development as a government-oriented project in the Darengeui village, Namhae, Korea. The paper uses evidence from a case study of rural tourism in the peripheral rural areas of Korea to explore some of the economic and social impacts.*

### **Introduction**

Rural tourism is an important source for generating economic, social, cultural and environmental enhancement (Butler, *et al.*, 1998; Hall, *et al.*, 2003; King, *et al.*, 1993; Lane, 1998; Milbourne, 1997; Page and Gets, 1997; Park, *et al.*, 2005). The reasoning behind the new debate on rural development is based upon notions of individual and community responsibility, self-help and “bottom-up” techniques which mobilise the skills and resources of the local community. In Korea one popular rural development programme is a rural tourism development project initiated by central and local government.

Although evidence suggests that the idea of self-help has not been adopted in Korean government policies to the extent that it has in other OECD countries, it is true to say that governmental decision-making is slowly being influenced by thinking in terms of community, self-reliance and self-help, which are gradually creeping into the discussion on regional and rural development.

This paper aims to explore rural tourism development as a government-oriented project in Darengeui village, Namhae, Korea. The paper uses evidence from a case study of rural tourism in the peripheral rural areas of Korea to explore some of the economic and social impacts. The focus is: to what extent does government policy on the development of a rural tourism project influence the rural community economically and socially?

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1. Researcher, Rural Development Administration, Suwon, Korea.

## Rural development and tourism development in Korea

Challenges for rural areas include explorations of power, diversity, counter-cultures, deprivation, marginalisation and rapid change (Cloke, 1997; Milbourne, 1997; Sibley, 1997). It is claimed that the agricultural productivist image of the countryside has been replaced by a more consumption-oriented and idyllic image (van Dam, *et al.*, 2002). The development of tourism is widely viewed as the establishment of an important set of economic activities to enhance local economies. Many studies have suggested that the development and promotion of tourism will create a source of new employment, revenue, additional tax receipts and foreign-exchange benefits, and also improvements to the community infrastructure, that will, in turn, attract other industries (Lankford and Howard, 1994). Until recently, the development and promotion of the rural tourism industry has been widely accepted as a positive economic step, especially in developed countries.

There are six programmes: Rural Traditional Theme Village (RTTV), Green Rural Experience Village (GREV), Integrated Rural Development (IRD), Beautiful Village (BV), Fishery Experience Village (FEV) and Integrated Rural Development in Mountain Areas (IRDMA). Within these areas, national and local policy has often concentrated on trying to encourage “bottom-up” development revolving around the commodification of local cultural resources.

**Table 1. Rural Development Programmes**

Programmes	Amount per area (000 USD)	Number of project villages				
		2002	2003	2004	2005	Total
Rural Traditional Theme Village (RTTV)	200	9	18	18	21	66
Green Rural Experience Village (GREV)	200	18	26	32	47	113
Integrated Rural Development (IRD)	7 000	–	–	16	20	36
Beautiful Village (BV)	1 000	23	–	–	–	23
Fishery Experience Village (FEV)	500	8	11	12	17	48
Integrated Rural Development in Mountain Areas (IRDMA)	1 200	88*	10	20	15	133
<b>TOTAL</b>		<b>117</b>	<b>104</b>	<b>86</b>	<b>68</b>	<b>419</b>

\* Number of villages from 1995 to 2002

Source: Ministry of Agriculture and Forestry (2005).

The IRD project was launched in 2004. The Ministry of Agriculture and Fisheries (MAF) selected sixteen areas in 2004 and twenty in 2005. The characteristics of IRD are bottom-up approaches and community participation. The average population in each area is 1 235. Each project covers, on average, 1 736 hectares. The average number of householders is 484. The RTTV and GREV are the two main projects that are focussed on rural tourism development. A total of 179 villages in rural amenity-based rural areas have been developing rural resources. Rural community people have differentiated those tourism projects from other, earlier kinds of rural development projects.

Table 2 shows the future plan of rural development programmes from 2006 to 2014. The number of programme areas is 1 364. The table shows that rural tourism – the RTTV and the GREV – is an important component of the rural development programme. The IRD emphasises the importance of empowering the populations of rural communities and of providing them with the opportunity to develop their capabilities. The working expenses are higher than for other programmes – almost USD 7 million per area. Under this programme, the average number of population is 1 364 and the average gross area is 309 hectares.

**Table 2. Future plan of Rural Development Programmes**

Programmes	Amount per area (000 USD)	Number of project villages						
		2006	2007	2008	2009	2010	2011-14	Total
Rural Traditional Theme Village (RTTV)	200	22	21	21	21	20	–	105
Green Rural Experience Village (GREV)	200	47	74	74	90	90	399	774
Integrated Rural Development (IRD)	7 000	40	–	–	–	–	–	40
Fishery Experience Village (FEV)	500	17	6	6	7	7	29	72
Integrated Rural Development in Mountain Areas (IRDMA)	1 200	15	30	35	30	30	120	373
<b>TOTAL</b>		<b>101</b>	<b>131</b>	<b>136</b>	<b>148</b>	<b>147</b>	<b>548</b>	<b>1 364</b>

Source: Ministry of Agriculture and Forestry (2005).

### Case study: Darengeui village

This is a small village located in southern Korea. It has a population of about 156 people, living in 65 households. Total land area is 27 hectares of paddy-fields and 13 hectares of upland fields. In 2002 the RTTV project was launched by central government.

The main crops produced are rice and garlic. Cultivation of these crops can be highly labour-intensive because the land consists of terraced fields on steep slopes, and because the rice has to be transplanted within ten days of harvesting the garlic. Villagers have collaborated with each other and have formed agricultural organisations. In particular, there are four groups (called “Dure”) that collaborate with each other. Traditional communal practices in rural villages have developed to produce rice effectively. These communal practices include joint rice planting and harvesting. Every year villagers form new groups with different members. This means that each group has new members working together every year. The farmers who have tractors and rice transplantation machines can provide the basis of a new group.

The ratio of the rural population to the total population shows a rapid decrease during the 1970s-1980s – from 44.7% in 1970, to 15.5% in 1990, and 8.5% in 2000. The curve of population graph peaks in the mid-1960s, when it was almost 700 living in 120 farm households. Since 1995 the number of householders has fallen to 58 during the 1980s and early 1990s, but the RTTV has been increased due to the arrival of seven new families in the village.



**Table 3. Trends in population and number of householders**

Category	1960s	1995	2002	2003	2004
Population	700	175	155	155	156
Number of households	120	58	58	58	65

### ***Government assistance***

Since 2002 central government and local government have assisted infrastructure, technical assistance, advertising and marketing, quality, labelling, networking, human development and agricultural technology. Rural development policy includes a broad range of policy measures to promote agricultural competitiveness, marketing assistance, human resource development, sustainable agriculture, environmental protection, and advocating economic growth and employment opportunities, preserving natural resources, sustainability, maintaining the cultural heritage of the countryside, and satisfying consumer demand for high-quality and safe products.

Rural development policy forges partnerships with rural communities, funding projects that provide housing, community facilities, utilities and other services. It also provides technical assistance and financial backing for rural businesses and co-operatives to create quality jobs in rural areas.

Generally, government-financed programmes support such essential public facilities and services as water and sewer systems, housing and emergency service facilities. They also offer technical assistance and information to help agricultural and other co-operatives get started and improve their effectiveness. These programmes also provide technical assistance to help communities undertake community-empowerment programmes (Park, 2005; Park, *et al.*, 2005). The viability of rural areas needs more than agriculture.

### ***Family types, age, generation of householders providing guesthouse accommodation***

The number of farm householders offering accommodation facilities is thirteen. The most remarkable aspect in the change of population is that the ageing section of the population is sharply and constantly rising within the rural population. The maximum number of tourists staying over-night is about twenty. Over 50% of total farm householders are made up of widows, or a husband and wife of the same generation. Table 5 shows that most of the farmers offering overnight accommodation have been getting older. Only two farmers left successors after they died.

Table 4. Government assistance

Category	Name of government	Contents
<b>Infrastructure</b>	Municipality Ministry of Environment (ME) Rural Development Administration (Extension Centre)	<ul style="list-style-type: none"> <li>– Facilities for activities and renovations for guest-house accommodation</li> <li>– Road repairing and pavement</li> <li>– Repairing fences in bus stop areas</li> <li>– Natural and Ecological Village Designation by ME (2002)</li> <li>– Pilot Programme Village for Improving Rural Life</li> <li>– Environmentally Friendly Renovation of Rural Housing (2005)</li> </ul>
<b>Technical Assistance</b>	Rural Development Administration Municipality Extension Centre Private Consulting Company Village Tourism Committee Kyeonggi University College Student Voluntary Group	<ul style="list-style-type: none"> <li>– Village planning</li> <li>– Resource and activity programme development for tourists</li> <li>– Planting trees for landscape</li> <li>– Cleaning dilapidated houses</li> <li>– Improving roofs</li> <li>– Construction of lavatories</li> <li>– Developing speciality products to sell to tourists</li> </ul>
<b>Advertising/ Marketing</b>	Rural Development Administration Provincial Agricultural Extension Service County Agricultural Extension Centre Society for Tourism Village Private Company	<ul style="list-style-type: none"> <li>– Providing homepage construction</li> <li>– Branding the village “Clean Dareneui Village”</li> <li>– Making two video tapes for advertising purposes</li> <li>– Establishment of four road signposts</li> <li>– Advertisements on television</li> </ul>
<b>Quality labelling/ Qualification</b>	Ministry of Agriculture and Forestry Municipality Association of Rural Tourism	<ul style="list-style-type: none"> <li>– Quality labelling of organic foods</li> <li>– Enactment of rural village landscape rules</li> </ul>
<b>Networking</b>	Rural Development Administration Municipality Village Tourism Committee	<ul style="list-style-type: none"> <li>– Setting-up of an advisory committee</li> <li>– Contacting and establishing communications with people who grew up in the village</li> </ul>
<b>Human Development</b>	Rural Development Administration County Agricultural Extension Centre Association of Advanced Farmers	<ul style="list-style-type: none"> <li>– Developing the potential of village leaders and helpers</li> <li>– Providing educational opportunities such as seminars and overseas training</li> <li>– Networking</li> </ul>
<b>Agricultural Technology</b>	Rural Development Administration Provincial Agricultural Extension Service County Agricultural Extension Centre	<ul style="list-style-type: none"> <li>– Providing the agricultural technology of garlic, seaweed and rice</li> <li>– Teaching methods of cooking garlic, buckwheat jelly and salted sea squirt</li> <li>– Dyeing gardenia seed</li> </ul>

**Table 5. Family types, age, generation of householders providing overnight accommodation**

Serial Number	Name	Age	Number of Family Members	Generation	Family (Age)
1	Kim 1	57	5	3	Mother (79), younger sister (42), nephew(12)
2	Kim 2	60	2	1	Wife (59)
3	Kim 3	58	2	1	Wife (57)
4	Kang	63	2	1	Wife (60)
5	Park	72	1	Widow	—
6	Kim 4	66	2	1	Wife (61)
7	Kim 5	72	2	1	Wife (70)
8	Kim 6	63	2	1	Wife (60)
9	Kim 7	72	2	1	Wife (70)
10	Lee	68	2	1	Wife (64)
11	Kim 8	73	2	1	Wife (70)
12	Kim 9	74	2	1	Wife (70)
13	Kim 10	70	3	2	Wife (70), mother (102)

There are thirteen farm households in this village, providing a total number of rooms of forty. Ten farm households out of the thirteen can provide cooking facilities for visitors. Only four householders have a visitors' house that is independent of the host's house. The fee for staying is USD 25 for one night and three meals. Generally, visitors like to stay in farmers' houses because they are cheaper and more comfortable than the *pensions* in the area.

### ***Structure of leadership and organisations***

There are three organisations: the Elderly Group, the Women's Group and the Younger Group. The Elderly Group has a minimum age limit of sixty. It was formed for those involved in performing sacrificial rites, village cleaning and funeral ceremonies. The Younger Group is made up of men between the ages of twenty and sixty. It is an initiative for assisting with important village events, maintaining the village environment, and planning the activity programmes for visitors. The Women's Group consists of married women. They provide and cook food for village banquets, weddings and funerals, and sales of agricultural products. The youngest member of the Women's Group is thirty-two years old and the oldest is sixty.

### ***Managing conflict***

One of reasons for community conflict is the distribution of the benefits from tourism. The Village Tourism Committee (VTC) manages and mediates when community conflicts arise. It is responsible for charging and checking reservations. As most visitors have been allotted to farm households with accommodation facilities, the VTC checks the quality of rooms and amenities. One of the main penalties, should farm householders

refuse to allow the VTC to carry out these inspections, is elimination of the screen for booking reservations in their homepage.

The VTC has made a new plan to manage community conflict and to encourage the development of farms offering accommodation to tourists. First, the Women's Group has a plan to provide lunches for groups of visitors (farm households have previously provided this service). Secondly, the VTC is placing emphasis on the level of service provided by the host families. It includes the quality of the welcome offered to guests, the availability of refreshments in between meals and the offering of farm products as gifts. Another emphasis on service perspectives is that the meals provided by the farmers should be based on their own products. Fourthly, the VTC has encouraged host farmers to develop traditional food to provide to their visitors. Fifthly, one of most important things is that most farmers have a discussion on how improve their services, and attend a programme for improving their cooking skills, on a monthly basis. The VCT has developed and operates activity programmes for tourists. It has charged the 10% rebound money for managing their activities programmes.

### **The tourism impact on Darengeui village**

The term "tourism impact" has been gaining increasing attention in the tourism literature. A number of studies in recent years have examined the local residents' perception of the impact of tourism development on their community, and it continues to be an important issue. The development and promotion of rural tourism is frequently justified on the basis of its potential contribution to the social and economic regeneration of rural areas.

A major reason for this growing interest has been the increasing evidence that the development of tourism leads not only to positive, but also, potentially, to negative, outcomes at the local level (Lankford and Howard, 1994). Liu and Var (1986) noted that tourism development was usually justified on the basis of economic benefits and challenged on the grounds of social, cultural or environmental destruction.

#### ***Trends of visitors by type of visit***

The number of both visitors making day trips and staying overnight have dramatically increased. At the beginning of 2002 there were many day visitors, in comparison with those wishing to stay overnight. At this time, the visitors were largely made up of people directly concerned with the development of the village, such as government officials, researchers and village leaders wanting to enhance their rural tourism projects. Since 2004, the tourism businesses has settled down and it has been shown that there are many visitors who come for purely touristic reasons.

The number of total visitors for the 2002-04 period was 27 950. Visitors increased from 2 010 in 2002 to 19 120 in 2004. The number of day visitors has rapidly increased, from 957 to 15 370. One of the challenges for this village is that the ratio of overnight visitors to total visitors will need to be increased.

**Table 6. Number of tourists, by day visitors and overnight visitors**

Category	2002	2003	2004	TOTAL
Day visitors	957	4 457	15 370	20 784
Overnight visitors	1 053	2 363	3 750	7 166
<b>Total visitors</b>	<b>2 010</b>	<b>6 820</b>	<b>19 120</b>	<b>27 950</b>

Until 2004 tourists tended to visit for their summer vacation. In 2000, however, visitors were coming all-year round. It is very positive that visitors consist of a mix of the older and younger generations. It has been shown that the changing mix of visitors has had a positive effect on rural tourism.

### *Economic impacts*

Over the 2002-04 period, the total income from tourism was USD 397 055. In the beginning, most of the money came from the organised activities and accommodation facilities provided by the farm household businesses. However, the sale of food and agricultural products has since become the most lucrative area. It has been demonstrated that most profitable sector of the rural tourism business is the sale of agricultural products, rather than farm households offering accommodation.

What is remarkable is that land prices have soared – increasing from three to five times. In addition, some new restaurants and markets have come into existence since 2004, showing that there are people in the community with a spirit of entrepreneurship, who want to bring vitality to their village. This could have the effect of not only facilitating social relationships, but also of creating a source of income directly from rural tourism.

**Table 7. Economic impact (USD)**

Category	2002	2003	2004	TOTAL
Activities and renovation of rooms	21 600	38 330	75 000	134 930
Sales of agricultural products	5 360	51 500	72 500	129 360
Food sales	6 070	35 445	73 250	114 765
<b>Total revenues</b>	<b>33 030</b>	<b>125 275</b>	<b>220 750</b>	<b>379 055</b>

### *Social impacts and social networks*

Butler (1998) identified that there are three impact domains, economic, environmental and social and cultural. These domains are not mutually exclusive and interactions can occur, as elements of complex impacts can be recognised in more than one domain. Social impacts can be described as those that affect human behaviour and organisation.

There are positive and negative impacts on the RTTV. It has been positively shown that the RTTV has encouraged villagers to participate in maintaining their community's environment and to vitalise their community. However, there are some negative impacts – certain conflicts between farmers who offer accommodation and farmers who do not have resulted in blocking the advancement of plans. The social network analysis showed that farmers offering accommodation occupied a central position in the community network.

### ***Changing gender roles***

Gender roles have changed since tourism development was launched in 2002. First, men have taken on the role as tour guides for visitors because this can entail certain dangers. Secondly, men have helped visitors to carry their luggage. Thirdly, they also have helped their wives to serve some meals to visitors, and they have sometimes prepared the meals for them.

### ***Increasing the areas of rapeseed***

Villagers have planted rapeseed in the early spring seasons. The total land area planted to rapeseed was just one hectare in 2004. Central and local government have encouraged community people to plant this crop because the government has to make all possible efforts to reduce the total yield of rice and garlic. Central government has a new policy of direct payments for maintaining the presence of rapeseed in the landscape. The VTC intends to increase the area planted to rapeseed and introduce some other varieties as well.

### ***Increasing use of partnership***

The main concern observed was the need to increase the use of partnerships between public, private and voluntary sectors in the development and implementation of local and regional policies. Rural development in the Ministry of Agriculture and Forestry forges partnerships with rural communities and between private and public sectors in the village. Since launching the project in 2002, community leaders have tried to network and form partnerships with several important stakeholders, local authorities, schools and members of alumni associations who had lived and graduated within the village, and other social organisations.

## **Challenges**

There have been some urgent challenges, including, among others: improvements to the social- hospitality aspects involved in running businesses that provide accommodation; development and animation of new activity programmes; and the introduction of a more service-oriented attitude.

### ***Developing human capital in the guest-house business***

The owners of most farms offering accommodation are comparatively advanced. Ten householders out of thirteen householders are husband and wife with no other family, and one householder is a widow. If these householders should die, there are no successors to take over their businesses. Only two householders have planned to make bequests of their businesses.

### ***Developing and operating new activity programmes***

The VTC has developed an activity programme corresponding to the needs of, respectively, elementary students, middle-grade students, and high school students. Community people and leaders have also developed an activity programme for adults. Now the village has several activities programmes, such as climbing, collecting seaweed and shellfish, concerts, and planting and harvesting.

### ***Providing hospitality***

Over 80% of visitors making a repeat visit came from the city of Seoul. The reason they made return visits and were prepared to travel such a long distance was that the cost of accommodation was lower and the services better than elsewhere. One of the most important conditions for success in the rural tourism business is that host families make efforts to ensure the comfort of their guests, and also to create a pleasant social relationship.

### ***Other problems***

Some problems in managing the businesses were: first, not possessing credit card facilities because the farms offering accommodation were not registered as an enterprise; secondly, host families were unable to meet safety requirements; thirdly, community people lack computer skills; fourthly, there were insufficient sanitary facilities; fifthly, occasionally there were problems with distributing the benefits of tourism businesses equally.

## **Conclusions**

Korea is concerned with alleviating rural poverty, boosting rural employment, stemming out-migration, providing housing, improving rural infrastructure, developing human capital, maintaining an attractive landscape, and protecting the environment. Korea has been faced with serious conflicts between the desires of policy makers to shift policy emphasis towards rural development programmes and the realities of tightening budgets. Rural areas in many peripheral rural areas of South Korea have turned to tourism as an alternative development strategy in the face of changes to the agricultural food production system. Particularly in more remote and less agriculturally viable areas, policies at national and local level have often concentrated on trying to encourage “bottom-up” development.

First, the development of tourism has brought considerable economic and social benefit to rural areas through the income and infrastructure developments, especially in marginal and less economically developed rural areas. Additionally it has the potential to provide organic, relatively low-capital, economic growth for locally owned businesses, contribute towards maintaining beautiful scenery, and it offers the possibility of an alternative to traditional rural activities such as crafts and cultural festivals.

Second, the government has considered tourism development as an alternative of rural development in Korea: it could, however, be a relatively fragile element of rural development. Inward investment, the creation of new businesses and employment generation could be limited, owing to the small scale and dispersed nature of the industry that has tended to offer low returns on investment.

Third, rural tourism has tended to be in the hands of those rural entrepreneurs, such as farmers, small town and village business and local officials, who frequently lack any specific training in tourism. To overcome these restrictions, the community people in the Darengeui village have tried to create networks for facilitating collaboration with specific groups or with specialists.

In conclusion, it must be recognised that agriculture’s contribution to the rural economy has been small, but, even so, agriculture has been important to the management

of natural resources and land-use in the Korean rural village. Even though the encouragement of rural tourism as a rural development policy in Korea is an essential element in strengthening local cultural identity and competitiveness, there is an explicit recognition that, while “rural” is no longer synonymous with “agriculture,” rural and farm policy are an essential element of rural tourism policy.

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