

The Sustainability of Rural Systems

**GLOBAL AND LOCAL CHALLENGES
AND OPPORTUNITIES**

EDITED BY: Mary Cawley, Ana Maria de S. M. Bicalho, Lucette Laurens

The Sustainability of Rural Systems

Global and Local Challenges and Opportunities

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Mary Cawley, Ana Maria de S.M. Bicalho, Lucette Laurens

Chapter 1

Introduction: Context and Contents

Mary Cawley

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The Sustainability of Rural Systems: Global and Local Challenges and Opportunities

The concept of a ‘system’ is highly contested in social sciences literature, not least because of the complexities associated with establishing boundaries for a social system (Bowler 2001). The term ‘rural system’ was adopted by the Commission on the Sustainability of Rural Systems (CSRS) of the International Geographical Union (IGU) more as a descriptive organising framework for the research of its members, which addresses the interrelationships between society, economy and environment in both theoretical contexts relating to rurality and imagined and actual spaces and places that may be conceived of as ‘rural’ (Bowler 1995). Inherent in the research, following the Brundtland Report, is a quest to find more balanced approaches to reconciling the competing demands and needs of rural society, economy and environment within increasingly globalised contexts (WCED 1987; CSRS 2013).

The Sustainability of Rural Systems: Global and Local Challenges and Opportunities was selected as the overarching theme for the 19th Annual Colloquium of the CSRS, in 2011, to explore the increasing range of influences that rural places and their inhabitants are subject to and the responses that take place. Globalisation is a defining feature of recent decades. Places at great distances from each other throughout the world are linked together through flows of ideas, people, goods and investment, facilitated by advances in information and communication technologies (ICTs) and in transport, as noted in the late 1990s by Amin (1997) among other scholars (Sokol 2011). Regulatory regimes relating, for example, to food production, trade and energy production have become increasingly globalised (McMichael 2009). Allied with such technological and regulatory mechanisms, processes of cultural, economic, political, and social change have become extended spatially through new sets of “relations of interconnection” (Massey 2005: 171). The local remains important, however, as a context for the working out of processes of globalisation which find different expressions in different places (Woods 2007). The local is also recognised as being of increased significance *per se* in a post-modern world where people seek alternatives to mass-produced cultures, foods, goods and experiences (Urry and Larsen 2011). Thus, local places, cultures, economies and societies, are imbued with perceived values that serve to attract migrants and tourists to more remote areas in both developed and developing countries. Macro processes of change are identifiable internationally but their particularities are influenced by place specific resources, histories and the agency

of residents in moulding outcomes (Cox 1997). Challenges and opportunities come from both globalisation, as a dominant force in contemporary society, and place specific human and physical resources, although external challenges may dominate and opportunities are frequently sought locally.

Brief consideration of technological advances, regulatory regimes and the ways in which the resulting outcomes are worked through in particular places illustrates some of the competing challenges and opportunities involved for rural residents and systems. Improved ICTs expedite the international transfer of information and investment capital which may provide new employment opportunities in low labour cost peripheral areas of the world. Equally, improved flows of information and the ease with which financial capital may be transferred facilitate the onward movement of investment in quest of still cheaper labour market conditions (Grimes 2003). The promotion of places and their products, including tourism products, is facilitated by ICTs and, in the process, new markets are accessed, external tourists are attracted and employment is generated (Egger and Buhalis 2008). ICTs also bring increased competition with local products through the potential for on-line purchasing over extended spatial fields and awareness of cheap international travel options. Not all local places are equally integrated into new ICT and physical transport systems; those that are not can become more marginalised from economic opportunities, out-migration of the young and ageing continue, as they have done in the past, and basic education and health service provision experience decline. Flows of information through new communication technologies, associated with globalisation, can also have negative effects for local cultures and traditions and for indigenous languages (Buttimer 2001).

Whilst recognising globalisation as a dominant feature of the contemporary era, it is important to acknowledge that rural production systems have been subject to the influence of international market trends for a long period of time (Robinson 2004). The scope and implications of more recent liberalisation of markets and the increased power of multinational companies in control of seeds, livestock breeding and methods of production are, however, much more wide ranging in their impacts in both developed and developing areas of the world (McMichael 2009). Whilst output has increased, food security and food safety have become issues of major concern.

Responses to processes of globalisation are worked out in the context of local resources and systems by the residents of particular places who exercise varying levels of agency. The use of the local agricultural and natural resource base is influenced by patterns of international trade and national and supra-national policy. It is also subject to challenges that arise from inherent features of land quality, climate, farm ownership structures and demographic profiles. Many rural social problems and the quality of service provision are also embedded in local histories of out-migration or immigration and in national welfare policies. The accessibility of health care and educational services is the product of the interplay of local circumstances and national policy in many countries. Rural producers in areas with relatively low population densities are encouraged to seek external markets for goods and services, including tourist markets, because of the limited demand that is present locally. The capacity to produce the goods and services is, however, embedded in the local environmental, economic, social and cultural resource bases. The relocalisation of food production in recent decades illustrates also the market opportunities that may be created by consumers interested in purchasing food that has been grown by known producers, although the power relationships involved are complex (Hinrichs 2000; Maye *et al.* 2007).

The chapters in this volume illustrate that the societies and economies of countrysides in many parts of the world increasingly operate between the local and the global. There is no doubt that processes of globalisation present particular challenges in specific places. They also present opportunities that some rural residents are able to grasp. There are also continuing challenges that arise from the (over)embeddedness of economy and society in local environments and systems but, equally, the local offers opportunities.

The following chapters are structured according to four main themes: land use, agriculture and food; population and settlement; rural development; and rural tourism. These chapters are preceded by the text of four keynote lectures, presented at the colloquium, by Professors Guy Robinson, Michael Woods, Ana Maria de S. M. Bicalho and Lucette Laurens. In addressing broad implications of the colloquium theme in different ways, Guy Robinson and Michael Woods provide critical and thought provoking perspectives and valuable context for the other papers in this volume. Ana Maria Bicalho and Lucette Laurens highlight local responses to pressure on land use in the Amazonian forest and the Mediterranean coast of France, respectively. The text of a keynote lecture by Tony Sorensen ends the collection by suggesting innovative approaches to the study of the sustainability of rural systems. Aidan Kane provides an invited commentary on Tony Sorensen's text.

Chapter content

The sustainability of agricultural systems has always been central to the research interests and publications of the members of the CSRS. Guy Robinson addresses the challenges posed to agricultural sustainability at a local level by increasingly globalised forces for change, including climate change. His chapter begins by reviewing key contemporary debates relating to the nature of sustainability in agro-food systems with reference to opposing technocratic industrialised and ecocentric low growth approaches. Local production systems and the security of food supply for some populations are undoubtedly under threat from an increasingly intensive, industrialised, technocratic globalised regime of food production. At the same time, there is evidence of capacities to counter these trends through organic methods of production (although challenges arise from conventionalisation), the relocation of production and sales through local markets. Emerging coalitions of producers and consumers seek methods of counteracting damage to the environment and threats to human and animal health arising from intensive methods of production. Guy Robinson advocates the development of a research agenda that will incorporate the ecology and economics of sustainable agricultural production, citizens' pro-environment behaviour and community capacities for responding to threats such as climate change, the global financial crisis and new technologies. This agenda involves three dimensions: making the results of scientific research available to land managers in a readily intelligible way; translating the research results into policies which elicit responses from local actors; and managing and monitoring the responses to policies. To illustrate his argument, he presents findings relating to the most effective methods of conveying the results of research on the implications of climate change for the sustainability of land use to land managers and other local actors in South Australia. The results show that trust in the source of the

information and relevance to real farming practices are central to the effective transfer of scientific knowledge. Guy Robinson recognises the need to be aware of broader global issues of food security but the chapter illustrates in a particular way the potential for research to engage with devising responses to global threats in local contexts.

Michael Woods identifies a set of four discourses surrounding 'global challenges' which relate to the scope and reach of these challenges from a world to an individual level, their geographical scale and the need for global responses, the aligning of the agendas of major stakeholders around shared priorities that require coordinated responses, and the prioritisation of technocratic solutions. He contends that an excessive emphasis on technological solutions (even among research awarding bodies) neglects several decades of geographical research which reveals how people imagine, value and experience the rural and how this influences their engagement with wider processes of change. This engagement includes opposition and protest. Michael Woods suggests that Amin's (2004) concept of 'a relational politics of place', which involves both a politics of propinquity (the management of competing demands in particular places) and a politics of connectivity (the interconnectivity of places on a global scale), provides insights into responses to global challenges. He illustrates how both forms of politics serve to ground global challenges in particular places, using the example of opposition to wind farm developments in Mid Wales. Vociferous opposition is expressed by citizens who hold emotional and spiritual attachments to the hillsides (a politics of propinquity) whilst supporters of windfarms advocate their development as a response to the global challenge of climate change (a politics of connectivity). Michael Woods identifies five ways in which rural geographers can make a distinctive contribution to meeting global challenges within the framework of a relational politics of place: (i) making other social scientists and policy makers aware of the relational constitution of the rural; (ii) informing research programmes addressing global challenges; (iii) researching further the relational politics of place and how it relates to key challenges; (iv) analysing the politics of connectivity; and (v) adopting participatory methods in order to bring about change.

Ana Maria de S. M. Bicalho highlights the threats that conservation through the creation of national parks and other forms of protected ecological areas can pose to the residency and livelihood rights of long established local populations, in traditional forested areas of Amazonia. Resistance movements have arisen to protect the rights of the traditional populations and Ana Maria Bicalho documents the activities of one of the best known of these movements in the Tapajós National Forest where local communities succeeded in maintaining their rights to use traditional forest resources and develop a community forestry system, in face of opposition from planners who thought them incapable of doing so. In 2005 a cooperative was established to undertake commercial logging and sale of lumber and non-lumber products and provide pertinent training and administrative experience, so building human capital. The example assumes particular importance as an illustration of the success of communities in engaging locally and with a range of external institutions and interests in order to have the validity of their traditional methods of cultivation recognised as part of a sustainable management system within a protected area. They also developed appropriate international markets for ecologically harvested timber. As a result of this and other local community activism, Brazilian environmental policy has been changed from one that focused on preservation to one where sustainable use, involving local governance, is permitted.

In Chapter 5, Lucette Laurens illustrates the challenges presented to agricultural land use by rapid population growth and urbanisation, with reference to the environs of Montpellier in the Languedoc–Roussillon region of France. Population grew by 67 per cent between 1962 and 2009 and involved progressive urban expansion and marked growth of individual dwellings in the surrounding rural *communes*. The number of farms fell by 60 per cent between 1970 and 2010 involving massive uprooting of vines which were replaced in part by other forms of cultivation. The author proposes a theoretical model in order to understand the new reality of former agricultural areas which are in a state of flux between different uses. Research with the intercommunal organisations revealed a desire to develop a form of agriculture that would meet the needs of urban residents and respond to environmental challenges in protecting biodiversity, as part of a green belt around the city. Two local studies, in the Route de la Mer and inland Vivrière, illustrate the changes that are taking place and the challenges presented. In the former case a range of diverse agricultural activities continue to be practised in an area which also contains nature reserves that are subject to inundation. In the latter, land has been acquired by the community for recreational purposes and agriculture is in retreat. This research illustrates in a marked way some of the challenges associated with the promotion of sustainable land use in areas under pressure from urban expansion.

Six chapters discuss agriculture, land use and food production further. Nguyen Trinh Minh Anh and Doo–Chul KIM use an institutional perspective to analyse the implementation of a national forestry land allocation policy at a local scale in upland areas of Thuong Quang commune, Central Vietnam, since the late 1970s. The resident Katu people had a relatively simple social organisational structure based on isolated villages and practised a slash and burn system of cultivation which was well regulated through customary institutional practice. At the end of the 1970s, Kinh people who are the majority ethnic group in Vietnam were granted land for residential and agricultural purposes in the uplands. Exchange of cultural cultivation practices took place between the Katu people and the Kinh immigrants. The former adopted practices of wet rice production from the Kinh who adopted swidden cultivation practices and customary land use rules from the Katu. However, the Kinh people were better able to adapt to the changing legal regulatory regime which accompanied Forest Land Allocation from the mid–1990s. The Katu people’s customary institutions inhibited adaptation to the official system. The study illustrates the role of ethnicity in shaping the responses of local communities towards government development policy and management of natural resources and the insights that an institutional analytical framework may provide.

In Chapter 7, Jonathan Bell discusses proposals to introduce a national park (NP) in the Mourne Mountains Area of Outstanding Natural Beauty in Northern Ireland with reference to a ‘resource paradox’. Traditionally, at an international level, national parks either prioritise conservation or make provision for such prioritisation, in cases of conflict (in the British and Welsh management model), over the social and economic needs of resident communities. A move towards giving greater attention to such needs is apparent in legislation relating to the Cairngorms NP in Scotland and in a 2011 White Paper on enabling establishment of national parks in Northern Ireland. Jonathan Bell suggests that a resource paradox arises if increased tourist numbers cause damage to the environment that is being protected and so diminishes the longer–term value of a NP in promoting both conservation and development. Local conservationists expressed concerns about the prioritisation of social and economic sustainability in the White

Paper. Another issue for concern relates to the retention of planning powers by local councils, instead of their allocation to an overall national park management body. The author advocates that, in order to avoid the resource paradox, the model adopted for NPs in Northern Ireland should give primary consideration to the environment and also facilitate socio-economic development of communities.

The major problem of meeting world food needs in ways that do not threaten the balance of ecosystems, landscapes, local economies and human health forms the focus of Ana Firmino's chapter. She advocates an approach to food consumption that is sensitive to principles of holistic sustainability, human and animal welfare. Organic and local food production and consumption, and international fair trade, are viewed as methods of promoting better health, guaranteeing a strategic food reserve and contributing to the sustainable development of rural areas and societies. The author's emphasis is on the agency of individuals and coalitions of consumer choices in supporting local producers of healthy and sustainably produced food from the local to the international level. She identifies the merits of innovative practices, such as Community Supported Agriculture in the UK and the USA, the role of the 'transition towns' movement in supporting farmers' markets, the Food for Life Partnership between schools and communities in England, and the slow food movement initiated by Carlo Petrini in Italy in 1986. Ana Firmino's chapter highlights the opportunities that consumers, who are critically aware of the importance of holistic sustainability in food production, can create for producers.

Helena Pina's discussion of port wine production in the UNESCO World Heritage Evolving Living Landscape of the Demarcated Douro Region of Portugal, since the late 1980s, explores the interaction between local social, economic and structural factors and changing external demand. Considerable diversity exists within the area between small family properties and large estates and has increased over time. Problematic farm size and age structures in the oldest wine producing area of the western Lower Corgo part of the Douro Valley serve to inhibit production; in the Upper Corgo further east, the largest of the major *quintas* or port wine producing estates have adopted mechanical methods of production; and mechanisation has progressed most in the Higher Douro, on the border with Spain, notwithstanding severe water shortages. Since 2008 supply exceeds demand, because of mechanisation and increased scale of production, resulting in reduced prices and income. Helena Pina suggests that strategies are needed to increase competitiveness within a framework where holistic sustainability and landscape values are preserved. Heritage tourism is viewed as having a role to play in this context.

A short chapter, based on a poster presentation, by Monica Alexander Rodrigues, Ana Monteiro, Alfredo Rocha and Hervé Quérol, illustrates the diversity that exists in terms of climatic suitability for quality wine production within the Demarcated Douro Region, based on an application of the Huglin Heliothermal Index to data for meteorological stations.

The expansion of food production to meet demand from population growth is a major challenge internationally. The results of research by Budi Gunthoro, Fathul Wahid, Ali Agus and Stein Kristiansen, in Chapter 11, investigate this aspect of food security in two provinces in Indonesia. The authors assess the presence of innovation in production methods with reference to chicken and beef farming, based on information collected from 149 farmers. Their research illustrates the low levels of technical advance in terms of disease control and breeding that are present in the study areas and a pressing need

for increased provision of training and education to develop the required skills and capacities to innovate to meet food needs.

Five chapters document population change and migration in a range of different geographical contexts in Asia and Western Europe. Hualou LONG, Yurui LI, Yansui LIU and Xingna ZHANG examine the patterns and causes of population and settlement change in China and the implications for rural development since the introduction of the 'open door' policy in 1978. They focus in particular on the period since 2000 and illustrate the increasing divergence between the rural registered and the rural resident population in the years 2000–2008. Migration took place to cities and many rural provinces lost population, including in proximity to areas of rapid urbanisation on the east coast. Floating migrant workers in the cities lacked access to many social welfare benefits and retained their homes in the countryside to provide the opportunity to return there. At the same time, traditional multi-generation family households were replaced by smaller nuclear families and major growth took place in the number of rural households. The number of occupied and unoccupied rural dwellings increased, as did the area of land per rural resident. Out-migration of the young and better educated also served to reduce the potential for development in the countryside. Arising from their analysis, Hualou LONG and his colleagues identify particular challenges for rural policy in China relating to: curbing an excess of rural housing, consolidating rural housing land, increasing job opportunities for excess rural labour and promoting large scale agricultural development.

Frans Thissen discusses the concept of 'person–environment' fit, with reference to ageing rural populations, based on a survey of 263 inhabitants aged 55 years or older in 17 small villages in the eastern Netherlands in 2009. Two dimensions of person–environment fit are investigated: (i) independence and self-reliance for housing and care and (ii) a more emotional dimension related to feelings of belonging and identity. Comparison with research in the same villages in 1995 revealed that the main change for some older residents related to a decline in involvement in the local community. The two dimensions of 'person–environment' fit were measured with reference to both 'successful' older people who are able to function effectively and are self-reliant and 'vulnerable' older people who experience exclusion and alienation as a result of changes in their environment, including individualisation. Even the latter, however, were found to possess agency in relation to the environment in which they live. This study raises issues that are of growing international concern relating to supporting the quality of life of older people in the countryside.

Chapter 14 by Holly Barcus and Cynthia Werner addresses transnational migration and its implications in integrating rural populations into wider economic, cultural and social systems. Their research is based on household and individual interviews among the Kazakh population living in the rural province (*aimag*) of Bayan-Ulgii in western Mongolia. The population includes Kazakhstanis who moved to Kazakhstan following the transition from a communist to a democratic form of government in the early 1990s but returned to Mongolia by the late 1990s. The research illustrates how the migrants introduced new knowledge and lifeways and extended social networks geographically. New economic opportunities have been created through trade with China and Russia (as a result of the opening of borders), migration and travel to Kazakhstan has increased and influenced social and cultural practices, material wealth has increased as has ownership of consumer goods. The chapter illustrates some of the implications of access to external cultures for social and economic change and ways in which new norms and

ideas have had implications for increased independence and improved life chances for women.

Garret Maher documents transnational migration in the context of two small towns in western Ireland which received Brazilian labour migrants to meet unmet demand in the meat processing industry in the late 1990s. They were welcomed initially and strong expressions of mutual respect were reported between the local populations and the immigrants. Local attitudes began to change as economic recession took hold from 2008 and unemployment increased for both local people and the Brazilians. Many of the latter, who could afford to do so, returned home but others remained, became undocumented and dependent on uncertain day labour and economic and social support from Pentecostal churches. Both the Brazilians and local residents reported that new arrivals from Brazil, in the late 2000s, most of whom entered Ireland without work permits, did not share the work ethic of their predecessors which contributed to social tension locally. The example raises questions relating to the factors that influence relationships between international immigrant labour and local populations.

The 'return' to Ireland during the 1990s and the early 2000s, of the children of Irish emigrants to Britain during the 1950s, is explored by Sara Hannafin. She uses the concept of Thirdspace, proposed by Edward Soja (as a combination of space as measurable and know and space as experienced), as a method of seeking to understand the meaning held by the parental homeland for these adult 'returnees'. Personal narratives were recorded from eighteen returnees of the experience of growing up in urban Britain, the decision to move to live in Ireland and the experience since doing so. Their narratives document a physical engagement with particular places in Ireland, during annual school holidays, and involvement in Irish cultural activities in Britain, as promoting an emotional attachment to a parental home place which emerged as being highly influential in making the decision to migrate there as adults. Their experiences align closely with the concept of Thirdspace suggesting, as Soja proposed, that it offers a new way of thinking about "the meanings and significance of space" (1996: 1)

Three chapters document dimensions of rural development. The effect of the transition process in rural Romania, following the fall of the communist system in 1989, is the theme of Chapter 17 by Cătălina Ancuța, Ana Ianăș and Claudia Muțulescu. The authors trace changes in demography, economy and living conditions at an aggregate level and in two contrasting case study areas in the west of the country. Positive impacts include improvements in public utilities, the revitalisation of some traditional forms of rural production, a growing interest in tourism development based on a rich cultural heritage, and the publication of a National Plan for Rural Development. Negative impacts associated with the transition relate to demographic ageing, arising from out-migration to cities, continuing disparity between large and very small farms, the under use of agricultural resources more generally, shortages of labour and a decline in educational and medical service provision. The authors conclude that methods of empowering rural entrepreneurs are necessary in order to enable them to take an active part in local development and respond to the challenges that they face.

The role of social capital in empowering small entrepreneurs in low population density rural areas to respond to global and local challenges is the theme of a chapter by Luisa-María Frutos-Mejías, Eugenio Climent-López and Enrique Ruiz-Budría, based on evidence from two agricultural and mining areas in the province of Aragón in Spain. Small scale entrepreneurship is supported by the EU LEADER (links between actions for the development of the rural economy) programme as a method of absorbing labour

from agriculture and mining. It was found, however, that few local entrepreneurs came from these sectors in the study areas, mainly because of a lack of need given subsidy support for farmers and good retirement pensions for former miners. Entrepreneurs tended to come instead from a traditional rural business class. Business network presence differed between the two areas but there was limited evidence of 'bonding' social capital in the form of local collaboration in either area. 'Bridging' links into provincial, regional and national business associations were stronger. The entrepreneurs were well integrated into local social networks but these had limited impacts on business development. It is concluded that business network development is necessary if local entrepreneurship is to be promoted.

Juan José Michelini also discusses the difficulty of establishing bonding and bridging social capital, in the absence of appropriate social structures, with reference to an irrigation project in La Pampa province, in the Upper Colorado River basin, Argentina. In the early 1960s, new settlers were introduced to develop small scale fruit production in a sparsely populated area with a view to integration in the local processing chain— an objective that was not realised. Their numbers declined over time and in the late 1990s, under a growing neoliberal economic model, large commercial companies were attracted which focused on alfalfa and wine production. An absence of local bridging social capital was identified, in the form of limited knowledge of one another and limited trust, whilst weak capacities to take part effectively in cooperative structures prevented bonding locally and externally. The study highlights central weaknesses in current state policy in irrigation areas in Argentina where small scale farmers are displaced by large corporations with almost no benefits for local and regional development. This experience provides wider lessons for rural development initiatives.

Six chapters deal with tourism themes in a range of rural environments. Scott Hoefle documents the evolving relationships between small scale fishing and tourism in the peri-urban fringe of Rio de Janeiro, Brazil. He traced livelihood change in interviews with 98 fisher families in the 1980s and again in 2011 in the Sepetiba Bay area which has gradually come under increasing urban influence. Families survived through a combination of small scale fishing and agriculture until the 1980s. Then, as a result of opening up to the influence of Rio and Sao Paulo through highway construction, increased investment took place in holiday homes, hotels and restaurants near the cities, and some small scale fishers sold their properties and became involved in providing tourist transport. The further expansion of Rio de Janeiro during the 1990s resulted in industrial and port development in the eastern half of the Bay and incidents of water pollution which reduced fish stocks and led to the migration of fishers to the slums of Rio. Mass day trip tourism also increased. Sepetiba Bay illustrates in a marked way the limited benefits that mass tourism can bring to local rural populations.

Serge Schmitz identifies another type of conflict associated with some forms of tourism development, in the context of the Belgian Ardennes; namely, that which arises when an established image based on local resources becomes 'disneyfied'. Because of its proximity to the Netherlands, the Ardennes is an established destination for Dutch tourists and Dutch companies own a large component of accommodation and recreational experiences which they tailor specifically towards the expectations of domestic tourists. Based on research on the ground and analysis of a wide range of tourist brochures and web sites, the author suggests that promotion by the Dutch companies towards their domestic market involves a process of 'disneyfication' involving artificial recreational experiences, which departs from the traditional image of

the Ardennes as being characterised by an attractive natural environment and rich cultural heritage. This changing imagery poses a particular challenge for the local authorities to maintain the quality of the Ardennes and its more traditional image.

Two chapters present the results of research with farm families who have adopted agritourism enterprises as a strategy for using local resources more effectively in face of challenges to the profitability of farming. Using an Interpretative Phenomenological Analysis, Suzanne Ainley documents the motivations of family farmers in Ontario, Canada, in adopting agritourism. In-depth research with multiple members of three farm families, involved in different types of agritourism, reveals that the decision to adopt a tourism enterprise on a farm is more complex than the need to contribute to family income solely. Other factors include the desire to remain living on a farm, an interest in agritourism *per se*, a desire to innovate and a decision by a son or daughter to return having acquired post-secondary education or training. The decision to charge a fee for an on-farm tourism experience emerges as an important threshold to cross. Diversification of this type is, however, accompanied by additional regulatory provisions because of not being established farm practices. Suzanne Ainley points to a need for loan and business supports that recognise that the transition to agritourism takes place over a period of time instead of being a once-off decision.

Charline Dubois and Serge Schmitz conceptualise the adoption of agritourism in Wallonia, Belgium, and Luxembourg by applying an actantian model in which agritourism accommodation is adopted and evolves along a pathway between constraints and opportunities. Insights were gained into a range of different types of agritourism farms through 15 in-depth interviews with farmers and their wives. Like the evidence from Ontario, farmers in Wallonia and Luxembourg reported personal motivations as being more important than economic motives in adopting agritourism. Differences were present between the two study areas which are related in part to a difference in farm size. In Luxembourg, the area of larger farms, the first motivation was a response to a market opportunity and the use of unused farm buildings for accommodation. In Wallonia, by contrast, social factors were listed first: welcoming visitors, social contact, personal investment and hospitality. Farmers negotiated change between these factors which operate from the level of the farm to the international. The transition to agritourism emerges as being more easily accomplished by farmers who have the capacity to benefit from it but it is not a method of saving vulnerable farms.

Jean-Bernard Marsat, Aurore Bonniot, Monique Bouchaud, Célin Monin and Pauline Mennegazi present findings from a research project in the Châtaigneraie Cantalienne region of the Auvergne, France, which seeks to deconstruct some of the oppositions between ‘concentrated’ (mass) and (small scale) ‘dispersed’ tourism. The authors invoke the concepts of complementarity (with agriculture) and social embeddedness to study the relations between tourism and agriculture and with local populations. The study area is characterised by dispersed tourism which benefits from proximity to the established destinations of the Massif Cantalien and the Périgord. There are many local synergies between agriculture and tourism and a high level of acceptance of tourism by farmers. However, there are few strategic alliances between farmers and tourism interests and those that existed in the past have been weakened as tourism offices become centralised in larger centres. It is suggested that policy needs to be devised to develop the relationships between agriculture and tourism further for the benefit of both sectors.

Thérèse Conway also invokes concepts associated with networking in order to explore the development and promotion of ecotourism in a peripheral rural area in northwest Ireland. The economy of the area had been neglected, because of its border location between the Republic of Ireland and Northern Ireland, during a thirty year period of civil unrest in the latter. Following the establishment of peace in 1998, funding became available from EU and philanthropic sources for development. It was decided to establish an ecotourism destination, the Greenbox, which was to be managed by a network consisting of, primarily, local organisational representatives and a professional staff. The network operated from 2003 until 2008 but ceased to function when it was ineligible for a second tranche of EU funding. Although a short-term network, several benefits arose in creating awareness of ecotourism, supporting local businesses in qualifying for ecotourism certification and promoting networking between the organisational members of the network and between them and ecotourism providers, which continued after the funding terminated.

Chapter 26 presents the text of a keynote address by Tony Sorensen. He suggests that we live in a world characterised by uncertainty where conventional thinking, knowledge and modes of analysis about the sustainability of rural systems may be increasingly ineffective and unreliable. He argues that rural sustainability is at the outer fringe of system uncertainty because of multiple pressures for change and that the CSRS should engage in more complex discussion. Towards this end, he proposes five key theories from quantum mechanics, for which he finds analogies in economics: chaos and complexity theories, tipping point theory, information theory and socionomics. Tony Sorensen invited comments on his text and Aidan Kane, an economist at NUI Galway, kindly provided a written response to which the former responded. Citing the experience in economics, Aidan Kane is critical of the idea of transferring theory from the physical sciences to the social sciences. He accepts the central argument that there are policy and analytical questions in rural sustainability that traditional methods of analysis may not have engaged with fully. However, he advocates caution in seeking explanations for socio-economic processes of change in theory derived from quantum mechanics, other than at the most macro of scales. Tony Sorensen fails to be fully convinced by the arguments made but his response also suggests that his thinking is framed at a macro level. His contribution provokes thought relating to the challenges presented by the scalar nature of global and local interactions and the appropriate responses in order to understand the implications for the sustainability of rural systems.

Global challenges, local opportunities

The research presented in the chapters in this text illustrates some of the challenges posed by processes of globalisation for cultures, economies, environments and societies in locations that may be described as rural and the capacities of local social and other structures to respond. The evidence reveals also that globalisation may provide opportunities and that features of local population, resources and living conditions may constitute challenges. In seeking to attain sustainability at particular points in time in particular places, populations are negotiating between these various influences. Reflecting the international nature of the contributions and the range of thematic issues involved, the evidence is diverse in terms of the themes covered and their geographical

contexts. A number of common elements may be identified that relate to the work of the CSRS. These include: (i) the role of theory in gaining better understanding of the sustainability of rural systems (which are often open ended), under increasingly pervasive processes of globalisation; (ii) the scalar nature of contemporary rural change, involving connections between the local and the global; (iii) the capacities that exist for the expression of agency and resilience at local levels; and (iv) the potential role that geographers can play through their research in the design of more appropriate policies in order to promote sustainability in rural contexts.

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Part 1

Global and Local Challenges and Opportunities: Principles and Practice

Chapter 2

Agricultural Sustainability: Local Challenges in a Global Context

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Introduction

There's got to be more emphasis on growing food here in our own back yard ... that means training more young people in agricultural skills and generating interest in producing food for the local market.
(Board member, Technical and Further Education College, South Australia, 23.6.11)

This statement was made during a conversation about Australia's agri-export market based system of agricultural production, which focuses on growing crops and livestock, harvesting (or slaughtering) and shipping it off elsewhere for processing, specifically in this context, grain exports from the South Australia's Eyre Peninsula to Indonesia. In this case the 'middle-man' is the US\$6 billion capitalised Canadian multinational Viterra, based in Regina, Saskatchewan, which entered the Australian market in 2009 (<http://www.viterra.au/>). However, the conversation could have referred as easily to wool or even live cattle exports.

Viterra was formed from the takeover of Agricore United by the Saskatchewan Wheat Pool, becoming the successor to the grain-trading cooperatives set up in Canada during the 1920s known as the wheat pools. It operates principally in Canada, the United States, New Zealand, Japan and also Australia, having acquired the former Australian government-sponsored marketing board, the Australian Barley Board (ABB Grain), in 2009. Viterra formulates and manufactures feed for dairy and beef cattle, and also has interests in value-added processing. As shown in Table 2.1 it plays a major role in shipping grain and other crops from its principal export port, Port Lincoln, the location from which the board member quoted above was speaking.

The model pursued by Viterra is one familiar to many companies in other parts of the country, in which farm-based production of crops and livestock is largely geared for export, with or without a processing phase conducted within Australia. This is the model that has predominated in Australia since European settlement began over two centuries ago, and its sustainability is rarely questioned. Clearly it has a strong degree of sustainability in the sense that it has operated for a long period of time. So it has been sustainable economically, though with distinct and recognisable environmental disbenefits (Pritchard and McManus 2000; Lockie and Bourke 2001). The primary method of tackling negative environmental outcomes from the system has been through

implementation of a process with long-term, though often unspecified, goals of modifying existing agricultural systems through small (sometimes state-led) system modifications to introduce more extensive, diversified and conservation-oriented farming systems to ameliorate the disbenefits.

Table 2.1 Shipping (tonnes) by Viterra from Australia, 2009–10

Crop	Port Lincoln	Australia	Port Lincoln as a % of Australia
Barley	442295	1759057	25.1
Canola	85934	232006	37.0
Faba beans	6811	41101	16.6
Peas	8400	10644	78.9
Wheat	1282663	2696949	47.6

Source: www.vitterra.com.au

This approach has been best typified perhaps by the Landcare programme, which was active from the late 1980s. It has disbursed almost \$1 billion in approved grants from government, and is essentially a voluntary community movement of about 4500 groups across the country. In 2008 the Australian Government set aside \$189 million for Landcare over five years as part of over \$2 billion invested in the new ‘Caring for our Country’ initiative (<http://www.landcareonline.com.au/>). The latter focuses on conservation activities on private land on farms, in water catchments and at the regional level; it extends some of the components of Landcare. Over the lifetime of Landcare about 40 per cent of Australian farmers have participated, which together with the reliance on voluntarism, raises questions about its impact and effectiveness at tackling deep-seated environmental problems (Byron *et al.* 2001; Wilson 2004). Indeed, the persistence of these problems associated with the agri-export model raises profound questions about the longer term sustainability of the system.

This paper examines current research on key issues underpinning these concerns, that is research on how agri-food systems are evolving and on the search for systems that deliver desirable environmental outcomes. A research agenda is outlined that draws upon the author’s current work on landholders’ adaptations to climate change in South Australia.

The technocentric, the ecocentric and alternative food economies

Debates on sustainable agriculture and how it might be achieved generally refer to two polar extremes: an ecocentric approach and a technocentric approach (Barkin 2006; O’Neill *et al.* 2008). The former is associated with no- or low-growth scenarios for human development, with protagonists championing organic and biodynamic farming, which have radical implications for changes in consumption patterns, resource allocation and utilisation, and individual lifestyles. The agricultural practices proposed

are largely opposed to the characteristics of industrial farming systems. The technocentric approach advocates greater harnessing of technology as the best means of meeting ever-growing demand for food and the need to make conservation gains from further agricultural development. In the past decade this approach has been linked closely to the term neo-productivism, essentially a convenient way of summarising the extension of productivist principles in agriculture, often associated with adoption of new technological and agri-food system innovation (Lawrence *et al.* 2009). Some have argued that we are moving towards a neo-productivist order whereby an emerging (re)emphasis on production is being fused with environmental care (e.g. Ilbery and Maye 2010a). This notion is linked to the concept of ecological modernisation (Marsden 2004; Jänicke 2008), which envisages development that combines both environmental gains and increased production, e.g. through greater harnessing of biotechnology such as genetically-modified (GM) foods.

Technocentric approaches to agricultural development generally reject the ecocentric as being both practically and politically unrealistic. This rejection also regards 'sustainable agriculture' as more of a contextual process representing a goal to be attained whilst existing agricultural systems are gradually modified. Technocentrism has been intimately associated with industrial-style (non-sustainable?) agricultural production, which remains dominant in the Developed World. This industrial model is spreading worldwide, especially through the growth of an increasingly affluent middle-class in the two most populous countries, China and India, which is producing food consumption patterns that parallel those of the West.

Industrial-style agriculture has contributed to substantial increases in production, with some profound shifts in diets reflecting the ability to transform production systems. Six times as much chicken is produced today than in 1970, three times as much pork and just under twice as much beef. Per capita meat consumption in the developing world doubled between 1980 and 2002, to 28 kg per annum; this is projected to reach 37 kg per annum by 2030 (Holmes 2010). Yet it has not reduced the amount of hunger and starvation in the world or solved major questions about food security and it continues to produce adverse environmental consequences.

The ecocentric approach to agricultural sustainability is linked to no- or low-growth scenarios for human development. Its protagonists champion organic and biodynamic farming, which have radical implications for changes in consumption patterns, resource allocation and utilisation, and individual lifestyles. The agricultural practices proposed are generally diametrically opposed to the characteristics of industrial farming systems. These 'alternatives' include farming systems with the following labels: organic, ecological, biodynamic, low-input, permaculture, biological, resource-conserving and regenerative. However, they are not the only development that might be regarded as an alternative to high production orientated agriculture as articulated within the contested terms 'post-productivism' (Wilson 2001; Tilzey and Potter 2008) and 'alternative food economies' (Holloway *et al.* 2007; Higgins *et al.* 2008). These include reductions in food miles, buying locally-produced food, community agriculture, the slow food movement, value adding to farm-based production through processing on-farm, and a focus on new relationships between farmers and consumers as illustrated by farmers' markets.

The growing literature on alternative food economies describes them as representing a reversal of long-established trends in the agri-food sector through a focus on quality, health, environment and fair trade (Watts *et al.* 2005). At the centre of

this reversal is the ‘new consumer’, who is motivated by ethical and health concerns rather than price, packaging, appearance and ease of food preparation. This implies the emergence of some new links between production and consumption, as illustrated in ‘buy local’ campaigns, farmers’ markets and emphasis on place of origin of food. Thus it is possible to recognise distinctions between ‘conventional’ and ‘alternative’ systems (Table 2.2).

Ecocentric approaches to sustainable agriculture are most commonly associated with organic farming whereby farmers have to obtain some form of certification to sell produce termed ‘organic’. There has been rapid growth of organic farming in the Developed World from the early 1990s. In part this has been supply driven, in that many farmers chose organic production and a commitment to more environmentally friendly farming methods on ethical grounds or in response to government promotion. However, more recently there has been growing consumer demand as a stimulus, prompted by rising concerns in certain parts of society for food safety and health (Lang 2009).

Growth rates for organic farming have slowed in recent years (Harris *et al.* 2008; Ilbery and Maye 2010b) and, despite continuing growth in sales, there are also deterrents to purchasing organic foods. These include high prices, poor product distribution, little obvious difference in quality, lack of information on the nature of organic products, and doubts about the integrity of items. Some research has identified reasons why farmers have been disinclined to adopt organic farming, including negative attitudes to organic farming on the grounds that it represents a reversion to ‘old fashioned’ methods; it is associated with reduced yields and is linked to higher costs because of increased labour input (Robinson 2009). There may also be some negative environmental issues relating to nutrient leaching, volatilisation of livestock gases and soil imbalances. Of course there are strong counter-arguments in favour of positive environmental benefits brought by organic production methods, achieved through increased and diversified populations of insects, wild flowers, mammals and birds, plus enhanced soil structure and reduced soil erosion (Arden–Clarke and Hodges 1988). In addition, higher prices for organic produce may compensate for lower outputs per hectare, and its labour intensity may support more farm workers thereby adding to sustainability of the farm population and rural society.

Table 2.2 The conventional: alternative food dichotomy

Conventional	Alternative
Modern	Post-modern/Post-productivist
Standardised	Mixed/Diversified
Rationalised	Traditional
Mass production	Craft/Artisanal
Economic	Non-economic (?)
Manufactured	Natural/Organic
Disembedded	Embedded (local community)
Externalised	Internalised (low food miles)

A notable feature of organic production in the last decade has been termed 'conventionalisation' (Lockie and Halpin 2005). This is the process whereby capital has been concentrated increasingly among a few larger organic producers. In effect this makes organic production 'just another sub-sector of farming', following conventional regulatory paradigms and agencies. Conventionalisation has involved a focus on market access rather than organic standards, with allowable inputs rather than proscribed inputs. Hence there appears to have developed two different organic sectors: the conventional and the alternative (Guthman 2004).

Increasingly, research has recognised the importance of retailers and consumers in shaping the nature of farm-based production and indeed the whole of the agri-food chain through the development of different types of food networks. In discussing the changing nature of these networks, Winter (2003) notes that many consumers tend to pursue what he terms 'defensive localism' in their food purchasing habits whereby they seek out foods produced locally irrespective of the production methods being employed. Purchasing local food that is also organic may therefore be seen as a bonus rather than as the main aim of 'consuming local'. Nevertheless, the desire to purchase food products from 'local' farms can be seen as part of a new culture of food consumption that is driven by consumers' desires for a healthier diet, often accompanied by a conscious attempt to rediscover traditional cuisines.

This is part of a distinctive counter-current to the 'de-localisation' associated with globalisation that is typified by the global presence of 'fast' food outlets such as McDonalds, KFC, Pizza Hut and Burger King. In effect there has been some 're-localisation' in which some consumers show a growing concern for the place or region of origin of food as per the European Union's schemes for protected designation of origin (PDO) and patented geographical indications (PGIs) (Ilbery and Kneafsey 2000). This has been accompanied by rising interest in food authenticity and variety, but also a concern over the standards associated with mass production of food as seen in various 'food scares' (Lang and Heasman 2004). Bell and Valentine (1997) refer to the focus on the location of production as recognition by consumers that people are characterised not only by what they eat but also where they eat, i.e. the location and type of food becomes paramount in consumption. This has been termed the 'reconnection' between producers and consumers, with some consumers desiring to know who produces their food, and where and how it is produced. Reconnection may perhaps also be viewed as a desire to move away from the dominance of fast food, supermarket control of food retailing and mainstream acceptance of industrial-style agri-food networks. In some cases this has translated into wider 'resistance' movements as seen in anti-capitalist, anti-big business political campaigns such as those of José Bové, the *campesinos* movement and elements of counterculture in general (Bové and Dufour 2005).

Links between the global and the local have tended to operate in two basic ways. First, global forces may find various forms of expression in local changes and, second, local initiatives and resistance to global forces may alter processes at the local level, thereby giving rise to the reshaping of these national or global processes. However, local food producers are not just subservient to global interests, and consumers and farmers do not merely react passively to overwhelming global forces; instead they develop locally-based adaptive strategies grounded in local culture, agri-ecology and farm household resources. These strategies include 'buy local' campaigns, the growth of farmers' markets, grow-your-own schemes, community agriculture, the slow-food

movement (started by Carlo Petrini) and the general ‘greening’ of household decision-making.

Farmers’ markets, for example, can deliver a wide range of economic, social and environmental benefits through making direct connections between ‘local’ food production and consumption. There are now around 400 in the UK (mostly held monthly), licensed by local authorities on the basis that production must be within 20–50 miles of the market (or 100 miles of the M25 for London markets). These markets now generate between £65 and £100 million in turnover (Kirwan 2004). Farmers can benefit from the increased returns associated with these additional outlets, and there is a local economic multiplier valued at £1 for every £1 spent by customers (Friends of the Earth 2000). The markets help to reduce food miles; they have a social value; they contribute to revitalisation of town centres; and they have become important outlets for sales of speciality produce, such as traditional meats.

Local challenges in a global context: a research agenda

In broad terms the research agenda in responding to the trends referred to above needs to tackle:

- The ecology and the economics of sustainable agricultural systems;
- People’s pro-environmental behaviour;
- The capacity communities have for responding positively to changing situations, notably climate change, the global financial crisis (GFC) and the impacts of new technology.

Rural geographers have made major contributions in all three areas, whilst interdisciplinary work has enabled new collaborations between the social and natural sciences to develop imaginative new approaches (Harris *et al.* 2009). Work on decision-making at the household level has also enabled more understanding of what drives pro-environmental behaviour (Barr and Gilg 2006; Barr *et al.* 2011a and b), with distinctions recognised between different lifestyle groups and across people’s lifecourses (e.g. Tudor *et al.* 2011).

One avenue of enquiry needs to focus on the human dimensions of natural resource management (NRM) in order to understand how land managers are influenced and motivated to modify their farming systems in response to changing conditions. This includes consideration of their responses to variations in climate, economic circumstances and the policy context, and the investigation of decision-making by farmers and farm households through a focus on the complex inter-relationships between social, cultural, economic and other factors that influence the management of natural resources.

This provides a link between scientific investigations, which seek to understand ecological systems, and the human dimensions of land management, and also with interactions between ecological, economic, social, political and psychological systems. Much of the previous research on natural resource management has tended to overlook the complexity of the human dimensions of land management, often resulting in poorly targeted policies and outcomes that have not been as beneficial as intended either in

terms of delivering desirable environmental outcomes or in sustaining vibrant farming communities. Hence the aim is to ensure that the ever increasing scientific understanding of the environmental underpinnings of farming systems can be translated into policy formulations that will be widely accepted and implemented effectively by the farming community.

This suggests that there are three key components that should be addressed by research involving the human dimensions of natural resource management:

- a) Framing the results of scientific research in such a way that land managers and the wider community can understand the implications of the results for their own farms and communities. This is especially important with respect to work in climate change science where there remains a great deal of ignorance and mis-understanding within rural communities;
- b) Translating research findings into policies that will elicit desirable responses from the target audience, e.g. land managers, rural businesses and community leaders;
- c) Managing and monitoring the responses in terms of the multiplicity of outcomes that may eventuate following the implementation of particular policies, e.g. measuring changes in key environmental indicators; assessing the changing economic well-being of targeted farms; and examining the downstream effects of farming system adaptations.

All three require research that addresses the nexus between scientific investigation, policy formulation and policy delivery. Therefore research focusing on human dimensions must inform policy and practice at various institutional and organisational levels by influencing the design, conduct and review of ongoing scientific research. This should extend to consideration of how research findings are taken up by 'end users' (e.g. land managers) through a variety of possible responses. In particular, there needs to be greater understanding of what influences decision-makers to respond positively to particular policies, e.g. motivation to participate in voluntary schemes promoting adaptive management. A broader objective is to enable and support change that will be part of an enhancement of community resilience through promoting capacity building and strengthening of local socioeconomic structures.

It is important to involve key stakeholders from the target community within the research process. This may include end-user engagement in design, implementation and evaluation of research. Hence the community becomes part of the research process itself rather than simply being the recipient of a policy initiative based on research findings. Generally this requires more information about the community to be collected within a research project, e.g. capacity and capability assessments, analysis of community strengths, risks and vulnerabilities, and consideration of enabling and disabling factors in the community with respect to receptivity to new ideas. Emphasis also has to be placed upon the nature of communications with stakeholders and on monitoring the impacts of policy implementation.

A case study: regional communities adapting to climate change while operating in a carbon constrained economy

A short example herewith illustrates how this research agenda can be developed in the context of both global and local challenges, with the ultimate goal of enhancing sustainability of the agri-food system. The wider context in this example is global climate change, which is increasingly the backdrop against which adaptive decisions are being made at a local level, in part reflecting responses to policies explicitly designed to address climate change. Farm-based responses to changing climate can often be seen to be mixtures of the ecocentric (e.g. improving biodiversity to prevent soil erosion under increasingly dry conditions) and the technocentric (e.g. using biotechnology to design drought-resistant crop species), but they are often dependent on the nature of policy signals and how farmers interpret them. So one question this research project addresses is how to successfully translate scientific knowledge into policy in order to enable informed responses from landholders.

In addressing this last question, the basis for the research project is that there must be a good understanding of the nature of the linkages between landholders and the people and organisations that provide information to them (e.g. extension services, farm advisors such as agronomists, farmers' organisations, key individuals in various government agencies) and wider community groups (e.g. rural banks, insurance agents, local businesses, business organisations, retailers and wholesalers). These organisations provide vital support to landholders in order to produce more resilient farm businesses. Furthermore, it can be argued that policy is implemented most effectively when presented in a form that resonates closely with landholders' understandings of the particular situation by a means that either reinforces their landholders' views of their position within the community or presents them with a suitable incentive. So it is argued that it is necessary to involve landholders and natural resource management practitioners from the outset of any policy design, and then in the planning for policy delivery and monitoring. Therefore research needs to focus on the knowledge of the landholders, their likely receptivity to new policies, the information providers, support networks, the wider community context and government agencies.

On this basis the project focuses on key networks and organisations which interact with landholders in terms of advice regarding changing weather patterns, practical options for adaptation to changing weather patterns, related policy options, policy delivery, monitoring, and creation of the environment within which landholders make decisions regarding the future direction of their farming enterprise. The objectives are to understand the roles and activities of the key agencies and policy networks, and specifically their attitudes and experiences with respect to understandings of climatic change, the operation of a carbon constrained economy, environmental markets, and potential on-farm adaptations to changing weather patterns (e.g. growing more native woody perennials).

The key policy issues being addressed are:

- Climate change: to investigate current understanding within the various networks and organisations and comparisons with existing results from farm-based surveys;

- On-farm adaptations to changing weather patterns: to investigate preferred information and programme delivery modes to landholders and operational limitations on particular modes;
- Potential for operating various types of environmental/biodiversity markets: to assess the organisations' knowledge and possible roles in producing relevant information and developing/translating policy to landholders;
- A carbon-constrained economy: to assess the organisations' knowledge and possible roles in producing relevant information and developing/ translating policy to landholders.

The ongoing research has involved interviewing farmers, their advisors and key community members in the broadacre farming regions of the Eyre and Yorke Peninsulas in South Australia to understand information flows, the type of knowledge imparted and the actions implemented by farmers to modify their farming practices in the face of changing weather patterns. It has revealed that, despite farmers' scepticism regarding the reality of human-induced climate change, they nonetheless tend to treat as reliable the climate change information presented to them by trusted advisors, though the latter do not belong to either government or science-based institutions (see also Riesenberg and Gor 1989). Factors encouraging adaptive farm behaviour include: information that has been streamlined for local conditions by trusted organisations and/or individuals; information on adaptation to climate change that is local-specific rather than information representing regional- or global-scale scenarios (see also Reilly and Schimmelpfennig 2000); and combining with farmer interest groups and/or communities of practice for the purpose of sharing climate change information. Major factors discouraging the acceptance of climate science by farmers include: climate change scepticism, the complexity of climate change science and the lack of local-specific information. The overall picture that is emerging is of farmers' confidence in their ability to manage risks by autonomously adjusting to market demands and changes in weather conditions.

Conclusion

This brief example of a project on knowledge transfer to landholders illustrates that it is necessary for policies comprising significant amounts of scientific content to be translated into local conditions by a trusted third party and have relevance to real farming practices in order for farmers to respond favourably and take actions desired by the policy-makers. The research has revealed that trust is integral to the successful management and transfer of knowledge from information producers to information users (the farmers/landholders). Clearly trust is one form of social capital that serves to bridge knowledge systems, and it may be seen as forming an important building block of community sustainability.

Placing this work in the broader context of agricultural sustainability, it is apparent that there are some clear counter-currents in the Developed World to the prevailing industrial agri-food model. The 'currents' are being driven both by consumers and producers, with some (often relatively weak) government intervention in the form of policies designed to deliver on-farm environmental benefits and to foster new forms of

relationship between producers and consumers. In the area of policy designed to address climate change it is possible that there will be a stronger set of policy measures aimed at encouraging farmers in effect to farm more sustainably. Such measures may take several forms, including practices designed to reduce greenhouse gas (GHG) emissions from farming, but primarily within a context in which landholders will be rewarded for taking actions deemed to be for the public good (Potter 2009). However, the global context is not straightforward as other policy aims may conflict, notably with respect to the growing issue of food security, which may challenge attempts to create and deliver more sustainable agri-food systems (Blay-Palmer 2010). The challenge for researchers therefore is to develop better understanding of the roles of the global and local affecting producers and consumers alike against the dominant backdrop of rising demand for food and energy worldwide, changing diets, adoption of measures to combat climate change and growing desire to reduce environmental disbenefits from the agri-food system.

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Abstract

Concerns over the long–term viability and sustainability of farming systems worldwide have given rise to increased debate over how systems deemed to be ‘sustainable’ might be recognised and promoted. Various environmentally friendly alternatives to the industrial–style systems dominant throughout the Developed World have been adopted, but their expansion has generally been restricted by a combination of economic, structural and behavioural factors within the agri–food system (Blay–Palmer 2008). Hence various forms of organic production, whilst now an important niche in parts of North America and Western Europe, still represent only a small portion of total farm output and of the food and beverage market. There is an urgent need therefore for more research that develops greater understanding of the nature of sustainable agricultural production systems and of both forward and backward linkages within the overall agri–food system. This must ensure that the sustainability of all aspects of supply of inputs, on–farm activities, processing, retailing and consumption are better understood. Indeed it can be argued that this research is needed more urgently than previously, given the seemingly inexorable rises in demands for food worldwide and prospects of reduced physical capacity for food production in some regions because of the impacts of climate change.

This paper illuminates key features of the current debates regarding the nature of sustainability within the agri–food system. It discusses issues such as different approaches to the development of sustainable agricultural systems, alternatives to the industrial model of production, and changing relationships between producers and consumers. In developing a research agenda an illustrative example is taken from ongoing work on adaptation to climate change in South Australia.

Keywords: Sustainability; agri–food system; alternative farming systems; organic farming; environmental benefits

Chapter 3

Grounding Global Challenges and the Relational Politics of the Rural

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Introduction

Recent years have seen the rise of a new discourse that has been employed both to frame particular societal issues and to formulate policy and research agendas. This discourse refers to ‘global challenges’ – although terms such as ‘societal challenges’ and ‘global uncertainties’ are also used in a more-or-less interchangeable way – and first gained currency as part of the work of the Millennium Project in the late 1990s, which listed 15 ‘global challenges for humanity’. Since then, the concept of ‘global challenges’ has been borrowed, adapted and applied by a wide range of government bodies, think tanks, NGOs and research institutions as a way of framing policy and research agendas. Whilst different organisations have produced their own lists of global challenges, they commonly converge around issues concerning the management of food, water and energy resources; climate change; population growth and increased migration; security threats from terrorism, crime and disease; and tackling inequalities in wealth, literacy and health.

Furthermore, these different applications of the term ‘global challenges’ implicitly subscribe to a set of underlying principles that constitute the ‘global challenges’ discourse. Firstly, the discourse consolidates a sense of global consciousness, encouraging awareness of global issues and of the inter-connectivity between individual problems and localised concerns. Secondly, the discourse frames the major problems facing society in the twenty-first century as being global in scope, and therefore as requiring coordinated global responses. Thirdly, it seeks to align policy, scientific and commercial agendas around shared priorities, demanding collective action. Fourthly, it actively promotes technocratic solutions.

The significance of scientific and technological progress to addressing global challenges is therefore a key tenet of the discourse, and has in turn led to the enthusiastic adoption of the discourse by the scientific community, where reference to ‘global challenges’ has been increasingly used to suggest the relevance of research and pitch for funding. Indeed, the discourse of ‘global challenges’ has also been increasingly employed by funding bodies to structure and prioritise research programmes, including the public research councils in the United Kingdom.

In keeping with the principles of the discourse, research programmes addressing ‘global challenges’ such as climate change and food security are commonly constructed as interdisciplinary initiatives. Yet, in practice, the co-option of the discourse by the scientific community has frequently led research problems to be framed in a way that

prioritises technical solutions, and which are often naïve in their conceptualisation of social and political factors, and, especially in their understanding of geographical space.

In particular, I argue in this paper that scientific–technocratic framings of global challenges commonly involve a conceptualisation of rural space that is misconceived and detached from reality. As many of the most prominent global challenges have significant implications for the use and management of rural land, this error has serious implications for the delivery of proposed responses to these challenges. To redress this concern, I propose that attention needs to be paid to how global challenges and responses engage with the ‘relational politics of the rural’ – adapted from Amin’s (2004) ‘relational politics of the region’ – which is illustrated by the example of renewable energy developments in Wales, and outline ways in which rural geographers might constructively progress this agenda.

Imagining the rural in global challenges

Issues such as food security, the provision of clean and reliable water supplies, energy sustainability, responding to climate change, and protecting biodiversity all intrinsically concern the management of resources that are predominantly located in rural areas. Moreover, they touch on activities that are inextricably entwined with rural economies, societies and cultures: farming, mining, forestry, land–management, hunting and so on. As such, addressing these global challenges will have profound implications for the future use and regulation of rural space.

Yet, the discourse of global challenges tends to be pitched at an abstract level, and is rarely grounded in the specifics of actual rural localities. If mentioned or acknowledged at all, rural space tends to be conceptualised in purely functional terms: as a source of food, water or energy supplies; as undeveloped land that can accommodate new infrastructure, such as renewable power stations or low–carbon transport networks; or as a natural ecosystem that contributes to biodiversity and to climate change mitigation. It is rarely recognised as a peopled space, except insofar that the dispersed nature of the rural population might be understood as presenting challenges for the delivery of supplies and services, especially in a post–oil scenario.

The rendering of the rural in functional terms is compounded by the association of the global challenges discourse with neoliberalism. As noted above, the discourse of global challenges aligns policy, scientific and commercial agendas, and as such it holds that there is a role for industry in technological innovation and development, and that addressing global challenges will involve the commercial delivery of technological solutions for profit. Accordingly, many of the proposed technocratic responses to global challenges such as climate change, energy security and protecting biodiversity involve the further commodification of rural resources, including resources and functions that have not conventionally been assigned a monetary value; and would use the market to finance, stimulate and regulate actions. These are key features of the concept of ‘ecosystem services’, for example. Furthermore, the liberalisation of international trade, including for agricultural goods, is commonly presented as a requirement for facilitating global responses, especially to challenges such as food security. By creating new income–generating opportunities for rural resources, such proposals assume that the enrolment of rural actors in actions to address global challenges can be negotiated on a

purely economic basis, with some commentators going as far as imagining a ‘new rural–urban compact’ (Gutman 2007) based on the supply of environmental services.

The framing of ‘food security’ as a political and research agenda is similarly problematic when it comes to anticipating the responsiveness of rural populations to proposed solutions. Food security could be presented as an emblematic example of the global challenges paradigm: a problem that is global in scope and requires a global solution, involving both scientific innovation and political–economic reform, and demanding the coordinated engagement of governments, researchers and industry. Although at least in part a politically–created problem, food security has been framed by the scientific community as a global challenge demanding a scientific solution (Royal Society 2009; Godfray *et al.* 2010).

In 2009, Britain’s research councils launched a multi–disciplinary research programme on ‘Global Food Security’ led, significantly, by the Biotechnology and Biological Sciences Research Council (BBSRC). Although the stated themes of the programme included issues of relevance to social sciences as well as those relevant to bioscience (for example, economic resilience and sustainable supply networks), the content of both the programme’s website and its five–year strategic plan are heavily skewed towards biotechnology and agricultural science.

In contrast, the five–year strategic plan for the Global Food Security programme (BBSRC 2011) includes not a single mention of rural communities, the contribution of farming to rural economies, the social contribution of farming, local food systems, or the rural landscape. Yet, approaches to food security that are biotechnology– and bioscience– driven are likely to reinforce changes to agricultural systems that have already created controversy within rural areas. The food security agenda will support the reassertion of neo–productivist and super–productivist agriculture, including industrial–scale livestock and horticultural units; it will promote the use of genetically–modified (GM) varieties of crops and livestock, challenging the current restrictions on GM use in Europe; and, with transnational biotechnology corporations playing a key role in research and development, it is likely to see a further increase in the reliance on proprietary seed and other inputs in agriculture, arguably compromising the independence of farmers, especially in the global south. Significantly, each of these developments has already prompted protests in rural communities, from resistance by Indian peasant farmers to the introduction of proprietary hybrid seed, to direct action against GM crop cultivation, to current opposition by local residents to proposed ‘super–dairies’ in England and Wales.

Neglected lessons

However worthy and well–intentioned policy proposals and research programmes on food security, renewable energy and ecosystem services might be, they risk being compromised by a lack of grounding in the rural communities that are central to their delivery. Driven by scientists and economists, they are missing insights from the last 20 years of rural geography research, which through exploration of the social construction of the rural, discourses of rurality, counterurbanisation, gentrification, the cultural practices of farming, rural otherness and so on, has developed a sophisticated understanding of the ways in which people imagine, value and experience the rural, and of how this shapes their engagement with wider social, economic and political

processes. Moreover, they also fail to heed the lessons of fifty years of spatial planning policy and land use conflicts.

After the Second World War, many of the concerns now designated as ‘global challenges’, including food, water and energy security, migration, urbanisation and environmental degradation, were regarded as ‘national challenges’ for countries such as Britain and the United States. Then, as now, they were in part addressed by converging policy and scientific agendas, developing responses that were delivered through rural space conceived in functional terms. The functional representation of the rural permitted the promotion of productivist agriculture and the development of increasingly intensive and industrialised modes of farming, as well as infrastructure modernisation projects including the construction of mines, quarries, reservoirs, power stations, pipelines, pylons, motorways, airports, new towns, military camps, waste dumps and oil refineries.

However, the assumption that rural land could be appropriated and rural communities displaced in order to meet the needs of urban populations was soon challenged, and further fractures emerged with the rise of alternative discourses that represented the rural as a space of consumption, or as space of nature, and which underpinned new dynamics of counterurbanisation, the growth of the tourism economy, and the burgeoning conservation movement (Mormont 1987, 1990). Within this new ‘politics of the rural’ there have flourished a plethora of rural social movements, pressure groups, campaigns and ad hoc protests that have contested rural conflicts ranging from disputes over street-lighting to movements against global trade agreements (Woods 2003a). Included in the targets of this politics of the rural are developments and actions that are promoted as responses to global challenges: renewable energy schemes; new mining initiatives; pipelines and transmission lines; super-dairies and other forms of industrial farming; cultivation of GM crops; high-speed rail links and other ‘sustainable’ transport schemes; new reservoirs and so on.

The relational politics of the rural

To help better understand the dynamics of these rural conflicts and their implications for the resolution of global challenges, I want to draw in the concept of a ‘relational politics of place’ as proposed by Amin (2004). Amin develops the notion of a relational politics of place as part of a critique of a conventional territorial reading of place politics, in which politics are understood as the management of a closed and bounded regional space. Rather Amin (2004: 37) argues for a relational understanding of place, “that is no longer reducible to regional moorings or to a territorially confined public sphere, but is made up of influences that fold together the culturally plural and the geographically proximate and distant”, which in turn gives rise to new perspectives on politics. In particular, Amin identifies two political challenges – the *politics of propinquity* and the *politics of connectivity* – that characterise the relational politics of place.

The politics of propinquity are presented by Amin (2004: 38) as the challenges arising from the constitution of places as “sites of heterogeneity juxtapositioned within close spatial proximity”, such that “the politics of a local society made up of bit arrangements and plural cultures that never quite cohere or fit together can no longer be cast as a politics of intimacy or shared regional cultures” (*ibid.*). The politics of propinquity hence concerns the management of competing demands on the same physical space:

Different microworlds find themselves on the same proximate turf, and that the pull on turf in different directions and different interests needs to be actively managed and negotiated, because there is no other turf. In other words, it is a politics shaped by the issues thrown up by living with diversity and sharing a common territorial space.

(Amin 2004: 39)

Moreover, because there is no single definable 'local interest', a politics of propinquity is necessarily open and inclusive. And because it rules nothing out, it cannot close down the parameters of 'local politics' by excluding certain issues or positions as the realm of national or international politics, such that the scales of political discourse are collapsed:

A relational politics of propinquity rules in everything that vies for attention in a given location. As such, it is a politics that cannot be confined to the everyday local or to the intimate, so that spaces of the international or national can be treated as spaces for another kind of politics (e.g. the politics of regulations, standards, 'big' issues, state affairs).

(Amin 2004: 39)

A politics of propinquity includes tensions and conflicts arising from multiculturalism and the spatial juxtaposition of different cultural and ethnic groups, or from contrasting economic interests or competing class-based consumption patterns; but I want to argue that it can also embrace the conflicts that arise from different discursive constructions of rurality being mapped over the same physical space. This is the politics envisaged by Mormont (1987: 562) when he described a new 'rural question' concerning "the specific functions of rural space and the type of development to encourage within it", and later referred to in my term, the 'politics of the rural' (Woods 2003a).

The politics of propinquity have therefore been part of the local politics of rural areas for some decades, intensifying as rural restructuring has eaten away at any sense of a hegemonic or consensual discourse of rurality. However, the global challenges paradigm has the potential to fuel the rural politics of propinquity in two ways.

Firstly, by conceiving rural space primarily in functional terms, the global challenges paradigm leads to proposals for new infrastructural developments, changes in land use, and regulatory frameworks that fail to comprehend the pre-existing social, cultural, economic and emotional claims to meaning for the rural sites concerned, thus provoking opposition and resistance to the proposed actions. Secondly, responses to different global challenges can make competing claims on the same rural spaces. Consider, for example, the competing demands on arable land from food security and energy security: many farmers in the North American prairies have switched from grain production to growing canola for ethanol production, but the magnitude of the switch has begun to raise concerns about food security in the United States. Or consider how threats to specific habitats are connected to a discourse of biodiversity in opposition to windfarms or reservoirs; or, conversely, how deforestation for livestock farming or palm oil cultivation in tropical regions is contributing to concerns about biodiversity loss.

Alongside the politics of propinquity, Amin (2004: 38) also identifies a politics of connectivity that reflects the positioning of places as "sites of multiple geographies of

affiliation, linkage and flow". A politics of connectivity emphasises the inter-dependencies of place – that outcomes achieved in one locality will reverberate in other locations around the world. Again, the politics of connectivity have been part of local politics in rural areas for some time, and have grown in significance as globalisation has intensified the economic, social and political integration of rural places into wider networks. However, the global challenges paradigm affords particular prominence to the politics of connectivity because it explicitly links local decisions and actions to global-scale problems. Land management and spatial planning decisions made in rural localities contribute positively or negatively to global struggles over climate change, food security, water security, energy sustainability, biodiversity and so on. The politics of connectivity hence inevitably spills over the imagined boundaries of local politics, drawing in external participants and reference points, and taking local conflicts out into the national and international media, or into sites of national political debate and decision-making.

The relational politics of windfarms in Wales

The role that both the politics of propinquity and the politics of connectivity can play in grounding global challenges can be illustrated through a short case study of windfarm developments in rural Wales. Mid Wales has been a prime area for the development of wind power stations in Britain since the 1990s, reflecting a functional interpretation of the region as a sparsely populated rural space offering both available land and appropriate weather conditions. Fourteen windfarms have been constructed across the counties of Carmarthenshire, Ceredigion and Powys since 1992 – one of the highest geographical concentrations in Britain – with a further 15 windfarms proposed or in development. Onshore wind energy is a key element in the UK strategy for increasing renewable energy production, and opponents are accused of threatening both energy security – the risk that without onshore wind electricity supply in Britain could fall short of demand – and action against climate change.

Nonetheless, proposals for new windfarms in rural Wales have attracted increasing vociferous opposition, with campaigners rejecting the functional identification of the Welsh hills as appropriate sites for windfarm developments and instead asserting alternative representations of rural space that emphasises aesthetic, cultural and spiritual values and emotional attachment. The contrast between the two discursive constructions of rural space was articulated by one newspaper correspondent objecting to a proposed windfarm at Cefn Croes in the early 2000s:

To the Renewable Energy Company, this is just 'a site', a 'suitable site for a wind farm,' where they perceive neither the beauty nor the spiritual value – only money, only profit.

(Letter to the *Cambrian News*, 24/8/2000, quoted by Woods [2003b: 282])

Thus, the politics of windfarm development in rural Wales involves a politics of propinquity in which competing representations of the same space vie for attention. It also involves a politics of connectivity, in which the specific development under debate is connected to wider global issues. Supporters of windfarms expressly connect their

development with the global challenge of climate change, mobilising connections with events around the world, as the project manager for the Cefn Croes windfarm articulated in a letter to the local newspaper:

[The windfarm] will produce clean, green electricity without polluting the atmosphere or leaving a dangerous legacy of waste for our children. It is an environment-friendly project that will help Wales to become self-sufficient for its energy needs. I strongly urge people to consider recent footage of the floods in Mozambique, Southern Australia and Venezuela – all probable results of global warming – before they consider their position with regard to this project.

(Letter to the *Cambrian News*, 08/03/00, quoted in Woods [2003b: 283])

Windfarm opponents, however, have also engaged the politics of connectivity, forming pluri-local networks that connect different localised anti-windfarm campaigns, investigating the corporate activities of the windfarm developers and financiers, and following the connections of the windfarm both 'downstream' by contesting the construction of a new pylon transmission line to take electricity from the Welsh windfarms to urban markets in the English midlands, and 'upstream' by highlighting the controversial impact of mining for neodymium (a core material in a wind turbine) in rural Mongolia.

Conclusions

In this paper I have attempted to sketch out some ideas and concerns about the growing significance of the global challenges paradigm in shaping policy and research agendas, and its potential consequences for rural societies, economies and land uses. The analysis presented here is still very much a work in progress, and I would welcome comments and feedback, but my major concern is that there is a notable disjuncture between the functionalist conceptualisation of rural space that appears to be inherent in proposed technocratic solutions to key global challenges such as food security, water security, climate change, biodiversity loss and energy sustainability, and the discourses of rurality prevalent among rural residents and stakeholders. Already, projects and developments in rural areas that attempt to address these global challenges have been confronted by protests and resistance because of their incompatibility with pre-existing claims to the rural.

For serious progress to be made in addressing global challenges, technocratic strategies that involve changes to the relational constitution of rural space and society need to be grounded in the relational politics of the rural. By unwrapping and understanding the politics of propinquity and politics of connectivity that frame the contemporary local politics of rural localities, mechanisms and strategies can be developed to pre-empt reactions and engage stakeholders in attempting to build consensual responses to global challenges that are appropriately grounded and deliverable.

Rural geographers can and must have a key role to play in this process. Rural geographers' understanding of the relational constitution of rural space is the critical

missing element in many current strategies for addressing key global challenges, and is an omission that threatens to delay, if not derail, progress. Opportunities exist through new multi-disciplinary research programmes for rural geographers to become more involved in the process of developing scientific responses, and I therefore wish to finish by highlighting five specific ways in which rural geographers can make a distinctive contribution:

Firstly, we need to challenge functionalist representations of rural space and to educate scientists, economists and policy-makers about the contested discursive and relational constitution of the rural.

Secondly, we need to inform the development of research programmes aimed at addressing global challenges such as food security and climate change, to ensure that emerging solutions are grounded in the spatial context of their delivery.

Thirdly, we need to further investigate the relational politics of the rural, and in particular how it relates to key global challenges. There is in particular a need for more ethnographic research that can examine in detail the perspectives of rural actors towards global challenges such as climate change and food security and towards proposed solutions.

Fourthly, in analysing the politics of connectivity, we need research that can develop a more comprehensive picture by following the connections, including international collaborative research, and research that incorporates both rural and urban areas, and localities in both the global north and the global south.

Fifthly, if rural geographers wish not only to be involved in critique, but also to contribute towards effective strategies to address real and pressing global challenges, such as climate change, then we also need to adopt participatory methods and to play our part by helping to broker outcomes in rural communities that can facilitate actions to address global challenges whilst recognising and respecting local traditions, cultures and ways of valuing the rural.

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Abstract

Rural spaces are central to both the reproduction and the mitigation of many identified ‘global challenges’ – food and water security, competition for natural resources, responses to concerns for energy security, animal to human transmission of disease, and the impact of climate change on agriculture and on the natural environment. Yet, the conceptualisation of the ‘rural’ in current literature on these global uncertainties tends to be functional and fails to appreciate the complexities of the hybrid rural and the influence of diverse discursive constructs of rurality. As such, it is argued that political responses to global uncertainties risk failure unless they understand and engage with the new relational politics of the rural. Drawing on and developing Amin's (2004) model of the relational politics of place, the paper describes the significance of the identified processes in shaping both a ‘politics of propinquity’ in which conflicts revolve around the proximity of competing representations of and claims to rural space (including the conflicting demands of response to different ‘global challenges’, for example, food security and energy security), and a ‘politics of connectivity’ in which the constitution of rural places is entangled in wider networks. Through these entanglements ‘global challenges’ are grounded in specific places, but not localised to them – rather scalar and spatial distances are collapsed as rural and urban politics and global and local politics are blended into inter-dependent relations, contributing to the dynamic and hybrid reproduction of the emergent ‘global countryside’.

Keywords: Global challenges; relational politics; rural; food security; windfarms

Chapter 4

Forestry Management in Inhabited Conservation Units: The Tapajós National Forest as a Model of Community Governance

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Introduction

Conflict appears when national parks and forests are created in areas with the presence of a long-standing resident population. This is particularly true when the parks have the bio-centric aim of preserving nature areas and humans are considered to be intruders who have to be removed or denied productive activities. This can provoke social movements of resistance and political mobilisation demanding rights, one such case being the Tapajós National Forest treated here.

The decades-old movement of the traditional riverine population living within the Tapajós National Forest was a watershed experience in Brazil which serves as model of community governance of natural resources in ecological reserves. Over the years the residents were able to politically organise themselves, to build alliances with governmental and non-governmental organisations and to obtain the technical training required for developing a system of sustainable forest management. Without investment capital, technical and management knowledge, the local population was able to seek out ways of overcoming these limitations and developing a complex sustainable forestry system which requires knowledge of engineering and the use of specialised equipment. This was achieved by mobilising prior social capital in the form of inter-communitarian associations which attained the organisational scale necessary to set up a cooperative managed by community members.

Logging and non-logging activities are undertaken but logging is given priority because of high product value and the presence of a woodworking sector and port in the nearby city of Santarém. Santarém is also a centre of governmental and non-governmental organisations with which partnerships were formed to access funding, technical knowledge and regional and international exchange programmes. Considering their recent past as impoverished subsistence producers, considerable economic gain has been achieved for families and communities by creating jobs and income.

The central issue then is to understand how Amazonian peasants living in a Brazilian conservation unit struggled for the right to use forest resources and developed a community forestry system despite the fact that planners thought them to be incapable. Because of this prejudice, Amazonian peasants are usually marginalised in regional development and socio-economic exclusion can be even worse in forest conservation units where local populations are subject to severe restrictions to farming activities if

they are allowed to stay at all. We will look at how the traditional and very poor population of the Tapajós River located within the Tapajós National Forest mobilised to resist eviction and how they were capable of developing a sustainable forest management system.

Field research in and around the Tapajós National Forest was undertaken in 2008 and 2010. Park administrators, land office officials, community leaders and farmers within the National Forest and in the buffer zone were interviewed. Secondary information was obtained directly from the administrators and community organisations and their publications.

Community forest tenure movements around the world

Peasants of the Amazon are not alone in these issues and there is a larger global process in which local populations living in and around forests are pitted against environmentalists with preservationist mentalities who consider humans to be a menace. Preservationists usually advocate the removal of inhabitants from conservation units or to permit only subsistence activities which maintains them in poverty. Recent trends involve a process of governance balancing top-down preservation with bottom-up sustainable development, which resulted from local social movements forcing policy change.

Community-based forestry has been one of the ways of permitting economic activity undertaken by local populations living within conservation units. This form of tenure involves common property resource management with characteristics and institutional innovations defined by local people for organising and exercising their rights to use and manage forest areas in order to supply logging and non-logging products. Between 1985 and 2000 over 200 million hectares of forest land in the world were legally transferred to or rights recognised for communities, mainly in Latin America, Asia and Oceania (Larson *et al.* 2010). In Latin America this was the result of grassroots struggles by indigenous people for the recognition of ancestral land and by traditional non-indigenous populations threatened by the arrival of outside settlers and firms.

During the 1990s this political process caused change in environmental policy which began to recognise the rights of local populations to use forest resources when done in a sustainable way. In effect, changing forest tenure is a contemporary form of agrarian reform because land ownership and rights change through a process in which land is appropriated and distributed and forestry rights are formalised.

Conservation units and environmental legislation in Brazil

Most Brazilian conservation units are located in the Amazon region and involve natural forest areas (Rylands and Brandon 2005). Full preservation units, such as National Parks and Ecological Stations, do not permit economic use or resident population. Sustainable-use conservation units, such as National Forests and Indigenous Reservations, allow sustainable uses and permit prior residents to stay, particularly if they are native people and traditional peasants. Rapid expansion of new forest

conservation units has occurred over the last ten years in Brazil. Most units are located in the Amazon and are federally administered while municipal and state administered units are only significant in the South East and South of Brazil (Table 4.1).

Brazilian conservation units are regulated by federal, state and municipal environmental legislation which has evolved over time (Azevedo 2007). The Forest Code of 1934 created the first three full-preservation National Parks. The Forest Code of 1965 created new kinds of conservation of units: full-preservation Biological Reserves and National Forests with economic use. In 1990 in a context of neo-liberalism, the federal government enacted legislation permitting Private Natural Reserves. Finally, in 2000, the National System of Conservation Units (SNUC) was set up, making an important distinction between full-preservation units on one side and on the other nature reserves with multiple sustainable uses with the formal right of local populations to stay. Both kinds of federal units are administered by the *Instituto Chico Mendes* (ICMBio), which in 2005 was separated from the Brazilian environmental protection agency, *Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis* (IBAMA), within the Ministry of the Environment (MMA).

Table 4.1 Federal and State conservation units (km²)

Conservation Unit	Federal		State	
	Brazil 2007	Amazon 2011	Brazil 2007	Amazon 2011
Full Protection	370,854	355,721	87,740	103,839
<i>Parks</i>	223,673	257,168	76,977	46,988
<i>Others</i>	147,181	98,553	10,763	56,851
Sustainable Use	1,405,532	1,373,408	136,865	308,994
<i>Forests</i>	188,084	154,178	25,160	185,531
<i>Extractive Reserves</i>	119,601	136,428	28,809	15,117
<i>Indigenous Reservations</i>	1,097,413	1,082,158	0	0
<i>Others</i>	434	644	82,896	108,346
Total	1,776,386	1,729,129	224,605	412,833

Source: IBAMA (2008), MMA (2011)

Within this scheme National Forests are public domain. Private property is expropriated which is resisted by prior resident populations who can only use land in the form of concessions involving formal management systems. If concession is granted, the Forests, like all conservation units, represent a way of blocking use of natural resources and restricting farming activities. In addition, different demands from competing environmental and farming institutions lead to confusion about what is permitted and not permitted. In the Amazon, this causes conflict with traditional populations and old settlers giving rise to social movements of resistance.

The Tapajós National Forest was a pioneer of this kind of resistance movement and the commercial community forest management system set up there is unique in Brazil. This movement was established prior to the SNUC legislation and was based on community organisation of the traditional riverine peasants of the Tapajós River but also embraced old settlers located along roads.

Sustainable forestry management in the Tapajós National Forest

The Tapajós National Forest, known as the Flona Tapajós in Brazil, is one of the oldest National Forests dating from 1975. It was created within the context of the great Amazonian highway building projects of the 1970s and was first administered by the *Instituto Brasileiro de Desenvolvimento Florestal* (IBDF), later by IBAMA and finally today by ICMBio. It is located in a corridor of conservation units created in the late 1990s along the Cuiabá–Santarém Highway (BR–163), with the intention of limiting deforestation in the Central Amazon. The frontier has arrived in this part of the region with increased logging, farming and mining pressuring local peasants. National and international environmental concern over the consequent deforestation, in turn, gave rise to greater regulation of conservation units by the Ministry of the Environment. In an attempt to prevent the construction of feeder routes off the highway, which would open up forest areas for settlement, a corridor of public forests occupies a 100-km strip alongside both sides of the BR–163. This involves 27 million hectares of forest, of which 1.52 million hectares have been allocated to sustainable forestry concessions, both for communities and for private logging firms.

Flona Tapajós is located at the north of this corridor, about 50 km south of the medium-size city of Santarém. The limits of the National Forest are Belterra town to the north, the BR–163 to the east, the Tapajós River to the west and to the south the Gupari River, located near the Transamazonian Highway (BR–230). The Flona occupies an area of about 600,000 hectares embracing considerable biodiversity and is one of the best studied conservation units in the Amazon.

The National Forest has been zoned into areas according to the uses permitted. An area along the Tapajós River and another small area along the BR–163 have been set aside for the resident population (1,438 families in 2006) who can use the area for residence, small scale farming, subsistence logging and hunting and ecotourism. The logging management zone is situated along the BR–163 where sustainable forestry can be undertaken. More restrictions are made in a zone of preservation and non-logging forest management where only latex, native fruit, nuts and honey can be collected and ecotourism developed by the local population. Finally, in the zone of complete preservation only authorised research and ecotourism can be practised. A buffer zone of 10 km exists around the Flona where in theory sustainable activities should be practised.

In the logging management zones, sustainable forestry with reduced impact and with natural regeneration of forest was developed, based on decades of local experience and in accordance with criteria of The International Tropical Timber Organisation (ITTO). Local knowledge of flora, fauna and the landscape is crucial for the system and is mobilised to identify biodiversity and in operational stages. In the logging zone of 32,222 hectares, a 30-year sector rotation system was initiated in 2009.

This system involves pre-logging and logging activities which require meticulous work and detailed local knowledge. Pre-logging planning activities consist of delimiting logging sectors, undertaking forest inventory (botanical identification of tree types), projecting a road network and storage facilities, determining the direction of felling and dragging trees in order to avoid damaging the forest, choosing trees to cut according to local availability of species and protection of rare and endangered flora and fauna. Logging activities can begin after the annual logging plan is reviewed and approved by

IBAMA. Roads and storage facilities are built in the sector to be logged, trees are tested to avoid cutting hollow trunks, selective cutting is made to avoid reducing biodiversity, stumps are left to guarantee forest regeneration, vines are cut to minimise damage to other trees and cutting trees with bird and animal nests is avoided.

Tenure conflict and the struggle for rights by the resident population

Today this forestry system is being implemented by the local rural population because of a thirty-five year struggle for rights in which strengthening collective goals produced the social capital necessary for undertaking community-based forest management. There were two dimensions to their struggle, one for land and the other for the right to exclusive use of forest products.

The struggle for the right to land pitted the Flona administration, IBDF and IBAMA on one side, against the Brazilian Land Office (INCRA) and the local population, on the other. In 1975 when the Flona conservation unit was created it overlapped existing INCRA settlement areas and traditional riverine areas. At the time, the Flona administrators tried to implement the conventional path of removing settlers and riverine peasants resident in eighteen communities. The riverine population was politically better organised and was the most active in pressuring IBAMA for land tenure rights. In 1980 the riverine communities unilaterally set their land use area to 10 km inland from the river and in 1983 they paralyzed IBDF land survey work meant to remove them. In 1990 IBAMA made a forest inventory and the population mobilised again to resist eviction. The county government came to their aid and in 1992 proposed to exclude the 10 km area along the Tapajós River from the Flona but IBAMA did not accept this. In 1996 a plebiscite was approved excluding the community area but again IBAMA did not abide by the result of the plebiscite. In 2002 a Local Land Tenure Commission was created to negotiate a concession within the Flona which another plebiscite approved in 2003. Finally, in 2010, an agreement was signed conceding land use for twenty years. This was possible because in the meantime the environmental agencies changed their mentality and went from being an adversary to being an ally in sustainable development projects.

The other dimension of the local people's struggle involved the right to use forest resources, which pitted IBAMA, researchers and logging firms against the local population. In the 1980s, official forestry experiments were undertaken in the form of joint ventures between IBAMA and private logging firms which used the local population as workers. The Flona has also been the object of a good deal of scientific bio-physical research which also used the local population as workers. In both kinds of work the local people gained experience in forestry activities. However, as the forestry area overlapped the area of the riverine communities, it was another source of conflict which led to demands for excluding outside private firms in favour of community forestry management for local benefit.

The social movements and political organisation of the local population which arose in their struggle for land and resource rights involved a long process of community organisation, culminating in the Flona-wide cooperative set up to undertake commercial logging. In the 1970s community organisation began in specific localities

along the Tapajós River in order to control fishing and farming activities between members, to demand public education and health services, to channel land tenure resistance and mobilisation and to form alliances with INCRA and municipal government against the federal forestry and environmental agencies. Between 1997 and 2005 legal recognition of the collective organisations was achieved which added strength to their struggle for land and forestry rights. These associations are formal entities of collective representation for negotiation with public institutions which enable participation in productive projects located in communities and permit wider alliances with local, national and international governmental and non-governmental organisations. At the same time, three inter-community associations (AITA, ASMIPRUT, APRUSANTA) were set up to represent different groups of communities. The three have come together in order to undertake collective logging and other forestry projects as well as to provide technical training via projects with NGOs and IBAMA.

Based on this wider organisation, the COOMFLONA (*Cooperativa Mista FLONA Tapajós Verde*) cooperative was set up in 2005 as a requisite for gaining the exclusive right to extract and sell lumber and other non-timber forest products from the Flona via a community forest management system and a cooperative marketing structure. The administrative structure consists of an elected president, three directors, a secretary, a treasurer and common members, all of whom must be members of the inter-community associations and membership is limited to two individuals of the same family. A nominal entrance fee of R\$100 (US\$1=R\$1.80) is paid divided in two annual instalments. The objectives of the cooperative are to operate community commercial forestry in order to create work and generate income in a part of the Amazon characterised by subsistence production and high underemployment. Logging is the main activity of the coop because it is the most highly valued regional product. Non-logging products are undertaken by community associations with the help of the cooperative and the cooperative markets individual and association products. The cooperative has since obtained green forestry certification which allows it to sell to eco-markets. It also provides the means for local and distant technical and administrative training in logging and non-logging production, management and accounting and cooperative administration and legislation, so building advanced human capital.

The community commercial logging operation has a work force of eight administrative personnel (with five outsiders contracted), 55 field workers during the cutting period of six months per year and a smaller group works the rest of the year doing pre-logging activities. Payment varies from R\$4,200 to R\$10,200 per year plus 20 per cent productivity payments for field workers. Field workers must be from different communities, only one worker per family is permitted and they are selected by the local associations.

In 2010 the annual production area was 700 hectares and in 2011 this expanded to 1,000 hectares, so that another fifteen loggers were hired. With a view to creating more work and income, the cooperative has plans to build a sawmill in order to aggregate greater value than that earned from selling brute logs and this will create jobs for another 50 workers, so that Flona families with members employed by the cooperative will pass from 5 per cent to 9 per cent. From net proceeds, income and benefits are distributed in the following fashion: 45 per cent goes to investment and operating capital, 20 per cent for worker productivity, 15 per cent for a contingency fund, 15 per cent for community buildings and activities and 5 per cent for community health care.

Non-logging activities also exist in community forest management and are developed by the associations and individuals in the community area of the Flona. Nuts, natural oils, tree seeds and latex are collected and wood handicrafts, furniture making and ecotourism are being undertaken in different communities of the Flona. These activities are based on local knowledge and skills but are relatively small in scale and do not generate much income. Due to their environmental and cultural appeal these activities are highly encouraged by NGOs but suffer from a number of limitations so large in scale that they are not given priority by the cooperative which has a better sense of what is commercially viable. The problems are the lack of technical knowledge and research for improving product quality, lack of strategies for presenting and selling product to aggregate value, the lack of buyers and a marketing structure, bio-security laws against stealing local knowledge and the small consumer market for this kind of product.

The question then is: if these activities are so poorly developed and generate so little income, are the activities relevant and do they deserve further research and investment in order to develop them beyond the rudimentary craft scale? Future potential for the products is considerable because the activities could generate work and income for the majority of local people who are not loggers, can be undertaken in the communities where people live (and not on the other side of the Flona where logging takes place) and have great potential for developing high-value products, such as oils and plants for biotechnological, medical and chemical products for international demand.

Conclusion

The Tapajós National Forest is an example of how the traditional population of the Amazon is capable of being pro-active and of engaging in highly commercial activities so that it can be included in development schemes in the region, contrary to the negative view of the incapacity of Amazonian peasants. Community organisation and later associations and the cooperative were of fundamental importance for building collective goals and the political unity necessary for countering other economic interest groups. Collective organisation facilitated external connectivity to national and international partners and inclusion in the highly-valued timber sector within the expanding world eco-economy. This experience shows that it is possible to articulate environmental, economic and social interests in a sustainable way, balancing local and external interests, but it was only possible with the effective participation of local actors in the governance process.

Elsewhere Amazonian peasants located along roads are rarely politically united and are subordinated to private-sector timber firms with no interest in legal sustainable logging methods. Being subordinated to predatory capitalism, instead of conserving natural resources, local people become agents of deforestation and depletion of biodiversity in the region. Therefore the main lesson from the pioneer experience of the Tapajós National Forest is that of active local participation in governance. The interests of local people prevailed and they are the ones most interested in environmental sustainability over the long run.

Acknowledgements

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Abstract

Conflict appears when national parks and forests are created in areas with the presence of a long-standing resident population. This is particularly true when the parks have the aim of preserving nature areas and humans are considered to be intruders who have to be removed or denied productive activities. This can provoke social movements of resistance and political mobilisation demanding rights, one such case being the Tapajós National Forest which is treated here. Field research in this area of the Brazilian Amazon was undertaken in 2008 and 2010.

The 40-year movement of the traditional riverine population living within the Tapajós National Forest was a watershed experience in Brazil which serves as model of community governance of natural resources in ecological reserves. Over the years the residents were able to organise and capacitate themselves in order to develop a system of sustainable forest management. Without investment capital, technical and management knowledge, the local population was able to seek out ways of overcoming these limitations and developing a complex sustainable forestry system which requires knowledge of engineering and the use of specialised equipment. This was achieved by mobilising prior social capital in the form of

inter-communitarian associations which set up a cooperative managed by community members.

Logging and non-logging activities are undertaken but logging is given priority because of high product value and the presence of a woodworking sector and port in the nearby city of Santarém. Santarém is also a centre of governmental and non-governmental organisations with which partnerships were formed to access funding, technical knowledge and regional and international exchange programmes. Considering their recent past as impoverished subsistence producers, considerable economic gain has been achieved for individuals and communities by creating jobs and income.

Keywords: Tapajós National Forest; Amazon; social movement

Chapter 5

Entre rupture agricole et bifurcation territoriale, quels modèles de développement ? Incertitudes autour de l'arrachage des vignes en Languedoc–Roussillon (France)

Between Abandoning Agriculture and New Territorial Trajectories, Which Development Models Can Be Taken? Uncertainties Pertaining to the Uprooting of Vines in Languedoc–Roussillon (France)

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Introduction

S'intéresser aux espaces agricoles en périurbain permet de s'interroger sur la nature et le contenu du projet de développement urbain et sur la façon dont ce projet intègre les espaces agricoles. Quels statuts il leur donne ? Cette question est d'autant plus importante que ces espaces se caractérisent par une forte incertitude, une instabilité et sont soumis à de fortes pressions. Ces espaces se trouvent dans une marge, une frontière qui n'est pas une limite mais un espace en train de se structurer autour de dynamiques et de forces contradictoires et divergentes. A priori, projets agricoles et projet urbain seraient inconciliables et pourtant ... différents projets sont en cours, à l'essai. Les espaces agricoles de cette marge sont indéniablement des lieux d'expérimentation. Cette expérimentation est à la fois hésitante, à petite échelle, modeste, ponctuelle. Ces espaces agricoles sont par ailleurs omniprésents dans le discours des acteurs politiques, ce qui donne l'impression que la ville ne peut plus se faire sans ces espaces. Au nom du développement durable, de la biodiversité, de la ville durable, de l'alimentation des populations urbaines, les discours et les postures politiques sur les espaces agricoles périurbains ont considérablement évolué. Leur concrétisation s'expérimente lentement, par tâtonnements successifs et multiplication des engagements publics. L'exemple de l'agglomération de Montpellier (sud de la France) est tout à fait exemplaire de ces dynamiques.

Le contexte: un chamboulement démographique et agricole

Le Languedoc–Roussillon, à l'image des régions du sud de la France, connaît depuis les années 1960 un chamboulement démographique et agricole (Courtot, Perrin 2005). La

population régionale est passée de 555 000 habitants en 1962 à 2 611 000 habitants en 2009 (+ 67 pour cent). Les prévisions de l'INSEE (2009) à l'horizon 2040 laissent penser que la population régionale progresserait de + 0,8 pour cent par an et s'élèverait alors à 3 291 000 habitants, soit 730,000 languedociens de plus qu'en 2007 (fourchette entre 3,1 et 3,5 millions). Le nombre d'exploitations agricoles s'est effondré depuis 1970, passant de 106 015 unités en 1970 à 34 160 en 2010 (– 68 pour cent). Ce bouleversement associe un recul et un changement d'affectation des terres agricoles. Les mutations paysagères sont évidentes. Mais la part d'incertitude demeure grande car ni l'agriculture, ni les autres usages ne sont stabilisés. Les données du dernier recensement agricole (Agreste données 2011a) montrent qu'en Languedoc–Roussillon, la surface agricole a reculé de 10 pour cent et le nombre d'exploitations de 3 pour cent depuis 2000.

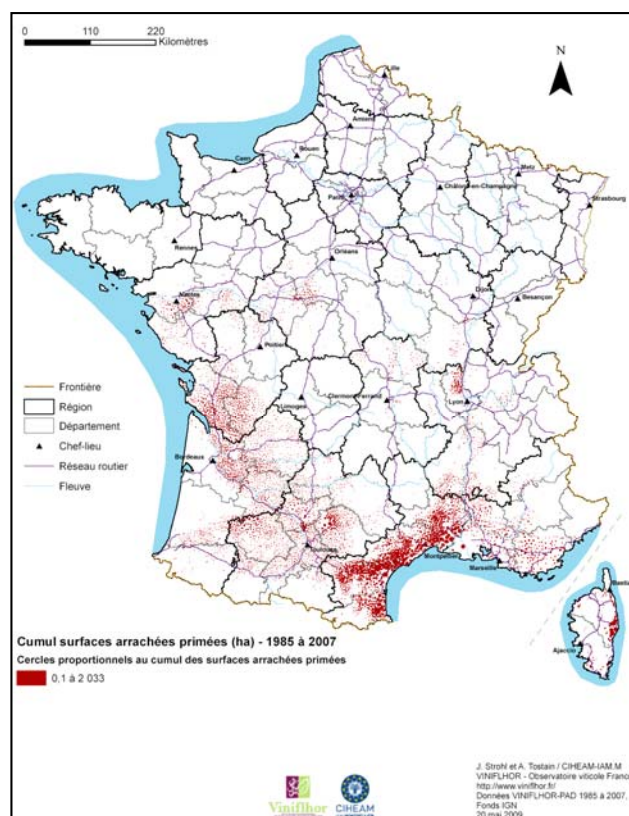


Figure 5.1 Localisation des surfaces arrachées primées (ha) de 1985 à 2007

La région Languedoc–Roussillon a longtemps fait figure d'une grande région viticole dans le monde. L'orientation de ce vignoble a privilégié une production de masse avant de s'orienter récemment vers une production plus qualitative. Mais en même temps, ce vignoble n'a cessé de traverser des crises majeures, économiques, de surproduction, sanitaires, climatiques, depuis le XIX^e siècle. Depuis ces dernières années, ce vignoble se trouve dans une situation très difficile qui a donné lieu à des incitations financières

d'arrachage définitif. Ainsi, les réalités de l'agriculture ont complètement changé. La réalité régionale de la viticulture est en apparence contradictoire (Agreste données 2011b). En effet, les chiffres donnent l'image d'une région viticole. En 2010, sur 31,000 exploitations en Languedoc-Roussillon, 19 800 cultivaient de la vigne dont 18 200 pour qui la vigne était la culture principale. Le vignoble languedocien demeure le premier vignoble en France avec 236 500 (ha) soit 30 pour cent du total national. Mais 60 000 ha ont été arrachés en Languedoc (forte concentration par rapport aux autres vignobles en France depuis 2000, ce qui est le témoignage d'une crise majeure qui a eu lieu entre 2004 et 2009! (Figure 5.1).

Dans la région Languedoc-Roussillon, le nombre d'exploitations agricoles a chuté de 55 pour cent entre 1988 et 2010, passant de 68 819 exploitations à 30 710. Dans le département de l'Hérault, la disparition a été de 58 pour cent, passant de 23 763 exploitations en 1988 à 9 929 en 2010. Cette évolution a débouché sur une concentration des terres agricoles puisque dans le même temps la SAU n'a diminué que de 13 pour cent dans la région et dans le département.

Depuis 1970, les évolutions sont encore plus contrastées. 47 pour cent du vignoble du département de l'Hérault a disparu alors que la SAU n'a diminué que de 28 pour cent (Agreste données 2011c). La vigne a donc été remplacée pour partie par d'autres cultures, notamment temporaires, cf. les terres labourables. Cette évolution marque très fortement les paysages.

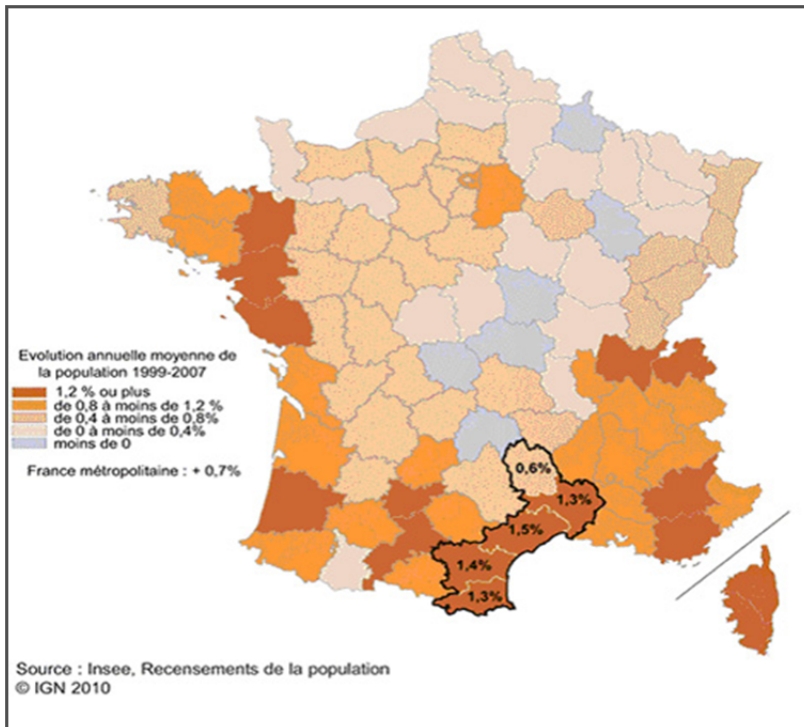


Figure 5.2 L'Hérault, le Gard, l'Aude et les Pyrénées-Orientales : rythmes de la croissance démographique entre 1999 et 2007

2^{ème} dynamique: le Languedoc–Roussillon et le département de l’Hérault se caractérisent, sur la période récente depuis les années 1960, par une très forte croissance démographique. Celle-ci a complètement bouleversé le paysage régional. Les départements littoraux du Languedoc–Roussillon connaissent les plus fortes croissances démographiques depuis plusieurs décennies, de l’ordre de 1,3 pour cent à 1,5 pour cent par an (Figure 5.2). Celles-ci ont renforcé l’étalement urbain avec une diffusion de l’habitat individuel dans les communes rurales (Figure 5.3). Cet étalement urbain est aujourd’hui chargé de tous les maux et serait à combattre (Mercier, Sénécal et André 1994).

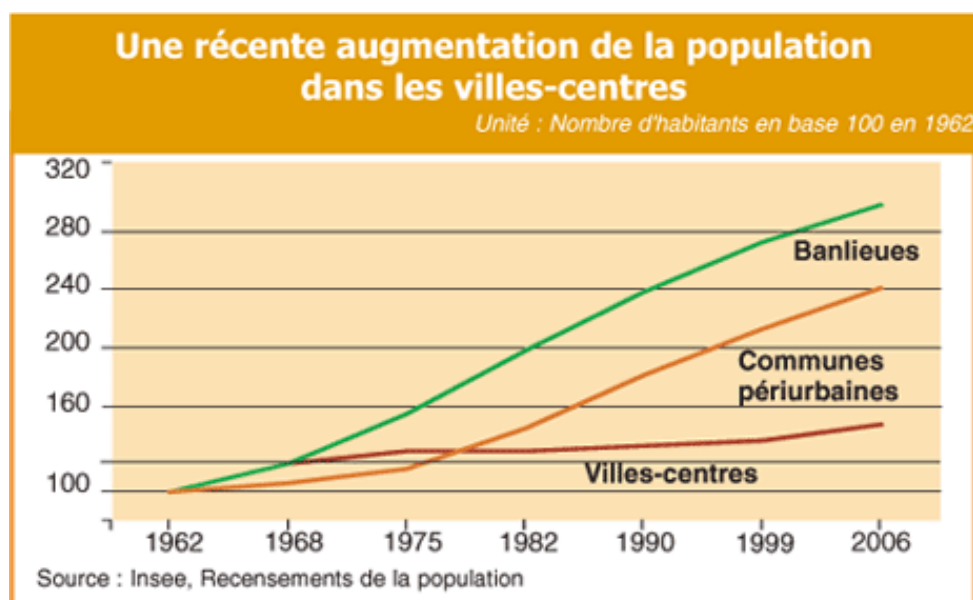


Figure 5.3 Déplacements de la population vers les périphéries urbaines

Les modes d’habiter se sont transformés. La maison individuelle est devenue le modèle dominant du logement. Elle représentait 41 pour cent des logements construits entre 1949 et 1974 et 62 pour cent au début des années 2000. Ces constructions ont consommé 400 000 ha de 1992 à 2004 (Bisault 2009). L’occupation urbaine dans la plaine languedocienne a progressé de 60 pour cent entre 1968 et 1990. On observe un continuum urbain en arrière du littoral méditerranéen participant à la structuration d’une métropole (Figure 5.4) (Volle 2002). Ces deux tendances cumulées fragilisent les espaces agricoles qui se rétractent progressivement face à l’étalement urbain.

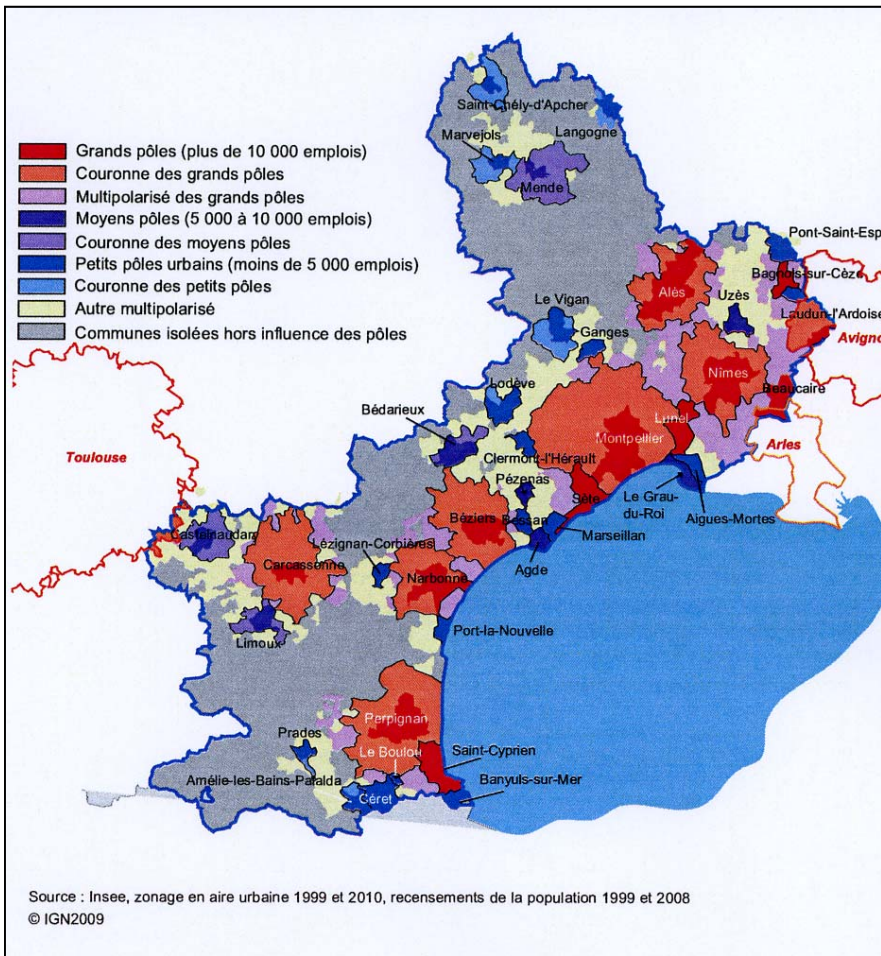


Figure 5.4 Les grandes aires urbaines du Languedoc-Roussillon en 2010

Problématique

Les deux phénomènes parallèles, croissance démographique et étalement urbain d'une part, recul des activités agricoles d'autre part, ont pris de l'ampleur dans la période la plus récente. L'artificialisation des terres agricoles (Pointereau, Coulon 2009; Antoni 2011) s'est amplifiée et la libération de terres par l'agriculture s'est accélérée. Cette double dynamique ouvre des possibilités pour le projet urbain¹ mais en même temps impose l'intégration des enjeux agricoles dans le projet urbain. Le rapport des espaces agricoles à la ville est donc de plus en plus complexe.

¹ « Le projet urbain est une procédure stratégique, pragmatique et contextuelle de fabrication intentionnelle de l'urbain qui tend à se substituer à la planification standard – téléologique, théorique et universelle » (Lévy et Lussault 2003).

Le projet urbain questionne et imagine la place de l'agriculture dans son territoire. Il s'agit d'un phénomène ancien renouvelé par l'étalement urbain qui intègre et se fait au détriment des espaces agricoles et naturels. La ville change d'échelle (Volle 2010) et la problématique du devenir des espaces agricoles n'est plus seulement agricole. L'espace agricole est de plus en plus multifonctionnel. Il est investi pour répondre à de nouveaux besoins, de nouvelles pratiques. J.P. Volle (2010) considère que ces espaces passent du statut « d'impensé urbain » à celui « d'espace partagé ». Mais comment passer de l'un à l'autre concrètement ? Voit-on émerger des projets agricoles, des projets urbains qui intègrent l'agricole, qui l'instrumentalisent ou le respectent ? De ce fait, le projet, l'action d'aménagement et de développement peuvent être très variés.

L'espace agricole est questionné par la rencontre de plusieurs projets. On assiste à la multiplication des outils juridiques et normatifs en matière d'urbanisme (règles d'occupation des sols) et de biodiversité (préservation, classement). Les projets individuels des agriculteurs périurbains sont de plus en plus incertains. Les usages récréatifs dans l'espace rural se multiplient.

Il y a bien rencontre, imbrication entre différents projets. Se révèlent-ils compatibles ou pas ? Comment peuvent-ils s'imbriquer ? Peut-il y avoir convergence d'intérêts ou n'y a-t-il que des oppositions, des conflits ? Comment les politiques urbaines intègrent l'agriculture, sous quelles formes ? Normalisent-elles l'agriculture en soutenant certains modèles, certaines formes d'exploitations et d'activités ?

Un cadre théorique pour appréhender cette nouvelle réalité

Pour conduire et illustrer ce questionnement, je vais oser la transposition des analyses des terrains vagues intra-urbains aux terrains agricoles abandonnés, considérant qu'ils ont toutes les caractéristiques des terrains vagues intra-urbains.

Ils correspondent à un espace paradoxal soumis à des flux et sont en partie indéterminés, vides (Sola-Morales Rubio, Campbell, Lévesque 1995). Mais ils se définissent aussi par des limites, une réalité spatiale et paysagère particulière et ils peuvent connaître différentes stratégies d'appropriation. Ils représenteraient une sorte de frontière à conquérir, à penser. Mais la réalité de cette frontière reste à définir. S'agit-il d'un lieu de reproduction des acquis de l'aménagement et du développement ou seraient-ils un lieu de créativité, d'innovation ?

Le terrain vague témoigne de crises, de phases de déclin, d'un abandon. Il brouille le projet urbain et le projet agricole parce qu'il correspond à une discontinuité géographique et sociale (Attali, Olalquiaga, Peran 2009). Est-il une opportunité pour développer de nouvelles formes d'activités agricoles ? Peut-il contribuer à la volonté politique de renaturer la ville (Declève 2008) ?

Ils sont des espaces convoités tout en étant incertains dans la mesure où ces terrains vagues n'ont pas actuellement une signification claire et reconnue. Ils ne sont que temporaires, évolutifs, fluctuants et ils apparaissent disponibles, vacants, à risque, potentiels (Lévesque 1999). Ils peuvent donner lieu à des projets individuels voire être intégrés dans un projet collectif. Sont-ils une opportunité pour imaginer de nouvelles formes et fonctions de la frontière urbaine ? Contribueraient-ils au renouvellement urbain à partir des frontières de la ville ?

Ils apparaissent comme une interface, une marge, une frontière. Du point de vue agricole, l'abandon est plus ou moins ancien, plus ou moins visible. Il existe ou pas de projets de remise en culture de ces espaces. Dans le même temps, le projet urbain cherche à maîtriser et organiser son développement spatial, à gérer des risques et à intégrer la nature. De fait, le changement d'échelle de la ville intègre ces espaces pour lesquels le projet est loin d'être stabilisé voire même n'existe pas encore.

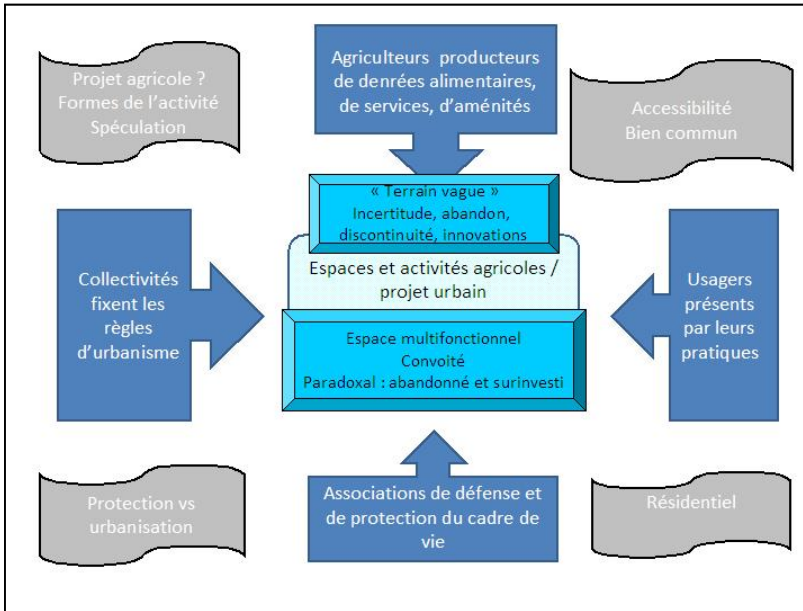


Figure 5.5 La diversité des acteurs et la nature des enjeux des espaces ruraux

Les acteurs concernés et qui vont potentiellement intervenir sont de plus en plus nombreux et variés, privilégiant chacun une lecture et des usages particuliers de ces espaces. Ils ont chacun un rapport particulier à l'incertitude, l'abandon et la discontinuité caractéristiques de ces terrains vagues agricoles (Figure 5.5).

Les résultats à partir du terrain d'étude de la communauté d'agglomération de Montpellier

Les données de terrain ont été validées via le travail d'enquête conduit par Emmanuel Mourgues (2011), étudiant en master GERADL à l'université Montpellier 3. La communauté d'agglomération de Montpellier regroupe 31 communes pour une superficie de 43 850 ha. La répartition est la suivante: 24 pour cent sont des espaces urbains, 37 pour cent sont des espaces agricoles et 39 pour cent sont des espaces naturels. Près de 15 000 ha ont été utilisés depuis 1968 pour accueillir les nouveaux habitants (usages résidentiels et usages liés). Ainsi 800 m² ont été nécessaires à l'accueil de chaque nouvel habitant. Un des objectifs du projet urbain est d'être plus économe (CAM 2007):

Les consommations d'espace demeurent néanmoins trop importantes à un double égard: le foncier de plus en plus rare et de plus en plus cher, ce qui compromet la solvabilité de nombreuses familles en recherche de logement et le bon équilibre financier de programmation d'activités économiques; les espaces agricoles et naturels continuent d'être urbanisés, ce qui met en danger la qualité du rapport entre la ville et la nature. (*ibid.* : 49)

Le projet politique inscrit dans le SCOT de l'agglomération de Montpellier révèle une prise de conscience des intérêts multiples des espaces agricoles et naturels. Ces derniers ne seraient plus seulement des réserves foncières pour l'urbanisation. Ils auraient à remplir d'autres missions. Comment la communauté d'agglomération de Montpellier considère et intègre les espaces agricoles présents sur son territoire ? Entre ce projet et sa mise en œuvre, il y a cependant un fossé dont le comblement suppose un déplacement complet de stratégies et de moyens. L'exemple de Montpellier est intéressant car il est caractéristique des dynamiques métropolitaines, de ces nouvelles tensions et de ces nouveaux impératifs.

L'agglomération de Montpellier considère que l'agriculture périurbaine est en prise à des enjeux multiples et importants. Il s'agit de maîtriser le foncier, préserver l'agriculture locale, répondre à une forte demande de la population locale, créer de l'emploi, développer les liens entre agriculteurs et consommateurs, utiliser l'agriculture comme un moyen de protection vis-à-vis des risques naturels (incendies de forêts, inondations). Il y a une certaine unanimité sur l'identification des enjeux, une présentation claire de ceux-ci qui globalement ne sont pas spécifiques à Montpellier. Les personnes interviewées souhaitent contribuer à développer une agriculture capable de répondre aux attentes et besoins des urbains, en promouvant l'agriculture biologique, en développant des circuits courts et en favorisant le maraîchage. Ces différents objectifs sont regroupés dans l'idée de porter un projet de ceinture verte autour de l'agglomération. L'idée fait consensus mais sa mise en œuvre en est encore à ses balbutiements.

L'ensemble des personnes interrogées considère que la structure politique (CAM²) est une bonne échelle pour porter ce genre de réflexion et de projet. Mais l'analyse des personnes enquêtées est contradictoire. Cette échelle reste à structurer, à renforcer et à doter de moyens matériels et financiers concrets. Les enquêtés disent aussi qu'il s'agit d'une échelle territoriale pertinente, qui dispose de compétences et de moyens importants! La conclusion est qu'il reste à cette échelle politique à faire ses preuves et à montrer sa capacité à intégrer les espaces et les activités agricoles dans son projet tout en ne les instrumentalisant pas.

La CAM porte actuellement des projets ponctuels soit en achetant des terres, soit en soutenant des activités agricoles pour répondre à des enjeux environnementaux et naturels. L'argument de la biodiversité est particulièrement fort, cf. exemple de la ville de Montpellier:

La biodiversité est reconnue comme l'enjeu fondamental dans le développement des villes du XXI^e siècle (...) Alors que la ville du futur interroge les outils et les méthodes de croissance des agglomérations actuelles, une approche paysagère et écologique doit équilibrer les

² Communauté d'agglomération de Montpellier: organisation intercommunale.

rapports de force à l'œuvre. Il s'agit de rechercher collectivement, au travers d'un diagnostic précis, puis de tendances d'évolution, les pistes d'une relation synergique pour l'environnement réciproque de la ville et de ses écosystèmes.

(Ville de Montpellier 2010)

Y a-t-il place pour les activités agricoles dans cet objectif? Comment associer agriculture et enjeux environnementaux et naturalistes? Est-ce que l'agriculture est en mesure d'apporter une contribution positive et de contribuer au maintien voire au renouvellement des aménités environnementales? Quels sont et peuvent être la place et le rôle de la collectivité territoriale dans ce projet?

L'illustration se fera au travers de deux exemples d'intervention de la Communauté d'agglomération, suffisamment différents pour mettre en évidence la complexité de la réalité agricole soumise à de multiples pressions dans ces espaces périurbains.

Sur le site de la Route de la Mer, l'activité agricole est pratiquée par cinq domaines, deux spécialisés en viticulture, deux en maraîchage et un en élevage. Le parcellaire agricole est très morcelé et une multitude de propriétaires se le partage. Cet espace est soumis à une intense spéculation foncière qui fragilise l'agriculture et se traduit par la présence de nombreuses friches d'attente. Ce recul de l'agriculture est dû en partie à l'implantation de zones commerciales autour de l'espace agricole. Malgré cela, la Route de la Mer est identifiée par le SCOT³ et les documents de planification comme un espace agricole. Cet espace est soumis au risque d'inondation en raison d'un réseau hydrographique complexe, de la présence de nombreuses zones humides et inondables. Il est également reconnu pour la richesse de sa biodiversité qui est révélée dans différents inventaires et classements de protection et de gestion (ZNIEFF, ZICO, RAMSAR, Natura 2000⁴). Cet espace agricole est sur le déclin, soumis à de très fortes pressions. Le projet politique actuel reconnaît l'intérêt de la pérennité de l'agriculture pour assurer l'entretien et la gestion des espaces soumis à des risques naturels.

Le domaine de Viviers a été acheté par la communauté d'agglomération. L'activité agricole a été abandonnée malgré des potentialités agronomiques riches et diversifiées. La remise en exploitation supposerait une réhabilitation préalable du domaine. En effet, cet espace est aujourd'hui essentiellement composé de bois et de garrigues et est devenu un espace récréatif pour les populations des communes urbaines voisines (Figure 5.6). Le domaine de Viviers est identifié par les documents d'urbanisme (SCOT, à l'échelle de l'agglomération) comme un espace agricole et naturel et par les documents de planification comme un espace naturel à préserver. D'ailleurs, il comprend des espaces protégés (surfaces boisées classées) et des sites archéologiques. Il est également soumis au risque d'incendie de forêt. L'acquisition foncière n'a pas pour l'instant débouché sur un projet d'utilisation et de valorisation. De ce fait, il n'y a pas de vision claire sur la place et le rôle que pourrait y jouer l'agriculture.

³ Schéma de cohérence territoriale, document d'orientation de la croissance urbaine pour les décennies à venir.

⁴ Différents types de classement environnemental.

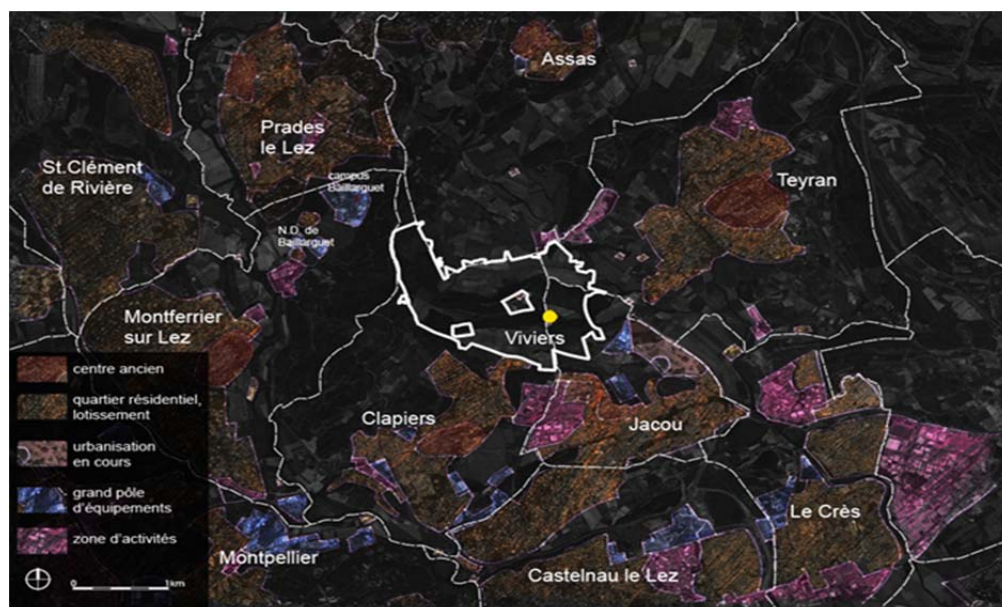


Figure 5.6 Localisation du domaine de Viviers, inséré dans l'urbain

Discussion

Porter un projet sur des espaces agricoles et naturels identifiés et reconnus par les acteurs publics: un défi, une dose d'innovation nécessaire!

La construction de ces deux projets demeure très classique même si elle révèle des avancées intéressantes dans les modalités de fonctionnement. L'agriculture y occupe une place ambiguë. Les acteurs en parlent, cherchent à mieux la connaître mais rencontrent des difficultés pour envisager ce qu'elle pourrait être dans ces espaces périurbains convoités pour d'autres usages. Les acteurs politiques ne savent pas comment rendre l'agriculture incontournable et imaginer la pérennité et la légitimité de sa présence au-delà de l'intérêt immédiat de la réserve foncière ? Sur le site de la Route de la Mer, les acteurs (communes de Lattes et Pérols, communauté d'agglomération de Montpellier, chambre d'Agriculture de l'Hérault) considèrent qu'ils ont raté une opportunité en ne pouvant pas valoriser les espaces agricoles et naturels dans le projet écocité⁵. Pour sortir de cette impasse, ils souhaitent mettre en place une intervention juridique afin de protéger le foncier et ensuite impulser un projet économique agricole privilégiant la multifonctionnalité.

⁵ « La démarche EcoCité vise à identifier les grandes agglomérations qui initieront, en partenariat avec l'ensemble des acteurs locaux, une démarche résolument novatrice en matière de durabilité urbaine. En accompagnant les projets les plus aptes à constituer des emblèmes de la Ville durable, l'État souhaite ainsi accélérer la transformation globale des grandes agglomérations pour une meilleure prise en compte des problématiques et des pratiques de la durabilité urbaine » (portail du Gouvernement Français).

L'avenir du domaine de Viviers est lui aussi incertain puisque sont à l'étude deux scénarios. L'un porte sur la construction d'un projet global et l'autre privilégie un diagnostic territorial et un projet de développement agricole. L'ambition est ici de construire un agri-parc bio comprenant une écolothèque, une « couveuse agricole⁶ », des îlots agricoles et un hameau agricole. Les scénarios agricoles sont encore flous. On a le sentiment que l'agriculture serait mise au service d'un projet plus vaste et plus englobant.

La recherche de combinaisons originales voire innovantes entre agriculture et territoire demeure pour l'instant un vœu pieu qu'aucun des acteurs n'est en mesure de concrétiser mais que tous appellent de leurs vœux. Ce type de projets impose aux acteurs engagés (responsables politiques urbains, responsables professionnels agricoles) un changement de postures. Ils ne peuvent plus se satisfaire des modèles antérieurs tant urbains qu'agricoles.

Comment inscrire des projets dans ces espaces agricoles abandonnés ou en cours d'abandon?

Ces projets concernent une multitude d'acteurs agricoles qui portent des projets individuels mais qui n'arrivent pas à faire émerger un projet collectif. Deux conceptions de l'agriculture s'affrontent, entre une vision héritée du modèle productiviste et une vision alternative (liens directs entre la production de denrées agricoles et alimentaires et des marchés de proximité). Un rapport de force prend naissance entre ces deux groupes, rendu plus complexe par la participation d'acteurs non agricoles. En effet, ces projets agricoles échappent de plus en plus à la profession agricole. Les autres acteurs ne savent pas non plus comment faire avec ces espaces à partir du moment où il s'agit de faire autre chose que de la construction immobilière.

Les débats portent aussi sur l'orientation à privilégier entre l'agriculture conventionnelle versus l'agriculture biologique. Ces projets ne font pas nécessairement l'unanimité auprès d'agriculteurs qui sont dans une stratégie de spéculation foncière par rapport à l'urbanisation. Quels choix techniques, économiques agricoles seraient à privilégier dans une perspective agricole et dans une perspective urbaine ?

On observe un attentisme général dans la gestion des problématiques de l'agriculture périurbaine : « L'intensité de la rivalité entre agriculture et urbanisation apparaît bien dans la comparaison concernant le prix du sol (2005) :

- À usage agricole: 1,3 € m² (0,5 € m² pour garrigues et bois)
- À usages urbains: 28 € m² pour les terrains à bâtir soit 22 fois plus »
(SCOT de Montpellier).

Tout en ne sachant pas comment faire, les acteurs politiques souhaitent stopper, contenir, maîtriser l'étalement urbain. On est certes dans le registre du politiquement correct mais ceci devrait avoir des incidences sur les évolutions à venir de l'agriculture. La question sous-jacente étant celle de la naturalisation de la ville (Declève 2008) liée à l'étalement urbain et au paradigme du développement durable. « La nature en ville ne pourrait-elle pas être agricole ? » (Niwa 2009).

⁶ Pépinière d'entreprises.

La question posée par Nelly Niwa dans les contextes suisse et japonais paraît relativement universelle et a du sens dans le contexte languedocien. Cette question semble être acceptée par la majorité des acteurs aujourd'hui mais ils semblent encore largement démunis pour s'en emparer efficacement. Les outils de planification sont insuffisants bien qu'ils constituent déjà une avancée certaine. Les réponses qui seront apportées feront essentiellement appel à leur imagination, à leur volonté de transgresser les pratiques d'aménagement et de développement.

Conclusion

Les exemples languedocien et montpelliérain se révèlent particulièrement pertinents en raison de l'ampleur des mutations actuelles, qu'elles soient démographiques, immobilières ou agricoles. Les résultats obtenus montrent que la période actuelle est particulièrement incertaine et expérimentale. En effet, le flou qui entoure les espaces agricoles périurbains libère les décideurs qui n'hésitent pas à lancer différentes expérimentations. Ces dernières s'imposent aussi à ces décideurs car l'intégration de la nature dans la ville est aussi une injonction de la société et du discours ambiant. Les décideurs ont à la fois une marge de liberté mais sont aussi contraints.

Cette communication résulte des recherches que nous menons à Montpellier qui sont à la fois des recherches fondamentales et des collaborations avec les collectivités locales. En effet, elles sont très demandeuses d'un accompagnement dans la mesure où elles ont pleinement conscience qu'il s'agit pour elles d'innover. Elles ont à faire face à un contexte spatial et social renouvelé, dans lequel les anciennes recettes sont inefficaces.

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Résumé

L'arrachage massif des vignes en Languedoc (sud de la France) accentue l'incertitude du devenir des terres agricoles dans une région soumise à une très forte pression démographique et immobilière. Ces terres sont susceptibles de changer d'affectation et d'être intégrées dans des projets urbains. Ces évolutions questionnent l'ensemble des acteurs et des décideurs politiques sur le sens de leurs projets de développement. Quels sens

veulent-ils donner à l'agriculture ? Ces espaces agricoles demeurent-ils des réserves pour l'urbanisation future ou bien bénéficient-ils d'une reconnaissance et d'une nouvelle légitimité ? Ces questions sont renforcées aujourd'hui dans un contexte où la relation entre ville et nature est réintégrée dans les discours, les décisions et les actions. Pour autant, la place de l'agriculture n'est pas complètement éclairée. Ce sont ces ambiguïtés que je me propose d'éclairer à partir d'exemples pris autour de l'agglomération de Montpellier.

Abstract

Massive uprooting of vineyards in the Languedoc region (South of the France) increases the uncertainty of the fate of agricultural land in an area subject to very strong demographic and urbanisation pressures. These agricultural lands are likely to change their orientation and become integrated into urban projects. These developments concern all actors and policy makers and pose questions about the meaning of their development projects. What meaning do they want to give to agriculture? Do these agricultural lands remain as reserves for future urbanisation or do they receive recognition and a new legitimacy? These issues are strengthened today in a context where the relationship between city and nature is being reintegrated into speeches, decisions and actions. However, the place of agriculture is not completely clear. It is this ambiguity that I propose to clarify based on examples from around the city of Montpellier.

Mots clés: Rupture agricole; arrachage des vine; Languedoc—Roussillon

Part 2

Land Use, Agriculture and Food

Chapter 6

Inter-ethnic Assimilation and Differentiation in Rural Development: Local Response to Forestry Land Allocation in Vietnam

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Introduction

In Vietnam where the agricultural sector accounts for more than 55 per cent of the national workforce, land for productive purposes is an important resource. In a cooperative model which was largely used before the late 1980s, instead of a connection between individuals or households to land, farmers worked this means of production under assignment and instruction from the cooperative, an intermediate layer of state administration (Sikor 2004; Sikor and Nguyen 2007). From the late 1980s the cooperative model was disbanded and land was de-collectivised to individual households. In the lowland areas, the subject of de-collectivisation was the paddy field; in the upland, given the lack of paddy fields but an abundance of forestry land, it was the latter which was the focus of de-collectivisation.

Upland areas, characterised by mountains and hills, account for more than 70 per cent of the country's land area (Sunderlin and Ba 2005). The area is also living space for more than a quarter of the national population, of whom a large proportion is composed of ethnic minorities. Most of the upland communities depend on the forest and forest-related economy. While the general economic conditions for households in lowland areas have improved significantly during the last 20 years, many upland communities, especially those of ethnic minority status still face constant food shortages and lack of access to adequate welfare services such as education and health care (Van de Walle and Gunewardena 2001). From the mid-1990s the government initiated various policies to allocate forestry land to individuals, households and communities (Hardy 2000). This set of policies was commonly known as Forest Land Allocation (FLA).

This empirical study was conducted in Thuong Quang commune of Nam Dong district, Thua Thien Hue province, Vietnam (Figure 6.1). In Thuong Quang forestry land has been allocated to individual households via government programmes since 2002. The commune population (approx. 1,700) is composed of two ethnic groups, the Kinh (40 per cent) and the Katu (60 per cent), living in 3 and 4 villages respectively. The villages are officially numbered from 1 to 7; hence, their names Village 1, Village 2, etc.

The Katu is a minority ethnic group, forming less than 0.1 per cent of the country's population (not exceeding 50,000 individuals) and is concentrated in the mountainous area of Quang Nam province on the southwest border of Thua Thien Hue province (Thong 2004). Similar to other ethnic minority groups in Central Vietnam, the Katu's

customary social and political structure was simple. The Katu clustered in isolated villages which were also the highest form of social structure since there was no inter-village society. Social and political differentiation was minimal because ruling and ruled

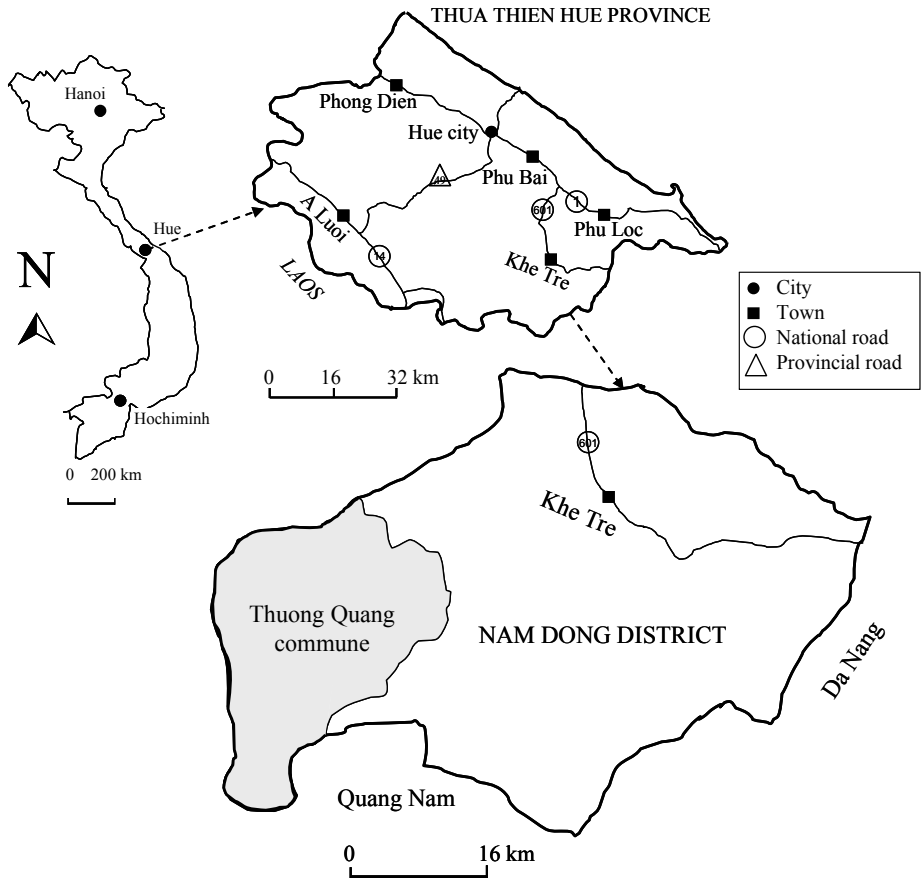


Figure 6.1 Location of the study area

classes had not yet appeared. Although the individual household was the fundamental unit of forestry land use, land was still considered as the common property of all villagers (Schrock *et al.* 1966). During the feudal and colonial periods, the administrations were more concerned about stamping out uprisings of several mountainous ethnic groups commonly called *moi* in Vietnamese, meaning barbaric. Military stations were built and occasional expeditions to this area were carried out by the feudal army and later by the French colonial army (Le Pichon 1938; Thong 2004). The encounter between Katu people and the lowland population at the beginning of the twentieth century was minimal and mainly for exchange of goods. For example, Katu

people traded their farming and forest products such as rattan for dried fish, clothes and, most important, salt brought to this upland area by lowland traders (Sang 2004). Before 1945, apart from military expeditions, the official authorities had little knowledge about the Katu and their culture. More generally, it can be stated that the official authorities had not established a governance system in this mountainous area. During the First Indochina War (1945–1954), the western mountainous areas of Thua Thien Hue province became hideouts and armed bases for Vietnamese nationalists. They were more concerned with building an army to fight the French colonist in town centres than establishing a governing system. From 1954 to 1975, in theory, this area belonged to the Republic of South Vietnam (RSV). In reality, again, the area became a base for communist guerrillas and the RSV government never had control over the area.

By contrast, Kinh people who migrated to the commune at the end of 1970s from the lowland had been familiar with a well developed social and political structure. Almost all of the migrants were from one district and they were resettling in Thuong Quang commune under a state-initiated programme. After the war, Phu Loc district, the origin of the in-migrants in Thuong Quang commune, became crowded with returning refugees and discharged military men while little land was readily available. The authority dealt with this issue by resettling part of the population to various locations in the highland area in the west of the province, considered at that time as vast and sparsely occupied. Upon arriving in Thuong Quang, the authority designated an area exclusively for the residential and agricultural purpose of Kinh people. The Kinh ethnic group is a national majority since they account for more than 85 per cent of Vietnam's population.

Most of the land in Thuong Quang commune is forestry land (92 per cent), of which 10 per cent is allocated to the household and community and 90 per cent still belongs to state agencies. Agricultural land accounts for 4 per cent divided into rubber plantation (80 per cent) and food crops and other uses (20 per cent) (Table 6.1).

Table 6.1 Land use in Thuong Quang commune

Category	Area (ha)	%
Agricultural land	597	3.8
Forestry land	14,334	92.3
Residential land	62	0.4
Special used land*	63	0.4
Unused land	346	2.2
Other	120	0.8
Total	15,522	100.0

Source: the district's land inventory in 2010

* land for local administration buildings, kindergarten, hospital, war martyrs' cemetery, etc.

This research aimed to examine how forestry land allocation was implemented in Thuong Quang commune and to explore the effects it produced in the customary governance system in Vietnam. In particular, the authors seek to answer the following questions:

- How did local relations, shaped by the existing local arrangement in management of forestry land, determine the outcomes of FLA?
- Upon the implementation of FLA, how did these local relations change?
- Were there similarities and differences between different ethnic groups in reaction to FLA policies?
- What were the causes for such similarities and differences?

Methods

The research was conducted in two villages of Thuong Quang commune. Village 1 was composed of mostly Katu people and Village 5 was made up totally of Kinh people. These two villages were selected because there were both forestry land recipients and non-recipients in both. The presence of both recipients and non-recipients in the sampling population was thought to be important as determining local factors in the allocation process. During three field surveys conducted in March, June and November of 2010, primary and secondary data were collected. Primary data were from a survey which consisted of a questionnaire to obtain the following information: (i) general household attributes (household size, education, age and labour force); (ii) current situation and changes in the land use system; (iii) access to informal credit; (iv) difficulties in agriculture and forestry in general; and (v) ranking on wealth, based on observation. The survey was conducted with 81 households (45 of a total of 73 households from Village 1 and 36 of a total of 45 households from Village 5) accounting for 20 per cent of the commune households. In addition to individual household surveys, interviews were also carried out with key informants such as village heads and household heads who could reconstruct village history and the forestry allocation process in detail. The purpose of the semi-structured interview was to investigate the process of FLA at village level. Secondary data were collected from documents obtained from the Commune People's Committee (CPC) an official management organisation at commune level. This included the history of the commune; labour conditions; poverty issues; land use and land allocation processes; land certificate issues as well as the training and credit programme. At district level, data on the status of the commune land use was collected from the district Department of Agriculture and Rural Development (DARD).

Results

Economic history of the Katu and Kinh in Thuong Quang commune

Prior to 1978, slash-and-burn cultivation and natural forest exploitation were the only

two livelihoods available to the Katu people. A Katu household would clear a forest plot, burn dried vegetation and cultivate the land. Once land productivity fell after two to three years of cultivation, this household would move to another plot and re-start another cycle of slash-and-burn. They would not return to the former land plot for 10–15 years until above ground vegetation on their plot had successfully recovered. During this fallow period, another Katu household who wanted to cultivate this land plot was required to seek approval from the former. After the arrival of the Kinh people from the coastal area around 1978, although animal husbandry and wet rice cultivation were introduced by the Kinh, the Katu population still depended heavily on slash-and-burn cultivation and extraction of natural products from the forest. Settling in Thuong Quang, the Kinh people developed paddy fields, of limited size, however, because the topographical variation in the mountainous area led to difficulty in supplying water to the paddy fields. As a result, they had to supplement their staple food with bean, corn and cassava from farming on swidden land. Since 2001, both ethnic groups started developing acacia and rubber plantations as a new means of livelihood. At this point, it should be emphasised that there was interaction between Kinh and Katu people. As former paddy field farmers and fishermen, Kinh migrants in Thuong Quang did not have the skills and knowledge necessary to cultivate swidden land effectively and productively. They had to learn from Katu people the skills to work on unfamiliar hilly and un-irrigated terrain. Without knowledge about choosing a plot of fertile land or suitable crop, at first Kinh people worked as sharecroppers for Katu landowners. Gradually upon polishing the much-needed skills, Kinh people started their own farming on swidden land. On the other hand, Katu people learnt wet-rice cultivation and animal rearing from the Kinh. Although the conditions of the mountainous area did not favour the success of these two livelihood strategies, they were still an important influence on the Katu people at the time; until the present, these two strategies are providing a significant contribution to their household economy. It should be noted that, in fact, Kinh people had never practiced the traditional long fallow on swidden land as the Katu did. From when they began farming on swidden land, the Kinh people tried to apply fertiliser, animal manure at the beginning and later chemical fertiliser when it came available. Thus, while Katu people practiced traditional long fallow cultivation, Kinh people relegated fallow time to almost nil. Towards the end of the 20th century, most of the Katu people had to abandon long fallow swidden cultivation because of pressure from population increase and also governmental enforcement of banning slash-and-burn.

Forestry land allocation in Thuong Quang commune

The allocation process was in fact a legalisation of a household's customary rights to land. After households identified in the field the plot of land to which they claimed a right, FLA officials checked if the plot was dispute-free before allocating the land to the corresponding household. Put another way, forestry land allocation was an incorporation between customary and statutory law, when the former identified the rightful recipients and the latter secured this right in law. In terms of land ownership, it was found that there was no major difference in the proportion of land owners from the surveyed households between Village 1 (78 per cent) and Village 5 (70 per cent); and between Katu (75 per cent) and Kinh (72 per cent) households (Table 6.2).

Table 6.2 Land ownership from surveyed households in Village 1 and Village 5

	Village 1			Village 5
	Katu	Kinh	Total	Kinh
No. of survey household	37	8	45	36
No. of forestry land recipients	28	7	35	25
No. of forestry land non-recipients	9	1	10	11

Source: Authors’ field survey in 2010

From the data for the swidden land area, it was also found that the average size of land allocated to Katu households was 1.18 +/-1.75 (ha), while that allocated to Kinh households was 1.59 +/-1.77 (ha). The t-test for difference between these two means was conducted showing that the difference was not significant statistically ($\alpha = 0.05$, p-value = 0.3223). It showed that ethnicity was not responsible for the degree of participation in FLA (ratio of households from each ethnicity having been allocated forestry land) and quality of participation (area of allocated land).

Governing institutions in Thuong Quang commune

Regarding the governance system in Thuong Quang commune, there were both formal and informal institutions. Formal institutions took the form of the main agencies at commune level: the Commune People’s Committee (CPC), Commune’s Cell of the Communist Party and Commune People’s Council. Of these the CPC was responsible for implementing policy as directed by a higher authority, i.e. the District People’s Committee (DPC) or the Provincial People’s Committee (PPC). It also received general instruction from the Cell of the Communist Party at commune level (Figure 6.2).

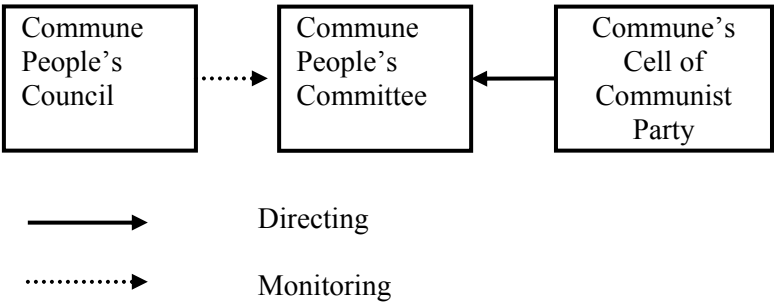


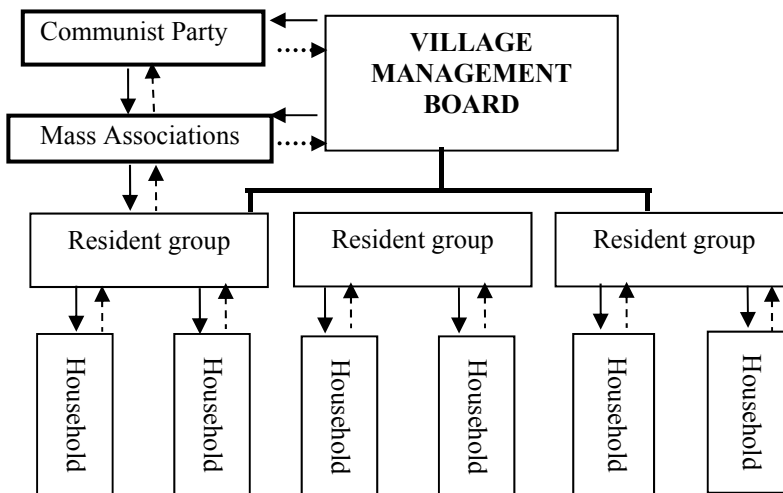
Figure 6.2 Institutions at commune level
Source: Authors’ field survey in 2010

The Village Management Board (VMB) was a replication of the CPC for the village

level. Members of the VMB, however, were not government officials. This means that they did not receive a salary from the state budget but instead received an allowance. The VMB members were selected, from and by the villagers, for one to two terms each of which lasted for four years. The VMB can be considered as a semi-autonomous organisation at village level because its operation was not entirely independent from the local authority. Each village was divided into several resident groups whose activities were overseen by the VMB. The Communist Party and other mass associations had a directing role over most of the social and political activities of households (Figure 6.3).

The leading figure of the VMB was the village headman who was selected by representatives of different mass organisations (Youth Union, Women Union, Farmer Union, and Veterans Union) and the villagers. He received approximately US\$ 30 per month to perform his duty of being a link between villagers and the commune authority.

Although not as obvious as formal institutions, informal institutions in Thuong Quang commune provided plenty of evidence for their existence. The Katu, traditionally living together in a village with no more than 100 households, had only their fellow villagers to rely on in the primitive forest and against the hostile attitude of other ethnic minority tribes. In these circumstances, the Katu developed a customary institution governing the conduct and behaviour of members of the village to share the burden of hardship and survive together (Thong 2004). The traditional Katu village had all the characteristics of what is described by Sahlins (1968) as a 'segmentary tribe'. Politically, an elder widely respected by fellow villagers for his cultivation wisdom, knowledge for ritual works or ability to mobilise collective action from the villagers was usually chosen as the leader. Economically, the Katu people's production was characterised by being small in scale for subsistence use of the producers only or to meet kinship obligations. A closer look at the Katu community in Thuong Quang



Notes: → Leading - - - -> Implementing

Figure 6.3 Structure of village administrative system

Source: Authors' field survey in 2010

commune today revealed that such a customary institution still exists. In fact Katu households kept an affiliation to their community and customary rules still defined the actions of each member in various arenas of activity. The presence of the patriarch in each village and his mediating role in conflict resolution between Katu households during FLA were the first evidence for the survival of the customary institution of land management. It implied that before FLA the use of land among Katu households still followed customary rules, even though the rules were not as strong as before.

In the Katu village, the patriarch was the informal symbolic and customary institution. Unlike the village headman, the patriarch was preferably an elder with great experience. In a village of the Katu, the positions of the patriarch and the headman existed concurrently. In a Kinh people's village, apart from a village headman there was no similar position to the patriarch in the Katu village. The customary institution of the Katu has a long history from the time when one Katu community was a single village. At that time a bonding of members was formed to provide support for each other in order to survive against harsh and isolated physical conditions as well as the danger from wild animals and other tribes (Schrock *et al.* 1966). Furthermore, it was proved through the in-depth interviews with the Katu villagers that informal rules were passed from generation to generation and that later they became, in practice, more of spiritual importance. Following the customary institution, the Katu people consider forestry land as a common pool resource, important as not only a means of production but also as a dwelling place of holy spirits. The enforcing mechanism for the customary institution was strong because this was a close-knit small community made up of households of several families. Acts of noncompliance would receive disapproval and result in denial of support from fellow Katu villagers. Given that Katu people were not yet able to effectively use resources from official channels, the support to one household from others was significant.

Their neighbours, the Kinh people, faced numerous challenges from the unfamiliar physical environment while receiving little support from the governmental agencies responsible for the resettlement programme. As a result, they also had to rely on each other during the initial stage of resettlement. It is expected, however, that the newly formed institution of the Kinh people was weak as a result of the different social backgrounds of the migrants. They may have come from the same commune, but they hardly knew each other beforehand. A widely known explanation is that the two main groups involved in state controlled migration after 1975 were: (i) landless poor farmers; and (ii) ex-officials of the collapsed South Vietnamese Government (i.e. former soldiers, policemen and officials) (Desbarats 1987). Participation in resettlement in Thuong Quang commune may not have been voluntary for every household involved, hence explaining the weak community connection during their early phase in the commune.

Similar to the informal institution of the Katu people, the Kinh people's informal institution was formed from the process of adapting to a new and unfamiliar social and natural environment. The difference was that it lacked historical depth because it was formed only after the Kinh people's migration to Thuong Quang commune. Another contrast was that they perceived and used land in a private property system unlike the Katu who considered land as a common resource. Given the short history and heterogeneous background of the Kinh migrants, this institution was weak and lacking in an enforcing mechanism. After they first arrived in Thuong Quang commune, the Kinh people's informal institution was influenced by the Katu people's customary

institution, as the Kinh people borrowed customary rules of land management to their own practice. Later they resorted to a formal institution when the latter became stronger.

Discussion

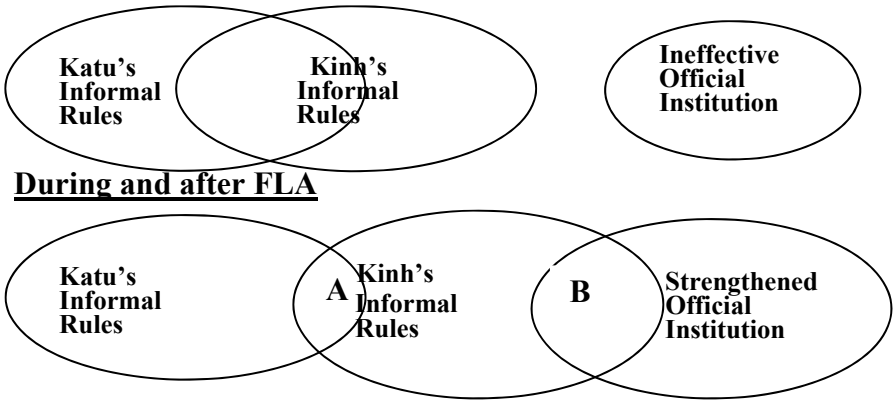
In terms of response to FLA, it was surprising that no significant differences were found between Kinh and Katu people in the average area of land allocated and the year when they participated in FLA. The absence of contrasts possibly indicated that the response to FLA from both groups was similar. The answer to why two different ethnic groups with diverse cultural and economic backgrounds reacted similarly to FLA may present itself as an inter-ethnic assimilation process which bridged the gap between the Kinh and Katu people. As mentioned before, Katu people and Kinh people learnt new livelihood strategies from each other. For both ethnic groups, what they learnt from the other allowed them to better adapt to a new environment in the Kinh people's case—and to have an additional potential livelihood. During the course of this adaptation, it is probable that Kinh people also learnt to use a customary system of land management as the Katu had always done. Rooted among the Katu community and embraced by Kinh migrants, customary land management was the undocumented arrangement between villagers that protected the land rights of households who first reclaimed land.

Despite this similarity, there was a sharp contrast in the resolution of intra-ethnic conflict among each ethnic group. For the Katu, informal rules were effectively exercised by the patriarch, the symbol of customary power, to resolve disputes. At the time of FLA, the patriarch no longer had the decision-making power as in the past but still played an important role as a mediator. In a land conflict, he facilitated negotiation between households to find a solution that minimised the damage to community harmony. The patriarch did not always follow a rigid formula to solve the disputes. He would consider different factors related to the land disputes; for example, history of land use, the need for land and the economic condition of each involved party.

In the Kinh people's village, the village headman did not take the mediating role but left the task to the authority. In other words, for intra-ethnic land disputes, Kinh people had no village institution to help in finding a resolution. As a result, the disputes required the attention of institutions outside the village such as the commune authority or the allocation programme officials. The resolution from these institutions usually followed official rules which favoured those with physical evidence more than local knowledge of past land use.

Having argued on the existence of informal institutions among the Kinh and Katu people, this section seeks to analyse the differences and similarities in the reaction of the two ethnic groups from an institutional development perspective. First, it is argued that the Kinh people formed an informal institution similar to that of the Katu in term of land use and recognition of customary land owners. This was why both ethnic groups used a customary land use system as a basis for official allocation. Lacking an effective legal institution, prior to FLA, to govern the use of this resource and to protect their interest, the Kinh people were influenced by the customary institution of the Katu people. That is to say, the Kinh people incorporated the Katu customary rules on land use into their own institution. This adaptation to an institution sharing values with that of the Katu in relation to land use before FLA would not have occurred if the Kinh people did not rely

on swidden cultivation in the first place. Land suitable for familiar cultivation of wet rice was limited, forcing the Kinh people to conduct swidden cultivation which was a traditional practice of the Katu. In other words, there was an assimilation process in which Kinh people replicated the Katu livelihood strategy and customary institution, albeit contrasting in cultural background and previous economic experience. Figure 6.4 summarises the relative relationships between the official institution and the informal institutions of the Katu and Kinh people.



A: Shared rules between Kinh and Katu people (self-enforcing): recognition of customary land users. Used for informal land allocation and resolution of inter-ethnic disputes. Intra-ethnic land disputes were rare because land was abundant.

B: Official rules adopted by Kinh group (enforced by an official institution). Kinh people could alternate between A and B to resolve inter-ethnic disputes. For resolution of intra-ethnic land disputes, the Katu used informal (customary) rules while Kinh people used B.

Figure 6.4 Transformation of Kinh people's informal institution
Source: Authors' field survey in 2010

It is argued that development policy can be considered as an effort by the state to solidify official institutions in benefiting a community. Market-orientated land property relations are not intended to reduce the control and regulation by the state on land use but to change the system of control. Prior to FLA, financial and human resource limitations handicapped the management role of SFEs, State Forestry Representatives at local level. In reality, forestry land was used as a common pool resource. Via FLA, the State transferred the cost of management to households and at the same time effectively enforced control over forestry land by reserving the right to apply a land use tax on recipient households (Tuan 2006). Official regulation which was gaining influence via the institutionalisation of forestry land, was closer to the Kinh's informal institution than to that of the Katu because Kinh people, as a dominant ethnic group, control official institutions nation-wide. That was why the Kinh people trusted the official rules in resolving land disputes. To the Katu, land had not only economic value as a resource but also spiritual importance, making their customary institution more conflictual with and

divergent from the official one because the latter treated land just as a resource. FLA programme officers resolved land disputed solely by their official rules, not considering the dynamic of land relations and the customary values of land for different actors. Instead of using official rules, which were not approved by the Katu community for its consideration of customary value, the Katu resorted to their customary institution for resolution of intra-ethnic disputes.

Conclusion

Given the sharp contrast in social and economic background between the Kinh and Katu people in Thuong Quang commune, it was surprising to find that there was no major difference in degree and quality of participation in FLA between these two ethnic groups. Eventually, this similarity was the result of an inter-ethnic assimilation process during which one ethnic group experienced new productive activity from the practice of the other. For Katu people it was wet rice production for which cultivation techniques were transferred from Kinh migrants. For Kinh people, it was swidden cultivation. To practice swidden crops, the Kinh people not only borrowed cultivation skills from the Katu but also customary rules that govern the land use system. It was the use of customary rules in determining the owners of land plots that created the basis for the later official land allocation.

An institutional development perspective provided an explanation for these differences by arguing that Kinh people shared more in common with official institutions than did Katu people. Given the fact that Kinh ethnicity is the dominant ethnic group controlling official institutions nation-wide, this is understandable. Trusting and understanding official institutions better, Kinh people were more skilful in the exploitation of legal tools. On the other hand, the conflict between the Katu people's customary institution and the legal institution accounted for the slow adaptation of this group to the official system; hence, hindering the capacity of the Katu people to exploit official resources.

There were two main conclusions drawn from this case study. First, local factors (i.e. ethnicity) were important in shaping responses of local communities towards implementing government development policy and management of natural resources, especially when official institutions were ineffective. Secondly, an institutional development approach provided a useful tool in the explanation of behaviour and the reaction of the local community towards official development policies. An institutional approach also provided insights into the motives of different local actors during the implementation process of development policy.

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Abstract

In Vietnam, where more than 70 per cent of the population live in rural areas while agriculture and forestry attract nearly half (48.2 per cent) of the national workforce, the matter of land ‘ownership’ is vital at different levels from household economy to macro national economy. Indeed, policies aiming at liberating land resources from central and collective management to household ‘ownership’ have been the major component of nation-wide social and economic reform since 1986. This study aimed to identify local factors influencing the implementation process of a Forestry Land Allocation policy in the case of Thuong Quang commune, Thua Thien Hue province, in Central Vietnam where forest covers more than 90 per cent of the land area. Thuong Quang is home to two ethnic groups: the Kinh as the migrant majority and the Katu as the indigenous minority. After the revision and amendment of the 1993 Land Law, the government issued a series of policies stipulating forestry allocation to households. Initially a customary land use system was an identity of the Katu. Kinh people in Thuong Quang, however, also adopted this approach to land allocation. This allocation system was informal and was only acknowledged by households. On this pre-negotiated basis, the Forestry Land Allocation conducted land registration, demarcation and finally, issuance of Land Use Certificates. In other words, the official allocation was in fact a process of legalisation of the existing informal allocation. The study shows that ethnicity is an important element in shaping the response to development policy. A similar reaction from two ethnic groups to Forestry Land Allocation is a result of an assimilation process between the two groups sharing the same economic and geographic settings. Differences in conflict resolution reflected the fact that Kinh people shared more cultural and economic concepts in common with the official institutions than the Katu did.

Keywords: Forest land allocation; ethnicity; local response; Vietnam

Chapter 7

A National Park for Northern Ireland: Reviving or Killing the Golden Goose?

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Introduction

Attempts to kick-start the economy in Northern Ireland are being directly challenged by the recent global recession (First Trust Bank March 2010). Public spending cuts, a reduction in the block grant from Westminster and the subsequent requirement to reduce dependency on the public sector have exacerbated the economic challenges facing the devolved administration (Northern Ireland Executive 2011). The Northern Ireland Executive has recognised the importance of maximising the value of current assets; natural heritage being one such asset. Tourism has been identified as a potential new growth industry with government setting ambitious tourism related targets (Department of Enterprise, Trade and Investment 2010). A recently published White Paper (Department of the Environment 2011) suggests a growing political awareness of the economic value of national parks and the contribution they could make in the current economic climate.

The empirical data in this paper was collected as part of a much larger research project which evaluated different approaches to designating new national parks in the UK. One of the chosen case studies was the Mourne Area of Outstanding Natural Beauty (AONB), a candidate national park in Northern Ireland. A secondary analysis of government policy, alongside a suite of semi-structured interviews undertaken in the Mourne, provides the empirical grounding for discussing the prospects of implementing a Northern Irish national park model capable of managing the tourism resource paradox. Twenty semi-structured interviews were conducted (between January and July 2011) with a wide range of Mourne stakeholders: Mourne residents, farmers, trustees, landowners, management body representatives, politicians, community representatives, business representatives, conservation NGOs and anti-national park campaigners. Amongst other issues, stakeholder views were sought on recent national park developments, including the contents of the National Parks White Paper (2011).

Initially, the global evolution of national park models is discussed, alongside the broadening of national park purposes. A ladder of national park models is included to demonstrate how the Scottish national park model represents the latest rung in the evolutionary development of the concept. Particular attention is given to the features of this latest model (Cairngorms in Scotland). The long-standing Northern Irish national park saga is briefly introduced before drawing on a recently published White Paper to discuss aspects of a possible national park model, amidst the government's overriding

economic imperative. Mourne stakeholder reflections are drawn upon to critique aspects of the most likely national park model for Northern Ireland.

The evolving national park concept

National parks have become globally recognised mechanisms for conserving the natural environment. Over time models of national park have evolved and the aims of designation vary worldwide, yet they all have the same overriding aim: protection and conservation of the natural environment (Bishop *et al.* 1998). The traditional ‘wilderness’ (Yellowstone) model of national park (most common in North America) was built around the desire to secure land from “habitation and speculative use” (Barker and Stockdale 2008: 2). This model is based on national ownership of extensive areas of pristine wilderness which are typically devoid of human habitation and fulfils the IUCN category II national park criteria (IUCN 2008). Indeed, national parks in the Republic of Ireland focus predominantly on conservation and recreational aims and correspond with the IUCN category II definition of national park. Outside of Scandinavia this strictly environmental protectionist approach was not easily transferred to other parts of Europe (Bishop *et al.* 1998). Barker and Stockdale (2008: 182) cite the “distorted appreciation of the relationship between society and nature” associated with this “nature in spite of society” model as the reason for its lack of applicability elsewhere. For example, Bishop *et al.* (1998: 4) suggest that humanised landscapes are a typical feature within Europe where conservation objectives are often compromised by “incompatible development or ownership”. As a result European national parks exist in many forms to manage a broader set of management objectives in a largely inhabited and cultivated countryside.

Whilst the first national parks in the UK shared a number of the American ideals, national park objectives have gradually widened to “reconcile the competing interests of conservation and community development” (Barker and Stockdale 2008: 5). The English and Welsh model still emphasises protecting the natural environment while offering a more balanced approach to management (McCarthy *et al.* 2002). The Environment Act (1995) requires that National Park Authorities in England and Wales “seek to foster the economic and social well-being” of park residents (McCarthy *et al.* 2002: 668). However, the 1995 Act still endorsed the Sandford Principle, whereby in situations of conflict between national park purposes, greater weight should be given to conservation (McCarthy *et al.* 2002).

Although national parks were traditionally designated for the purpose of environmental protection, models of national parks have evolved to incorporate, to varying degrees, social and economic interests. In light of potential financial spin-offs many national parks have since become key economic generators through growth of the nature based tourism industry (Hamin 2001; Reinius and Fredman 2007). While McCool (1985) questioned whether designating protected areas contributed to increased visitation levels, Fredman *et al.* (2007) found a 40 per cent increase in visits following National Park designation in Sweden. Commodification of nature, which views use of the natural environment through a lens of economic exploitation, could be contradictory to the traditional concept of designating protected areas in the first place (Zimmerer 2000; McIntyre *et al.* 2001; Mbaiwa 2003; Healy and McDonagh 2009). This dilemma

can be conceptualised through the ‘resource paradox’ (Plog 1974; Oliveira 2003; Williams and Ponsford 2009) which relates to the use versus overuse scenario; natural areas offer a resource to be marketed, yet overuse (potentially through tourism) could destroy the natural beauty upon which the tourist experience depends, thereby jeopardising future tourism.

The eventual designation of Scottish national parks in 2002 (Loch Lomond and the Trossachs) and 2003 (Cairngorms) represented the first distinct attempt to incorporate the principles of sustainable development within UK national park management (Barker and Stockdale 2008). Appraisal of the Cairngorms national park model revealed four distinct aspects which unite to create a unique model of national park (Figure 7.1). It is this combination of factors which have led some within the conservation community to deem the Cairngorms unworthy of the national park label (Watson 2003; Watson 2005; Bailey 2010; Edwards 2010).

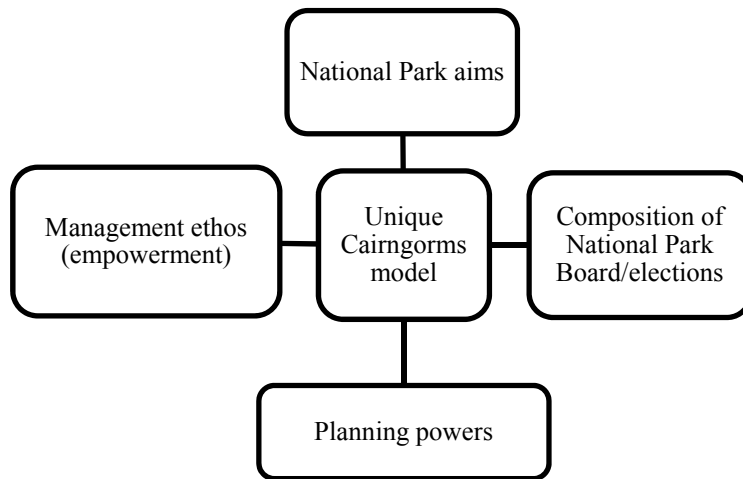


Figure 7.1 Four distinct aspects of the Cairngorms national park

First, in line with the principles of sustainable development which underpin the Scottish national park model, and in contrast to practice in England and Wales, an explicit fourth aim is included in the Scottish national parks legislation: “to promote sustainable economic and social development of the area’s communities” (McCarthy *et al.* 2002: 669). As in England and Wales, the Sandford Principle is enshrined in Scottish legislation to ensure that in situations of irreconcilable conflict between park aims, greater weight is given to conservation. A recent report published by Environment Link (Bailey 2010), an umbrella group of environmental organisations in Scotland, raised concern at what they considered to be the unreasonable weight given to socio-economic considerations within the Cairngorms National Park, questioning the National Park Authority’s adherence to the Sandford Principle. Second, the operational culture of the Cairngorms National Park Authority (CNPA) is based upon the principle of “management by partnership” (Stockdale and Barker 2009: 491), evidenced by the fact that the Cairngorms National Park Authority does not have an independent ranger service or staff any visitor centers. Instead, the Authority collaborates with existing

private estate ranger services and other public and private sector bodies. Third, development control powers, which are fundamental to the regulatory tool kit of any national park, typically reside with the National Park Authority. In the Cairngorms, development control functions remain with local authorities while the Cairngorms National Park Authority retain ‘call in’ powers to decide applications which are of significance to the realisation of park aims. Finally, the make-up of the National Park Board represents a fourth distinct aspect of the Cairngorms model. Initially the Board was composed of ten Ministerial, ten Council and five directly elected appointees. The Board has since been reduced in size and notably the five directly elected appointees remain, with Council and Ministerial appointments being reduced to seven each. From a conservation perspective, this could be interpreted as a further watering down of the national conservation interest at the expense of local socio-economic interests. It is too early to judge whether this has been the case, but in the context of the English and Welsh model, the change further reinforces local ownership of national park management in the Cairngorms.

On the basis of the features outlined, the Cairngorms model appears to represent the last rung on the ladder of national park models (Figure 7.2). As revealed in the following section through stakeholder interviews and a recent review of government policy, a Northern Irish national park model could represent a further evolutionary stage, offering unprecedented weight to socio-economic considerations.

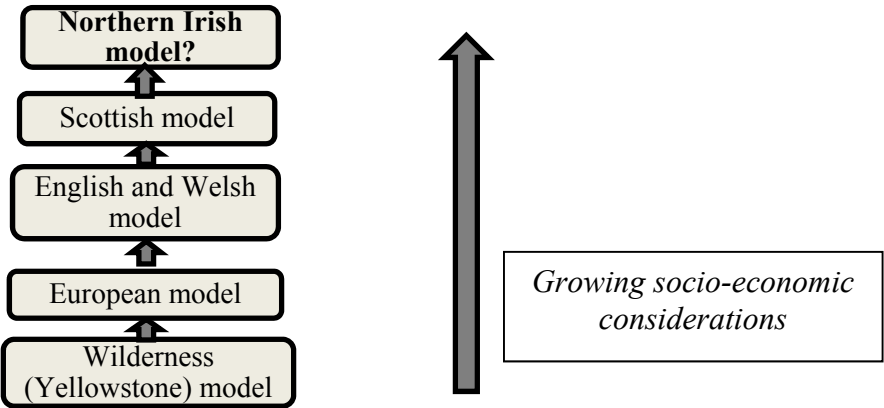


Figure 7.2 A ladder of national park models

A national parkless Northern Ireland

Despite numerous recommendations, the first of which was made by the Planning Advisory Board in 1947, national parks have yet to be designated in Northern Ireland. Legislative provision for designating national parks was realised in the form of the Amenity Lands Act (1965) and the Amenity Lands Order (1985). While providing the legislation to enable national park designation, no powers were established to provide a mechanism for park management. Buchanan (1982) attributes the failure to designate

national parks to rising civil unrest (alternative political priorities) and political hesitancy in the face of strong landowner opposition.

Socio-economic priorities and the tourism resource paradox for Northern Ireland

While civil unrest was said to have contributed to environmental neglect in Northern Ireland (Buchanan 1982), the prolonged violence and political instability has had a clear economic impact on the region (Deloitte 2007). On emerging from four decades of sectarian conflict, the Northern Ireland Programme for Government (2008: 2) identified “growing the economy” as its top priority. Achieving such a goal has been severely hampered by the recent global recession (First Trust Bank 2010). Indeed, tourism has been identified as an undeveloped economic sector and targeted as a major new growth industry with government aiming to double tourism revenue by 2020 through increasing annual visitor numbers from 3.2 million to 4.5 million (Department of Enterprise, Trade and Investment 2010). An Environmental Policy Group (2004) recognised the importance of the countryside: “tourism in Northern Ireland depends largely on the quality of the countryside, its natural attractions and its distinctive cultural heritage and many visitor destinations are within AONBs” (Northern Ireland Environmental Policy Group 2004: 9). However, in contrast to national parks, Area of Outstanding Natural Beauty (AONB) management bodies have no statutory management powers and operate on a shoestring budget. As such, these AONBs are in danger of damage by increased visitor numbers. During an interview with the Mourne Heritage Trust (MHT), a management body for one of Northern Ireland’s candidate national parks, it was stated: “We’re already struggling to manage the environmental damage that visitors are doing, particularly the erosion in the high Mournes, but increasingly litter as well”.

Government anticipate that national parks would make an economic contribution through increasing visitor numbers to Northern Ireland (Department of the Environment 2011: 4): “National park designation would increase focus and marketing opportunities for tourism in an international context. This would increase visitor numbers and spend in any designated area”. However, as greater numbers of tourists visit Northern Ireland the attractiveness of the natural heritage they come to see is potentially jeopardised. The future of the industry therefore becomes threatened. The recent White Paper (2011) on national parks for Northern Ireland acknowledges this potential countryside management conundrum or resource paradox:

Some of our iconic landscapes suffer from unmanaged visitor pressures ... designation would help to address these issues and also facilitate conservation and enhancement of ecosystems, so that these landscapes remain attractive to visitors and make a positive contribution to the livelihoods and welfare of the people who live and work in and around them.

(Department of the Environment 2011: 4)

National parks offer one possible option for managing the tourism resource paradox by providing enhanced management structures to cope with tourism growth whilst maintaining the natural resource base. However, attempts to introduce national parks in

the past have proved particularly controversial (Bell and Stockdale 2009; Bell 2011). The most recent attempt (2006/7) to proceed towards national park designation in the Mourne AONB resulted in a vociferous anti-national park campaign involving local landowning and farming interests. Indeed, Cassidy (2007, unpaginated) suggests that “the gap between supporters and critics of the national park seems to be widening”, following a flawed consultation process (Bell and Stockdale 2009; McAreavey 2010; Bell 2011). The resulting local disillusionment could hamper future prospects of designation in the Mournes. For example, a newspaper article in 2009 alleged that a national park for Northern Ireland was very much “back in the wilderness” (Johnson 2009: 1). Albeit with a strong economic focus, there are renewed prospects of designating a national park in Northern Ireland. A National Park White Paper (Department of the Environment 2011) was published detailing the Department of the Environment’s proposal to establish a legislative framework for national parks. Commitment to an ‘economic’ orientated model of national park for Northern Ireland is confirmed by the then Environment Minister, Alex Attwood:

I am on record as saying I favour the concept of national parks ... we seek recognition of our most cherished landscapes through the national park label, while utilising it as an economic driver that will boost local business and provide sustainable employment and new business opportunities for this and future generations.

(Department of the Environment 2011: 5).

While the White Paper lacks detail it does outline possible national park aims, overall purpose, potential funding and administrative arrangements, as well as criteria for identifying and selecting suitable national parks. If nothing else, this White Paper represents an Assembly commitment to develop enabling legislation. The economic lens through which national parks are viewed is demonstrated by the following abstracts (Department of the Environment 2011: 4): “a key argument for national parks in Northern Ireland is the need to grow economic opportunities”; “there is a need for national parks to boost tourism ... and to contribute to growth generally”; “national park designation would increase marketing opportunities for tourism”.

National parks: part of the solution or part of the problem?

National parks potentially offer one mechanism for managing the tourism resource paradox. By the same token, national parks could potentially exacerbate the problem. The label of a national park, has the potential, on the one hand to attract further unsustainable tourist numbers, while on the other hand to lead to the introduction of adequate management structures and mechanisms to pro-actively manage tourism and safeguard the natural environment.

The need to strike a balance is not lost on government. The White Paper acknowledges current visitor impacts on Northern Ireland’s iconic landscapes and the role that national parks could play in managing this pressure. However it is striking that the White Paper emphasises the economic perspective with only minimal reference made to the environmental merits of national park designation. For example, without outlining the environmental benefits of national parks the first paragraph on the ‘need’

for national parks states: “a key argument for national parks in Northern Ireland is based on the need to grow the economic opportunities of our most cherished landscapes” (Department of the Environment 2011: 23).

There was a common belief amongst interviewees that a strong economic imperative was behind the government’s recent national park agenda. For example, one local landowner claimed: “I think there’s far more impetus now on the part of government to have a national park simply because there’s this belief, that I think is mistaken, that tourism is going to cure all our [economic] ills”.

Indeed, local conservationists and one political representative expressed concern at the disproportionate weight being given to economic considerations:

I suppose this is probably my concern, now that government has said it does want to go for national parks in Northern Ireland ... I would be a wee bit concerned that it’s too much seen as it’s a money spinner as opposed to protection.

(Local conservationist)

It is really an advocacy paper and it has Poots’s [previous Environment Minister] stamp on it, probably trying to appeal to the DUP’s [his party] rural base with unreasonable weight given to the economic.

(Local conservationist)

I’ve looked at it, it seems very loaded to economic, it looks at the environment second which is strange for me.

(Local politician–MLA)

The White Paper outlines three issues which will be fundamental to how a national park operates and therefore sheds light on the type of national park the government envisages for Northern Ireland. First, it is suggested that a national park would have four aims, as in Scotland (Department of the Environment 2011). Notably, the White Paper (*ibid.*: 8) lists “Promotion of sustainable economic and social development of the area’s communities” as the first national park aim. Typically the first listed aim of any national park would be conservation orientated. It is unclear whether the aims were intentionally ordered as such, but it demonstrates how the socio-economic imperative is at the forefront of government thinking about the role of national parks.

Secondly, the (NI) White Paper outlines two possible options for governing national parks: local independent bodies or a joint committee comprising Council (local authority) and Department of the Environment representatives. The White Paper (*ibid.*: 8) makes clear that the body would not adopt a “regulatory regime but a facilitating and enabling framework” which resonates with the operational culture of the Cairngorms National Park Authority. Independent bodies are a basic feature of national parks worldwide. They are essential for fulfilling the aims of designation by acquiring central government funding to provide a concentrated management focus within the national park area. The challenges of national park management are often heightened in multi-functional humanised landscapes where myriad stakeholder interests compete for dominance. Within the highly contested (environmental) landscapes typically found in Northern Ireland (Bell and Stockdale 2009; Bell 2011) it would be ideal to have an independent management body providing an exclusive management focus. Such a body would offer a more holistic and integrated approach to managing the complex

challenges associated with contested (environmental) landscapes. However, this is likely to be a more expensive option, especially if a network of national parks is being considered.

Thirdly, the White Paper (Department of the Environment 2011: 33) reassures readers that a management body would not be anti-development. Furthermore it states: "... the agenda for building in the countryside has already been set by [a recently introduced rural planning policy] PPS 21 [sustainable development in the countryside]. New national park legislation would not disturb this, and a park management body would not exercise any planning powers in its own right". However, it is still possible that the chosen management body could acquire plan making functions. A lack of development control powers could deprive the national park body of a vital regulatory function, rendering it impotent in the face of growing economic development and tourism pressures. The Mourne AONB also currently straddles three Council boundaries. Council boundary changes are set to be introduced in 2015 (http://www.lgbc-ni.org/index/publications/final_recommendations.htm) but it is still possible that a national park could encompass two or more Council districts. Aside from administrative complexities, there is potential for inconsistent planning decisions between administrative districts within the Park. Concern also emerges regarding the extent to which Council planning authorities would embrace a national park plan that is prepared by an outside body. There is potential for Councils to undermine the work of the management body if the plan is not perceived to be their own. Indeed, the abstract from the White Paper (above) suggests that planning policy within the national park would provide no further restrictions than those currently offered through the existing policy (PPS21). PPS21 represents a more balanced version of a previous draft planning policy (PPS14) which issued a presumption against development in the countryside. Many within the conservation community view PPS21 as too relaxed (McKee 2008; Stewart 2010). One controversial aspect of this current policy relates to the provisions made for farmers to build a new house on their land every ten years. It is questionable whether current rural housing policy would be sufficient to provide a level of countryside protection worthy of the national park label. However, any move to implement more restrictive planning policy is likely to prove particularly controversial.

Conclusion

Recent events suggest that government will look again at the issue of national parks for Northern Ireland and evidence presented in this paper suggests this is mainly to satisfy an overriding economic agenda. In light of the current management deficit in the Mournes and in protected areas across Northern Ireland, a national park designation could provide the integrated management approach required to manage the tourism resource paradox. The potential for a national park to manage this paradox will ultimately depend on the model of national park introduced. The 2011 White Paper suggests a light touch management approach with local authorities (district councils) retaining development control functions. Given the controversial history of rural planning in Northern Ireland, an independent national park authority with development control functions is unlikely to receive widespread stakeholder support. If planning powers remain with local Councils it is essential that the national park management

body prepare the park plan in conjunction with Local Councils to generate ownership of the plan, thus enhancing the prospects of successful implementation.

Given the clear economic rationale and the proposed ordering of national park aims, Northern Irish national parks could adopt an even stronger socio-economic focus than those in Scotland. If national parks were launched with socio-economic development of local communities as the first priority, they could represent little more than national park by label, becoming akin to a rural development agency. Such a national park would be unprecedented in global terms and almost certainly represent a new rung on the evolutionary ladder of national parks (see Figure 7.2). In accordance with every other national park, the first aim of designation should be conservation focussed. As evidenced in other contexts, such as Scotland, socio-economic renewal can still be facilitated in national parks despite conservation taking primacy. It may seem economically beneficial to exploit the national park brand for solely economic gains, while simultaneously introducing tokenistic national park management structures. However, the tourism resource paradox (Plog 1974; Oliveira 2003; Williams and Ponsford 2009) suggests that by introducing the national park label alongside an ineffective management body, landscapes could become quickly eroded. Killing the golden goose (degradation of natural landscapes) could jeopardise future tourism potential (golden egg) thus limiting the possibility of long-term tourism induced economic renewal in rural areas. A national park model which gives primary consideration to the environment, while at the same time facilitating socio-economic development of the area's communities, is essential to securing sustainable growth of natural heritage based tourism in Northern Ireland. A degraded landscape is neither economically nor environmentally beneficial.

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Abstract

The natural environment in Northern Ireland is said to be degrading at a faster rate than current management structures can handle and a predicted rise in tourist arrivals may exacerbate the problem. This dilemma can be conceptualised through the ‘resource paradox’. This paper focuses on the possible designation of a national park in Northern Ireland which, among other things, will have to manage this countryside management conundrum. While the model or type of national park likely to be introduced has yet to be decided, the proposals contained in a recently published White Paper suggest a unique model; one that gives unprecedented weight to socio-economic considerations. Such a model could represent a further evolutionary stage, or alternatively a further dilution, of the traditional national park concept. In this context it is possible that national park designation could offer a long-term and pro-active countryside management solution for Northern Ireland or lead to the rapid commodification of its natural environment. In the meantime, interviews with stakeholders in the area most likely to be designated as Northern Ireland’s first national park sought to explore possible aspects of a national park model, as a means for managing the tourism resource paradox.

Keywords: National parks; protected area management; resource paradox; countryside sustainability

Chapter 8

Food and Consumption: How a Meal can Change the World

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We often have a hard time believing that the simple choices we make each day – what we eat, how we respond to stress, whether we smoke, how much we exercise, and how well our social relationships support us – can make powerful differences in our health and well-being, even in our survival. But often they do.

(Ornish in Robbins [2011: xiii])

Introduction

Humankind has gone through a deep change in its food production and consumption patterns throughout history. However, never before did these patterns affect so deeply the balance in ecosystems, the landscape, local economies and even our health, as now. How to feed an increasing world population is certainly a task which has motivated many titles in the scientific literature, at least in the last 30 years, and with different approaches (Ensminger 1978; Pierce 1990; Bodin–Rodier *et al.* 1997; Boyens 1999; Robbins 2001; Madeley 2002; Robinson 2004; Woods 2005; Parmentier 2007; Tudge 2007; Petit 2011). The spectre of famine has generated protests and motivated scientists such as Borlaug, the father of the ‘miracle seeds’ and 1970 Nobel Peace Prize winner, to create HYV (high yield varieties) that gave rise to the Green Revolution, initiated in the 1950s in Mexico. Later on, progress took place in research conducted on GMOs (genetically modified organisms) but, although the overall production of cereals has been in general growing in line with population increase, chronic under-nutrition persists because it “is not a consequence of overall scarcity, but of unequal access to land, technology, education and employment opportunities, coupled with a whole range of socio-economic and environmental factors” (Millstone and Lang 2008: 20). These authors express their belief that “improvements are needed in agricultural practices and in social structures so that more food can be produced and consumed where it is most needed” (*ibid.*). Petit (2011: 107) adds that the most important challenge, in order to increase agricultural production by 70 per cent by 2050, consists in integrating in the modernisation process the small farms, mostly family units, which will remain dominant in many developing countries. Kofi Annan (former UN Secretary General) supports this statement as he contends in the Campaign ‘Alliance for a Green Revolution in Africa’ that “the path to prosperity in Africa begins in the fields of Africa’s small scale farmers, with a dramatic sustainable revolution in agriculture” (www.agra-alliance.org).

A new form of Green Revolution is sought (Horlings and Marsden 2011) which will avoid the problems associated with the preceding one which has favoured some crops over others (wheat and rice over cassava, for example), some countries over others (India to a greater extent than African countries, for example) and large scale producers and, increasingly, commercial companies over small scale farmers (notably in Africa and Latin America) (Bicalho and Hoefle 1990; Briggs 2009).

Although an increase in production is the most visible argument to fight hunger, many other actions can and should be implemented, in order to contribute to a better world, not only in what concerns the environment, but also human health, animal rights, local economies and solidarity among people. That is what I will try to point out in the next paragraphs.

How a meal can change the environment

The need to increase production, due to a growing population and the adoption of a western diet, has induced environmental damage at several levels. In order to reach higher levels of production, intensification of agriculture has been achieved according to a 'demand-based' agricultural model (Botkin and Keller 2003), which has been supported by the heavy use of chemical pesticides, mechanised transfer of raw materials and products, mechanised groundwater irrigation, as well as mining and production of synthetic fertilisers. Thus several resources have been quickly depleted and, in many cases, the simplification of the landscape drove a decrease in biodiversity. In a case study presented by Soltner (1988: 66), an area in western France was studied in three different time periods. Initially there was a complex landscape where 30 different animal species were to be found. The same area had 19 of the former species after hedges were removed. In a final intervention, after the soil was levelled and rivers directed into channels, only 7 species remained. This impoverishment in biodiversity represents a threat to the balance in ecosystems making the emergence of plagues and pests easier. Besides, it has a high impact on the landscape *per se* and may induce erosion processes.

In Europe, especially in Portugal, the abandonment of agriculture, based on the premise that 'everything arriving from abroad is better and cheaper' has also contributed to the proliferation of fires when the fields are abandoned and people migrate. The current economic crisis curiously constitutes a new opportunity to bring these fields back to life since the country cannot afford to import food and thus will have to depend more on its own production.

The 'burgerisation' of the world and the general increase in the consumption of meat has led to the enlargement of the area occupied by pasture and by grain to feed animals, accounting for 66 per cent of deforestation in Central and South America to create pasture for livestock (Millstone and Lang 2008: 38) and 75 per cent of the agricultural land in the European Union which is used for growing animal feed (Millstone and Lang 2004: 34). However "while livestock farming may make economic sense in the short-run, it makes less nutritional or ecological sense in the long-run. Many more people can be fed from a given area of land if the crops grown are eaten directly by people rather than being fed to animals" (Millstone and Lang 2008: 38). According to the same authors (Millstone and Lang 2004: 34–35) the amount of grain

needed to feed one person for one year on a meat-based diet is 930 kilograms and only 180 kilograms on a grain-based diet. Besides, in order to produce 1 kilogram of beef, 10 kilograms of feed and 15,000 litres of water are necessary, which places a great burden on the environment compared to the energy that it supplies.

Food waste, estimated at about 90 million tons each year in the European Union alone, is another problem (www.divethefilm.com). The calibration of fruits has contributed about 30 per cent of waste because of small size or irregular shape. Fortunately this measure has been recently abolished by the European governments. In the USA, the Good Samaritan Act, introduced by Bill Clinton, tried to avoid food going to dumpsters. In that country, the movement 'Dive in' has been recruiting volunteers to rescue food and start living differently. The campaign 'Eat Trash' intends to end food waste (www.divethefilm.com).

How a meal can change the economy

One of the most recent tendencies in the developed world is to buy fresh and local, as Cristóvão *et al.* (2009) exemplify for the USA. Curiously it is also in this country that the word 'locavore' was born, meaning someone who only purchases food produced not further than 400 kms from his or her dwelling (Bégout *et al.* 2010). The term was created by Jessica Prentice, in 2005, during a world pro-environment journey. The circuits of proximity (short food chains) try to correspond to this consumer profile and are well represented in France by the AMAP (*Associations pour le Maintien de l'Agriculture Paysanne*) corresponding to the CSA (Community Supported Agriculture) in the UK and USA. The supporters of these models are consumers who are endeavouring to experience a feeling of community, get fresh food produced in a sound ecological way, mostly organic farming, and keep what is left of agricultural infrastructures around cities. They may help on the farm, especially during the harvest season, or only go for a walk there with their children. They establish a contract with a farmer or group of farmers so that these supply their community with the products that they will need throughout the year (vegetables, fruit, bread, eventually meat and milk products). These farmers usually do not sell any products outside the community and get paid in monthly instalments. The advantages resulting from this contract are evident. The farmer knows from the beginning that the total production will be sold and he/she will get the right price for his/her labour. The participants benefit from the solidarity of the group and if someone, for some reason, is not able to pay his/her instalment, the others will cover his/her share. This no doubt means a major change in values and behaviour towards others, evidencing a sense of solidarity so necessary in a clear scenario of economic and social crisis, such as that we are facing nowadays.

There is some diversity in the way these AMAPs are organised. Some offer box schemes supplying the products of the season each week, which is a good way to eat healthily throughout the year. Data relating to the evolution of the AMAPs in France show a clear pattern of growth in these associations. In 2007 there were 750 AMAPs, responsible for the supply of 30,000 families. In 2010, they were already 1,000 in the hands of 1,600 farmers which supplied 250,000 persons, generating a volume of business estimated at €52 million (Bégout *et al.* 2010).

Short cycles (short supply chains) are an alternative for the producer to get paid immediately and have direct contact with the consumer. The sustainability of these alternative food networks is discussed in a recent chapter published by Ilbery (2011), in a book edited by Traversac *et al.* entitled *Short Supply Chains, Sustainable Development and Territories*. Figure 8.1 shows the distribution of farms with a short cycle sale, by sector, in the département of Maine-et-Loire, France. In this example, viticulture is by far the most represented sector selling its production in a short cycle (42 per cent), followed by fruit and vegetables (16 per cent), beef (12 per cent) and horticulture (8 per cent). Plate 8.1 shows a wine producer from Bordeaux selling his production in a street market in La Baule (north of France). These examples show how

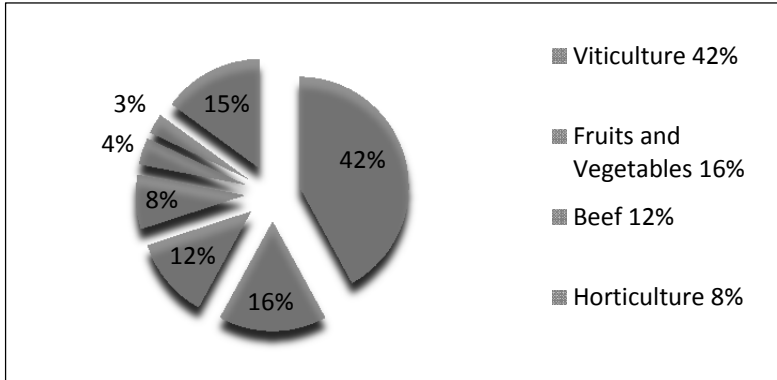


Figure 8.1 Distribution of farms with a short cycle, by sector, in Maine-et-Loire, France (July, 2011)



Plate 8.1 Bordeaux wine producer selling his production in a street market in La Baule, Bretagne, France (July, 2011)

our choices can bring a dynamic to local economies with all the related advantages, such as employment provision, synergies with other economic sectors, national food security, food sovereignty and less pollution and fuel consumption.

“Tell me what you eat: I will tell you who you are”

The opening up to Western dietary models and international food complexes introduced new food patterns in various countries, such as Portugal, based on fast food catering that were particularly well accepted by the youngest members of society. At the same time, the economic expansion of the 1990s, and the concomitant participation of women in the labour market, facilitated the replacement of a family meal with homemade food by fast food or processed food, mostly preserved with chemicals and with high sugar and fat content, eaten in front of a television set. This fact induced drastic changes in the traditional family, in the dialogue between the generations, in the absence of conviviality and in the rejection of the healthy meal present in the Mediterranean Diet, so praised today and laureate in the UNESCO Intangible Heritage.

The change in our daily intake of food starts right after our birth, arising from women being encouraged to feed their babies with substitution milk, based on the assumption that ‘scientifically studied’ specialised products can provide better nourishment to meet the babies’ needs during their growth. However ‘times change and so do attitudes’ and this is what has been happening in Western societies too, supported by the economic crisis. Thus, fewer women find employment outside the home and little by little even doctors recommend that mothers nurse their babies as much as possible. Suddenly the ‘scientifically studied’ milks are put aside on behalf of better health, the intimacy of a nursing moment and, very important at the present time, to spare some euro. A study by Rito and Breda (2010) with Portuguese children aged between 6 and 9 years, showed that 32.1 per cent are overweight (17.6 per cent are pre-obese and 14.5 per cent obese). As causes, the authors present: (i) excess of calories (bread filled with chocolate, pizzas, hamburgers, sodas); (ii) rejection of the traditional Mediterranean diet (soup, fruits, salads, whole cereals); (iii) no physical activity. Among 400 primary school children, 60 per cent practised no sport, watched TV for about 11 hours each week and played with a Playstation for two hours each week.

Campaigns have been launched in order to introduce some good habits, such as ‘Fruits of every Taste’, an initiative of the National Association of Rocha Pear Producers, aiming at informing children about the benefits of eating fruits. They created the site www.clubedafruta.com, and organise visits for pupils to the fruit delivery centres as well as other events (‘Club of the Fruits Party’). Concomitantly, Trüniger and Fonseca (2000: 84) advocate, among other measures, the implementation of information campaigns to make consumers aware of the advantages related to the consumption of quality products, namely from organic farming. They conclude that the motivations to choose organic products are due to the memories of the past or the mistrust produced by food scandals or preference for local production.

New ‘old’ consumption patterns

Corresponding to the model created by Rob Hopkins (2008) of a ‘Transition Town’, many places and people in the world (from a simple quarter of a city to a town or a single group of people— students at the university, neighbours, etc.) try to organise themselves in a more sustainable way. Resilience is an important feature of the transition towns, which try to evolve into a sustainable model. One of the preferences of

these citizens relates to street markets, namely farmers' markets (Plate 8.2). Many different actions can be achieved in the framework of Agenda 21, at the municipal level, as, for example, the supply of organic food to public canteens (in Portugal a protocol between Agrobio, the Portuguese Organic Farming Association, and the municipality of Cascais, near Lisbon), will allow children in the kindergarten to eat organic food at school during one year). Abroad the 'Food for Life Partnership' is a network of schools and communities across England committed to transforming food culture. Their aim is "to reach out through schools to give communities access to seasonal, local and organic food, and to the skills they need to cook and grow fresh food" (www.foodforlife.org.uk/Aboutus.aspx).



Plate 8.2 Farmers' market in the Transition Town Forres, Scotland (August, 2011)

Some people also show interest in alternative catering systems, which can contribute to his/her well-being. The *Bakehouse*, in Plate 8.3, is an example of a restaurant of the slow movement in the transition town of Findhorn, in Scotland. In these restaurants, food is prepared to order, with fresh products, organic (as much as it is available), and people can enjoy the moment slowly. The slow movement was born in Italy, in 1986, after McDonald's opened a restaurant close to the Square of Spain in Rome. Carlo Petrini, a writer on gastronomy, launched the Slow Food Movement to oppose fast-food, namely praising original local and seasonal products, organic farming, recipes inherited from past generations, home-made production and quiet meals with family and friends. It is also in favour of eco-gastronomy, the notion that to eat well is

compatible with environmental protection and that people have the right to enjoy it (Honoré 2006).

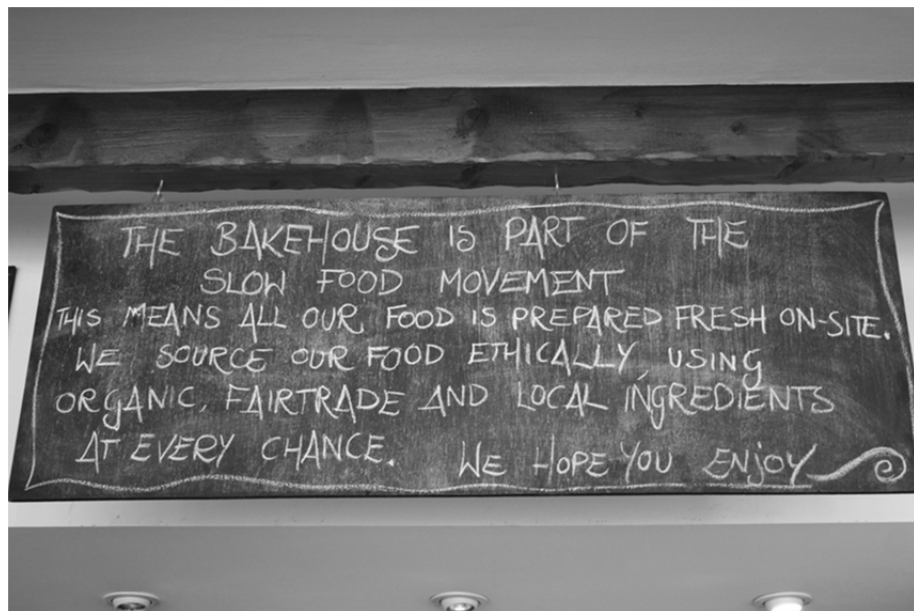


Plate 8.3 The *Bakehouse*, Findhorn, Scotland, example of a restaurant of the slow food movement in a transition town (August, 2011)

Nowadays more and more people show sympathy for a voluntary simplicity. In the 1980s, a phenomenon called ‘downshifting’ was identified in the USA, as a process that some people embraced voluntarily to shift into a more relaxed existence, with less earnings but also less consumption and less stress. In 2002, Datamonitor, a London based market studies enterprise, estimated that there were about 12 million downshifters in Europe and that these should be 16 million in 2007 (Honoré 2006: 51). In order to improve the delight in tasting food, a restaurant in Lisbon offers, once a week, in the evening, the opportunity to eat in complete darkness, so that the senses can more accurately enjoy the smells, the aromas and textures of the ingredients used, without getting distracted.

Conclusion: what can be done?

Rimsky-Korsakoff (2003) suggests that we should all become ‘consum’actors’ and buy ethically and selectively, prioritising local production and consumption. Indeed the number of initiatives aimed at supporting local production has been increasing exponentially. In a global movement of Transition Towns people try to produce as much as they can *in loco* and exchange products among themselves. This will considerably reduce their ecological footprint. Initiatives such as the one intended to supply the Olympic village, during the 2012 Olympic Games in London, with ingredients produced

in the surroundings of and in London, show that this is no utopian dream. On the other hand, some famous cooks have been contributing to the rise of awareness in areas such as the quality of food. Jamie Oliver, in 2004, launched the campaign ‘Feed me better’ aimed at improving the quality of food served in British school canteens. As a consequence, in 2005, the budget for school canteens in England doubled.

The raising of awareness relating to what concerns the environment due to Earth education in schools and the campaigns organised by environmentalists and NGOs in recent decades, as well as the fears motivated by several food scandals (in spite of all the safety that is promised) especially in Western countries, is contributing to a consumer who is more responsible and ethical in his/her choices.

Turning and Fonseca (2000) express the view that the Portuguese consumer, especially the youngest, are concerned with the environment and integrate in their daily consumption certain values and attitudes related to the environment that may correspond to what Spaargaren and Van Vliet (1998) consider as being ‘sustainable life styles’, i.e. behaviours that privilege environment-friendly and healthy products (Trüniger and Fonseca 2000: 7). As a consequence, a new pattern of consumption emerges where not only are the hygienic and nutritional characteristics of the products and prices important factors in the moment of choice, but also the mode of production (organic farming), the distance to the market, direct sale in a short cycle, traceability, the history and edapho-climatic characteristics (*le terroir* according to the French), respect for human and animal rights, solidarity towards poor farmers in developing countries (Fair Trade) and respect for those who produce what we eat.

This corresponds to a paradigm change, supported by the movement that is taking place in favour of more responsible behaviour and actions to mitigate the effects of the economic crisis as well as to offer social and ecological services (Firmino 2011). Food is definitely a fashionable topic at the moment, and it attracts large numbers of people either to the several TV programmes dedicated to it or to fairs organised to promote a particular product (e.g., the sweet potato fair in Aljustrel, Portugal) or medieval markets where a large range of traditional products are offered. It has been used as a tourist attraction, announced in tourist guides, such as: Temple Bar Farmers Market, for “organic gourmet goodies bound by the market’s one rule: local producers only”(Davenport 2010: 69); Coppinger Row Market, for Gourmet Food, that “keeps the focus on small artisan food growers from around the country, who gather here to sell their delicious goodies and address the curiosity of their customers” (*ibid.*: 83); People’s Park Market, for “organic meat and veg, local seafood, Irish fruit and farm cheeses”, to mention only a few in Dublin, Ireland (*ibid.*: 130).

A meal can indeed change the world because the way its ingredients are produced will determine the sustainability of ecosystems and natural resources in general. The reduction in the meat that is eaten has a positive effect on the area cultivated and resources and probably also on our health. Respect for animal rights is a moral obligation. We may express solidarity with the other members of a community (AMAPs and CSAs) and support the improvement of the livelihoods of farmers in (developing countries when we prefer to buy Fair Trade products. There is also a need for what Horlings and Marsden (2011: 441) describe as “a new type of regionally-embedded agri-food economy” in developing countries, through which opportunities are provided for farmers to practise traditional ecologically sensitive methods of production in order to ensure the security of their food supply.

There is so much food dumped in the world that could feed so many mouths, if people became organised in a different way. Famine is not only a question of food production but mainly a problem of wealth distribution. A ‘consum’actor’ has the power to decide in a spontaneous governance act which dictates the sense of development. The preference for local production boosts the local economies, creating jobs and associated activities, keeping the landscape alive and promoting autochthonous varieties. Finally, spirituality and ethics play an important role when a “more inclusive, holistic and peaceful approach to management is needed if business and political leaders are to uplift the environmentally degrading and socially disintegrating world of ours” (Ribera and Lozano 2011: 199).

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Abstract

The emergence of a new paradigm in food production and consumption is a reality made possible by a silent but persistent rise of awareness among citizens who wish to change the prevalent patterns and play a decisive role in achieving a better world by inducing positive synergies in different areas. The realm of these changes is often far broader than most of us realise. The simple fact that we buy organic products may support the maintenance of traditional landscapes, the balance in ecosystems, the genetic pool constituted by traditional varieties and breeds, respect for human and animal rights and so on. The preference for local production will improve local economies and reduce 'food miles' and our ecological footprint. It will also contribute to create employment and bring a new dynamic to some regional industries and services. The purchase of products certified as 'Fair Trade' helps poor farmers in developing countries and last, but not the least, the consumption of a vegetarian meal, even if only a couple of times each week, contributes to considerably reduce the area used to produce fodder to feed animals, making it available for other crops. It is argued here that a change in food production and consumption patterns is necessary in order to promote better health, namely among the youngest, guarantee a strategic food reserve and contribute to the sustainable development of rural areas.

Keywords: Food production; consumption patterns; short cycles; Slow Food, Transition Movements

Chapter 9

Land Use Structures in the Demarcated Douro Region: Overarching Trends in the Last Few Decades

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Introduction

An iconic area, the Demarcated Douro Region (DDR) is not just a special region which produces various wines of excellent quality, with an emphasis on Port wine, but is also a complex landscape, a “giant canvas” (Dionísio 1977: 22), reflecting the interaction between nature and human activity (Andresen 1999). Throughout its 250,000 hectares, only 45,000 of which are taken up with continuous vineyard, according to the Port and Douro Wines Institute (*Instituto dos Vinhos do Douro e Porto*) in 2010, there are many terraced vineyards of specific regional grape varieties, planted on the steep slopes along the Douro River and its main tributaries, offering a very attractive landscape. This landscape was partially classified in December 2001 as a World Heritage ‘Evolving Living Landscape’ (Aguiar 2000; FRAH 2000).

The DDR is an historic, iconic territory but it also contains problems, which require a thorough analysis in order to minimise or overcome them (Pina 2010a). Among the many problems referred to here, we focus on land ownership, farm size and structure, essential parameters in the Douro context, although inseparable from others mentioned below. To this aim, we build upon the statistical information provided in the Agricultural Censuses (INE 1989, 1999 and 2009), selecting some indicators which we combine with the extensive fieldwork conducted. Given the spatial heterogeneity involved, this analysis considers three wine sub-regions but the time span is restricted to the last three decades, a period of great change.

In the DDR, where the terraces rise on the steep slopes of the Douro River valley and its main tributaries, there is no evidence of homogeneity. In contrast, the appearance of the landscape changes gradually from west to east with increasing altitude. These landscape differences are environmental, economic, social, or even cultural, justifying the division into three sub-regions: *Baixo Corgo* (Lower Corgo), *Cima Corgo* (Upper Corgo) and *Douro Superior* (Higher Douro). Nevertheless, the different units complement each other and reveal a remarkable dynamism, in a complex yet very attractive territorial mosaic. Various anthropogenic and natural factors account for such contrasts.

Despite the potential of this landscape, consisting of pre-Ordovician schist-greywacke soils and a very valuable architectural, social, cultural and gastronomic heritage (Cristovão 1999), problems continue to mount in the region. Of particular importance among these problems are: the fragmented land ownership pattern of wine farms, the (dis)orderly expansion of the vineyards (with resulting excess production and

its impact on the regional output), an ageing farm population in decline and a poorly-qualified workforce, trained in traditional practices. Access routes are poor and are one of the major constraints to the dynamism of this region (Pina 2003).

But the problem with more serious repercussions in the Douro context lies in the fragmented land ownership structure. On average, each land owner in the Douro has one hectare of vineyard and about three hectares in total farm area, regardless of the type of land occupied. In 2010, approximately 40,000 small wine farmers (according to the Port and Douro Wines Institute) ran these family farms which are undercapitalised but still the preservers of the Douro landscape. Furthermore, the farms are highly fragmented and dispersed; the vineyards are old with multiple grape varieties and the choice of varieties is not always most appropriate. To make matters worse, access to the farms is often through a mesh of very narrow and degraded roads which are poorly maintained.

The above scenario, although of crucial importance, is not uniform throughout the Douro region; family farms exist side-by-side with business-scale farms, which easily exceed 100 hectares in size and are engaged in export, particularly in the Upper Corgo sub-region. The socio-structural dichotomy has become accentuated, given the progressive territorial and economic importance of these exporting firms in the context of regional production. They have strong technical, human and financial means whilst innovation and mechanisation are limited on the family farms.

Thus, small farms continue to depend on intensive family labour and only rarely do they employ workers. These small farms (< 2 hectares in area), inherited from relatives, persist because of tradition and their sentimental value, since the income they provide is very low, usually supplemented by the older family members' social pensions and the salaries the younger members get paid from other economic activities. Thus, involvement in other activities and multiple sources of income sustain these small farms and the magnificent landscape.

In the larger family-owned farms, paid labour is on the rise and, despite being hard to find and expensive, it has become a necessity since the vineyards were restructured, renewed and mechanised. Although more profitable, the investment is made in new vineyard types that have affected the landscape's character. The changes wrought by the large business enterprises are thus replicated among the smaller holdings. Consequently, the region's sustainability faces the challenge of combining innovation with preservation and tradition; otherwise, the continuity of its heritage and population is threatened.

The Demarcated Douro Region: background

The region, whose history spans over 250 years, is not by any means homogeneous. Although the vineyards and winemaking bestow on the DDR its unique nature, it comprises a striking diversity of landscapes, which increase its potential and shape the three sub-regions: Lower Corgo, Upper Corgo and Higher Douro (Figure 9.1). The Lower Corgo, the westernmost sub-region is marked by a Mediterranean-type climate which, although typical throughout the region, has here a higher degree of humidity and lower average annual temperatures. Less full-bodied wines are produced which are more highly appreciated in drier years (Plate 9.1). This sub-region, the oldest historically, which experienced the greatest anthropogenic transformations, is home to the first group of

vineyards between the most important urban centres in the Douro, Lamego and Vila Real, spreading along the two banks of the Douro. More than 70 per cent of the UAA (usable agricultural area) is occupied by mostly traditional family-owned vineyards on very small and highly subdivided farms. Thus, there are many problems arising from the fragmented farm structure.

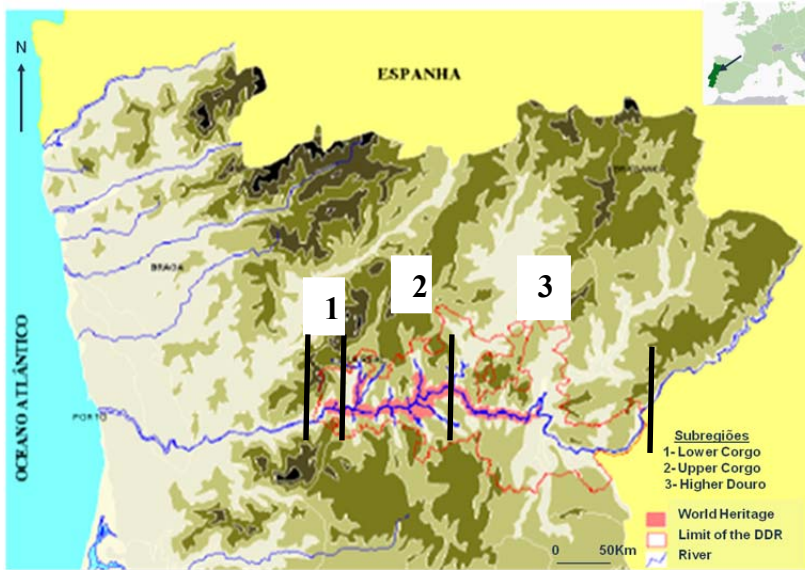


Figure 9.1 The River Douro and the Demarcated Douro Region (north of Portugal)
The World Heritage Area extends along the Douro from area 1 to the eastern extremity of area 3

Source: *Plano Interm. De Orden. Territ. Do Alto Douro Vinhateiro*, UTAD



Plate 9.1 The Lower Corgo: a high percentage of traditional vineyards and terraces are still maintained and olive trees contribute in preserving the landscape and its biodiversity



Plate 9.2 The Upper Corgo with its large commercial estates, where investments were made in renewing the vines and in mechanisation, given the availability of strong human, financial and technical capital



Plate 9.3 The Higher Douro, in Barca de Alva (on the border with Spain), where olive and almond groves dominate

Further eastward is the Upper Corgo sub-region (Plate 9.2), where the major *quintas* are located (large or medium-sized wine estates which include sizeable vineyards, a manor house or other residence and wine production facilities). The largest and most extensive

and renowned *quintas* are located in this area, sustained by a labour force with advanced technical skills working in vast, modern and mechanised vineyards (Santos 2000), and producing the most outstanding Port wines. By contrast with the Lower Corgo, the 'cradle' of the winegrowing region, where there is still a high percentage of old vineyards and traditional terraces, supported by 'rubble stone' walls made of schist, in the Upper Corgo, new morphological types of vineyards prevail. These are organised into 'vertical rows' (*vinha ao alto*) and 'narrower terraces or shelves' (*vinha em patamares*), which are used to overcome the shortage of skilled labour and high wages (Rebelo 1995). Such techniques irrevocably alter the traditional landscape but modernity does have to be reconciled with tradition (Caldas and Rebelo 2000).

Further east towards the border with Spain is the Higher Douro (Plate 9.3), the easternmost sub-region with a more recent vine growing history where, given severe water shortages, olive and almond trees are dominant in the landscape. However, it is in this sub-region that the expansion of mechanised vineyards has become more relevant since the 1970s (Pina 2004).

It should be noted that in any of the sub-regions, the degree of humidity rises with increasing altitude, while the temperature decreases, factors that influence the quality of the wines, thus explaining the different types available. It is from this variety that wines of various organoleptic nuances are produced, both Port and unfortified wines, whether DOC (Controlled Designation of Origin), VQPRD (Quality Wines Produced in a Demarcated Region), or other regional wines.

Given this regional scenario, which is visually attractive but also displays various problems that need to be solved, there is a need to develop some aspects of the economy, in particular of the wine sector. Indeed, if we exclude the regional urban centres, which have effectively sustained the development of third sector activities (Pina 2007) by capturing a young, qualified workforce, which has enabled the continuity of wine-related activities; wine production remains the backbone of the local economy, even though fraught with many problems. In fact, there is a succession of negative factors perpetuating a difficult situation that deteriorated during the twentieth century. We focus on the last decades of that century and the beginning of the third millennium, thus covering three distinct scenarios that represent the changes taking place in the territory. Whereas the first ten years under study (1989–1999) saw the end of a sustained and continuous increase in exports (between the 1970s and 2001), at a later stage a new recessionary period emerged, which deteriorated from 2008 on and still persists. Against this backdrop, what is the strategic position of the Douro vineyard land ownership and land use structures in explaining this situation?

The Douro land use structures: a troubling scenario

The first observation to be made is that the problems have worsened over the decades. At the beginning of the twenty-first century, a bleak picture of the wine industry persisted (Pina 2007), even though vineyards and wine production dominated the Alto Douro's economy. On the other hand, although the area under analysis has diversified its land use, the DDR's economic structure reflected the problems affecting Port wine, other DOC, VQPRD and regional wines. In this context, we highlight the main factors shaping the Douro farming region, in particular its farm structure and land use. We

discuss some of the basic parameters from an evolutionary perspective, based on the Agricultural Censuses of 1989, 1999 and 2009 (INE). Distinctions will be made between the three wine sub-regions, because the differences in land organisation are influential.

1989: problematic farm structure issues

We begin the analysis with a basic parameter, the average size of farms (UAA), to characterise the land use structure of farms, which indicates that in 1989 there was already cause for concern. While in the DDR the average size of farms was 5.1 hectares, variations in size continued to increase (Figure 9.2). In the Lower Corgo the average farm size was less than 2.5 hectares; in the Upper Corgo, by contrast, it often exceeded 5 hectares, although farms smaller than 3 hectares were often found in the municipalities bordering the Lower Corgo. In the Higher Douro, on the other hand, farms were on average 9.2 hectares in area, and could even exceed 16 hectares near the border with Spain. Nevertheless, there were parishes in which the average size of farms did not even reach 2 hectares, particularly in those located on very steep terrain at higher altitudes and even more so if they faced north (Pina 2004). In contrast, in the parishes with larger business establishments, the average size of farms exceeded 5 hectares. This is particularly true in the ‘heart’ of the region, in the Upper Corgo, where the larger sized business type farms are clustered, although surrounded by a huge number of tiny family-based farmsteads.

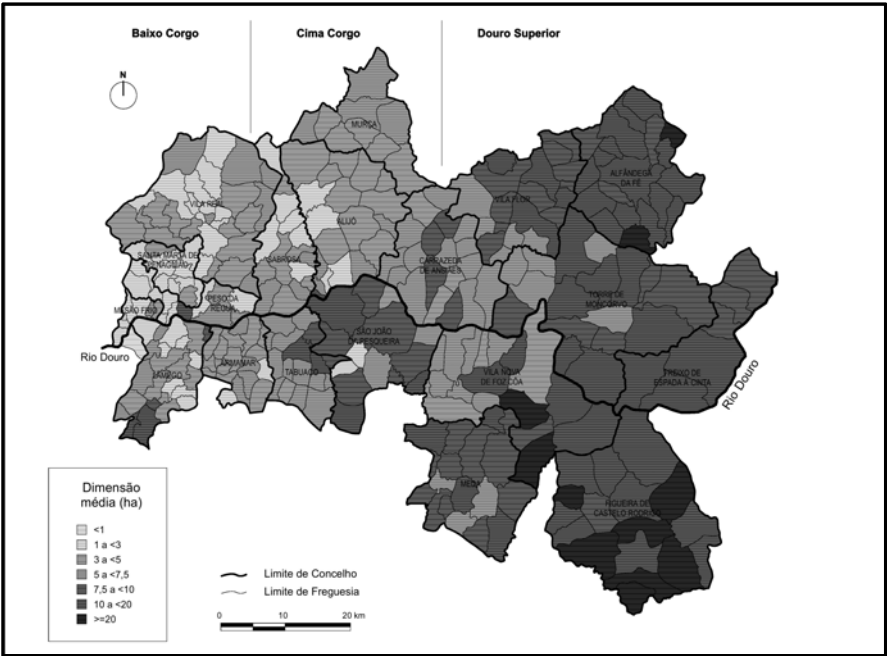


Figure 9.2 Average size of farmsteads, by parish, in 1989 (ha)

This dual farm size structure also occurred in an easterly direction, but to a lesser extent. Due to the more evident edaphic problems and water shortages in the Higher Douro, farms over 10 hectares have increased in number. These larger farms were also found in parishes that had invested in the renovation of the vineyards or in their expansion (Pina 2005), or whose owners had invested in olive and almond groves, taking advantage of the EU funds provided for that purpose (Costa 2000).

A few farms over 50 hectares in area could be found in the Lower Corgo, although they proliferated in the Upper Corgo. However, surrounding them, reflecting a significant and growing socio-structural dichotomy, a tangle of very small farms belonging to independent farmers remained (Pina 2004). In fact, the land ownership and farm size structure showed more serious problems if we consider the farms that did not even reach 1 hectare in size (Figure 9.3). The prevalence of these farms was significant in the Lower Corgo and on the border with the Upper Corgo. More than 65 per cent of farms were of this size in many of this area's parishes. In the Upper Corgo, although there were some farms under 1 hectare, they represented no more than 20 per cent to 40 per cent of the total. In the Higher Douro the numbers were less than 10 per cent, where plot subdivision increased in the most fertile soils only, or in the parishes where urban pressure was significant.

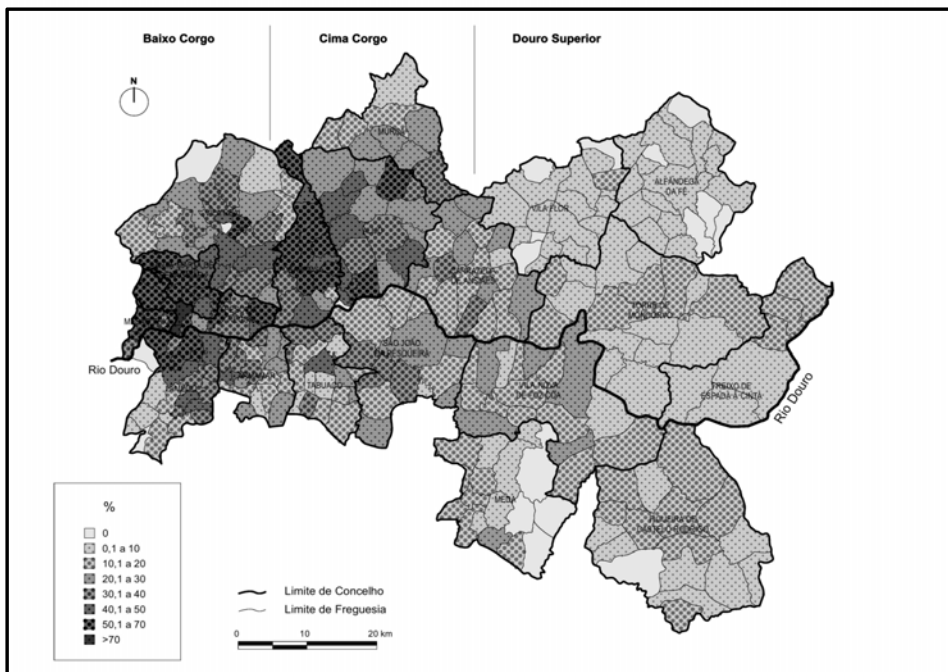


Figure 9.3 Farmsteads below 1 hectare in area, by parish, in 1989 (%)

This socio-structural dichotomy reached its peak in the Upper Corgo with the continuous expansion of large business holdings through the gradual acquisition of plots adjacent to their properties from heirs who abandoned the wine sector, as they moved to the main urban centres because income from the family farm was low (Pina 2007).

Exporting firms would therefore carry out ‘specific land consolidations’, a trend that increased during the 1990s and early 2000s, while also expanding the vineyards under the influence of exporting firms. This led to the absolute prevalence of this culture in the Lower Corgo, which easily covered 85 per cent of the area (Figure 9.4), while in the Upper Corgo it already covered 60 per cent. In the Higher Douro, land dedicated to viticulture was less than 20 per cent of the total, but was growing rapidly.

Land use is further aggravated by the extent to which farms were subdivided. Indeed, although extremely small, farms were subdivided into several dispersed plots. These negative consequences were more significant in the Lower Corgo and especially in the parishes where the slopes are too steep and the altitude too unfavourable to obtain more full-bodied wines (Pina 2005). There, farms could be subdivided into 5 to 10 plots. The Upper Corgo, on the other hand, showed more positive features, especially in the parishes with a strong business focus, where only in rare cases were farms divided into two plots. Mechanisation and the dissemination of innovative practices were hindered, in addition to the fact that a large number of increasingly scarce employees had to be hired. This framework is problematic because, although previous generations accepted the subdivision of farms, the new generations chose to add other activities, giving priority to non-agricultural work that provided them with a secure income and social status.

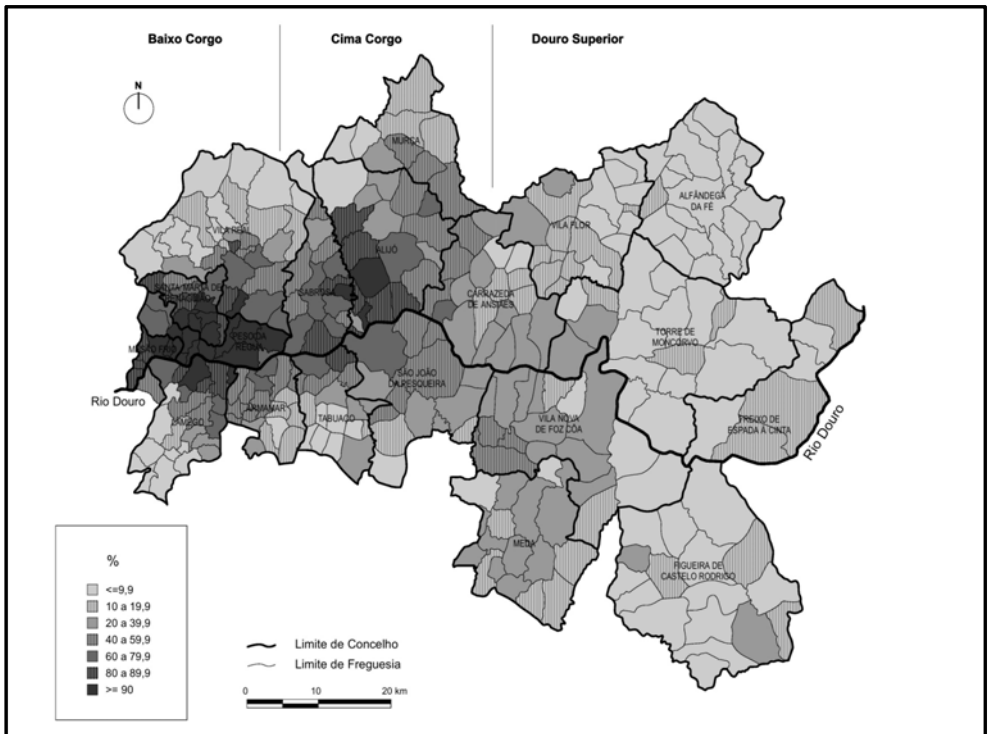


Figure 9.4 Proportion of vine areas in the UAA, by parish, in 1989 (%)

In short, the Douro land use structures in 1989 were problematic, especially in the Lower Corgo. Furthermore, a socio-structural duality existed. Whilst the business farms with extensive technical and financial resources expanded their property (Pina 2007), the larger number of family farms maintained a structure that increasingly lacked capital and innovative technical expertise.

1999: a scenario of deepening problems

One decade later, the problems detected in 1989 had not only continued but also deepened. Between 1989 and 1999 the number of farms decreased (Figure 9.5), and the problems escalated, especially in the Lower Corgo, whilst the area occupied by vineyards expanded. However, this expansion brought about a surplus of wine production, with serious economic and social consequences which would be triggered in 2001. The subdivision of farms also increased as did the average number of plots per farm, particularly in the Lower Corgo, there being a growing number of plots under 5.000 square metres. Thus a precarious situation became more serious.

Whereas in the Lower Corgo the problems multiplied in just one decade, in the Upper Corgo, subdivision also increased, although less sharply. In the Higher Douro, on the other hand, the subdivision of farms rose in the more peripheral areas with a fragile physical and social structure but, in the other areas, the scenario was slightly more favourable. However, the most disturbing scenarios persisted in the parishes adjacent to Mirandela, an industrialised urban centre outside the region (Pina 2007). In this area, in the 1990s, the number of farms increased by 25 per cent while the UAA diminished. Everything pointed to the uneconomic structure of farms in the Higher Douro, requiring farmers to work in multiple activities or abandon their farms if the situation was not restructured.

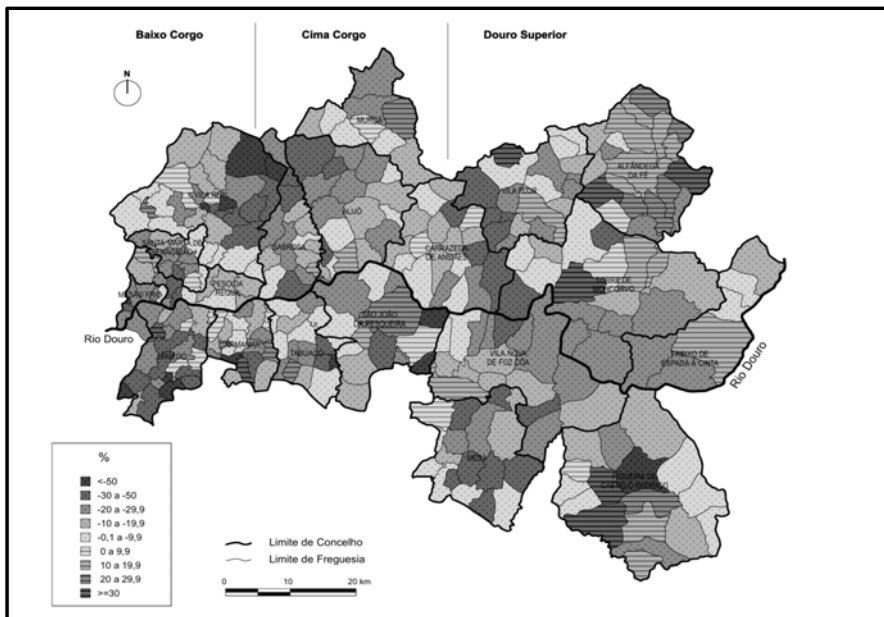


Figure 9.5 Variation in the number of farmsteads, 1989–1999 (%)

2009: growing disparities in a dichotomous framework

In 1999 the expansion of the vineyards was undeniable and ten years later, despite the crisis that had occurred, this expansion continued, leading to an increasing number of parishes where more than 60 per cent of the area was occupied by vineyards, including the Higher Douro (Figure 9.6), an unthinkable fact in the 1970s. In this sub-region, there were parishes in which more than 40 per cent of their area was occupied by recent, mechanised and mostly business-type vineyards. The expansion continued, but with a marked slowdown since 2008.

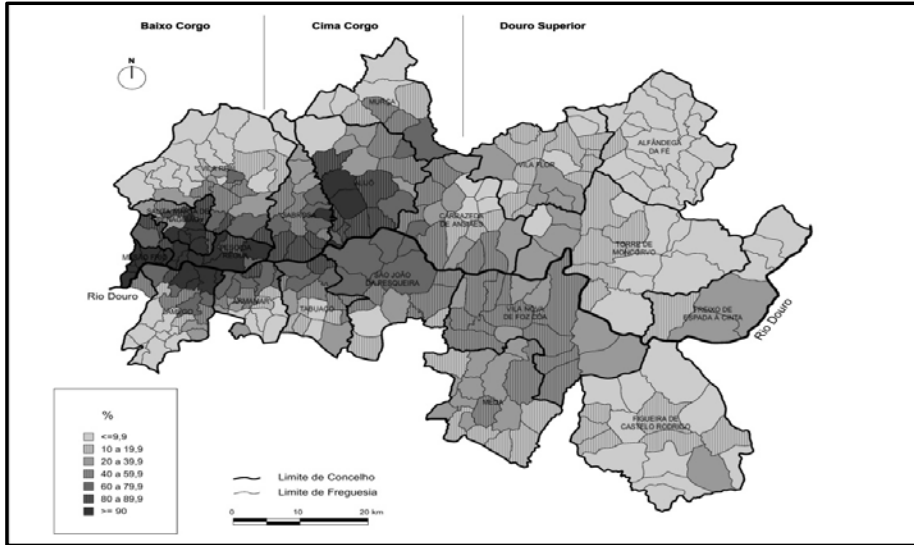


Figure 9.6 Proportion of vine areas in the UAA, by parish, in 2009 (%)

New vineyards stood out in the riverside parishes with a more attractive morphology, especially in the Upper Corgo. The more marginalised parishes, surrounded by more rugged relief and lacking access routes, were marked by an accentuated subdivision of farms and fewer vineyards. They were also marked by a lower number of farms, reflecting the land consolidation implemented by the exporting firms, combined with some land abandonment in the peripheral areas. Such trends have led to a slight increase in the UAA, which has occurred mainly in the Higher Douro and in the parishes with a strong business environment in the heart of Port wine territory. Meanwhile, in the Lower Corgo, the small family farms (Figure 9.7) and older vineyards prevailed. Moreover, the proportion of farms of less than one hectare remained almost unchanged (Figure 9.8), although revealing a slight reduction.

Despite this scenario, the average number of plots per wine farmer was still not very high, especially because the new generations chose to own a limited number of plots close to their homes. Thus, in 2009, in only very few parishes did wine farmers own more than 4 plots (INE 2009), with the more problematic cases found among independent farms located on steep slopes, whilst in the heart of Port wine territory land consolidation took place. However, because the expansion of the business vineyard

operations continued at a time when high production was combined with a decline in exports (without provision for market stability), the Douro situation was aggravated, leading to some abandonment and, with it, to negative landscape impacts.

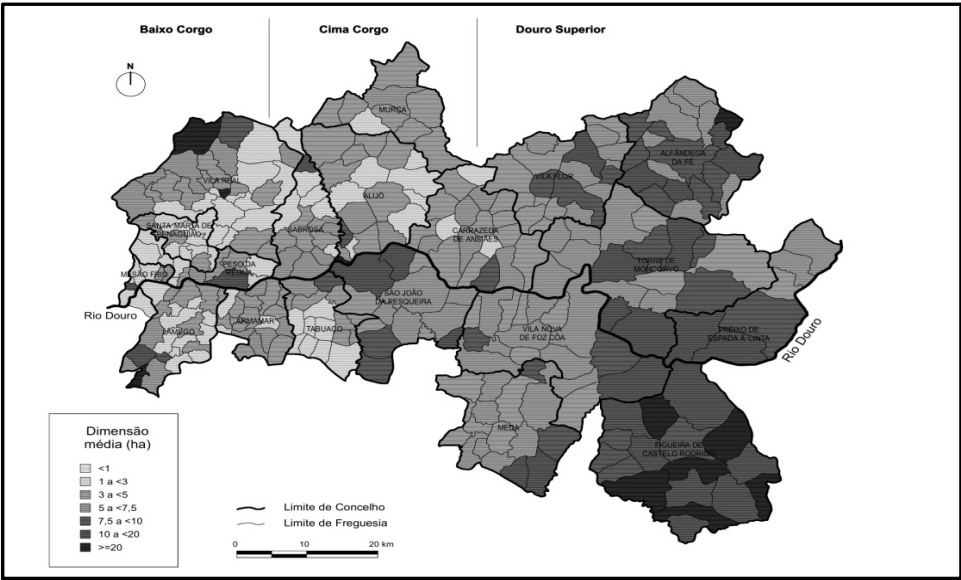


Figure 9.7 Average size of farmsteads, by parish, in 2009



Figure 9.8 Farmsteads below 1 hectare in area, by parish, in 2009 (%)

This is a very complex picture which lacks a strategy to address the impact of a declining farm size, poor training of farmers (MADRP 2007a; MADRP 2007b), or even the gradual reduction of the labour force. The latter factor cannot be ignored, given the continuation of a high percentage of traditional vineyards which are very demanding of manpower. In the meantime, the exporting firms that own large mechanised farms with restructured vineyards reinforced their position, widening the socio-structural dichotomies and enhancing the dependence of family farms on the large producing and exporting firms. Only wine cooperatives emerged as alternatives (Rebelo and Silva 1996); however they also need to restructure.

Conclusion

Despite the potential and heritage in the DDR, there are still many problems, some of which are decades old, for which solutions have not been found. Indeed, they have become more pronounced over time. In this context, we highlighted those related to the wine industry, particularly with reference to land ownership and use structures. We found that even though over the last three decades small family farms continued to prevail, evidence suggests a slight increase in the average size of farms (less than 200 square metres). At the same time, the historical socio-structural duality has become more pronounced; the disparity between the small family properties and the large business holdings has increased, differences that are clearly visible in the technical, financial and human resources employed (Pina 2005). The latter are battling with serious viability problems and, therefore, facing problems of continuity.

Furthermore, these trends involving a multitude of land use differences also confirm that the Lower Corgo is increasingly under-rated, an area which is persistently marked by subdivision. By contrast, the Upper Corgo is being increasingly singled out. It is endowed with a wealth of vineyards, but with a dualistic structure, as the preferred areas are legally owned by the large traditional firms, with capital and a favourable land use structure, whilst the opposite is the case for most small family farms.

The business framework is expanding gradually to the Higher Douro, where the vineyard area has increased dramatically, given the availability of large areas of land, despite chronic water shortages in the summer. Therefore, although in a slowdown, the wine sector is also expanding in this sub-region. This explains the additional vineyards and the succession of annual surpluses, with consequent reductions in prices and income in the Douro region.

Although one of the most serious problems in the DDR lies in the dichotomous ownership and land use structures, there are also social problems, such as the wine farmers' lack of associativism and organisation, the aged profile of most of these farmers, and the lack of technical, financial and legal coordination. But it is in associativism that a solution may reside. However, to increase associativism, or even possibly land consolidation, which is always relegated to a very subordinate role because of the cultural profile of the wine farmers, major investment will have to be made in the information and training provided to these real preservers of the centuries-old landscape.

Furthermore, although the vineyard is the region's economic mainstay, we cannot ignore the other local potential derived from human resources and historical-cultural, landscape, architectural, economic and wine-related attractions (APPI 2003). This is a

multifunctional potential that gradually gains ground and obviously includes tourism in its many forms (Pina 2008; SPIDOURO 2003), as a complement to wine farming without undermining it (Pina 2010b). On the other hand, we need to analyse the question of spatial complementarity more thoroughly, especially the different proposals for the region, without ignoring those operating in the surrounding areas (Pina 2008). All the social groups need to be activated with this view in mind, as it is the only way to effectively promote this heritage in a multifunctional context.

These are the dynamics that have to be implemented, by increasing the number of restructuring projects to take advantage of EU funds under LEADER (an EU rural development programme), PRODER (Rural Development Programme, co-financed by the EAFRD – European Agricultural Fund for Rural Development), and VITIS (Portuguese Programme for the Renewal and Restructuring of Mainland Vineyards) (MADRP2007a). Only thus can rural development be enhanced and boosted in an iconic region suffering from changes that need to be urgently corrected (CCDRN 2006). The future of a region with the World Heritage status of ‘Evolving Living Landscape’ is at stake.

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Abstract

The Demarcated Douro Region (DDR) is not only a special area where a diversity of high-quality wines are produced, among which Port naturally stands out, but also a multifaceted landscape comprising a wealth of history. Throughout its 250,000 hectares, terraces laden with vines rise up the slopes of the Douro River valley and its main tributaries, resulting in a very attractive landscape, classified as World Heritage by UNESCO in December 2001. With the Douro River as its structuring element, the DDR boasts a highly diversified landscape and a superb heritage, unique to the area. It is however rife with many problems, among which are: fragmented land ownership, an aged population in decline and a dichotomy between a number of large business units and a dominance of small scale family holdings. This situation, which is deeply rooted in the Douro region, has experienced change, particularly since the 1990s, when the above-mentioned dichotomy was aggravated and sharp economic and social decline commenced. With the beginning of the third millennium and investment in renewal and expansion of the vineyards, what are the consequences that should be highlighted in terms of farm size, land ownership and land use? To answer this question, we turn to the agricultural censuses, with particular reference to that of 2009, as well as to the extensive fieldwork that was conducted. There is a need to analyse the regional situation with a view to identifying strategies to boost this region, ensuring an increase in competitiveness but within a framework where its sustainability and heritage values are also ensured.

Keywords: Land use structure; viticulture; rural development; sustainability

Chapter 10

Climatic Zoning and Vineyard Aptitude in the Demarcated Douro Region

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Introduction

Environmental factors, namely weather and soil, impinge in a concrete way on the quality of grapes and consequently of wine. These abiotic factors besides being bounding, or even preventive of the establishment of production, are also responsible for a wide range of conditions of production (Clímaco e Castro 1991). It is essential that the grape varieties of a region are perfectly adapted to the edapho-climatic conditions of the region so as to allow, in the great majority of cases and years, perfect conditions for maturation in order to obtain quality production on a regular basis. There is a diversity of methodologies used in the characterisation and bounding of viticulturist regions, namely bioclimatological indexes, pedological, bio-ecological and agro-meteorological methods. The bioclimatical index is a very important tool for correctly defining areas most suited to agricultural production. In the vineyard, the bioclimatological zonal division allows for perfect knowledge of the capacity of a specific area for winegrowing, helps to determine the quality of the species more adapted to the region, and eventually find the limitations to production. The application of bioclimatical indexes is one of the methodologies which it is possible to follow in order to determine the climatic zones of a specific region. These indexes are numeric hints which are used to characterise, in most cases, the climatic capacities of a specific area in order to ensure ripening of the grapes according to the requirements of the different species (Huglin and Schneider 1998) (Table 10.1).

In this study, the Huglin Heliothermic Index was calculated. This index defines the capacities of regions for winegrowing in terms of temperature values and latitude and may be translated using this scale:

$$IH = \frac{\sum [(T - 10) + (TM - 10)]}{2} \times K$$

T represents the daily mean temperatures, TM the maximum daily temperatures and K a variable coefficient between 1.0 and 1.06 for latitudes between the 40°N and 50°N,

calculated for the period between April and September. According to this index, the lower limit of possibility for vine growing corresponds to around 1,400.

Table 10.1 The six weather classes of the viticulturist regions according to Huglin (Tonietto e Carbonneau 2004)

Type of Viticulturist Weather	Abbreviation	Interrelation of classes	Interpretation of classes
Very cold	IH1	< 1500	Thermic limitation– only white species may be grown whose heliothermic requirements for maturing are less demanding
Cold	IH2	>1500<1800	Maturation is possible for a wide range of species, both white and red
Mild	IH3	>1800<2100	Some species may attain the desired maturation a little later
Mild Hot	IH4	>2100<2400	Generally speaking, there is no limit for maturation concerning the group of cultivated species
Hot	IH5	>2400<3000	Heliothermic surplus–risk of associated stress
Very Hot	IH6	>3000	Climate of intertropical zones with the possibility of more than one harvest per year–risk of associated stress

Methods

The study area

The study area is the delimited area in the DDR, the first viticulturist region to be delimited and regulated under the worldwide scale. It now includes around 250,000 hectares, of which 45,000 are occupied by continuous vineyards (IVDP 2010). It corresponds to an area stretching along the valley of the River Douro and its main tributaries, from the region of Mesão Frio (about 100 kilometers east of Porto) to the frontier with Spain on the east border. Due to the length and breadth in a W–E direction along the Douro valley, it is not surprising that the region is not homogeneous, having three sub–regions: *Baixo Corgo* (Lower Corgo), *Cima Corgo* (Upper Corgo) and *Douro Superior* (Higher Douro). The *Baixo Corgo*, the most western region is the ‘birthplace’ of the viticulturalist region. Due to its proximity to the air masses coming from the Atlantic, there is a higher degree of relative humidity accompanied by lower yearly mean temperatures here, although the maximal daily values in summer range around 40°C. Further east is *Cima Corgo* from where more robust wines of a higher quality are obtained, produced in the valley’s more protected region because the temperature on the slopes frequently exceeds 30°C. In climatic terms the weather is less damp, with higher

yearly mean temperatures as well as more pronounced thermic amplitudes, which favour the existence of hydrological problems. In the opposite direction is the *Douro Superior*, the most eastern region which stretches to the frontier with Spain where vinegrowing is more recent and more limited and the yearly mean temperatures and the thermic amplitudes are the most pronounced within the region (here almond trees and olive trees are predominant as they require a less damp climate– a yearly medium precipitation of less than 400 mm).

The top-soils

The valley of the River Douro is geologically framed by the Schist Grauvatic Complex integrated into the Central Iberia Zone within the Hesperic Massif. The probable age is Upper–Cambrian Pre–Cambrian. The soils in the Douro valley are mainly constituted of friable schist clays whose layers accumulate upwards which allows the infiltration of water and roots. Due to the shallow natural conditions of the soil the schistic rocks appear on the surface. The soils are mainly composed of Cambrian and Pre–Cambrian schist (Esteves 2008); however ‘flecking Douro’ come to the surface at one point or other granitic rocks are sometimes inserted in the schist. Small areas of calcareous rocks and quartz veins may be observed more rarely. Another characteristic of the soils where Port wine grows is the fact that they are formed by huge amounts of gravel mixed with clay, giving them a special and convenient structure for the root system of the vineyards. The gravel covered soils on the surface counteract erosion and, as they are dark, they have a great capacity to absorb solar radiation (Magalhães 2009), gathering the heat during the day and distributing it gradually during the night, providing for good ripening of the grapes. The soils display dominant sandy textures (which are prevalent), and dominant muddy and muddy textures. The amounts of thin sand and mud are very high which sometimes hinders the development of new vinestock. Less representative are the granites in Freixo de Numão and Seixo de Numão which, because of their characteristics, generally preclude the production of Port wine. The great majority of the soils may be classified as Leptosols, consisting of a shallow layer over the base rock, and those occupied by the vineyards are Antrosols (Magalhães 2009). With reference to the composition of the soils they are lacking in azoth, calcium and organic matter but rich in potassium, conditions which are truly favourable to the production of wines of superior quality but to the detriment of quantity.

Climate data

This study used data for 18 weather stations belonging to the Agrometeorological Forecasting Stations for the Northern Douro, which represent different phytogeographical areas in the DDR and surrounding areas (Figure 10.1). The database consisted of the following variables: daily precipitation, maximum and minimum temperature and daily mean temperature. Through the analyses of the data series, it can be verified that on many days with no registered data, the observations in nearby stations also showed the absence of temperature values and precipitation. This is a common and serious problem in any kind of study done on the climate of a region. Once

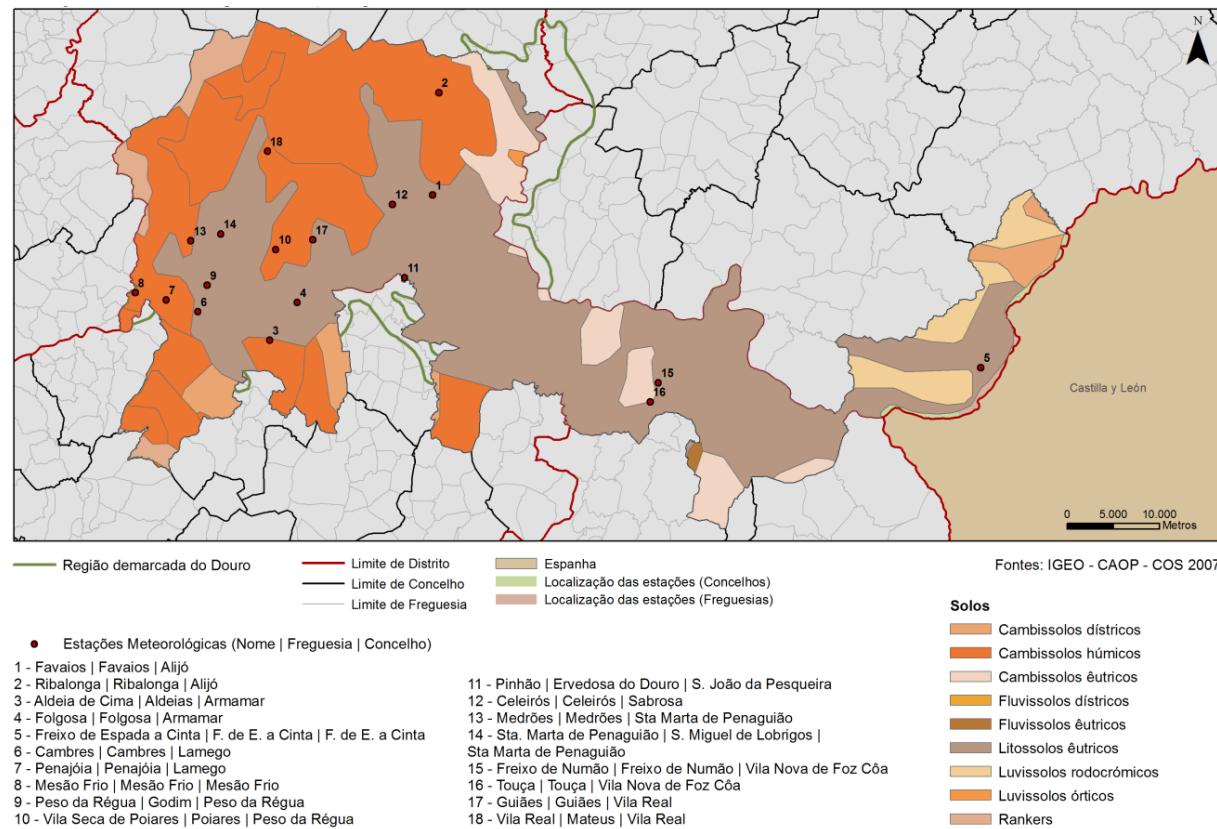


Figure 10.1 Typology of soils and meteorological stations in the DDR

the series of temperature values for some of the stations selected showed a significant percentage of failures, the method of compensating for these gaps was restricted to very simple procedures, so as not to add any noise to the series. Our main goal, besides amending gaps in the data, was not to change in a major way the climatic information actually registered at the stations. Once some of the series were for less than 20 years' duration, they were treated according to a consistent technique. This technique involved comparing the shorter series with a series in a reference station of high reliability and with many years of observations. It was necessary to make some amendments relating to the choice of the most appropriate station for each sub-region, mainly due to orographic features, influence of air masses or even to a better knowledge of closer similarity between a winegrowing region and a meteorological station.

Results and conclusions

It was determined that the maximum value observed in the heliothermic Huglin index in the DDR was 2562 (Pinhão). Through the geo indication of IH in the DDR it was possible to create a map relating to the thermo point of view for viticulture in the Douro region. The climatic groups defined by Tonietto and Carbonneau (2004) were used for this purpose. The map for the climatic areas IH for DDR is displayed in Figure 10.1. In the current vinegrowing regions where Port wine is produced, the classes of viticulturist weather with HI are: for Peso da Régua (IH5) – Hot; in Pinhão, the heart of Douro, it is predominant hot viticulturist weather (IH5). There are some areas with moderate viticulturist weather (IH3) in Vila Real. However for each class of viticulturist weather there are different potential implications for the quality of either the grapes or the wine. The hottest areas tend to produce grapes with a higher amount of sugar and less acidity. The DDR offers conditions to produce exclusive wines taking into consideration the geographic situation.

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Abstract

The ground climatological zone division in tilled areas allows the determination of spaces with special characteristics for viticulture. The objective of the work reported was to define zones in the Demarcated Douro Region (DDR) according to the climatic conditions suitable to produce quality grapes for the existing viticultural regions and for those that present potential for this activity. This work presents Huglin's Heliothermal Index (HI), using data from 18 weather stations. A map with the major thermal zones for wine production was prepared using the geographical distribution of HI in the DDR. The results of this research offer useful information to adapt vineyards to different local climates.

Keywords: Climate; zoning; Douro; vineyards

Chapter 11

Business Development and Innovation among Chicken and Cattle Farmers in Rural Areas, Indonesia

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Introduction

Smallholder livestock keepers represent almost 20 per cent of the world population and steward most of the agricultural land in the tropics (McDermott *et al.* 2010). Two-thirds of the world's domestic animals are kept in developing countries, where over 90 per cent are owned by rural smallholders. They dominate crop–livestock systems, with livestock playing an essential role in highly diversified livelihood strategies that typically combine crops and livestock with off–farm activities (Ellis and Freeman 2004; Deshingkar *et al.* 2008). The major constraints to improving livestock productivity, where production efficiency is only one-quarter that in developed regions, include a devastating animal disease burden, a near ubiquitous shortage of good quality livestock feeds, rapidly diminishing forage and animal biodiversity, poor access to markets, and unresponsive policy environments. Livestock contribute about 50 per cent of the income of poor households in crop–livestock systems in some agriculture–based states of India (Deshingkar *et al.* 2008). Pastoral systems are less densely populated and, for many households, livestock is often the largest non–land asset they own (World Bank 2007).

In rural areas of Indonesia, markets are often poorly serviced. Smallholders are unable to take advantage of market opportunities and must pay high costs to overcome market imperfections. Farmers often have trouble accessing credit, obtaining information on market opportunities or new technologies, purchasing certain inputs and accessing product markets. When markets are accessible, farmers may be subject to price fluctuations or inequitable prices. Such difficulties are barriers to their development and represent a ‘bottleneck’ in the development process (Patrick 2004). In Indonesia, a major role of animals such as cattle and buffaloes is to provide draught power. In terms of resource use there is no competition for food with humans or monogastric animals, since the basis of the diet of draught animals is crop residues—mainly straw from rice and wheat. This basic feed resource is often supplemented with small amounts of forage from communal grazing areas or from cuttings from road sides, which are carried to the animals.

The problem is fundamentally one of a real lack of coordination between researchers and the local farmer. Adopting modern agricultural tools is not possible for

local farmers mainly because of illiteracy. Farmers need less academic feedback than they are currently receiving from agricultural research institutes. Access to knowledge is needed more in relation to dissemination of technology, including methods of reproduction and disease control. With a view towards improving food sufficiency, therefore, this study aims to identify business development and innovation development among chicken and cattle farmers currently operating in rural areas of Indonesia. Food security is recognised as being a particular problem in Indonesia especially among households who are engaged in food and cash crop subsistence farming and agricultural wage labour (WFP and FAO 2010).

Methods

The study was conducted in two provinces in Indonesia, Yogyakarta Province and East Nusa Tenggara Province. The areas were selected by multi-stage sampling. The researchers selected one regency from each province, being the most marginalised area among other regencies where poverty is still a common phenomenon (the regency is a political subdivision of a province in Indonesia which has its own administration and legislative body and each regency is divided into sub-districts). Gunungkidul in Yogyakarta province and Ngada in East Nusa Tenggara Province were selected; then three sub-districts were selected in each regency. In Gunungkidul, data collection was carried out in Wonosari, Playen, and Panggang Sub-districts, while in Ngada data were collected in Bajawa and North Bajawa Sub-districts. In total 149 chicken farmers and cattle farmers were selected as respondents. Using questionnaires as the major tool, the research was conducted by researchers who were assisted by local interpreters. Primary and secondary data were collected. Descriptive statistical analyses were used.

Results

Business development

On average, between 2007 and 2009, the number of cattle owned by the farmers increased slightly. In 2007, the cattle farmers had 3.91 head on average which increased to 4.18 head in 2008, and 4.35 head in 2009. But this is not the case for chicken farmers (Table 11.1). In general, cattle farmers enjoyed some development within three years, while chicken farmers experienced decline in their business.

Table 11.1 Development of chicken and cattle ownership (average /farmer/head), 2007–2009

No	Cattle	Average number		
		2007	2008	2009
1	Cattle	3.91	4.18	4.35
2	Calves	1.00	1.24	1.02
3	Chickens	15.45	13.82	9.12
4	Chicks	12.35	11.03	6.21

The study found that in 2009, the farmers on average sold 2.6 cattle and 0.16 calves. However, we also found that several farmers did not sell any cattle. Chicken farmers, on average, sold 6.34 chickens, 0.32 chicks, and 10.40 eggs. But, we should also note here that egg selling is conducted by only a limited number of specialised farmers; only two chicken farmers were involved in the business of selling eggs.

Table 11.2 Annual operational cost

Cost component	Cost (Rp) and % of total cost	
	Cattle farming	Chicken farming
Feed	1,007,886 (76.61%)	134,808 (77.36%)
Housing	109,457 (8.32%)	17,767 (10.19%)
Healthcare	116,180 (8.83%)	21,585 (12.39%)
Salary of employees	18,818 (1.43%)	101 (0.06%)
Reproduction	63,243 (4.81%)	0 (0%)
Total annual operational cost	1,315,585 (100%)	174,262 (100%)
Number of cattle/chicken ownership	4.35	9.12
Cost/cattle or chicken (Rp)	302,433	19,107

Table 11.2 shows that the cost contribution of feed costs to the total cost of both cattle farming and chicken farming is almost equal: 76.61 per cent of the total annual operational cost was contributed from feed costs for cattle farming, and 77.36 per cent for chicken farming. Since chicken rearing at a household scale was the traditional way of production, without use of a chicken house and without reproductive treatment, the production and performance of chickens was, as a result, very low. This problem was also faced by cattle farmers. But in the case of cattle farming, reproduction problems are still under the control of the farmers.

Both in Gunungkidul and Ngada, native chickens are raised using traditional production techniques by almost every household in the village. They are a side-line activity and are not considered to be the main source of family earnings. The members of the family are generally working in crop cultivation, as labourers, or as traders for their main livelihood. In some cases, farmers have integrated their native chicken operations with inland fish farming by constructing the chicken cages above the fish pond. This enables the fish to use chicken feed and manure for feed. While the utilising of manure for organic fertilisers is a common practice, it is rarely collected in the smallholder farms. Significant amounts of manure are collected on the large farms, and this can become a source of revenue for the farmers. Native chickens represent an important source of meat and eggs. Although consumed by the family on most family occasions, native chickens are not able to provide for consumption on a daily basis due to their low productivity. Native chickens do play a very important role in the cash flow of rural people, provided that they do not suffer from infectious diseases, and native chickens lack specific characteristics and vary in performance and plumage from one to another.

Business innovativeness

Table 11.3 illustrates that veterinary medicines, artificial insemination and vaccines are higher than other forms of business innovation, especially for cattle farmers in Gunungkidul, because Gunungkidul farmers are more aware of animal health and reproduction. In Ngada, artificial insemination is still not familiar. Other business innovations, such as bank credit, paddystraw fermentation, paddystraw drying, and composting of waste are still not familiar in Ngada, due to low information about feed technology and banking. Silage in Gunungkidul is still difficult to implement, due to the dry land. Moreover, they cannot save the feed (grass) during the rainy season, only in the dry season.

It is recognised that better integration and improvement of livestock production in the small farm enterprises could contribute significantly to the improvement of the livelihoods of small farmers (Davendra and Thomas 2002). The development of new technologies and information are important and can help to improve the viability and profitability of small size farms. Emphasis is placed on developing a number of innovative activities: new animal technologies and enterprises that are focused on specialty farm products and the marketing of these products; developing new management tools to enhance the efficiency and profitability of small farms; developing farming methods appropriately scaled to small farms that are directed at more efficient use of natural resources; and developing new educational tools to ensure that small farmers have the information they need to operate their farms on a sustainable and profitable basis.

Table 11.3 Innovation carried out

No	Innovation	Gunungkidul		Ngada		All	
		n	%	n	%	n	%
1	Medicine	74	49.66	8	5.37	82	55.03
2	Artificial insemination	65	43.62	0	0.00	65	43.62
3	Vaccine	47	31.54	17	11.41	64	42.95
4	Paddystraw drying	52	34.90	0	0.00	52	34.90
5	Additional feed	47	31.54	3	2.01	50	33.56
6	Housing	31	20.81	9	6.04	40	26.85
7	Superior grass	24	16.11	15	10.07	39	26.17
8	Waste processing to compost	24	16.11	0	0.00	24	16.11
9	Breeding with superior species	17	11.41	2	1.34	19	12.75
10	<i>Gaduhan</i> from government	8	5.37	8	5.37	16	10.74
11	Silage	0	0.00	14	9.40	14	9.40
12	Recording	7	4.70	5	3.36	12	8.05
13	<i>Gaduhan</i> from public	9	6.04	2	1.34	11	7.38
14	More regular marketing	2	1.34	1	0.67	3	2.01
15	Credit from bank	2	1.34	0	0.00	2	1.34
16	Paddystraw fermentation	2	1.34	0	0.00	2	1.34

Small scale livestock development is normally considered as being the most feasible option for poor small farmers (Phalarak 1985), but native chicken development has been

neglected by the government. This is similar to Thailand's problem, as Kajarern *et al.* (1989) observed; that is, with an increasing need to concentrate on economic crops and livestock, native chickens are attributed least importance by farmers. Therefore, most farmers do not want to invest money in their chickens, especially for better feed.

Table 11.4 illustrates that both cattle and chicken farmers in Ngada were in a more difficult situation in term of capital, healthcare, marketing, feed management, and reproductive management. But in general, access to capital was the most difficult problem faced by famers both in Gunungkidul and Ngada. In Indonesia it is more difficult to get loan capital from the bank for animal businesses, especially for small businesses.

Table 11.4 Problems faced by the farmers

Problem faced *	Gunungkidul		Ngada		All	
	Cattle	Chicken	Cattle	Chicken	Cattle	Chicken
Capital	3.59	3.33	4.53	4.73	3.75	3.51
Health care	2.92	3.12	4.16	4.64	3.14	3.31
Marketing	2.31	2.20	4.21	3.64	2.64	2.38
Feed management	2.86	2.37	4.53	4.36	3.16	2.63
Reproductive management	2.76	2.33	4.47	4.36	3.07	2.59

Notes: *Measured using 5–point Likert scale (1=very easy, 5=very difficult)

Conclusions

Access to capital was a major challenge and problem for poor farmers in the areas studied, since they had low income and poor access to credit. Healthcare was also a major problem, since they had no knowledge about animal healthcare, feed management and reproductive management. Marketing was also challenging. For small farmers living in remote rural areas, transport opportunities and transport costs can both be limiting factors, especially if investment in rural infrastructure is not a high priority on a national level. Information may also be difficult to obtain in remote rural areas, as are credit facilities and other inputs. Innovation both in cattle and chicken production are at low levels. This problem could be reduced by enhancing skills and knowledge through training and education.

Efforts to increase livestock productivity can be effective only if they are linked to an appreciation of market potential; and this calls for integrated approaches along the full continuum of production, storage, processing and marketing. Building social capital, creating learning situations based on extensive interactions and forging durable linkages among stakeholders are necessary to create tangible outcomes beneficial to farming communities in Indonesia.

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Abstract

The study is part of major research on competency development and dissemination to increase innovation among chicken and cattle farmers, as part of a national food security programme in Indonesia. The study aims to identify business development and innovation development among chicken and cattle farmers in rural areas. A total of 149 chicken and cattle farmers were selected as respondents from two provinces of Indonesia (Yogyakarta Province and East Nusa Tenggara Province) using multi-stage sampling. The results showed that the number of cattle increased slightly in three years (2007–2009) while the number of chickens decreased over the same time period. In terms of business innovation, use of veterinary medicines, artificial insemination and vaccines were higher than other forms of business innovativeness in Gunungkidul while, in Ngada, innovations such as credit, feed fermentation and waste processing were still not familiar. The problem of accessing capital was the most challenging among the various problems faced by farmers, such as healthcare, feed management, reproductive management, and marketing.

Keywords: Rural area; chicken farmer; cattle farmer; business development; innovation development

Part 3

Rural Population

Chapter 12

Population and Settlement Change in China's Countryside: Causes and Consequences

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Introduction

It is well known that China is a nation with strong rural roots. Despite rampant urbanisation, 52 per cent of its population still lived in rural areas in 2009, and the national economy has been built on agricultural foundations since ancient times. However, China has transformed rapidly since Deng Xiaoping launched the economic reforms of 1978. The traditional centralised economic system changed to being market-based and the economy, which was once primarily agricultural, has become increasingly urban and industrial (Long *et al.* 2011). Whereas during the 1980s and 1990s the restructuring of rural China was largely driven by internal national dynamics and reforms, and arguably had a limited impact outside China, the outcomes of the current policies for rural development will be of global significance because rural China is increasingly integrated into global social and economic networks (Long and Woods 2011). Global integration has also brought convergence between the dynamics driving change in rural China, and those experienced in other parts of the world. Increased political, economic and cultural openness has exposed rural localities in China to globalisation processes— such as global trade and economic competition, international migration, cultural assimilation, and political issues such as climate change and food security— that are already contributing to the reconstitution of rural places elsewhere (Woods 2007, 2012).

Recently, the restructuring process in rural China has been influenced to a great extent by such national macro-economic development strategies as implementing a household responsibility system, developing township and village enterprises (TVEs) and building a new countryside. These have resulted in tremendous interconnected changes in the rural population, lifestyles, employment structure, industrial structure and community organisation (Putterman 1997; Unger and Chan 1999; Xu and Tan 2002; Tilt 2008; Long *et al.* 2010, 2012). For example, rural population change also directly influences the utilisation and management of rural land. Since rural communities are blighted by depopulation and the abandonment of buildings and land, a unique phenomenon of 'village-hollowing' came into being in China (Long *et al.* 2012). This paper aims to examine the pattern and causes of population and settlement change in China and its effects on China's rural development.

Methods

China has two different statistical methods of measuring rural population: registered and resident populations. Rural registered population is based on household registration (*hukou*) and on the administrative classification of rural areas from which the sampling frame for the rural household survey is derived. On the other hand, rural resident persons have lived in their locality for more than six months in the year preceding the census/survey (NBSC 2006; World Bank 2009: 51). Rural settlement, also called rural housing/residential land, comprises land utilised by rural residents for dwelling and living, that is, land for building houses and other structures or affiliated facilities (Long *et al.* 2007).

In this paper, national rural registered population data were collected from the *China Population Statistics Yearbook* (1993–2006) and the *China Population and Employment Statistics Yearbook* (2007–2010), while national rural resident population data were from the *China Population Statistics Yearbook* (2001) and the *China Statistics Yearbook* (2001–2010). Provincial rural resident population data and rural registered population data were from the *China Population Statistics Yearbook* (2001–2006) and the *China Population and Employment Statistics Yearbook* (2007–2009). We focused our study on the period of 2000–2008 as provincial rural resident population data have only been published since 2001. National and provincial land use data (1996–2008) were from the Department of Land and Resources of each province (autonomous region or municipality). The ESRI's ArcGIS 9.2 spatial analysis module was used to analyse the databases and to identify spatial relationships.

Results

Population change in China's countryside

Figure 12.1 shows that since economic reform and an open-door policy were adopted in 1978, the rural resident population and the rural registered population entered a transitional period of rapid decline in 1996 and 2001 respectively. To put it more precisely, the rural registered population has gone through a rapid decline since 2001 following a period of rapid growth from 1978 to 1991 and slower growth between 1992

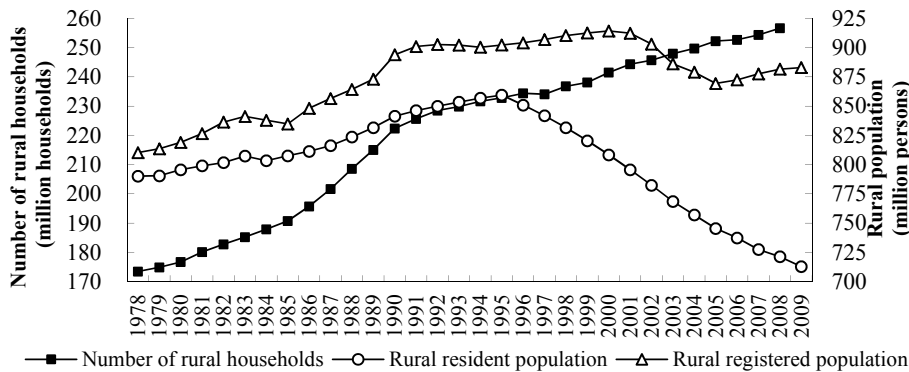


Figure 12.1 Change in China's rural population and households, 1978–2009

and 2000. The rural resident population shows rapid growth from 1978 to 1995 and a rapid decline since 1996. The deviation between rural registered population and rural resident population peaked at 170 million in 2009, most of whom flocked into cities and, thus, a floating population came into being. Meanwhile, improved economic conditions in rural regions and diversification of employment away from agriculture have reduced the traditional dependency on the ‘big family’. Traditional models of the ‘coalition family’ and the ‘stem family’, with diverse family members forming a single inter-generational household, are being replaced by smaller nuclear family households (Long *et al.* 2012). The number of rural households in China increased from 173.5 million in 1978 to 256.6 million in 2008 (Figure 12.1).

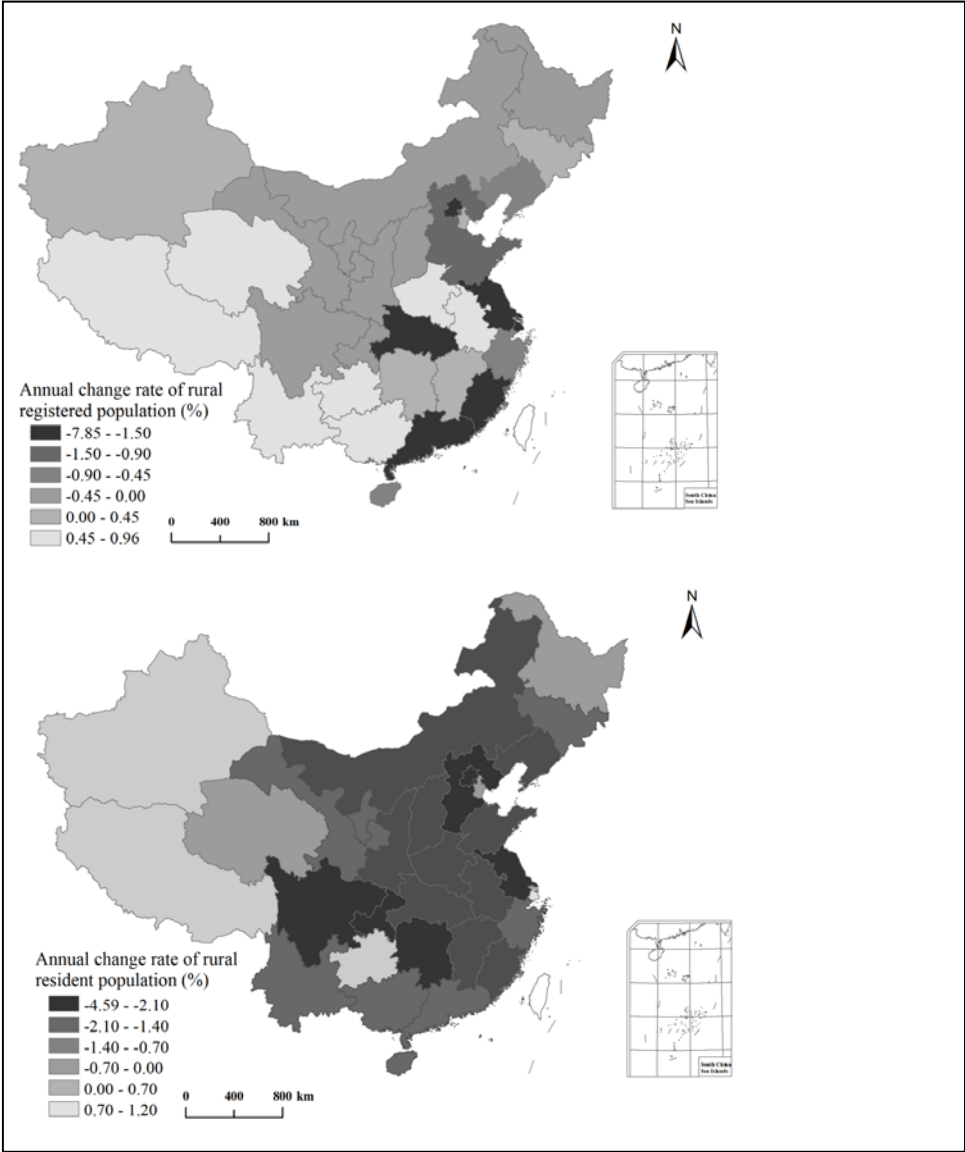


Figure 12.2 Spatial pattern of China’s rural population change, 2000–2008
(The class intervals were derived based on the indicator’s mean and standard deviation)

Figure 12.2 shows that the areas with rapid decline of rural registered population were mainly located in the economically developed eastern coastal provinces which have experienced rapid urbanisation and industrialisation, while population change in the northern provinces was relatively slow. However, there was an obvious increase of rural registered population in central and southwest rural China where there are low levels of economic development.

The rural resident population of the eastern coastal provinces also declined rapidly, as well as that of major grain producing areas with huge migrant and surplus rural labour numbers. There is a universal decline trend of rural resident population in China except for a minor increase in Guizhou, Tibet, Xinjiang and Shanghai (Figure 12.2).

Settlement change in China's countryside

China's rural residential land has been growing at an annual rate of 0.12 per cent, representing an average annual increase of 20 thousand ha since 1996 (Figure 12.3). However, there is an obvious provincial difference, with a decline in the central provinces due to the emigration of individuals and families from rural areas and the reclamation of their settlements for rural purposes while a significant increase took place in the surrounding provinces (Figure 12.4).

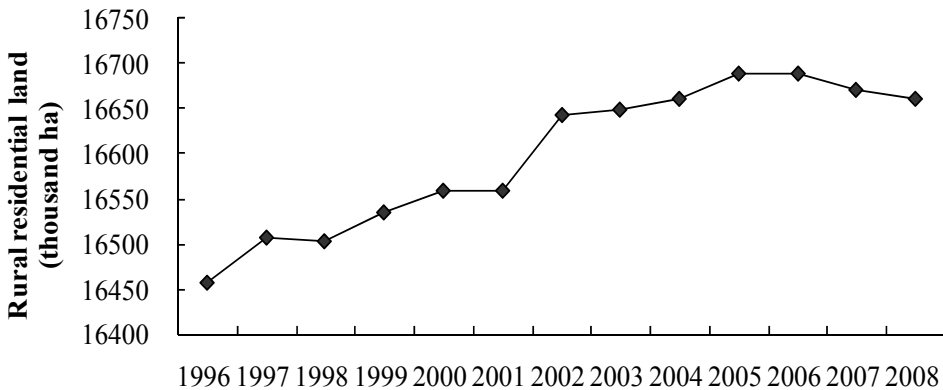


Figure 12.3 Change of rural residential land in China, 1996–2008

Figure 12.5 shows that China's rural residential land per capita in terms of rural resident population continued to increase by 20.76 per cent from 1996 to 2008, and it also increased by 3.60 per cent in terms of rural registered population, which exceeded the national standard limit of 150m² (MCC 1993) by 55.80 per cent and 25.79 per cent, respectively.

In 2008, the spatial pattern of China's rural residential land per capita, in terms of rural registered population, showed that the value is high in the north and east and low in the south and west, and the value in 24 provinces exceeded 150m². However, in terms

of rural resident population, it showed an obvious pattern of high-values in the north and low-values in the south, and there were 27 provinces with the value exceeding the national standard (Figure 12.6).

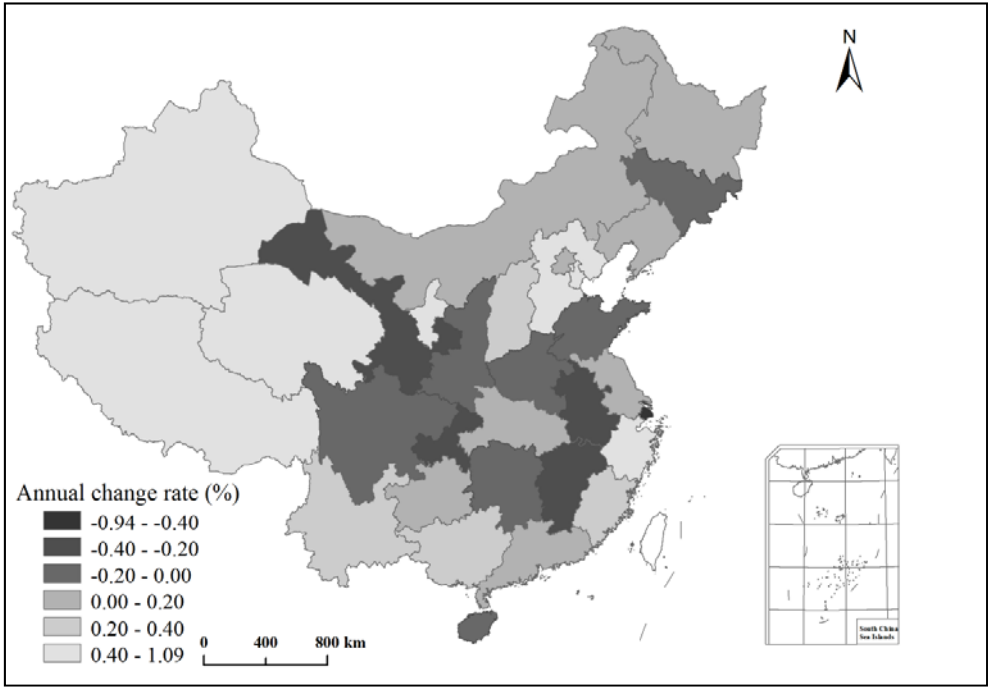


Figure 12.4 Spatial pattern of rural residential land change in China, 2000–2008

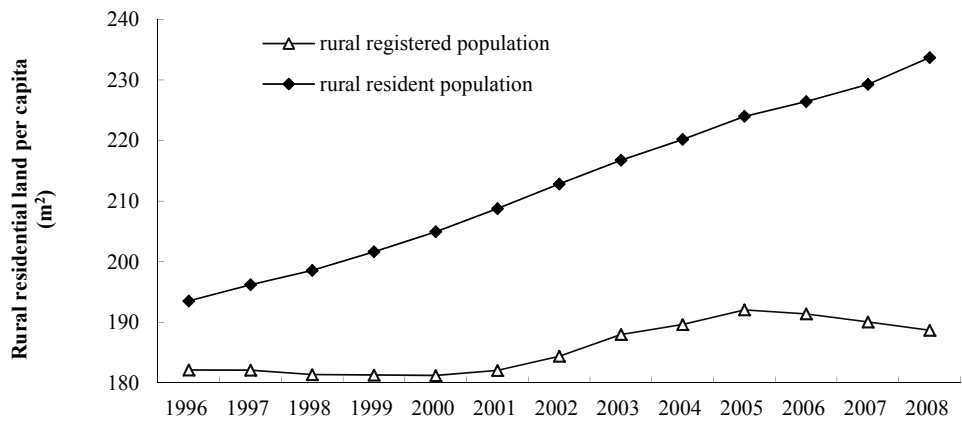


Figure 12.5 Change of rural residential land per capita in China, 1996–2008

During the period 2000–2008, the rural residential land per capita in terms of rural registered population took on a complex pattern, but there was obvious growth in eastern coastal China; however, in terms of rural resident population, all the provinces except one experienced an increase trend (Figure 12.7).

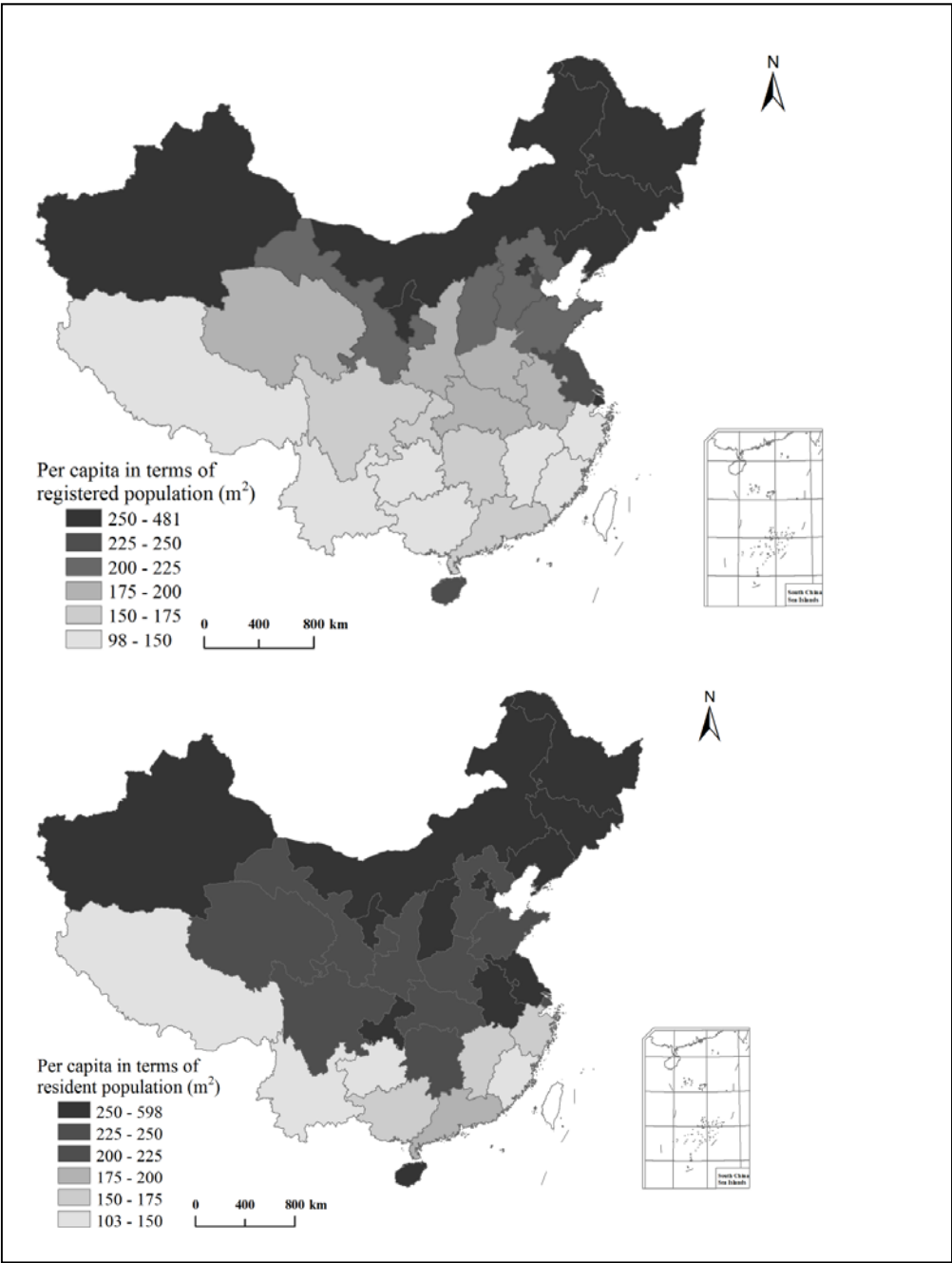


Figure 12.6 Spatial pattern of rural residential land per capita in China, in 2008

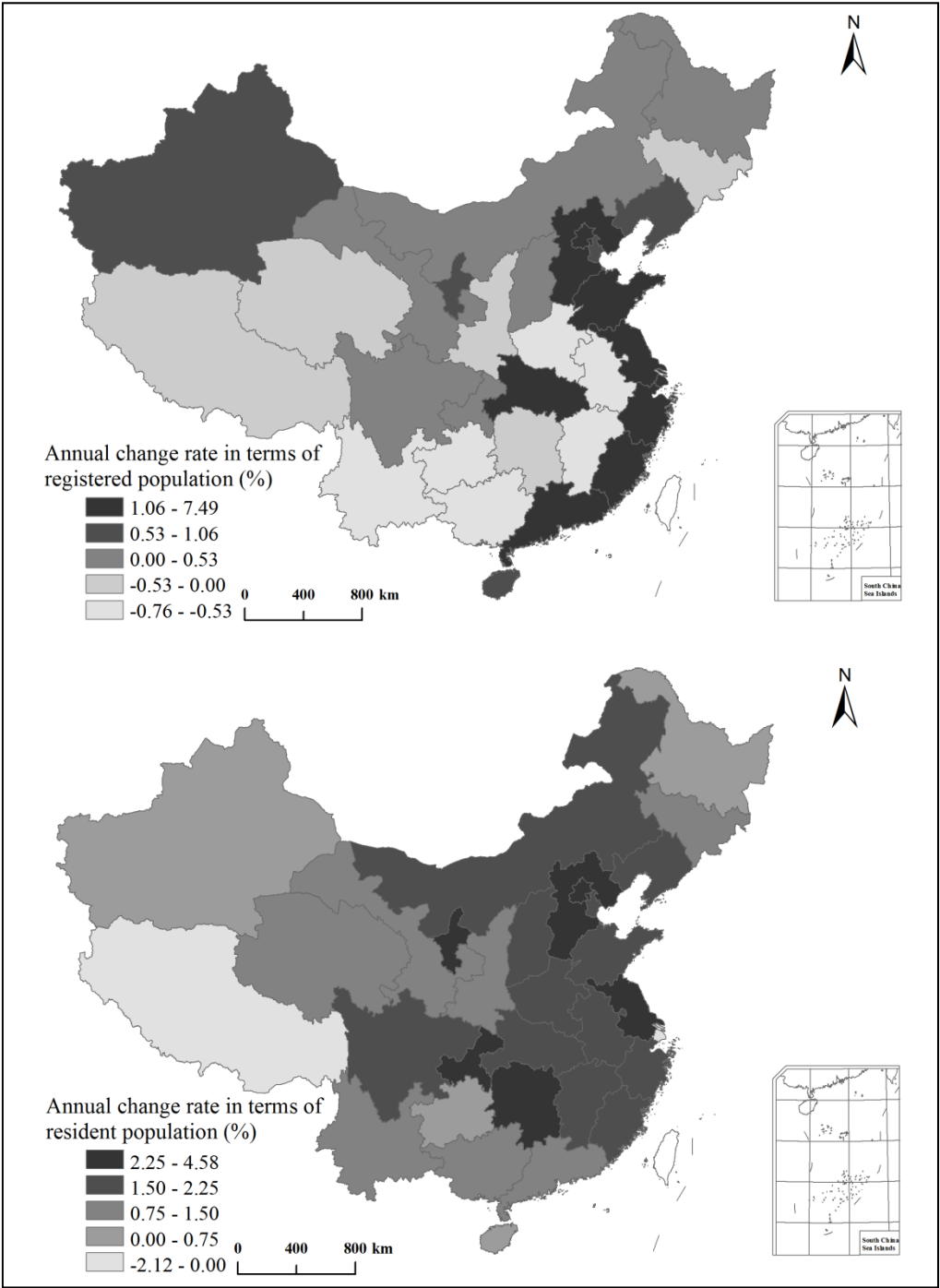


Figure 12.7 Spatial pattern of rural residential land per capita change in China, 2000–2008

Causes

To a great extent, the patterns of population and settlement change in China have been shaped by the ‘dual-track’ structure of rural–urban development, including the contribution of economic, institutional–managerial, socio–cultural and environmental factors (Long *et al.* 2012). Rural population migrating to urban areas in search of highly paid jobs effectively became ‘floating’. The post–1978 economic liberation together with the growth of TVEs increased real per capita incomes and enabled investment in new more spacious and comfortable houses after abandoning the old ones. However, in the context of institutional and managerial factors, the absence of rules and regulations aimed at dealing with vacant or abandoned housing means that local governments are limited in their capacity to act to address the problem of irrational expansion of rural settlement. The ‘dual-track’ policy of rural–urban development in China dictates that the millions of rural migrants to cities are not granted permanent household registration in cities and are not eligible for many social welfare entitlements and employment opportunities that are reserved for permanent urban residents, which encourages many rural migrants to work and live in the cities but keep vacant rural housing to give the opportunity of returning home. In some cases villagers are forced to emigrate and resettle in response to both natural and human–induced local environmental conditions.

The factors mentioned above combine to drive rural population and settlement change in China. And the process is embedded in the wider context of economic restructuring and rural–to–urban migration in China. More importantly, it will evolve differently over time and may have different effects in different places (Long *et al.* 2007, 2012).

Effects of the change on China’s rural development

Rural development and industrialisation and modernisation are closely interrelated in the context of migration, employment, land use and environments. Reform–induced industrialisation and urbanisation have rapidly altered the physical and human landscapes in China’s rural areas, as evidenced by the substantial rate of rural housing development, rural poverty, rural–to–urban migration, agricultural to non–agricultural land conversion, widening rural–urban income gap, and regional inequalities. The population and settlement change in China’s rural areas has resulted in the phenomena of ‘floating population’ and ‘village–hollowing’, which brings about both positive and negative impacts on socio–economic development in rural China.

Traditional Chinese agriculture is labour intensive. With agricultural modernisation and a contraction of the agricultural sector, due to further trade liberalisation, a large percentage of the rural labour force will no longer be needed in this sector. These people will inevitably have to migrate into urban areas and find jobs in manufacturing industries, construction and household service sectors. In the long run, however, these rural migrants will not go back to the rural areas, but will try to stay in the towns and cities, where incomes are higher and living conditions are better. Since most of these migrants are young and better educated than the remaining rural population, there is a significant rural to urban brain–drain. The countryside is losing its most active population segment (Long *et al.* 2010). As such, the major negative effects of the

population and settlement change involve the loss of rural human capital, a huge waste of land resources due to large areas of rural construction land being unused or idle, and the increased social costs arising from the loss of infrastructure in small or remote villages in rural areas. However, there are also some positive effects resulting from this change; for example, it boosts farmers' incomes since out-migration increases scale economies in agriculture and total factor productivity growth, and shows tremendous potential for development that would assist in achieving an optimal allocation of rural land resources, releasing and protecting agricultural land and helping to strike a balance between the demands of food security and urbanisation (Long *et al.* 2012).

Discussion and conclusions

Rural population and settlement change in China has been driven by economic, institutional-managerial, socio-cultural and environmental factors. The rapid urbanisation and industrialisation of the country has drawn migrants from rural to urban areas, leading to a trend of rural population decline; yet most migrants are young and better educated. However, most of the 'floating' rural population cannot really settle down in the city because they have difficulty in being granted permanent household registration in cities and are not eligible for many social welfare entitlements, and need to keep their houses in the countryside. There is a dilemma in terms of rural development in China. Some highly productive farmland and rural dwellings were abandoned because the owners left to work and resettle in the city, and those staying on in rural areas are aged individuals, women, children, and sick or disabled men, which makes rural development partly paralyzed in a sense.

China is a nation with a huge population of 1.3 billion, a large proportion of which is rural. More importantly, China's national economic development is based on the development of rural areas. Although China is rapidly transforming itself from an agricultural country into an industrial nation, sustainable rural development will be an important theme in China's development for a long time in the future due to the obvious regional discrepancies, rural poverty, and rural land use issues (Long *et al.* 2010). Aiming at the current difficult position for rural development in China due to the change of population and settlement, the solutions may focus on paying more attention to curbing excessive rural housing and consolidating rural housing land and providing more job opportunities for the surplus rural labour by developing TVEs. In addition, some encouraging measures and policies need to be set down to stimulate the development of scale management in agriculture.

Acknowledgements

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Abstract

A better understanding of the spatio-temporal characteristics and driving forces of population and settlement change in contemporary rural China, under rapid urbanisation and industrialisation, is an important foundation for instituting feasible policy and strategy to promote socio-economic development in rural China. This paper systematically analyses changing regional patterns of China’s rural population and settlement, using rural demographics from the China Statistics Bureau and land use data from the Department of Land and Resources for each province. The results show that the adoption in 1978 of economic reform and the open-door policy was followed by a rapid decrease in rural resident and registered populations, especially in the five years between 1996 and 2001. In 2009, the ‘floating population’, the difference between rural resident population and rural

registered population, amounted to 170 million people. A positive pattern of co-evolution of population and residential land in rural areas has not appeared, and land utilisation tends to be extensive, especially in northern and eastern coastal provinces. Rapid industrialisation and urbanisation in China has resulted in a phenomenon of ‘village-hollowing’ caused by the dual-track structure of socio-economic development separating rural and urban areas, a process also underpinned by institutional-managerial, cultural and environmental factors. Its impacts on socio-economic development in rural China have been both positive and negative, and suggest some policy challenges for rural development in China. These include curbing excessive rural housing, consolidating rural housing land, providing more job opportunities for surplus rural labour by developing TVEs. In addition, some encouraging measures and policies need to be set down to stimulate the development of scale management in agriculture.

Keywords: Rural population; rural settlement; spatio-temporal pattern; rural development; China

Chapter 13

Measuring Person–Environment Fit of Older People in Villages: Self–Reliance and Feelings of Belonging and Identity

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Introduction

Europe's rural areas are faced with unprecedented changes in population structure. Ageing and 'dejuvenation' (a declining proportion of younger people in the population) require the attention of academics, professionals and policymakers. First and foremost, for some decades, ageing has been related to declining fertility rates and increasing life expectancy at a national level. Secondly, migration is of growing importance for an age specific redistribution of population within nations, between regions and between urban and rural places. In the context of small countries like the Netherlands, retirement migration is not extensive but can have important local effects. As a result, amenity rich rural regions and places show an even higher proportion of older people. Dejuvenation is initially a consequence of the same national changes in population structure. However, rural areas in Western Europe are faced with a recent dejuvenation trend. The migration of youngsters to urban areas is growing in importance in the context of the emerging 'knowledge economy'. Emerging age specific interregional migration patterns are increasingly related to the life course and social mobility (Fielding 1992). The result of the age specific migration patterns is a growing and changing diversity among the older population in rural areas. In addition to older people having grown up locally, there are other older people who have a different migration history. Differences in these migration histories are related to differences in social networks, socio-economic position and housing conditions.

Besides a growing and changing diversity among the older population in rural areas, the geographical diversity of regions and settlements is also changing from an older form to a newer form (Thissen 2001). Geographical diversity based on productive functions is changing into a diversity based on consumptive functions (Marsden 1998). Age specific migration patterns have contributed to this changing geographical diversity but, at the same time, the latter has imposed new conditions on the older population of villages and rural areas. The relevance of changing diversities is also emphasised in the debates of social gerontologists (Phillipson 2007). Awareness of the increasing heterogeneity of older age groups in European societies, related to fundamental economic shifts and social change, has stressed the importance of variables like social class, gender, ethnicity and vulnerability in the experience of old age. However, geographical or environmental variables, especially those relating to rural–urban and

rural–rural divisions within the older population, have been underplayed in European gerontology (Phillipson and Scharf 2005; Scharf *et al.* 2005). The interest in environmental perspectives in social gerontology is increasing, not least because environments are being transformed through changes associated with Europeanisation and globalisation. This is giving rise to new types of migration in old age and is also generating new social divisions (Phillipson 2007).

Despite recent signs of new interest in rural ageing, the lack of data and attention, as Woods (2005) points out, have led to the formation of stereotypical and contradictory images relating to older people in rural areas. Besides the image of older people deeply embedded in a supportive village community, there is also the image of rural older people abandoned by their families and heavily dependent on a poorly developed rural service infrastructure (Scharf *et al.* 2005). Attention has recently been paid to disadvantaged or vulnerable older people in rural areas (Scharf and Bartlam 2006). The person–environment fit of older people in rural places can be seen as the ultimate criterion for the quality of life of this age cohort in a rural setting (Keating 2008).

This paper reports the first results of a study of rural ageing, conducted in 2009 in Eastern Gelderland (the Netherlands). The study focused on several aspects of the person–environment fit of older people living in 17 villages in a region faced by ageing and changing diversity. In 1995, a survey was carried out which focused on a comparable age group in the same villages and which used a questionnaire featuring more or less the same questions. That makes it possible to describe some trends for the period 1995–2009. The next section of the paper develops a conceptual framework for rural ageing and is followed by an introduction to the research region and methods. A description of recent trends is then provided relating to two aspects of person–environment fit. The final section of the paper is a discussion of further analysis.

Rural ageing

Villages and rural regions are often seen as demanding environments for older people, especially when the latter start losing their independence. A lack of local services and public transport, long travel distances to service centres and lower levels of economic development can restrict the lifestyles of rural older people. Individual dependency in interaction with a lack of household resources, like poverty and living alone, can make older dependent people vulnerable (Deeg 2002). Vulnerability in a demanding environment can result in ‘environmental stress’ (Lawton 1982). This is reflected in low neighbourhood satisfaction and low feelings of safety (Van der Meer *et al.* 2008). Rural restructuring, resulting in changing local diversity, can make the rural environment even more demanding for older people. The growing dependency on car use because of general scale enlargement and the social recomposition of rural communities are important developments for older people with uncertain and sometimes polarising effects (Woods 2005). In addition, the restructuring of social policies in European countries has led to an increasingly explicit emphasis in health and social care on individual responsibility and on support provided by (local) support networks (Phillipson and Scharf 2005). This makes a new balance necessary between informal and formal care, including in rural settings.

In general, these developments create new social divisions between ‘successful’ and vulnerable older people (Thissen *et al.* 2003), or between the ‘elected’ and the ‘excluded’, between those able to choose residential locations consistent with their biographies and life histories and those who have resided in the same locality for long periods without any choice or who are trapped in a rural housing situation in which they experience rejection and marginalisation (Phillipson 2007). Person–environment fit of older people in rural places (Keating 2008) covers two domains, a practical domain of independence and self–reliance in housing and care (Thissen *et al.* 2003; Van der Meer *et al.* 2008) and a more emotional domain of ‘feeling at home’; of feelings of belonging and identity (Phillipson 2007). However, even older people who are vulnerable are not only passive consumers or victims of their environment. Most of the time, they are also active agents with respect to that environment. Many older people receive care but most of them also provide care, for instance, to their children, or show high levels of involvement in the local civil society. Only a small percentage of the oldest older people in villages receive care without giving care (Van der Meer *et al.* 2008).

Research region and research methods

Eastern Gelderland (more or less equal to a region called the *Achterhoek*, which can be translated as ‘back corner’) is situated in the east of the Netherlands, along the German border. It is seen by the inhabitants and Dutch visitors as a rural region with an attractive small scale landscape of meadows, arable land, woods, castles and villages. It is famous also, in the Netherlands, as a region with a clear rural identity with socio–cultural values that have been inherited from a traditional agricultural society. Security, intimacy, cosiness, helpfulness (*naoberschap*, the moral obligation to help your neighbours), small scale, self–reliance and dialect are referred to and boasted about as being important socio–cultural values of the region (KNHM 2005). Inhabitants fear the loss of these values because of social trends like individualisation, but also because of features of rural restructuring like the changing composition of the villages because of ageing and in–migration.

At a regional and local level attention to the well–being of older people is growing in Eastern Gelderland. The central goal of the provincial policy is ‘to encourage the ageing population to take part in the society, according their needs and wishes with respect to housing, care and well–being’ (Provincie Gelderland 2008). Besides regional and local programmes directed at care needs, the integration of housing, care and well–being at a local level, the prevalence and avoidance of social isolation and loneliness, the encouragement of participation in order to improve vitality and self–reliance, attention is also paid to the consequences of restructuring (Spectrum 2005). A great deal of attention is also paid, at a local level, to the physical and psychological health of older people (GGD Gelre IJssel 2006). Eastern Gelderland was the context for a study aimed at aspects of the person–environment fit of older people in villages that are facing restructuring. We documented levels and forms of self–reliance and the extent to which and how older people in small villages feel at home. We also sought to describe whether older people themselves contributed to their person–environment fit. This paper concentrates on the conceptualisation and the measurement of person–environment fit. The ultimate goal of the study is to describe the characteristics of older people who are

successful or vulnerable in their relationship with the local environment and the relevance of local differentiation in this respect. In other words: what kind of older people are successful or vulnerable and in what type of village?

Data were collected in April 2009 using a semi-structured questionnaire with 263 inhabitants, aged 55 and older, who were not living in institutions. Older people were randomly sampled in 17 villages in three municipalities in Eastern Gelderland. Comparable data was collected in the same villages in 1995, and this made it possible to describe certain trends over time.

Trends in rural ageing

Trends are seldom used to describe older people in a rural region or in small villages. However, the availability of data from the questionnaire surveys in 1995 and 2009, for such a specific age group, made it possible to indicate some general trends. Important recent trends that can be illustrated are scale enlargement, individualisation and technological change. These trends are often obvious in the changes in the daily path and the life path of the older inhabitants (the 'day path' and 'week path' were used by Thorsten Hägerstrand [1970] to describe segments of the life path of individuals). For instance, the percentage of older people who were born and grew up in the (same) village declined over the time period (Table 13.1). Remarkably, the percentage of retirement migrants did not grow in these villages during the same period of time. This is in contrast with the opinion in the region that social change in the villages is the result of the recent immigration of retirement migrants. It appears as if the changes in social composition in the villages are due more to changes within the region itself.

Technological trends and growing prosperity, as shown by car availability and a higher level of education, mean that older people are becoming more independent and less tied to their village in daily life. The independence of older villagers is also growing with respect to the management of the household. These developments and changes in the migration history, together with general individualisation, have direct consequences for the kinds of social support networks available to older people.

The changes in the support network type (cf. Wenger 1991), described in Figure 13.1, show a clear individualisation trend. Although most social networks of older people are still local, many networks shifted from a 'locally integrated' type to the more individualised type which were 'local self-contained'. Locally integrated support networks include close relationships with local family, friends and neighbours. Older people within this network tend to be actively involved in church and voluntary organisations. Local self-contained networks rely on their neighbours, although they tend to adopt a household-focused lifestyle. Older people within this network display low community involvement. The shift in support network types illustrates the change in the meaning of 'community' taking place in a globalising world (Thissen *et al.* 1995; Phillipson 2007) and changes in the social composition of villages.

Table 13.1 Some characteristics of older people (55 and older) in Eastern Gelderland (survey data 1995 and 2009, %s)

Characteristics	Categories	1995	2009
<i>Migration history</i>	Born and grew up in the village	28.8	23.8
	Settled in village with retirement motives	9.5	6.5
	Settled in Eastern Gelderland after 55 yrs	7.9	6.7
	Other	53.8	63.1
	<i>Total</i>	<i>100.0</i>	<i>100.0</i>
<i>Car availability</i>	Car available, two cars in household	10.2	17.6
	Car available, one car in household	52.1	62.5
	No car available	37.7	19.8
	<i>Total</i>	<i>100.0</i>	<i>100.0</i>
<i>Household independency</i>	< 80 % independent	24.8	19.0
	81–99 % independent	12.9	15.2
	Completely independent	62.3	65.8
	<i>Total</i>	<i>100.0</i>	<i>100.0</i>
<i>Level of education</i>	Higher education (university)	13.1	24.7
	Higher secondary	16.3	28.4
	Lower secondary	10.9	15.4
	Vocational	35.6	29.5
	Only primary school	25.1	7.0
	<i>Total</i>	<i>100.0</i>	<i>100.0</i>

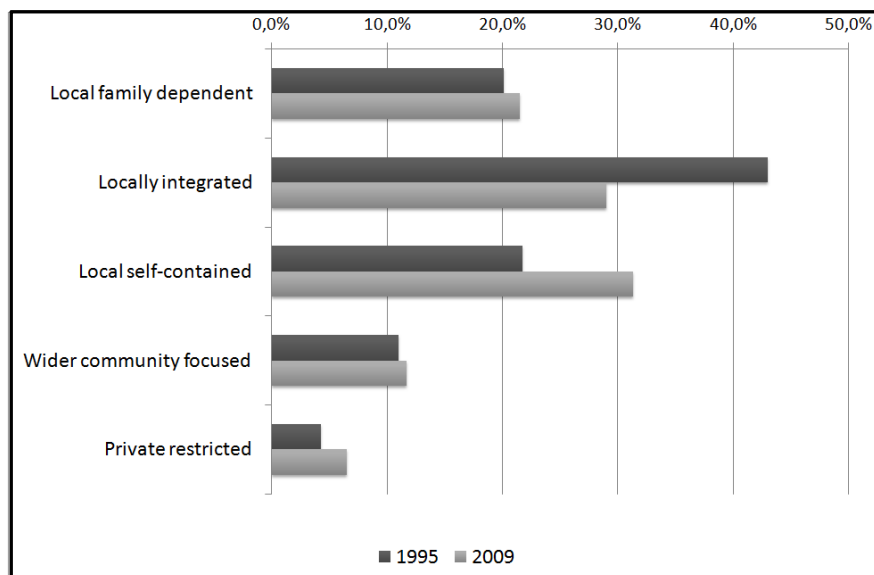


Figure 13.1 Social support network type (cf. Wenger 1991) in Eastern Gelderland 1995, 2009

Person–environment fit in rural ageing

Person–environment fit is essential for the quality of life in old age (Walker and Hennessy 2004), including in rural regions (Keating 2008). Table 13.2 summarises the way we conceptualised the person–environment fit of older people in small villages. We discerned two domains of fit, namely self–reliance and feeling at home, which we connected with the three domains that were discerned in the provincial policy, namely housing, care and well–being. For all domains we developed measures to describe the opinions of older people in general and several aspects of these domains. We also formulated questions to describe the respondents' own contribution with respect to a better person–environment fit.

Table 13.2 Conceptualisation and measurement of person–environment fit of older people in small villages

		<i>General opinion about self–reliance</i>	<i>Own contribution:</i>
Self–reliance	<i>Housing</i>	<ul style="list-style-type: none"> • Opinion about dwelling • Opinion about residential environment • Opinion about characteristics of the residential environment (facilities, safety, inhabitants, attractiveness) 	Recent activities aimed at better person–environment fit: Moving, changes to dwelling, activities aimed at better fit with respect to residential environment
	<i>Care</i>	<ul style="list-style-type: none"> • Opinion about formal care • Opinion about informal care of family • Opinion about informal care of neighbours • Opinion about informal care of friends 	Recent activities with respect to self–care, informal care, volunteering, helping family, friends and neighbours
		<i>General opinion about feeling at home</i>	<i>Own contribution:</i>
Feeling at home	<i>Well–being</i>	<ul style="list-style-type: none"> • Loneliness • Place attachment <ul style="list-style-type: none"> ◦ Social (social integration) ◦ Physical (aesthetic and emotional) ◦ Historical (relation developed in time) • Identification: relation between own lifestyle and place identity 	Recent activities with respect to social integration, the physical quality of the village, historical consciousness, attuning lifestyle and place

Most respondents regard themselves as independent and as self–reliant with respect to housing and care. When asked what is important for their self–reliance, most older people mention their health as being crucial. They often refer to independence with respect to household tasks and personal care. In addition, they often regard individual mobility as important. With respect to housing, most older people are positive about their dwelling and about the residential environment. With respect to the dwelling, the maintenance of the garden is seen as a burden relatively often. A third of older people regard the geographical position of the dwelling as relatively unattractive. With respect

to the residential environment most people are very confident in their village. Traffic safety is quite often judged as problematic. Most people are confident about the level of services in their village, although some of these villages have a small and diminishing number of services. A relatively large number of older people are negative about public transport. However, less than 10 per cent sometimes have a real problem with transport. Most respondents are also positive about care. The negative opinions that are expressed usually relate to professional medical and household care, but are still made by less than 5 per cent. Informal care is always regarded as positive.

The own contribution to self-reliance in housing is described by recent moves to another house, recent adaptations to the dwelling and participation in public action with respect to the quality of the village. References are also made to the own contribution to care with two thirds of older people providing care, with volunteer work, baby sitting, and small repairs being most frequently mentioned.

Almost all older people feel 'at home' in their village. When asked what contributes to this feeling, most of them stressed the social climate, that is the mentality of fellow villagers, the intimacy, feelings of belonging together, social contacts, and village activities. Far fewer references are made to elements of the physical infrastructure, like the older people's own dwellings, elements of the residential environment (like the landscape) and certain facilities. 'Feeling at home' is measured in three ways. First, the feeling of loneliness is measured by a scale developed by De Jong Gierveld (2006). Secondly, the attachment to the village is measured by a village bond scale and opinions on the landscape, social integration in the village, the aesthetic value of the village, the emotional value and the tie with the village developed over time— a temporal perspective of place connectivity (Burholt 2009). Finally the extent to which the respondent identifies with the socio-cultural values of the region was measured. With respect to feeling at home we also measured the contribution that old people make to feelings of belonging and identity in their village. Active participation in social activities, volunteering and active involvement in village affairs were measured and high levels of engagement were found.

Discussion

This chapter is limited to the introduction of the theme of rural ageing, a first conceptualisation of this theme, the development of a methodology and a description of the variables developed to measure person-environment fit. Interesting questions to answer concern the relationship between self-reliance and feeling at home. Two alternative hypotheses can be discerned. Firstly, it is possible that older people who are self-reliant with respect to housing and care also feel at home in their village. An alternative hypothesis is that feelings of belonging and identity are paramount and are the basis for person-environment fit with respect to housing and care. The question is, therefore, not only whether a relationship exists between self-reliance and feeling at home, but what the direction of the (causal) relationship is. Other questions to answer relate to the stated variety of older people and of rural places. What is the effect of personal characteristics and the variety in the residential environment of the villages for the person-environment fit? Which older people are 'successful' in which villages and which older people are vulnerable with respect to person-environment fit in which

villages? What is the meaning of the alternative models with respect to the relationship between self-reliance and feeling at home for different groups of older people in different types of villages?

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Abstract

European societies are ageing fast and European rural areas are ageing even faster. Policymakers are concerned about housing, care and the well-being of older people in rural areas, especially in small villages. A central issue in this paper is the concept of the ‘person–environment fit’ of older people. The group of older rural inhabitants in question is diverse, with successful older people and vulnerable older people sometimes being members of the same rural communities. Successful older people are able to make choices with respect to their environment that are related to their preferences, while vulnerable older people are confronted with exclusion and alienation by developments in their environment. This is reflected in differences in self-reliance and feelings of belonging and identity. The focus of this paper is on the measurement of aspects of person–environment fit of older people in villages. Although the role of the community is no longer self-evident, the local context is still relevant for the division between successful and vulnerable older people. However, older inhabitants are not only consumers or victims of their environment. They are also active agents who contribute to the quality of the local environment. The measurement of person–environment fit is illustrated by the results of a survey of 263 older inhabitants, living in small villages in the East of the Netherlands, conducted in 2009.

Keywords: Ageing; villages; older people; self-reliance; feelings of belonging

Chapter 14

Transnational Migration, Globalisation and the Persistence and Adaptation of Rural Livelihoods: A Case Study of the Kazakh Diaspora in Western Mongolia

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Introduction

The focus of this chapter is transnational migration among the Kazakh population living in western Mongolia and the implications of their migration decisions and behaviours for individuals and the broader community of Bayan-Ulgii *aimag* (province). Individual and household adaptation to changing economic, social, and environmental conditions is essential to sustaining livelihoods through time (WCED 1987). At the community scale these adaptations collectively alter the social and economic dynamics within rural areas. The chapter assesses the local scale impacts of transnational migration on local economic development and, in turn, livelihoods, in a once isolated, rural province. As an outcome of these migrations, the communities within Bayan-Ulgii have become more integrated into the broader global economy. In turn, this has brought about new economic contexts in which everyday life is negotiated and manifested in changes in livelihoods and consumer practices in this largely isolated geographical region.

The research is informed by several different but related literatures including the growing literature on transnational migration, behavioural approaches to migration decision-making and the broader sustainability literature. In utilising these different literatures, we are interested in understanding this particular migration, within the context of both structural factors that promote and inhibit migration of a particular group of people, while acknowledging that these decisions reside at the individual and household scales.

From the perspective of sustainable development, improving social, environmental and economic well-being of a community is key to long-term viability (Bowler *et al.* 2002). Within this framework, several key factors influence local livelihood change and community economic viability, including: the changing role of women; new economic opportunities created by greater connectivity to Russia, Kazakhstan and China; and increased access to non-local cultures. These factors influence the ways in which households adapt to the changing economic circumstances in western Mongolia and raise questions about the long-term sustainability of current economic development

which is, at least in part, dependent upon continued connectivity with nations and populations beyond Mongolia.

Transnational migration

Transnational migrants are defined by Castles and Miller (2003: 45) as “migrants whose social and cultural identities transcend national boundaries, leading to multiple and differentiated forms of belonging”. Scholars of transnational migration argue that this type of migration needs to be approached from multiple scales (household, community, origin and destination) and to incorporate the influence of both macro-economic trends and local social and economic practices, integrating these traditional models and understandings of migration behaviour and new global migratory realities, and one way to do this is through multiple scales of analysis (Glick-Schiller *et al.* 1995; Cohen 2005; Cohen *et al.* 2008; Sirkeci 2009). Recent studies of transnationalism include analyses of economic issues (e.g. Adams 1998; Connell and Conway 2000), cultural issues (e.g. Basch *et al.* 1994; Glick-Schiller *et al.* 1995), political issues (e.g. Ong 1999; Vora 2008) and studies of gender and transnational migration (Pessar and Mahler 2003). Other literatures that inform our understanding of transnational migration among the Mongolian Kazakhs, which we discuss in other articles (see, for example, Barcus and Werner 2007; Werner and Barcus 2009), include the importance of transport and communication technologies and social networks as key factors in the migration decision-making process. The concepts of ‘homelands’ and ‘identities’ – again the idea of multiple scales and the emergence of identities beyond the local – may encompass both past histories, as well as aspirations for the future. And finally there are behavioural approaches to understanding migration decision behaviours (Boyle *et al.* 1998). Migration decisions are also influenced by broader structural factors, such as changes in immigration policy in destination countries, economic fluctuations that privilege opportunity in one location over another and, as in the case of the Mongolian Kazakh diaspora, the availability of government-sponsored incentives to move. These broader scale factors influence but do not determine individual decisions which may be more influenced by an individual’s perceptions, needs, desires and economic circumstances. In this article we argue that migration attitudes and transnational migration more generally have local-scale implications for economic development and livelihood strategies in Bayan-Ulgii.

Methods and study area

Preliminary research began in 2006 with an initial survey questionnaire which we tested both for content and usefulness of questions and also the feasibility of pursuing these research questions in various study sites in rural Bayan-Ulgii *aimag*. Our preliminary work was followed, in 2008, by the completion of 40 semi-structured life history interviews and 183 household surveys. For our survey we utilised a stratified quota sample based on age, sex, migrant/non-migrant status and geographic location (urban or rural). We completed follow-up life history interviews in 2009, returning to a sub-set of those individuals interviewed in 2008.

Bayan-Ulgii is located in the far western corner of Mongolia and shares international borders with both Russia and China. The population of the province is primarily Kazakh (88.7 per cent). Kazakhs comprised only 4.3 per cent of total population of Mongolia in 2000 (the most recent census data available) and are largely clustered in Bayan-Ulgii *aimag*, Hovd *aimag* (also in western Mongolia) and the capital city of Ulaanbaatar. Similar to Mongolians, the Kazakhs historically are semi-nomadic pastoralists. Modern populations in Mongolia are increasingly diversified economically, although pastoralism is still a pivotal part of the Kazakh cultural identity. In contrast to Mongolians, Kazakhs speak Kazakh (rather than Mongolian) and are Muslim, rather than Buddhist. Post-socialist decollectivisation of agriculture and the opening of international borders between Mongolia and China and Russia have ushered in new economic opportunities and challenges both within Mongolia and internationally.

As Mongolia transitioned from a communist to a democratic form of governance and from a command to a capitalist economy in the early 1990s, the Mongolian Kazakhs, taking advantage of President Nazarbayev's incentives for migration and repatriation to Kazakhstan, began migrating out of Mongolia to Kazakhstan. At the peak of this outmigration, nearly 60,000 of the 120,000 Kazakhs in Mongolia are estimated to have migrated to their 'homeland' of Kazakhstan. Nearly 20,000 of these original out-migrants returned to Mongolia by the end of the 1990s. These shifting migration patterns and the changing composition of the flows are important catalysts for the community-scale changes occurring in Bayan-Ulgii. Return migrants and, increasingly, temporary migrants return to Mongolia with new knowledge and lifeways and geographically extensive social networks. Improvements in communications technologies have facilitated the maintenance of and enhanced these networks and information flows and created new employment opportunities beyond traditional pastoralism. Bayan-Ulgii has become more integrated into the broader global economy, which has brought about new economic contexts in which everyday life is negotiated and is manifested in changes in livelihoods and consumer practices.

Results: adaptation and changes of rural livelihoods

Our research findings suggest that several key factors influence local livelihood change and community economic viability, including: (i) new economic opportunities created by greater connectivity to Russia, Kazakhstan, and China; (ii) access to non-local cultures through travel and migration which influences local livelihood adaptation; and (iii) changing lifestyles for women.

Economic changes

The first factor includes the broad economic changes occurring in Bayan-Ulgii, including the expansion of trade, tourism, communications infrastructure and, briefly, migration. The transition period, extending from 1991 to 2009, opened new opportunities and challenges for residents of Bayan-Ulgii. Trade expanded substantively. Prior to 1991, trade across the Russian and Chinese borders was strictly controlled and the majority of local commerce took place in state-owned stores. As the

borders become increasingly porous between Mongolia, Russia and China, residents of Bayan-Ulgii are able to engage in cross-border trading activities. Traders from Ulgii travel to Urumqi in Xinjiang province in China, trading animal skins and cashmere for Chinese-made clothing and household goods. These goods are sold in the bazaar in Ulgii or other *soum* centers. The goods are also traded to Russian traders who buy the Chinese goods to sell in Russia. These trade relationships have grown informally since the beginning of the transition when small scale traders worked across the borders. Today, there are many new privately owned stores in Ulgii selling imported furniture, clothing, electronics, and other miscellaneous household goods to local consumers. For some, trading is a primary economic activity but, for many who engage in trade, this income supplements income from other sources such as herding or jobs in the formal sector.

Tourism has also opened new opportunities for local residents. Numerous tour companies operate in Ulgii, while others are based in Ulaanbaatar providing trips to the Altai region. The Altai region, where Ulgii is located, is well-known for its high peaks (Tavan Bogd~ 4,000 m; Khuiten Peak~ 4,500 m), petroglyphs, glaciers, and for its cultural tourism opportunities. The Kazakhs are a minority population and such practices as eagle hunting and the eagle hunting festival as well as home stays and horse treks attract both adventure tourists and individuals interested in indigenous cultures and cultural experiences. Tour companies in Ulgii are dominantly home grown, owned, operated and staffed by local people and utilise local social networks to provide experiences for tourists. One tour operator boasts that his company has served tourists from more than a dozen countries. The majority of tourists to western Mongolia include Russians, and western Europeans, with a handful of Americans, Australians, Japanese and Koreans. For young Kazakhs, tour companies offer opportunities to work as translators and guides while, for herding families and eagle hunter families, opportunities include hosting tourists and providing horse trekking experiences as well as acting as drivers for the various companies.

The transition period has also been a time of widening communications infrastructure. During the 1990s, there was little direct connection between Ulgii and the outside world beyond Mongolia. Today, most urban homes (and many rural homes) have television sets and can access television stations from Russia, Kazakhstan, China and Mongolia. Programming ranges from news broadcasts to soap operas and Kazakhs, young and old, are avid enthusiasts. For those in more remote areas, satellite dishes and solar power facilitate the use of televisions. In urban areas, wealthier families also have computers and internet connections at home. Finally, cell phone communications have rapidly expanded in the past decade. Most urbanites have cell phones as do rural residents in the areas with cell phone connectivity. Although not all rural pastures are connected, an increasing number are and households with family members living in Kazakhstan report frequent and sometimes daily communication with family members via text messaging.

Access to non-local cultures

This greater engagement with the world outside of Mongolia is also reflected in travel destinations. While many people who travel outside of Ulgii or outside of Mongolia do so for trade or business purposes, a small but growing affluent class travels

internationally for leisure to destinations in Southeast Asia as well as to Russia, Turkey, Kazakhstan and, less commonly, to cities in western Europe and the US.

Migration to and from Kazakhstan continues despite economic decline in both Mongolia and Kazakhstan. As we have elucidated in previous papers, the decision-making process has changed in recent years. Today, people weigh the pros and cons of staying in Mongolia versus moving to Kazakhstan within an extensive framework of information and experience. Many people have visited relatives in Kazakhstan and most visit Kazakhstan before deciding to migrate. Others, such as herders, who are hit particularly hard during a winter season may choose to move as an alternative to trying to continue to survive as herders. Respondents have indicated that moving to Kazakhstan is good for younger adults and children (who will have greater job opportunities with Kazakhstani high school and college diplomas) but for older adults the jobs are more difficult to find and the adjustment process more challenging. Migration and travel to Kazakhstan has greatly influenced the social and cultural practices of non-migrating Mongolian Kazakhs. Wedding ceremonies have become more elaborate, and home designs are becoming larger and more architecturally interesting than the traditional single or two-room mud-block homes characteristics of old-Ulgii. Clothing styles of young people differ little from what one would find in urban areas of major cities.

These broader scale changes in Ulgii set the stage for looking at local livelihood changes. Between 1990 and 2004, the number of herding households and the total number of herders nearly tripled in Bayan-Ulgii and a larger share of herding households own televisions, cars and motorcycles (an indication of material wealth) (Table 14.1). Livestock increased from 1.3 million head of livestock in 1989 to 1.6 million in 2007 (NSO 2008). Increases in sheep and particularly cashmere-producing goats represent a changing composition of the livestock herds.

Table 14.1 Increasing material affluence

	<i>1989</i>	<i>2004</i>	<i>2007</i>
Total population	94,800	101,200	100,800
Total households	17,300	22,000	21,100
Herding households (% total households)	4,300 (24.9%)	11,511 (52.3%)	11,102 (52.6%)
Herdsmen (% total population)	8,600 (9.1%)	24,889 (24.6%)	23,682 (23.5%)
TV ownership	NA	18.4%	48.7%
Car ownership	NA	15.2%	20.1%
Motorcycle ownership	NA	18.9%	21.1%

Source: NSO 2008, Tables 3.3, 3.5, 10.13, 10.14; NSO 2005 p. 211

While the number of herding households increased and then declined slightly (Table 14.1), our interview and survey data suggest that many households are not exclusively or necessarily full-time herders but rather supplement their incomes through trade and other part-time work. The long-term future for full-time herders seems unclear. Herding, as a profession, is being passed on to younger generations although overall family sizes are decreasing and interviewees repeatedly state the importance of education, particularly for women. Traditionally, the youngest son in a Kazakh family stays with the parents and continues herding while the other children seek education or alternative occupations. Daughters are more likely to be sent for additional education while sons are seen as able to get by without higher education. This is changing as more value is placed on education and higher education in particular.

Increasing access to technology is also changing pastoral livelihoods. With access to television, cell phones and, to a more limited extent, the internet, herders much like their more urban counterparts are no longer isolated from mainstream news and ideas. Specifically, truck transport of yurts is more common than moving by camel for seasonal migrations, and solar power and satellite dishes are common among rural households. Foodways are also changing. While families still utilise the entirety of an animal once slaughtered, there are other store-bought food goods in rural households as well. Stores in the bazaar and private grocers in *soum* centers carry packaged goods from Russia, Kazakhstan and China that are increasingly notable in both urban and rural households. Finally, the textile handicrafts traditionally made by women are still being made but it is unclear whether these skills are being passed down to younger generations. Several interviews revealed that the oldest daughter in a family was taught these skills while younger daughters were not. Textiles are still popular among Kazakhs and Mongolian Kazakhs take them as gifts when they visit relatives in Kazakhstan. There is also a growing tourist market for textiles. Finally, as migrants come and go from Bayan-Ulgii there is a growing market for used textiles. For example, when a family moves from Mongolia to Kazakhstan they typically sell their yurt and many of the accompanying textiles. These will be purchased by return migrants as well as by young families in need of a first yurt.

Numerous interviewees related to us that they thought Ulgii City was growing; specifically that more people from the countryside were moving to Ulgii. However, the *Statistical Yearbook* from the Mongolia Statistical Office reveals that, in 1990, 35 per cent of households were considered urban while, in 2007, only 29.9 per cent were considered urban. As the last census was conducted in 2000, it is unclear what the official statistics are based upon. Ulgii does indeed seem to be growing in its spatial extent as new homes and areas designated for homes have increased on the periphery in the past few years. The 2010 Census should help sort out this discrepancy. Urban Ulgii strongly reflects the changing economics of the area with wealthy families building large, multi-storey homes and the sheer traffic congestion on Ulgii's streets.

Changing lifestyles for women

The last major factor is changing lifestyles for women in Bayan-Ulgii. Traditionally, women's work primarily focused on domestic activities, such as childcare, cleaning, cooking, and milking domestic livestock. During the socialist period, women's

education and economic opportunities increased significantly. Now in the post-socialist period, with greater access to outside cultures, norms, and ideas, Kazakh women in Bayan-Ulgii are negotiating new gender ideals. The decline of state enterprises meant that many families struggled economically and many went hungry, during the early and mid-transition years. Increasingly women can be found as traders and engaged in professional occupations. There are many more educational opportunities for men and women, but it is notable that women are more often encouraged to pursue higher education and increasingly seek work outside of the home. Many women are now studying in Kazakhstan, Ulaanbaatar, Turkey and Russia as well as in local teachers colleges. Women's responsibilities at home are lessening somewhat as a result of declining family sizes and incremental improvements in access to modern 'convenience' technologies such as running water, washing machines, electricity (even in the *gers*), and television. In Ulgii, 25 different television stations can be accessed via satellite from Kazakhstan, Russia, Mongolia and China. Television shows and movies from the US and Turkey are dubbed in Kazakh so current US television programmes and movies (such as *The Little Mermaid*) are readily accessible. Tourism is also exposing many women to different lifestyles and styles of interpersonal interaction, including Western behaviours such as increased assertiveness for women and expectations for spouses, clothing, and home styles.

Conclusions

This chapter assesses the local scale impacts of transnational migration on local economic development and, in turn, livelihoods, in a once isolated, rural province of Mongolia: Bayan-Ulgii. These macro-scale changes have direct economic implications for local communities and call into question whether the traditional pastoral-nomadic livelihoods of rural populations are culturally and economically sustainable.

Economically, there is much greater diversity in livelihood strategies in Bayan-Ulgii. Today, employment can be found in a state job, herding, trade, sales, hard labour, and tourism or a combination of these occupations. For those who are entrepreneurial, the transition has resulted in much greater wealth and prestige, although for others life is more precarious.

For women, there are new economic opportunities and increasing evolution of women's roles in and outside of the household. Exposure to non-local cultures manifests in clothing styles, attitudes and expectations for the future. 'Traditional' gender roles and particularly traditional semi-nomadic pastoral livelihoods are continuing to evolve as families adapt to new and changing economic realities in western Mongolia.

It seems that livelihoods based exclusively on pastoral-nomadism are declining, especially with the younger generation – even herding families send children to college in Ulaanbaatar, Kazakhstan, Turkey or the local teachers colleges. Most families seem to be diversifying their livelihood strategies both for current adult members of the household as well as when considering the future careers and education of children.

As a developing country making its way through a difficult, albeit peaceful economic and political transition, Mongolia is poised to make important policy decisions regarding its environment, trade, social welfare, and land tenure policies. This

paper has described key areas of change in a rural and isolated region that could have either positive or negative long-term implications for this community. While the specific circumstances of Bayan-Ulgii are unique, the struggle for rural communities to adapt to a rapidly changing global economy by strategically utilising migration and trade is less unique and the opportunity and challenge for countries such as Mongolia are to harness the potential in a way that is beneficial to both today's inhabitants and their descendants.

Our research findings suggest that several key factors influence local livelihood change and community economic viability including the changing lifestyles for women, new economic opportunities created by greater connectivity to Russia, Kazakhstan, and China, and increased access to non-local cultures. These factors influence the ways in which households adapt to the changing economic circumstances in western Mongolia and raise questions about the long-term sustainability of current economic development, which is at least in part dependent upon continued connectivity with nations and populations beyond Mongolia. This province has evolved from an isolated, semi-autonomous area populated by the minority Kazakh population to one that is economically and socially tied to Kazakhstan, Russia and China through trade and migration. These macro-scale changes have direct economic implications for local communities and call into question whether the traditional pastoral-nomadic livelihoods of rural populations will be culturally and economically sustainable for much longer.

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Abstract

Individual and household adaptation to changing economic, social and environmental conditions is essential to sustaining livelihoods through time. This paper assesses the local-scale impacts of transnational migration on local economic development and, in turn, livelihoods, in a once isolated, rural province of Mongolia: Bayan-Ulgii. Mongolia's rapid political and economic transitions of the 1990s parallel regional-scale reorganisation of territories and peoples following the Soviet Union's collapse. One striking development is the movement of populations: ethnic groups, separated from their imagined homeland, have started to repatriate these lands—decisions that profoundly affect sending and receiving communities. While these migration decisions are made at the individual and household scales, extensive in- or outmigration, such as has been occurring in western Mongolia, has long-term impacts for local communities. Our research findings suggest that several key factors influence local livelihood change and community economic viability including changing lifestyles for women, new economic opportunities created by greater connectivity to Russia, Kazakhstan, and China, and increased access to non-local cultures.

Keywords: Transnational migration; livelihoods; Mongolia; globalisation

Chapter 15

Living in Thirdspace: Imaginings and Experiences of Second Generation Irish who have ‘Returned’ to Ireland from Britain

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Introduction

This chapter is based on ongoing research into the migration to Ireland of the adult children of first generation Irish migrants in Britain. Using the concept of ‘Thirdspace’ (Soja 1996), the intention is to explore how a physical engagement with the place of parental origin, which is reinforced through activities in Britain, the country of birth, enables a way of thinking which motivates particular behaviour regarding the parental home place and, in this case, results in migration. My argument is that the children of the Irish in Britain have an experience of the parental home place which is both real and imagined and by acknowledging and investigating this experience further it is possible to explore the Thirdspace idea. The work fits with a recent growth of interest in second generation identification with the parental home country, which may include emotional loyalty and roots tourism (for examples, see Markowitz and Stefansson 2004; Levitt and Waters 2006).

Although not return migration in the strictest sense (since these are a group returning to the place of *parental* birth), in keeping with the findings of other studies of second generation migration, the term ‘return’ is appropriate since, as King *et al.* (2011: 2) argue, there is an “affective connection” to what is perceived to be the “home country”. There is limited research on second generation return, which is explained by King and Christou (2009: 4) by the fact that the expectation for this group is typically “framed with reference to an expected trajectory of assimilation into the host society”, where assimilation is assumed to be the only positive outcome for residentially segregated ethnic minorities. This is particularly the case for the Irish in Britain for whom Campbell (2000: 267), in his work on second generation musicians in Britain, argues that “the assimilationist thesis has been the dominant historical and sociological paradigm” and who were described by sociologist Liam Ryan (2007: 60) as an immigrant group for whom assimilation is “practically complete in a single generation”. Correctives to this have recently emerged through the work, for example, of Mac an Ghaill (2000), Walter (2004), Campbell (2011) and Hickman (2011), whose research has detailed a continued sense of Irishness evident in the next generation, albeit often a hybridised and fluid positioning (Hickman 1998; Hickman *et al.* 2005).

In his influential work, *Thirdspace*, Soja argues that the study of lives has unquestionably been assumed to have a pertinent and revealing historical and social dimension to which spatiality is peripheral, if not absent. In migration terms it is ‘sociality’ and ‘historicality’ which explain the apparent inevitability of assimilation as

the socialisation of an immigrant group over time, while ‘spatiality’ is, to use Soja’s (1996: 72) terms, “unproblematically silenced”. The increasing evidence for transnational practices among migrants and the continuation of these, in some form, by the next generation (see Levitt and Waters 2006) provides evidence that place is not “unproblematically silenced” (Soja 1996: 72) and the fact of second generation return to the parental home country challenges traditional assumptions about the straightforward assimilation of migrant groups and requires new ways of thinking about the significance of place(s) to individual identities. Recent research suggests a more complex relationship between the individual and the place of parental origin which raises the need for a way of understanding how identities may include a sense of two national places, despite the conflicts and confusions this may cause for the individuals concerned. In her work on second generation Greek–Americans who had returned to Greece, Christou (2006: 832) found that the experience of return resulted in multiple experiences of the same place through a sense of both “inclusion and exclusion as well as alienation and belonging”. A similar study of Swiss–Italian return to Italy described the way that the homeland was remembered by emigrants as the ideal, a fact which then caused challenges to those of the second generation who chose to return (Wessendorf 2007).

Soja’s theories on spatiality draw mainly on the work of Henri Lefebvre (1991). He identifies three ways of thinking about space based on Lefebvre’s ideas about the way in which space is socially produced, which he names Firstspace, Secondspace and Thirdspace. Firstspace, Soja describes as empirical space; it is the space that we use and can easily be seen, measured, accounted for or physically felt. Secondspace is space as it is imagined by, for example, architects and planners; those with the power to shape the way that space is used. Soja then introduces the idea of Thirdspace which, instead of being a third option, is intended to be a fusion of both First and Secondspace and ‘something more’. In Soja’s (1996: 5) words it is “both/and also”. Borrowing from Lefebvre he describes it as “the dominated ... space which the imagination seeks to change and appropriate” and it is this space which “overlays physical space, making symbolic use of its objects” (Soja 1996: 67–68). What I want to show using individual accounts is that the second generation Irish have both an experience of the physical space of Ireland, mainly through childhood holidays, which is overlain with Ireland as it exists in the imaginary and it is this which may shape identity in relation to place, motivate adult return migration and influence subsequent experience. Thirdspace is, thus, a way of thinking that shapes a way of being pre- and post-migration.

Methodology

The discussion which follows is based on eighteen in-depth interviews with ‘return migrants’, following an ethnographic approach (McHugh 2000). They are all the children of Irish people who emigrated to Britain in the 1950s, a decade when almost half a million people left Ireland, with the majority settling in Britain (O’Hanlon 2004). I have focused loosely on those born between 1960 and 1970 in order to consider the life stories of these individuals in the context of growing up at a time when being Irish in Britain could be problematic. This was mainly due to the political conflict in Northern Ireland at the time and related bombing incidents in Britain which often

increased anti-Irish racism in Britain. Having ‘returned’ myself in 2004, I am researching from ‘within’ which has been useful in terms of a shared experience and an understanding of what it was to grow up in Britain with a sense of an Irish identity that was usually invisible outside the family. Participants were recruited through letters in local newspapers and advertisements on shop notice boards and, using written reflection and in-depth interviews, information was collected on life in Britain, the decision to move and life in Ireland since the move. Adverts were titled ‘seeking people born in Britain to Irish parents’ and I started by asking individuals to ‘write me something about how you have come to be living in Ireland’, purposely avoiding use of the terms ‘second generation’, ‘migrant’, ‘migration’ or ‘return’ and I also tried not to suggest that they may be ‘coming back’ or ‘coming home’ in order to allow that sense to evolve without direction.

The first thing to note is that all of the eighteen people interviewed grew up in urban Britain, with twelve being from the larger urban areas of London, Birmingham, Manchester, Leeds and Bristol and six from smaller towns. Sixteen of the group had two Irish parents; therefore for most there was an opportunity to connect with two places in Ireland, although for various reasons one parental home place might be preferred. As children, all but one had spent time in rural Ireland with many describing experiences on farms or, if not, in small villages; only one person visited family in Dublin, and no other Irish cities have featured. In order to preserve the anonymity of the interviewees, pseudonyms are used and specific local places are not identified by name.

Findings

The experience of Firstspace

In terms of an experience of Firstspace– the physical space of Ireland– everyone went on regular summer holidays to Ireland and often this was for the full six weeks of the British school holidays. In many cases cows were milked (by hand), hay was made, there were trips to the bog to cut turf, time passed and what has come through in most cases was a great sense of freedom, welcome and inclusion in the extended family and local community. Tom, for example, spent his time at his mother’s home place in County Mayo which he described as a: “Small, typical West of Ireland farm ... and just arrive there and disappear out the door and be gone for two weeks, come back at night, sleep there and that’s it, there wouldn’t be the same worries about where are you, everyone in the village was known” (Interview 03). This was echoed by Frank whose mother was from County Wexford:

We’d just land there and we’d really feel that we were home and all of those clichés you hear about, they’re absolutely true about the freedom, just being able to wander around, the friendliness of neighbours. There were a whole host of cousins that meant we were part of a really big family.

(Interview 13)

And Michelle described time in her mother’s home village in County Kilkenny:

Well there wasn't much farming in M—— because my mother's parents only had half an acre but they used to sow potatoes and carrots ... it was just walk down the street every morning, meet the rest of the gang, we'd probably play down by the river, there was a waterfall just outside M——, we'd just go and just walk really or play in fields that was it really, you were never bored.

(Interview 09)

She also painted a picture of some of the inconveniences of life in rural Ireland in the 1960s and 1970s and illustrated the huge contrast between her everyday life in London and the everyday life of her Irish family. In her father's home place in County Clare:

They had no running water, so there was no bathroom, no toilet, no nothing and they only had lights downstairs, there was one plug socket in, what they called the kitchen, so it was quite hard work for people born and bred in inner city London that were so used to having a tap. If you wanted milk for your breakfast you took it out of the milk churn and it just took a lot of adjusting.

(Interview 09)

Regular visits gave a knowledge of the place and created a very local connection which Buckley (1997: 111–112), in her work on Irish women in Britain, describes as “anchoring the identity” of children to place, not only the place of Ireland but to their (parental) home townlands (the smallest territorial unit in rural Ireland) and parishes, through trips which gave an “unshakeable sense of continued belonging to their native neighbourhoods within Ireland” (*ibid.*). In common with recent research on the impact of childhood holidays on return decisions to Greece and Cyprus (King *et al.* 2011) the themes of freedom, connection to the extended family, and the contrast between rural life and life in the country of birth come through very powerfully.

Related to the facts of being in the physical place there was the emotion with which some described their feelings about these visits, much of which focused on the journey. Michael was the youngest of nine and grew up on the Kent coast in Ramsgate. He spent his summers on his father's family farm in County Leitrim and at his mother's home place next to the beach in County Donegal. As soon as school finished for the summer his family set off for the 03:15 ferry sailing from Holyhead with, for him, an excitement that was matched equally by his sadness on the return journey. He described his feelings as follows: “For year after year I can recall standing on deck at about 6 am facing into the cool morning breeze as Ireland, and Dublin Bay specifically, came into view” (Interview 10). As a small boy he sought a first glimpse of the physical landmass of Ireland through the early morning mist; in a sense honouring the place by being there to greet it. The value of this place was learned not only from previous visits but also through knowledge of his family story and his experience of being Irish in Britain. In Michael's case this included discussing Irish history and politics at home with his family and, outside the home, playing Gaelic football with other second generation Irish.

Frank also described going up on deck to wave at his mother's family who would be waiting for them to arrive at Rosslare harbour. One of his strongest memories was of the sense of excitement about going to Ireland and the sense of despair at leaving, which

he felt that he and his siblings picked up from their parents at a very young age. Similar emotions were evoked by James who grew up in Essex and spent his summers on his grandparent's small hill farm in County Kerry. He said:

I will never, as long as I live, forget the absolutely miserable tear soaked journey back to England which my siblings and I endured every 29th of August year after year. It was probably the most profound emotional experience of my childhood, coupled with an utter incomprehension, at that age, as to why we were being forced back to Essex ... I vowed at an early age to return here to live.

(Interview 17)

The experience of Secondspace

Soja (1996: 73) describes Secondspace as the space of the imaginary and attributes it to those with "the power to shape the way that space is used" but, in my work, the way that place is remembered and imagined by the *individual* may be an alternative way of thinking about Secondspace. Although all of my participants would have remembered and imagined Ireland while 'at home' in Britain this was illustrated most powerfully by Steven who spent a great deal of time with his father's family in Dublin. His mother was a native speaker of the Irish language from a small fishing village in the south west. For reasons that he did not go into they did not visit her family and, instead, he learnt about the people and place through his mother's stories and photographs. At the age of 16, however, he independently visited her home village and spent the summer in south west Ireland, the place he eventually moved to twenty eight years later: "I travelled by myself, at the age of 16, to west Kerry. The summer I spent there transformed my life. It was like going home. The stories and photos of my youth became vivid, multicoloured, moved from being silent movies to talkies". From then on he described his growing curiosity about Ireland outside of his family and his gradual connection with what he described as the organised Irish community in Birmingham with which he had little contact as a child: "I knew that I would know no peace until I found a way of going home, but to do so in a way that enabled me to give something and not just consume the place" (Interview 18).

For these migrants therefore the physical experience of place is remembered through the lens of emotion and they have described experiences of childhood holidays in which the real and its imagining combine to produce a depth of feeling and sense of connection which endured into adult life. At the same time, growing up in Britain included numerous moments of reflexive awareness about their identity in relation to both their place of birth and their parental homeland. Most attended Catholic schools and churches and took part in Irish cultural activities such as traditional music, dancing or sport. Many then developed a sense of an Irish identity which, with age, they found they increasingly needed to justify both to themselves and to others. James, for example (Interview 17), while attending (a Catholic and rugby playing) secondary school in the 1970s, felt he had to choose between supporting either Ireland or England in international rugby competitions and he chose Ireland. Alternatively, an awareness of difference as a fact and not a personal choice was described by Mary (Interview 11) who won a scholarship to a private, non-Catholic secondary school where her

classmates holidayed on continental Europe whilst she spent her holidays in Ireland with her family. The idea of Ireland and Irishness therefore became a “space which the imagination seeks to change and appropriate” and a way of thinking which “overlays physical space, making symbolic use of its objects” (Soja 1996: 67) and, rather than being a specific place, I would argue that Thirdspace is a way of thinking which shapes a way of being, both pre- or post-migration.

‘Return’ to Ireland

So what of the reality of going to Ireland as permanent migrants? What happens when the childhood idyll becomes the reality of adult life? What eventually motivated migration varied depending on age and family circumstance; however, of the eighteen interviewees, only two talked about a possible return to Britain and one (Steven) was still working there, when interviewed, and commuting. Therefore, for most, the choice to combine the real and the imagined in a return to a perceived ‘home’ was relatively successful. Only one person was living in their actual parental home place, although many may have been guided to a particular part of the country through family connections. For every second generation returning migrant the experience of ‘living in Thirdspace’ differed; therefore I conclude with two specific examples in order to illustrate some of the general themes.

In the case of Michael, the small boy on deck above, the death of his mother prompted his migration. During our meeting he described a happy childhood and success in his education and career in Britain and, at the time of his mother’s death in 1996, he was a manager for a large mental health charity in London and enjoying his life there. However following her death and burial at home in Ireland he described his return to London as follows:

Sitting on the plane two weeks later returning to London, I felt ageless. I could have been six, sixteen or sixty. My life had changed completely, yet all was pretty much the same. It was on that journey home that I decided that this would be the very last time I ever made this particular journey – leaving Ireland to return to London.

(Interview 10)

He described it as the paradigm shift he needed to put the idea that he would always go ‘home’ to Ireland into action and he felt that as a result of his loss he would find comfort in the place where he had always felt he belonged. He explained:

It was like an enormous pair of arms that comes out and takes hold of you at a time when you’re not sure what’s going on in the world, you’re not really feeling the loss but you know that something fundamentally has changed and that’s what it was like and I just thought there was something powerful in that.

(Interview 10)

Conclusion

In common with studies of second generation return to Greece and Italy, for the participants of this study, it was frequently a sense of homecoming or a sense of connection which prompted an inevitable return. Although the migration was likely to have been enabled by Ireland's recent economic growth, between the late 1990s and 2008, this was just one factor in the decision to move and many downplayed this in preference for, or in addition to, the significance of enduring family connections and national loyalty. For many of the participants, it is their prior experiences which have shaped their decision-making in the present and given them insights and expectations about life in Ireland which would not be available to other immigrants, at times resulting in more complex negotiations about self and where they 'fit' in the place they perceived to be home. The 'both/ and also' approach of Thirdspace is a way of thinking which combines the remembering of place with present realities and can therefore be a useful conceptual tool for exploring second generation return where emotion is a significant motivating factor.

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Abstract

This paper is based on research into migration to Ireland by the adult children of the first generation Irish in Britain. It considers how the concept of Thirdspace (Soja 1996) may be useful in exploring emotional connection to place and how this may arise for this second generation group whose migration is unlikely to be motivated by economic factors. Using a qualitative methodology which combined written commentary and in-depth interviews, participants were asked to focus on their experience of growing up in Britain with a sense of connection to Ireland, their decision to move and their experiences since the move. Individuals have described how a physical engagement with specific places in rural Ireland during regular childhood holidays, along with cultural activities in Britain, frequently promoted an emotional attachment to Ireland which then motivated migration during adulthood. In *Thirdspace*, Soja (1996: 1) calls for a new way of thinking about “the meanings and significance of space” and the fact of second generation return suggests that the space of the parental home frequently remains meaningful and significant to next

generations. The enduring connections between an individual and the parental homeland, resulting in second generation transnational behaviour and return migration are growing areas of research (Christou 2006; Levitt and Waters 2006; Wessendorf 2007) to which this study hopes to contribute further by engaging with the Thirdspace concept.

Keywords: Thirdspace; second generation; return migration; transnationalism

Chapter 16

Attitudes to Brazilian Migrants in Rural Ireland in Conditions of Economic Growth and Decline

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Introduction

A major increase has taken place in international migration among both lower-skilled and highly-skilled labour during the last two decades which has not necessarily been stemmed by international recession since 2008 (Ruhs and Anderson 2010). There is, however, evidence of changing attitudes towards lower-skilled immigrant workers, from one of positivity about their contributions in compensating for domestic labour shortages to one of negativity, if competition appears to increase with local workers during a period of recession (Wilkes and Corrigan-Brown 2011). Negative attitudes have also been associated with cultural differences as much as macro-economic factors (Rustenbach 2010). This chapter explores the experience of immigrant Brazilian workers in two small towns in rural Ireland, between the late 1990s and the late 2000s, when the Irish economy moved from rapid economic growth to stagnation. Competition in a declining labour market also increased because of the opening of Ireland's borders to labour from ten new European Union (EU) states, from April 2004. Localised factors played a role also, in particular the closure of a meat plant in one of the towns studied, which further reduced the employment opportunities available.

Ireland experienced a major turnaround in its economy and migration patterns between the 1980s and the 2000s. During most of the 1980s, Ireland's economy was stagnating with slow growth and high unemployment (of almost 20 per cent) (Hardiman 2005) and "one of the highest ratios of debt to national income in the world" (O'Hearn 2003: 35), which forced tens of thousands of Irish people to emigrate in search of work. Yet, within the space of only a few years, Ireland's economy slowly improved. This has been attributed in particular to EU structural funding and government policy, including a low corporate tax rate, which attracted foreign direct investment in the guise of large multinational corporations such as Intel, Microsoft, Hewlett Packard and Dell (O'Riain 1997). By the mid-1990s, Ireland's economy was one of the fastest growing in the Organisation for Economic Co-operation and Development countries (OECD 2001). From 1994 to 2001 a sustained period of economic growth took place (known as the 'Celtic Tiger'), with annual GDP growth averaging 10 per cent from 1997 to 2000 (Sweeney 2008).

With such unprecedented economic growth, employment was being created at the fastest rate in the State's history, with over 600,000 jobs created between 1993 and 2003, an increase of over 50 per cent on the 1993 figure (CSO 2004). The increasing job creation meant declining unemployment; from the mid-1990s until the global economic

recession in 2008 levels averaged 5 per cent. Irish people became less willing to accept lower paying jobs; the labour deficiency was especially prevalent in specific economic sectors such as hospitality and cleaning, as well as the construction and agriculture sectors (Gray 2006; Walsh and O'Shea 2009). With Irish people less willing to work in these fields, the recruitment of migrant labour was the most practical solution to keep the economy growing and legal and illegal immigrant labour was attracted from many countries internationally (MRCI 2007).

The meat processing industry was one of those adversely affected by labour shortages; abattoirs and meat packing plants found it difficult to recruit local Irish workers. Through a personal contact, skilled migrant labour was recruited in Brazil in 1998, by an Irishman who had worked there in the meat processing industry for more than twenty years. In response to requests, he recruited skilled meat workers, who had recently been made redundant from a processing plant in the town of Vila Fabril on the outskirts of Anápolis, in the state of Goiás, and arranged work permits and flights to Ireland for them. As the numbers of Brazilians recruited increased, social networks began to play a stronger role and family and friends began to join their counterparts in search of work in other sectors. Demand for Brazilian labour declined after May 2004 and by the late 2000s return migration and repatriation were taking place (Maher 2010). In particular it became more difficult for non-EU citizens to obtain work permits after 2004, when Ireland opened its borders to labour migrants from the ten new EU states. Closure of a meat plant in one of the towns studied in 2007, following failure to obtain compensation for fire damage from an insurer, removed an important source of employment for the Brazilian migrants. Recession from 2008 on further reduced the opportunities for even casual employment.

The purpose of this paper is to describe the experiences of the Brazilian workers in two small towns in western Ireland over a ten year period, from their arrival in the late 1990s until the late 2000s. Attention focuses on: (i) the attitudes of Irish people towards the Brazilian immigrants when they first arrived; (ii) the immigrants' perceptions of the Irish attitudes towards them; and (iii) change, if any, over time in attitudes towards the immigrants as competition for employment and economic recession increased.

Methods

Research for this study was conducted in Gort, County Galway and Roscommon town, County Roscommon (Figure 16.1). Gort is a market town, located about 35 km south east of Galway City, which had a population of 2,700 in 2006, approximately 40 per cent of whom were non-Irish nationals, mainly Brazilians (CSO 2009). Roscommon town is located some 80 km north east of Galway city. In 2006, the total population was some 5,000 people, approximately 20 per cent of whom were non-Irish nationals (*ibid.*). Both towns contained a high number of Brazilian migrants in relation to the local population, in comparison to other towns of similar size in Ireland in the mid-1990s. The influx of sizable numbers of non-Irish people was unprecedented in both instances.

Primary data for the study was collected between October 2007 and February 2010, using a combination of quantitative and qualitative methods. The data collection involved engaging with Brazilian migrants and key-informants, both Brazilian and Irish, in both study sites and in the areas of origin in Brazil (the main focus here is on

the information from Ireland). Eleven in-depth interviews were conducted with Irish people, 21 with Brazilians and 36 questionnaire surveys with Brazilians; participant and non-participant observation was also conducted on site (Table 16.1).

The interviews with Irish people who had some interaction or involvement with the Brazilians were organised through the assistance of members of the local community; further Irish people were then contacted via a snowball sampling technique. The interviewees included community workers, translators, several business people and teachers. A farmer interviewed for a television programme is also cited (RTE 2006).

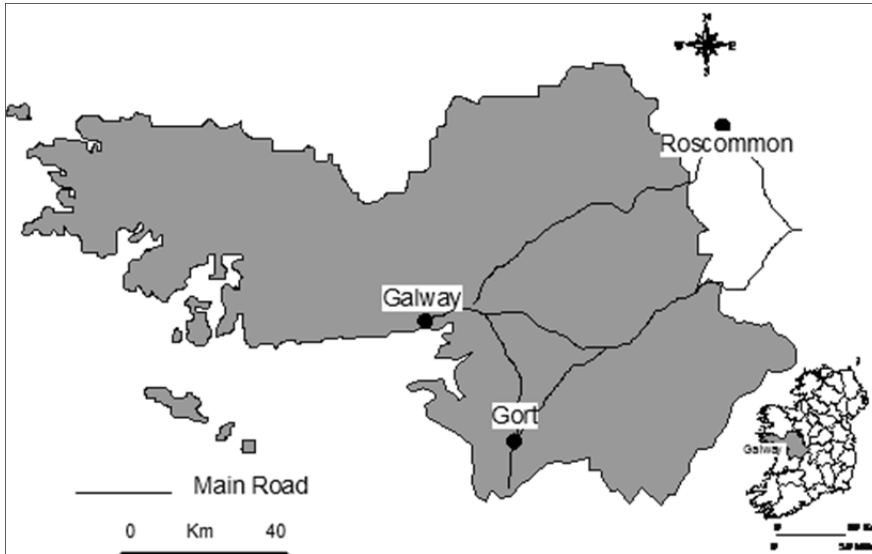


Figure 16.1 Study areas

Table 16.1 Profile of respondents (interviews, questionnaires and focus group)

Method	Gender		Total
	Females	Males	
Questionnaires (Brazil and Ireland)	3	33	36
Interviews: Brazilians in Ireland	10	11	21
Interviews: Irish people	4	7	11
Total	17	51	68

The interviews with Brazilian people in Ireland were arranged by initially contacting community leaders in the study sites and, again, a snowballing method was used to garner further contacts. The majority of the interviews with Brazilians were conducted through English; for those with no English, an interpreter was present to translate. However, during the research a good knowledge of Portuguese was acquired, in order to gain the trust of the migrants, to overcome cultural and language barriers, and to communicate better with them (Murray and Wynne 2001). The Brazilian interviewees

included agricultural day labourers, construction workers, kitchen workers, domestic workers such as cleaners, and child minders. Over 80 per cent of the interviewees were aged 25–44 years. They were most representative of the Brazilian populations in Gort and Roscommon. All of the interviews took between one and two hours to conduct, were digitally recorded and transcribed for thematic analysis. The questionnaire survey schedules were designed to be completed within 15 minutes because the survey was conducted mostly in public areas, such as outside a shop, a bank or in some other public space with migrants who were unwilling to be interviewed in-depth. All of the questionnaires were conducted and answered in Portuguese and translated into English with the assistance of a translator. Quantitative and qualitative analysis followed. Quotations are attributed according to location and whether from an Irish or a Brazilian informant. Three interviews conducted in Brazil with migrants who had worked and lived in Gort are also cited.

Results

The reported attitudes of local residents to the arrival of the Brazilian migrants in their community in the late 1990s are discussed first. The reported Brazilian perceptions of Irish people and their attitudes towards them follow. Finally, the reported perceptions and attitudes of both Brazilian migrants and local Irish people during a period of economic decline are discussed. In 1998, the first Brazilians who were recruited from Vila Fabril came to work in various meat processing plants in Ireland. Three meat processing plants hired Brazilian workers in the two study sites but only one, in County Roscommon, hired staff directly through the Irish agent in Vila Fabril. The remaining two, a meat processing plant in Gort and a poultry processing plant in Roscommon, hired their Brazilian staff via social networks within the meat processing industry in Ireland, initially, and then via existing Brazilian employees.

Attitudes of Irish people to the Brazilian immigrants

Ireland is viewed as having an historical sensitivity towards migrants due to its own recent past as a migrant sending country (Turner 2009), although incidents of xenophobia have been recorded and a 2004 referendum, which removed the automatic right to citizenship from children born in Ireland to non-national parents, has been described somewhat harshly as marking a transition to a racist state (Lentin and McVeigh 2006). Notwithstanding these critiques, the 11 local community interviewees expressed generally positive attitudes towards the Brazilian immigrants in Gort in three main ways: (i) sympathy with their plight as being foreigners in a foreign land; (ii) appreciation of their role as a much needed workforce; and (iii) willingness to learn at least the rudiments of Portuguese in order to communicate more effectively with them.

Many of the Irish respondents could relate to the Brazilians immigrants, because either they, or members of their family, sought employment abroad during past periods of economic difficulty. Jack, the principal of the primary school in Gort, believed that most local people had a positive attitude towards the Brazilians because of this history:

My parents emigrated, they were in America you know, and my uncles went to England, and ... that's the way they got work. So I think a lot of people in Gort ... could, you know, associate and understand ... where the Brazilian community came from ... my own parents would.

(Gort-Ireland interview 4)

Employers also commented favourably about their Brazilian employees because of difficulty in finding Irish workers at the wage levels that they were willing to pay. For example, a local farmer and horse breeder in Gort stated in a television interview (RTE, 2006):

Only for the like of these new people ... we could not keep a place like this going. There's nobody here to give you a hand, even to stand at a gap these days. Everybody is working in factories or what have you, and you couldn't afford the big wages they are making in the factories.

Although most of the interviews were conducted through English, the majority of the Brazilians arrived in Ireland with very little English. In response, over 70 per cent of the Irish people interviewed reported that they felt it essential to acquire some Portuguese, in order to communicate with them. Suelita, a Brazilian translator in the primary school in Gort (Gort-Brazil interview 4), who had lived in Ireland for more than seven years when interviewed in 2008, commented: "some Irish they want to learn Portuguese because of their Brazilian friends ... no Irish people would want to learn Portuguese if the Brazilians weren't here". Suelita also recalled assisting other teachers: "I started teaching Portuguese to the teachers in secondary school, a few teachers from the (primary) convent as well came to me asking for private (classes)".

Brazilian perceptions and experience of local attitudes towards them

The immigrants were queried about their perceptions of the attitudes of the local people in Gort and Roscommon towards them. The majority reported that in 1999 and 2000, following their first arrival in Gort, they felt readily accepted by the local population and believed the Irish to be 'good' people. Carolina, a married woman who spent three years working as a house cleaner in Gort and the surrounding areas, described what Ireland was like for her: "I thought it was how I imagined, a place with friendly people and opportunity". Pedro, a married man who spent 11 months working as a farm hand said: "the people, most of them are friendly... most of them were good for me...especially at work ... they're more human ... more patient". Leonardo, a married man in his mid-40s (Gort-Brazil interview 1), who arrived in Ireland in 2002 expressed a similar view: "yeah the Irish people here in Gort they are so ... so nice people, they really opened their arms for the Brazilian community here". Jessica, a married woman who spent over seven years in Ireland (Brazil interview 18), and worked as a chef in Gort, believed that Irish people were very friendly, and noticed that as her time in Ireland increased, more and more people were receptive of her: "Irish people is very kind, you know, when I come six years ago ... everybody knows me now ... people used to say 'hello, how are you, what's your name?', I think nearly everybody knows me. I know lots of Irish people, all around here, because I work everywhere you know".

Jessica also said: “I never had any problem with the Irish people ... always, they were always helpful”.

Many of the Brazilian respondents also described how Irish people helped them find employment. Artur, a single man who arrived in Ireland in 2005 (Gort–Brazil interview 6), and worked as a freelance translator, reported: “lots of Irish help the Brazilians with the jobs, because sometimes Irish need (someone) for a few days job, and the Brazilian need more days’ work, and the Irish help, you know”. Once employed, many of their employers were supportive of the Brazilians. Kenny McNeill, a social worker in Gort (Gort–Ireland interview 1) explained: “I mean, I heard one guy saying his boss was like his father, you know he was like a father to him ... works as a panel beater, gave him a car ... paid the insurance, everything”. In Roscommon, Rogerio (Roscommon–Brazil interview 2) who worked in a car dealership fell ill and was cared for by his boss, as he explained: “I had to have operation in hospital, with my kidneys, my boss helps me, he brings me to hospital”. Largely, the Brazilian migrants who arrived prior to the onset of the recession felt that Irish people were positively disposed towards them. Overall, Luana (Brazil interview 16), who lived in Ireland for more than six years and worked cleaning houses in Gort believed: “Irish people helped the Brazilian community ... speaking with us and giving us jobs ... I think Brazilian people could learn to be more friendly ... like the Irish people”.

Reports were made of exploitation in the workplace in a small number of cases, reflecting evidence from Norway which suggests that migrant workers in rural areas are especially prone to exploitation by farmers looking for cheap and docile labour (Rye and Andrzejewska 2010). The examples in this study suggest that a lack of English left workers vulnerable to exploitation: “I know many people who weren’t paid. I think just because they didn’t speak English, it is easy then to try and rip them off” (Artur, Gort–Brazil interview 6). As the economy deteriorated migrant day labourers became particularly vulnerable, because they were now competing with each other for declining opportunities and were in great need of money. Therefore, some undercut each other in order to secure a day’s work on a farm, for example, and less scrupulous employers exploited their predicament.

Changing migrants and changing attitudes

While the Irish economy prospered, social networking led to increased numbers of friends and relatives from Brazil travelling to Ireland in search of work. Prior to 2004, it was relatively easy to enter Ireland; it is estimated that up to 80 per cent of the Brazilians in Ireland were undocumented, having overstayed a three-month holiday visa. The police did not take action to deport them, partly at least, because they filled vacancies in the labour market. Gort, in particular, earned a reputation as almost a sanctuary area with good relations between Irish and Brazilian people (Maher 2010). From April 2004, Ireland gave unrestricted access to its labour market for citizens of ten new EU accession states (Gray 2006). It subsequently became more difficult for Brazilians to enter the country at ports and airports and competition for jobs with EU nationals from Central and Eastern Europe increased.

By the late 2000s, many of the workers who arrived in the late 1990s and early 2000s had returned to Brazil, having earned their income targets to support their family and save for investment in their home or a small business (Mac Cormaic 2007).

Maureen (Gort–Ireland interview 2), a 25–34 year old Irish woman who was resident in Gort during the period of economic growth and decline, described a change among the migrants moving to Gort in the late 2000s:

Well when they first came we all made a big effort to help them, I learned Portuguese and helped some people get better places (accommodation), and the Brazilians were grateful ... but the lads coming later, they were a bit rougher, coming from the big cities like Sao Paolo, and not the country towns like Anápolis, not all of them now, but some of them. They used to get into fights and one lad was selling fake DVDs and cigarettes and they got a bad reputation then, especially within the Brazilian community.

The newer migrants were also younger than the earlier arrivals and were reported to be less hard working, which may have been due to the fact that they were not supporting dependents as the former often were. The difficulty in finding employment was probably a factor also; many of the early migrants held more than one job at the same time. The earlier migrants referred to a change in attitude towards the new arrivals among local people which they associated with the behavioural norms of the latter, rather than with competition for employment. Jessica (Brazil interview 18), described how attitudes changed from when she first arrived in 2002:

When I go to Ireland the people spoke more to Brazilians in the street, everybody say ‘hello’ and ‘how are you’, for me it’s the same. Now (early 2009), I have some complaints about Brazilians, about Brazilian boys fighting some time in the disco. Now, not too many Irish say hello to everybody, for me it’s the same because everybody know me before, but now some Irish no like Brazilians any more.

A Brazilian immigrant, who chose to remain anonymous, was also concerned about some of the Brazilians who arrived in Gort and Roscommon in 2008, as the Irish economy began to go into recession:

Things could be better now ... people are ... as you see the money conditions are going down and low for everybody ... there are people who leave Brazil (to come to Ireland) and they have a problem with the drugs already. Oh yeah, you are going to find people here that had a problem in Brazil, even more than drugs, maybe crimes ... you’re going to find more people who had problems that are ... who were in jail for a while for many reasons. Now ... I can see there’s a very good integration between the Brazilians and Irish on drugs, the integration going much better now in drugs (laughs).

The opinion expressed above is similar to that of Artur (Gort–Brazil interview 6), who referred to the effects of the recession and the arrival of a different ‘type’ of migrant from Brazil having all contributed to changing attitudes towards Brazilians in Gort and Roscommon. The strong work ethic of the earlier Brazilians was said to differ from the work ethic of the later arrivals. Eduardo (Brazil interview 8) who spent seven years in Ireland working in various construction jobs described the behaviour of some newer arrivals in Gort: “when they go there they get the money and just spend, spend, spend,

they drink, pay things for girls, you know just spend the money ... like drop the money on the floor and burn a fire (laughs) not save money, they forget to save money ... no mind to save money”.

Conclusions

This chapter discussed attitudes towards migrant workers in the context of two small towns in western Ireland during periods of economic growth and decline. Brazilian migrants were recruited initially to work in agricultural processing plants that were unable to obtain Irish labour when other opportunities were available. Local community workers and the Brazilian interviewees reported that the migrants were welcomed into both towns, were viewed as being hardworking and efforts were taken to learn their language and find employment for them. Some incidents of exploitation did occur when unscrupulous employers took unfair advantage of poor English language skills to underpay workers. This became more prevalent when the meat plant closed in Gort in 2007 and increasing numbers of the migrants became day labourers, competing with each other for limited employment on farms and on construction sites. Changing attitudes towards new Brazilian immigrants were also noted among the Brazilian and Irish interviewees in the late 2000s. It was noted that younger migrants had begun to arrive from large cities in Brazil who were less hardworking than their predecessors, became involved in anti-social behaviour and, in some cases, possibly in illegal activities. They were not welcomed either by the local community or their own countrymen. This evidence, although localised, suggests that attitudes towards migrant workers in conditions of recession may be more complex than arising from competition in the labour market solely (Rustenbach 2010).

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Abstract

It is well documented that Ireland's economy experienced some of the fastest levels of economic growth in the OECD countries during the period from the mid-1990s until the late 2000s, known as the 'Celtic Tiger' (O'Hearn 2003). Such economic progress inevitably led to changes in population and migration patterns, in particular, as young Irish people no longer found it necessary to emigrate in search of work. Many of the latter were, however, unwilling to accept low skilled and low paid employment and international migrants were increasingly attracted to fill the vacancies that arose. Thus, various cities, towns and villages throughout Ireland saw migrant populations becoming established for the first time in their recent history. This paper illustrates the Brazilian migrant experience in two small towns in western Ireland, how the migrants were perceived, and how the reciprocal perceptions of both the migrants and their hosts evolved from the late 1990s, during a period of rapid economic growth and high employment, to EU accession in 2004 and the onset of recession in 2008 when unemployment levels rose again. The key data come from interviews and questionnaires.

Keywords: Migration; attitudes; rural; Brazil; Ireland

Part 4

Rural Development

Chapter 17

Selected Aspects of the Effects of the Transition Process upon the Romanian Rural Space and System

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Introduction

Romanian rural space contains 45 per cent of the total population in 12,956 rural settlements grouped in 2,860 communes (the commune is the smallest administrative unit of Romania, formed of at least two villages) and occupies 90 per cent of the total surface of the country. Thus, it can be said to be a major component of the national territory (Figure 17.1). The collective mentality grants to rural space a number of generally acknowledged virtues. Thus, the village is considered the birthplace of Romanian civilisation, especially in its most authentic elements of technology and folklore). It is glorified as having had a major role in ensuring continuity to the Romanian people and their culture throughout their troubled historical evolution when it developed in the buffer space between great empires or kingdoms. Because of the historical context, Romanian society developed as a profoundly rural society until the second half of the twentieth century. The installation of the communist regime at the end of the Second World War was the starting point of forced industrialisation and artificial urbanisation and of a profound transformation of rural space through the process of collectivisation of agriculture. Specifically, the communists forced the peasants to give up their lands, animals and agricultural machinery to the newly established Agricultural Production Cooperatives (CAP) (Axenciuc 1996). Romanian peasants were transformed into agricultural workers who had the right to work a maximum of 250 square meters around their own houses. Young families, lacking resources and prospects, left the villages and went to the cities which were turned overnight into industrial centres (Ancuța 2004).

The temporary need of a labour force was compensated by seasonal workers, but also by school pupils, students, convicts, or inhabitants of the mountain villages that were not included in the collectivisation process. This situation led to a state of social mixing and disrupted the social balance of the villages (Oțiman 1997). In traditional Romanian rural communities the community exerted a strict control over its members. This was grounded in good mutual knowledge, as agricultural activities, the festivities related to them, the religious life and its holidays generated very good bases for mutual knowledge and for reflection on and perpetuation of systems of values and beliefs. Thus, the traditional rural world became gradually diluted during the communist period. “The village was reduced only to its agricultural function and lost its self-regulating way of functioning and became a mere recipient” for decisions imposed from above

(Ancuta *et al.* 2008: 80). The fall of communism, in December 1989, marked the beginning of the transition period towards democracy and a free market economy, a new tipping point in the evolution of the Romanian rural space and system. The present analysis aims to highlight the effects of this 20 year period on different components of the rural system: demographic (including its social and psychological aspects), economic and the built environment.

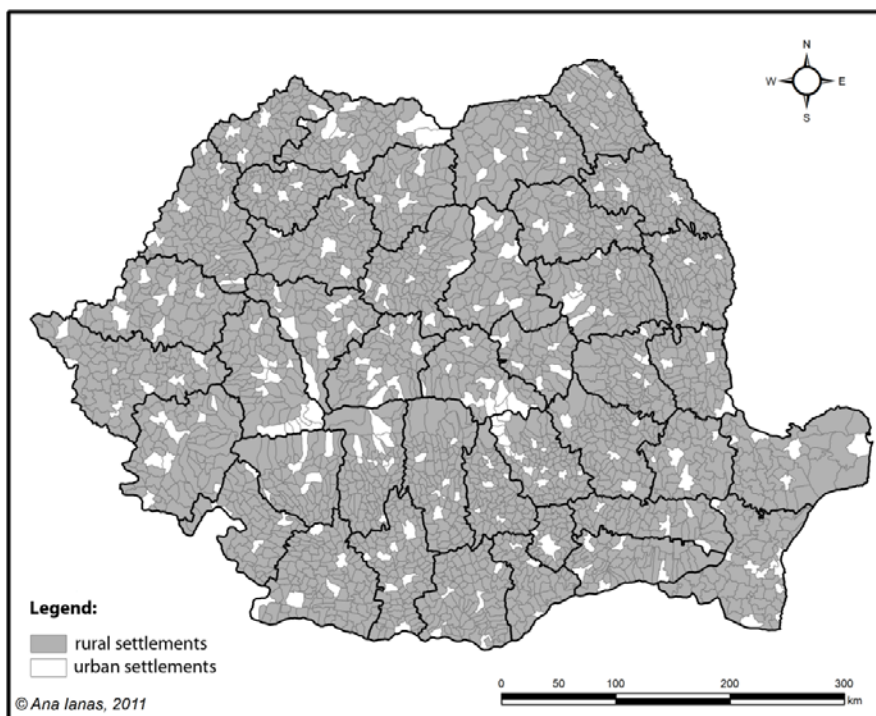


Figure 17.1 The distribution of rural and urban settlements in Romania, 2011

Demographic dimensions

The Romanian rural population declined from 10.59 million inhabitants in 1992 to 9.6 million in 2008. The rate of decline was greater than in the national population: -8.7 per cent versus -7.35 per cent. In order to highlight this evolution and to better understand the consequences of the transition process, it is necessary to analyse several demographic indicators. A first and major observation is related to the decrease in the rural birth rate from approximately 14 per thousand, in 1992, to approximately 10 per thousand, in 2009 (Figure 17.2). The decrease is most obvious for the most recent years. Thus we can say that it has little connection with the change in demographic policy (i.e. the liberalisation of abortion), but is more likely to be a consequence of the modernisation of demographic behaviour of the village population and reduction of the fertile groups as a result of demographic ageing and migration of the active population

(Iațu 2006). The demographic ageing of the population which characterises the Romanian village is underlined by the high mortality rate (Figure 17.3), an obvious result of the natural attrition of the older population. Under these circumstances, rural space has a highly negative demographic balance (Figure 17.4).

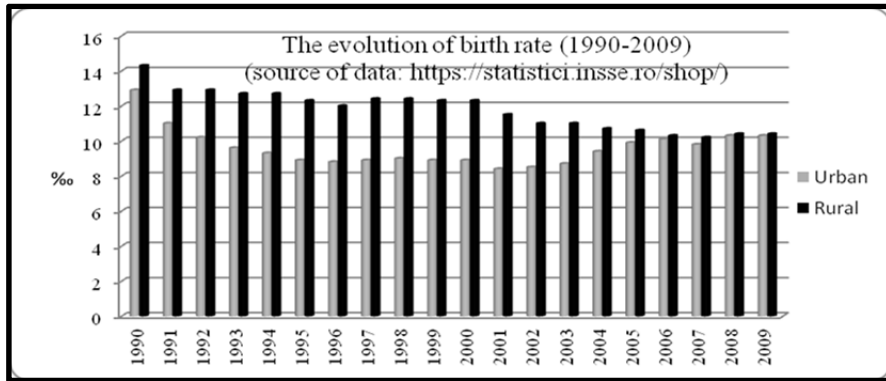


Figure 17.2 The evolution of the birth rate, 1990–2009

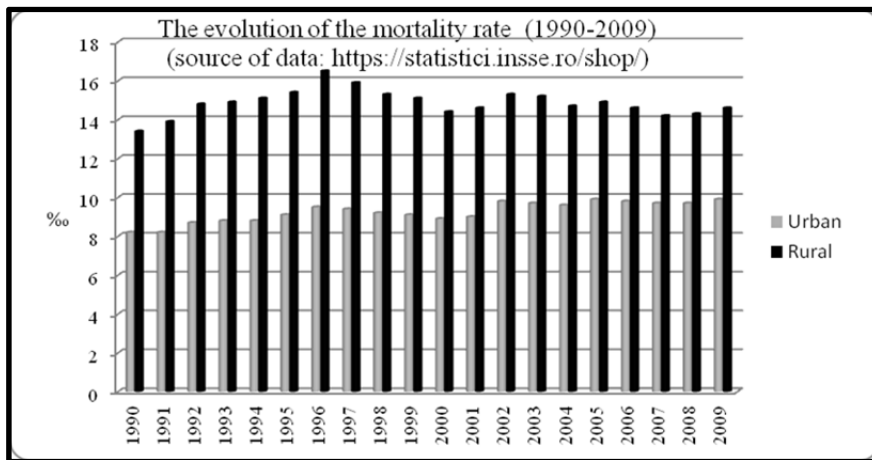


Figure 17.3 The evolution of the mortality rate, 1990–2009

The Romanian Village no longer fulfils its traditional function of demographic reservoir, a function based on traditional features: early marriage, early births and a mean family size in excess of 2.5 children, which enabled extended renewal of generations (Trebici and Hristache 1987). The age of women at their first marriage as well as the age of women at their first child birth increased for the period 1992–2009 from 21 to 24. Child mortality, which has long-term consequences for the labour force, has registered small variations, remaining at high values in Romanian rural areas: 12.6 per thousand compared to 8.1 per thousand in urban areas. This is a symptomatic indicator of the lower educational level of the rural population, of the lack of proper

health care and of the difficult access to quality health care – “ignorance being more criminal than poverty” (Sauvy cited in Trebici and Hristache 1986: 61). The evolution of demographic structures is unfavourable and rural areas lack demographic vigour. Yet, the migration balance became positive in recent years as rural areas became a refuge for those who lost their jobs and could no longer afford to live in towns.

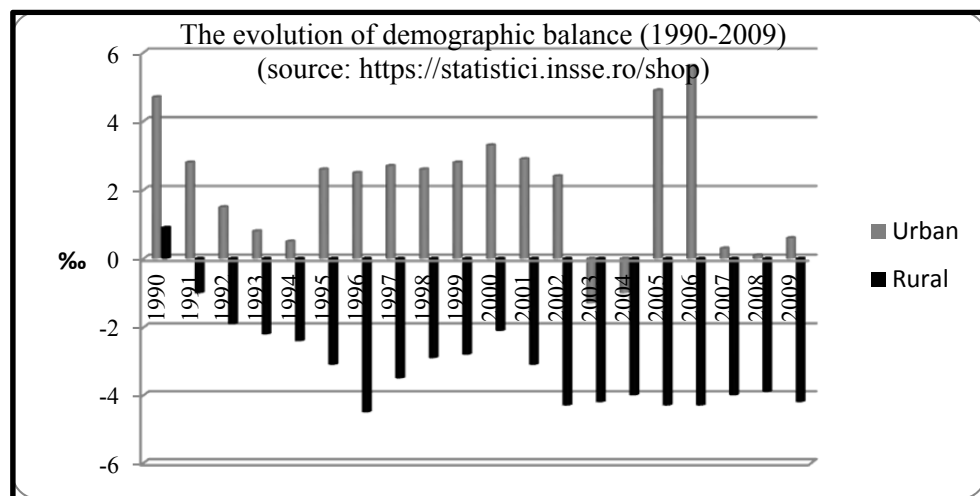


Figure 17.4 The evolution of demographic balance, 1990–2009

Functional evolution

The analysis of the economic functionality of the Romanian rural must have at its centre the primary sector and especially agriculture, given that agrarian land represents 61.6 per cent of the total land area. Nevertheless, the analysis of national GDP reveals a modest contribution of agriculture (only 5.7 per cent in 2008) and, thus, of rural space, to the total of the national value added tax. Rural space is far from revaluating its important agricultural potential and, consequently, does not play a major role in the Romanian economy. This is a direct consequence of the difficulties of the transition period. Romanian agriculture has suffered since 1990 from the impact of deficient, sometimes contradictory laws, which contributed to structural deficiencies (Ançuta 2004). Small farms, under 5 hectares, predominate, representing 82 per cent of the total; furthermore, 30 per cent of these farms are smaller than 1 hectare in area. There are several explanatory factors.

First, the regaining of land by the lawful owners or their descendants, under a Law of 1990, was an extremely difficult process, requiring frequent references to unpredictable archives and often to court decisions. The land that could have been recovered under that law was not permitted to exceed 5 hectares of agricultural land or 1 hectare of forest land. This fact led to the division of the land in small parcels even after 1990. It was only in 1998 that a law was introduced to extend the recoverable surface to 50 hectares of agricultural land and 10 hectares of forest. Second, the laws regulating land transactions were also late in being introduced (1998), as was the law relating to

rent. The break-up of the large lots of the former CAP (agricultural production cooperatives) and IAS (state agricultural enterprises) had variable effects on the structure of the cultivated areas and on agricultural production, in general. Types of production and cultivated areas were no longer decided politically after 1989, being the direct choice of the individual owners or of the agricultural commercial societies. Thus, the areas cultivated with wheat and maize, traditional cultures for Romania, remained relatively constant. The areas occupied by sunflower and vegetables increased, in direct relation with the increase in consumption. The areas cultivated with sugar beet decreased dramatically as a consequence of the bankruptcy of the sugar factories after 1989 (Table 17.1).

By comparing the evolution rates of land areas with those of production, we can identify several features of Romanian agricultural productivity in this period of transition (Tables 17.1 and 17.2):

- A very low output of wheat is apparent, where the areas under cultivation were reduced by about 10 per cent, but production decreased by 60 per cent, as the technologies of wheat production involve high costs associated with the use of herbicides and the prices of the seeds are also high;
- A good level of output of maize. In this case the areas cultivated decreased by approximately 14 per cent and the output increased by 40 per cent. The possibility of having good results by using physical labour, the lower cost of the seeds and also the strong penetration of productive hybrids on the market from the PIONEER Company can explain this situation;
- Very good yields have been recorded for sunflowers, where cultivated areas have increased by 100 per cent, while production has increased by 200 per cent;
- The areas devoted to vegetables increased by 21 per cent and production by 42 per cent.

It must be noted that individual producers registered modest outputs of wheat or maize, whereas large agricultural exploitations like farms registered important increases in outputs.

A large part of Romanian agricultural production takes place in an archaic manner. An important reason is that the recovery of agricultural land, starting in 1990, was not accompanied by the recovery of the agrarian inventory of equipment that the villagers ceded to the CAPs four decades before. In the meantime, the communists transferred mechanical equipment to the so-called Stations of Mechanisation of Agriculture which were not subjected to retrocession. Consequently, agricultural landowners were incapable of using modern technologies and most of them used old and cheap methods and practices, such as animal labour and manure. Some 89.4 per cent of the agricultural labour force is also non-salaried, which underlines once more the predominance of subsistence agriculture in rural areas of Romania.

Sheep breeding, a traditional activity for the Romanians, has undergone an important reorientation as is underlined by the decrease by more than a half in wool production (Table 17.2). This is a consequence of several factors: the sharp decrease in the demand for wool on the domestic market, due to the bankruptcy immediately after 1989 of the indigenous textile factories; difficulties in the process of free transhumance and animal breeding after the retrocession of land to private owners; difficulties in

Table 17.1 The evolution of the main cultivated surfaces, 1990–2010 (hectares)

Year	1990	1992	1993	1995	1997	1999	2001	2002	2003	2010
Wheat	2,297,658	1,475,386	2,307,445	2,501,429	2,424,396	1,686,883	2,558,571	2,309,794	1,748,029	2,176,945
Maize	2,466,735	3,335,920	3,065,682	3,109,236	3,037,742	3,013,376	2,974,020	2,894,504	3,199,583	2,098,394
Sunflower	394,741	615,050	588,367	714,490	780,746	1,043,011	800,282	906,219	1,188,037	790,814
Sugar beet	162,675	179,942	97,192	133,209	128,770	65,481	39,029	41,633	45,192	22,029
Vegetables	216,009	222,590	219,290	213,819	208,259	233,058	229,231	236,348	241,887	262,692

Source: <https://statistici.insse.ro/shop/> (accessed November 2010)

Table 17.2 The evolution of agricultural production, 1990–2003 (tonnes)

Year	1990	1992	1993	1995	1997	1999	2000	2001	2002	2003
Wheat	7,379,022	3,227,614	5,354,513	7,709,266	7,185,601	4,682,531	4,456,240	7,763,767	4,441,074	2,496,410
Maize	6,809,604	6,828,270	7,987,450	9,923,132	12,686,700	10,934,815	4,897,603	9,119,194	8,399,779	9,576,985
Sunflower	556,242	773,986	695,833	932,932	858,060	1,300,929	720,871	823,549	1,002,813	1,506,398
Sugar beet	3,277,705	2,896,691	1,776,327	2,654,610	2,725,512	1,414,928	666,870	875,485	954,630	764,475
Wool	3,8167.1	28,019.4	26,011	24,322.6	22,119.8	18,983.2	17,996.5	16,879.8	16,659.4	16,879.1
Honey	10,579.3	10,409.6	9,936.1	10,435.2	10,543.1	11,153.2	11,746.1	12,597.6	13,433.9	17,408.7
Vegetables	2,357,461	2,632,259	2,871,673	2,870,565	2,427,606	3,049,357	2,527,776	2,877,360	2,863,534	3,358,334

Source: <https://statistici.insse.ro/shop/> (accessed November 2010)

coping with European regulations after the accession of Romania to the EU, in the absence of immediate measures to support sheep owners and their traditional products.

Beekeeping experienced a constant increase; the production of honey increased by 64 per cent between 1999 and 2003 (Table 17.2). The regaining of land ownership meant for many persons an opportunity to revive a traditional occupation in the Romanian countryside since antiquity. The increased interest in a healthy diet and natural medicine represented favourable factors for the development of this activity, especially in the most recent period.

The Romanian rural space has been, since the 1990s, the subject of debates concerning development possibilities through functional diversification and tourism, which has been considered a viable solution. The Romanian village is recognised for the ancient character of its civilisation and authenticity, which are attractive elements for potential tourists from advanced urban civilisations, and much effort was taken in this direction (e.g. the creation of the National Association for Rural Ecologic and Cultural Tourism, ANTREC). Nevertheless, rural tourism is of modest importance: the share of nights spent in agro-touristic guest houses is about 3.7 per cent of the total of bed nights at national level.

Evolution in the quality of life

The communist regime was not at all interested in assuring a comfortable standard of living, even for city dwellers and less so for villagers. The last 20 years brought remarkable progress in the infrastructure of technical utilities, mainly due to pre-accession financial aids (PHARE, ISPA) (Table 17.3). Thus, the length of the water distribution network increased by 242 per cent, the length of the gas distribution system by 412 per cent, and the length of the sewage network more modestly, by only 52 per cent. This evolution also improves the attractiveness of rural space for various investors.

Healthcare units had a complex evolution. A lot of public medical clinics were closed down as they depend on the financial support of local administrations which, in the large majority of cases, are in a critical situation in rural areas, while private pharmacies and medical offices appeared, as a result of freedom of investment. Access to healthcare remains restricted, because health units are located in the communal residential centres and the purchasing power of the rural population is very low and over 80 per cent of households from villages cope with difficulty with their daily life. This explains that although utilities infrastructure developed significantly in rural areas (as mentioned above), the consumption of water and gas recorded much slower increases (Table 17.4): in the last 10 years, the use of water increased only by 15 per cent, compared with the growth of 115 per cent in the total network length; the consumption of gas increased only by 0.6 per cent compared with the increase of 200 per cent of the total network length.

Case studies

At inter- and intra-regional level, Romanian rural space is highly differentiated with reference to development level and performance. The classification goes from isolated

Table 17.3 The evolution of technical utilities infrastructure in rural space, 1990–2009 (km)

Km (000s)										
Year	1990	1992	1994	1996	1998	2002	2003	2005	2007	2009
Water distribution network	10.79	10.41	9.82	11.16	10.19	13.43	17.40			
Sewage	13.75	14.60	15.02	15.29	16.01	16.81	17.18	18.15	19.36	20.95
Gas distribution network	10.78	11.67	13.65	16.74	19.44	24.07	23.92	27.50	30.73	33.34

Source: <https://statistici.insse.ro/shop/> (accessed November 2010)

Table 17.4 The evolution of water and gas consumption in rural space, 2000–2009 (000s cubic metres)

Cubic metres (000s)										
Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Water consumption	122.69	160.41	121.29	112.84	116.51	126.85	126.85	135.54	135.82	141.97
Gas consumption	354.67	309.73	269.61	296.43	290.74	328.49	318.58	310.32	372.49	357.09

Source: <https://statistici.insse.ro/shop/> (accessed November 2010)

rural periphery in decline to rural spaces situated in proximity to dynamic cities. The following case studies illustrate the extremes of this classification (Figure 17.5).

Almăjului Land is an isolated rural space situated in a peripheral position, in the south of the mountainous area of the West Developed Region of Romania. Three entry–exit roads assure connections with small towns, reachable in less than one hour. The county seat, the town of Reșița, is accessible in one and a half hours by road. There is no railway connection in the area. This is a pure rural system comprising 31 villages: one has inter–communal functions, 6 villages are commune seats and 24 villages have less than 500 inhabitants, of which 18 have less than 100 inhabitants (Figure 17.6). The development potential is related to the relief: the forested area, above 750 metres altitude, represents 30.7 per cent of the total; pastures and meadows in the piedmont and low mountains, from 450 to 750 metres, represent 35.6 per cent of the surface; and the agricultural area, below 450 metres, which is devoted to cereals and fruits, represents 33.7 per cent of the total. Due to the relief, the communist collectivisation process affected only 9 villages.

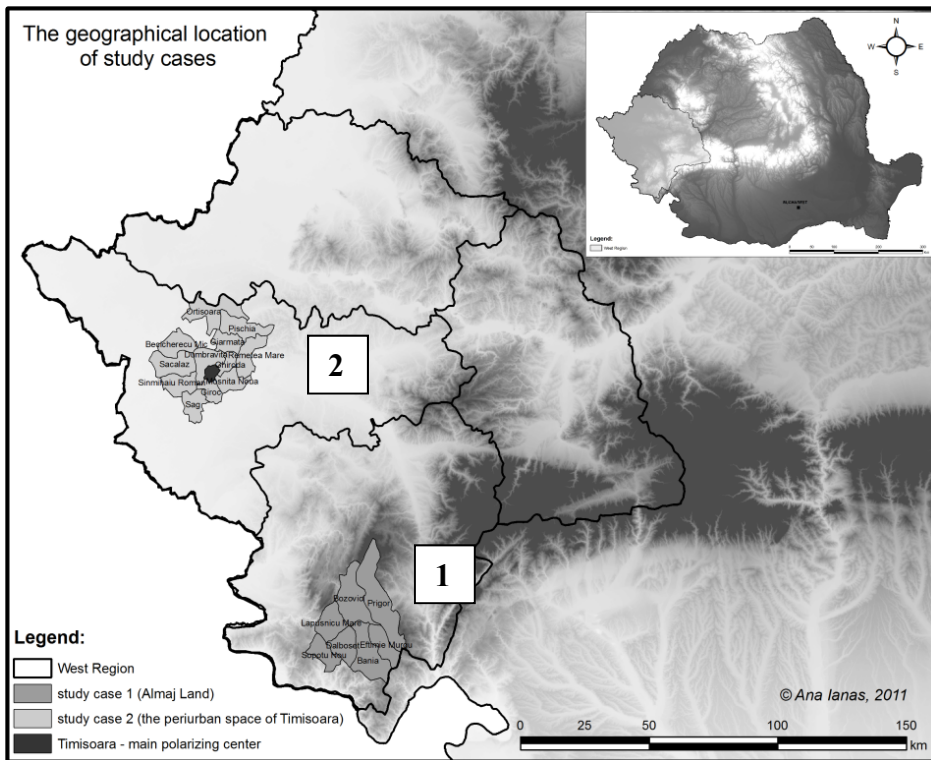


Figure 17.5 Study area locations

In this context, the active population did not leave the area and, in addition to the main jobs in heavy industry or mining outside the area, continued to practice the traditional activities of orchard cultivation, livestock, and plum brandy production and to a lesser

extent traditional crafts. The removal, in 1998, of state subventions led to the bankruptcy of the regional industry and thus the active population became unemployed and focused on the former additional activities.

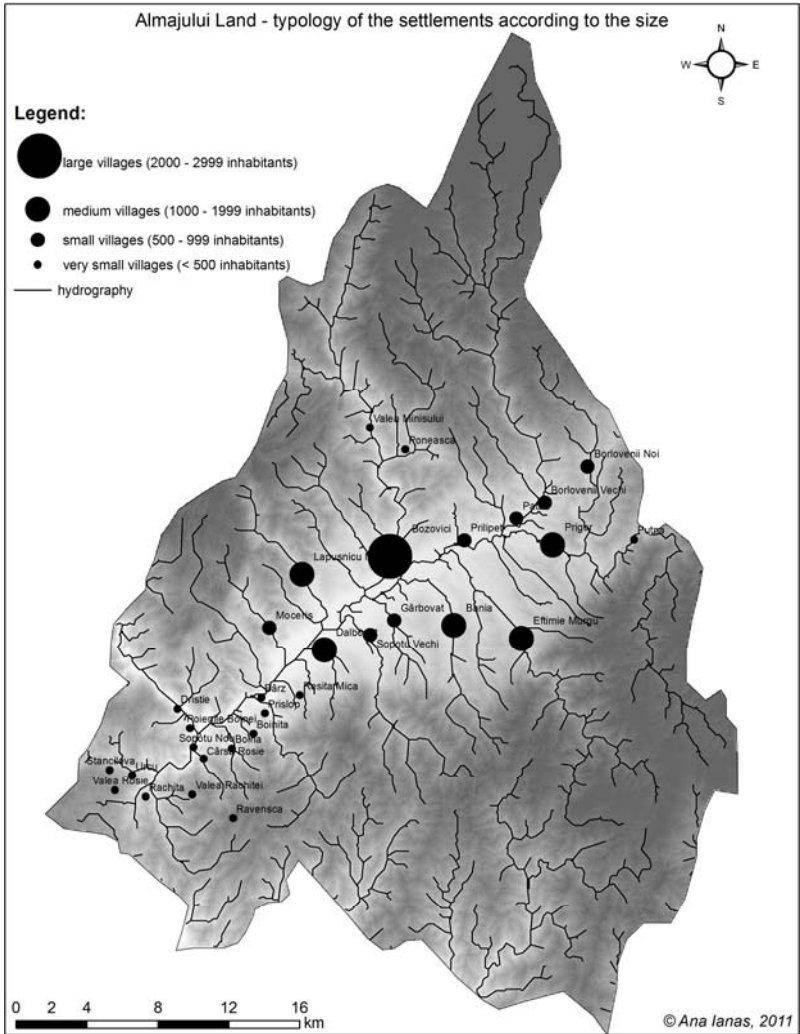


Figure 17.6 Almăjului Land- typology of settlements according to size

The economic profile of the rural area was not in accordance with the economic potential, as the predominant resource, the forest, could not be revalorised because of a long and difficult retrocession process. Agriculture became the main activity, occupying between 40 per cent and 70 per cent of the active population. Nevertheless, having no finance, modern know-how or managerial culture, the inhabitants applied a simple structure of cultures, closely related to the needs of subsistence and local consumption. Besides its modest economic role, agriculture has still great importance as an identity

mechanism for local communities, festivals being very closely related to it, especially to sheep breeding.

Manufacturing industry is represented by timber, which is not valorised at local or supra-local level but is exported to Arab countries, according to field investigations in 2007–2009 (Plate 17.1) (Ianăș 2007), and the food industry. There are three milling and bakery units and one dairy unit for manufacturing processed cheese in Prigor. The latter has 38 employees, being the biggest industrial unit in Almăjului Land. It dates from 2003 and the owners state that the motivation for having established the dairy here was that “in Caraș Severin County are plenty of high quality milk resources that can be purchased at very low prices and there was (and still was in early 2012) only one other dairy factory, in the whole region” (Ianăș 2007). The products are sold to wholesale sales companies throughout Romania.



Plate 17.1 Timber harvesting in Almăjului Land ©Ana Ianăș

The Almăjului country, as all peripheral rural spaces in Romania, offers a low standard of living: the total length of the drinking water distribution network registered a small increase after 1990 so that, at present, only 13 villages have access to this facility (41.93 per cent of the total population); the sewage system is present in only 4 villages (12.9 per cent of the total population) from the main commune, and there is no natural gas distribution. The public healthcare system registered an accentuated decline. While there used to be medical offices in all communes, at present this public service exists only in the main village. From April 1, 2011, the only hospital in the area was closed. This can be regarded as the most important setback, the nearest hospital being in the departmental centre, at 70 km distance. The local community reacted weakly to the development opportunities granted by the possibility of accessing national and European funds for different purposes. There are only four recent European projects: one relating to street infrastructure, two focused on changing the local mentality of pupils and one oriented at training the population in rural tourism activities (Ianăș 2009).

The suburban area of Timișoara

Timișoara currently has 310,000 inhabitants, being the third city of Romania and the main urban pole in the west of the country. The 13 communes in its proximity are situated on major circulation axes (E70, E671), 10 of them within a 5 minute travel distance and three others within a 30 minute travel distance (Figure 17.7). They are large sized communes, having between 2,000 and 5,000 inhabitants. In the 1980s and the 1990s, the Communist Party forbade cities to expand spatially at the expense of agricultural land. The 1989 change of regime allowed the cities to develop complementary relationships with the surrounding rural areas which led to major functional and spatial changes in the suburban settlements (Ancuța 2011). The most relevant feature of the evolution of these communes is the important demographic growth: the registered rates range for the period 1999–2008 from 4 per cent for the most remote communes, to 100.9 per cent for the nearest (Figure 17.7). This growth is determined by the immigration of former inhabitants from the city who settled in the villages, starting with 1998–2000, in the context of the acceleration of the process of land restitution, land market organisation and the formation of an upper-middle class. The factors of attractiveness were related to the advantages of the rural space (tranquillity, high quality of environmental components) and, of course, proximity to the workplace.

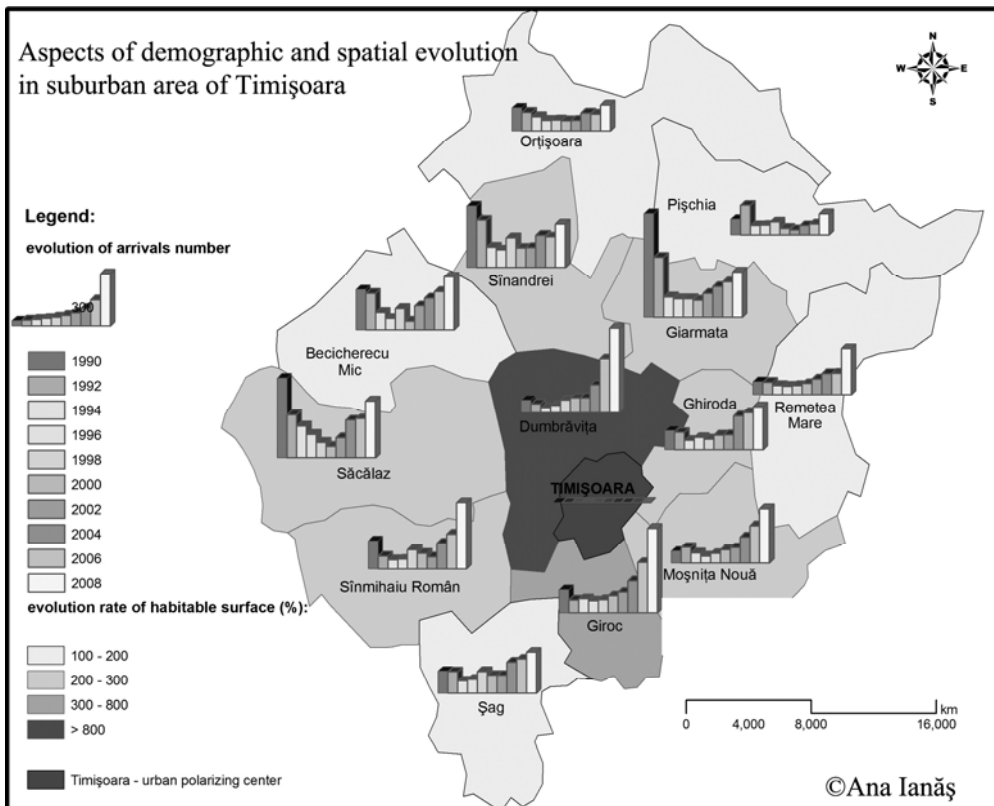


Figure 17.7 Aspects of demographic and spatial evolution in the suburban area of Timișoara

Consequently, the evolution in the residential living area was remarkable, with increase rates varying from 128 per cent to 324 per cent and even a maximum of 800 per cent (Figure 17.7). The expansion of the built space was achieved at the expense of gardens within the built up area or the agricultural terrain from the unincorporated areas. Aside from the positive effect on the local budgets, residential growth produced a series of negative aspects. These included: (i) a lack of coherence, poor organisation, deficient utilities, over-demand on the capacity of service facilities, and residential growth being the result of a very high number of individual initiatives; (ii) a low quality of housing with the expansion of built areas taking place in an unplanned way and the absence of an accompanying equal growth of services, public utilities infrastructure, or green spaces; (iii) negative impacts on the social cohesion of communities, with difficulties in establishing solidarity between *old* and *new* inhabitants.

Important change was registered in the economic profile of the suburban communes, which potentially could benefit from a series of positive factors such as favourable positioning, availability and low cost of space, easy access from external areas. As a consequence, a complex range of economic activities was established. The structure of the turnover by branch enterprises emphasises the predominance of services, with a share of 50 per cent of the total, followed by industry with 25 per cent, and construction with approximately 10 per cent; agriculture has just 2.5 per cent of the turnover (PIDU 2010). The residential pressure on agricultural land generated a blockage of a large part of it, due to land profiteering. The increased interest in the acquisition of agricultural land and its transformation into built areas determined that an extensive area of land was left fallow waiting for possible buyers. The local authorities were efficient in using European and national funds in order to improve the standard of living. Consequently, substantial shares of the population benefit from the water and gas networks: 48 per cent and 53.6 per cent, respectively. In recent years, the economic crisis slowed down the suburbanisation process in this area which presents a poly nuclear structure and still preserves rural features in the landscape.

Conclusions

The transition generated by the fall of the communist regime determined contrasting changes in Romanian rural space. Negative changes refer to: demographic decline, ageing of the population, the critical situation of labour resources, sub-use of agricultural resources, and decline in educational levels and living standards. Positive changes refer to: improvement of technical utilities, recovery of some traditional activities, rebirth of interest in the touristic capitalisation of the rural cultural patrimony, the growing concern for planning which has materialised in acts such as the National Plan for Rural Development which aims to reshape rural-urban complementarities. Although there are sufficient planning strategies for the recovery of Romanian rural space, the achievement of a real synergy between all the decisional layers, from the governmental to the local one, seems to be difficult to accomplish.

The essential aim of rural development in Romania is considered to be, in the short term, the finding of realistic solutions for the efficient revaluation of the local potential, from the agricultural to the tourist potential. This implies a transition from the role of

spectator of state politics that the agricultural worker had for 50 years in communism, to that of dynamic owner and entrepreneur held prior to 1947.

Acknowledgement

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Abstract

Romanian rural space is a major component of national territory in terms of its population and land surface. Assigned the essential role in ensuring Romanian continuity and identity throughout history, it was reduced by the communist regime to a mere recipient. December 1989 represented a new tipping point in its evolution. The present analysis aims to illustrate the effects of this event on different components of the rural system: demographic, economic and built environment. Two study cases illustrate the effects of this period of transition at local level.

Keywords: Romania; rural space; transition period; Almăjului country; Timișoara

Chapter 18

Social Capital and Business Networks in Rural Areas of Low Population Density: A Case Study

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Introduction

There is great diversity in rural areas, which presents different challenges and opportunities for development. This paper deals with a particular type of rural area characterised by low (or very low) population density. This type of rural area generally has a highly specialised economic base built on the utilisation of natural resources through agriculture or mining. Agriculture is an activity that is in economic decline, at least in terms of job creation. The same is often also true of mining as a result of the depletion of mineral resources or decreased profitability. Rural areas whose economic base is agriculture or mining have experienced emigration that has led to their current low population densities. In contrast, those areas that have diversified their economic bases have been able to retain and increase their population densities.

The European Union (EU) postulates that rural development cannot sustain itself through agriculture alone; rural development requires additional economic activities (aside from mining, which is also in decline). Economic diversification requires movement towards new entrepreneurial initiatives, which can be either endogenous or exogenous. That is, these activities can involve local residents or businesses from elsewhere. It is assumed that the latter prefer areas that offer better business opportunities; therefore, the EU's rural development programme, LEADER (links between actions for the development of the rural economy), strongly depends on local entrepreneurs. The promotion of endogenous economic diversification initiatives in rural areas where they have not previously existed is a significant challenge. Will residents of such rural areas now be capable of what they have not been before? It is widely assumed that social capital is a key asset available in rural areas that are least able to diversify their economic bases and reach greater levels of development. This assumption is a starting point for this research; the objective is to evaluate the role of social capital in creating a business network oriented towards the diversification of the economic base in rural areas of low population density.

The theoretical framework: social capital and rural development

Classical economics considers natural, human, and physical capital to be factors in economic development. More recently, social and cultural capital have become recognised as additional factors in economic development (Bebbington 1999). Social capital is “a broad term encompassing the norms and networks facilitating collective action for mutual benefit” (Woolcock 1998: 155). A network is understood to be a concrete group of actors and the relationships that interconnect them. These actors can be individuals or groups, and the relationships can be of many types. These relationships might have a more clearly material and observable character; they might, for example, involve the exchange of goods. However, these relationships might also be immaterial and difficult to observe, involving the exchange of services, information, or ideas. The relational structure of a social network can be a resource in itself, available for utilisation for the group’s benefit. This resource is known as social capital. Internal cohesion is a primary consideration in characterising the relational structures of networks. Internal cohesion is the abundance and strength of the ties among the actors that compose the network: “The strength of a tie is a (probably linear) combination of the amount of time, the emotional intensity, the intimacy (mutual confiding) and the reciprocal services which characterise the ties” (Granovetter 1973: 1361). We also consider the connections among networks, that is, the bridges that link members of a network with other networks. Social capital is increased whenever the internal cohesion of a network and its connection with other networks increases (Burt 2001). In a definition of social capital developed prior to that cited by Woolcock, trust is identified as an additional element: “Social capital refers to features of social organisation, such as networks, norms and trust, which facilitate coordination and cooperation for mutual benefit” (Putnam 1993: 2). Trust among actors has a positive influence on the creation of social capital.

Social capital is an essential factor in development, incorporating social and institutional elements that have not been explicitly included in analyses in the past. Because natural, human, and economic factors do not satisfactorily explain why some societies progress more quickly than others, other factors are considered, including social relations, trust, and norms. From this new perspective, the existence of social capital will facilitate the attainment of development goals that, in the absence of such capital, would be more difficult to reach (Coleman 1990).

Perhaps the most specific characteristic of social capital in comparison with other forms of capital is that it is accessible to everyone; obtaining it requires only life time and energy (Svendsen *et al.* 2010). Therefore, social capital is considered the capital of the poor. In applying this idea to the present study, it is possible to suppose that the principal asset of impoverished areas (such as rural areas with low population density) is social capital. Some World Bank projects begin from this premise (Fox and Gershman 2000), which seems to be confirmed by the results of many studies on social capital in rural environments in both less-developed countries (Ma 2002; Bebbington *et al.* 2006) and more-developed countries (Lee *et al.* 2005).

Methodology

The steps taken to evaluate the role of social capital in the creation of a business network oriented towards diversifying the economic base of rural areas with low population densities are as follows. First, identify and characterise the new entrepreneurs; second, investigate the social networks in which they are inserted, taking into account that the highest levels of social capital are reached in networks with many strong internal ties and many bridges that connect the network with other networks; and third, investigate trust, both in the business community and in the local society as a whole.

As case studies, we selected two rural areas with low population densities situated in Aragón, one of the interior regions of Spain. The first area is Monegros, whose economy is based on agriculture; the second is Andorra-Río Martín, whose economy is based on agriculture and coal mining. The population densities of Monegros and Andorra-Río Martín are 7.6 and 12.7 inhabitants per square kilometre, respectively. Both areas have benefited from the LEADER initiative, and their principal challenge is the diversification of their economic bases. A qualitative methodology was used based on semi-structured interviews with a selection of entrepreneurs and key informants. In the interviews with entrepreneurs, we determined their social origins, training, motivations, and social prestige; their relationships and cooperation with other businesses and agents in the territory; and the degree of trust that underlies these relationships. Interviews with key informants were used to compare their opinions with the opinions of the entrepreneurs regarding their social prestige and the relationships between local society and businesses. These interviews were also intended to investigate the relationships and levels of trust that exist in the local communities.

Results

The new local entrepreneurs

In the two areas included in the study, agriculture is based on small farms that are organised into powerful cooperatives. In Andorra-Río Martín, coal mining is dominated by two large businesses: one multinational and one national. Non-agrarian businesses, which are almost entirely endogenous, are small and traditionally have been dedicated to providing services to the population (trade, repairs) and to construction; recently, some businesses related to the food industry, agricultural machinery, and tourist services have been created. These are primarily family businesses owned by families not linked to agriculture or land ownership. Both business creation and business growth are primarily based on household savings; if loans from financial institutions are necessary, family property serves as collateral. Families provide not only funds for bank guarantees but also labour. Spouses generally work in these businesses, cutting labour costs significantly and providing highly trustworthy labour. Generally at least one child is also involved in the business when they are old enough to begin working or when they have finished their schooling. Entrepreneurs have often inherited a family business;

however, in other cases, they become established independently through previous experience as employees in non-agrarian companies.

Entrepreneurs are trained through practice; they learn to manage their businesses based on their own experience, first as employees and later as entrepreneurs. However, some entrepreneurs, especially the youngest, have received some type of formal professional training. These entrepreneurs have primarily developed business projects to create work for themselves and their families in the community where they live and have roots. Many of them have the mentality of artisans; they participate directly in production processes rather than emphasising business tasks such as management. The group of entrepreneurs that drives the diversification of such a local economic base, therefore, is limited: it includes a small number of small businesses and entrepreneurs with little training and a weak entrepreneurial mindset. These entrepreneurs come from a minority social group. There are no farmers among the members of these small business networks; the dominant mentality of the farmers values the safety of the EU's guidelines and subsidies above the risk associated with new businesses. Nor are there entrepreneurs among the miners, who undertake very difficult but well compensated work; in recent years, there have been drastic reductions in staffing in the mines, achieved by means of early retirement, which is why there are so many retirees with high incomes. It is practically unthinkable for these predominant social groups to reorient their professional lives to create businesses, which is why it is not expected that the local business network, already weak in quantitative and qualitative terms, will expand and become denser.

Interviews revealed that these entrepreneurs enjoy little social prestige. Farmers do not value the time that entrepreneurs dedicate to their companies, which is generally much greater than what is required on farms. They also do not value the courage necessary to take the risks that are required when making decisions under uncertain conditions and with limited knowledge. Farmers are accustomed to attributing business success not to efforts or to personal merits but rather to luck and even to cheating. Entrepreneurs also do not enjoy prestige among active or retired miners, whose income levels are frequently higher; because of the trade union mentality of the miners, entrepreneurs are not highly regarded.

Local business networks

Entrepreneurs are part of networks from which they can obtain social capital. They have been studied by separating business networks— that is to say, those organised exclusively by entrepreneurs— from networks of a general social character. In the latter, the entrepreneurs join with other individuals and groups. Among non-farmer entrepreneurs, an individualist mentality is common. However, in recent years, these entrepreneurs have developed some informal mechanisms of cooperation. These entrepreneurs commonly do each other favours or exchange information. There are also mechanisms of formal cooperation, though business associations have little importance in either rural area studied. The oldest association is a shopkeeper organisation in Monegros; its objective is to make local commerce more attractive so that local businesses will not lose their market share to the large retail businesses in nearby cities.

More recently, Local Action Groups, the managers of the LEADER programme, have tried to stimulate the growth of business associations in their respective areas, even offering support for such associations. The results of this effort have not been equal in the two zones. In Andorra-Río Martín, a local association was created whose activity has been very low until now. In Monegros, three specific associations have been formed: one artisanal, another for food producers, and another for tourism and the hotel industry. All three associations share the objectives of seeking formulae for commercialising products from the associated businesses and jointly attending sectoral fairs. The first two associations have little activity because there are few businesses in the region that are dedicated to these sectors; the third, which has more members, is doing a better job of accomplishing its planned objectives, having already attended national fairs. In addition to these associations promoted by local action groups, there is an agribusiness association that was recently developed in Andorra-Río Martín.

In conclusion, cooperation among local businesses exists, but it is modest. Neither rural area considered in the study can be called an articulated economic system; the interviews and statistical data reveal that these groups of businesses are dedicated to different activities and include few relationships. In essence, these business networks have a weak internal structure, which means that social capital is not an especially abundant resource among them. Most businesses, in contrast, are integrated into provincial, regional, and national business associations. These relationships can be interpreted as bridges with other business networks.

The business and social networks

Social networks can also be a source of social capital. A good way to evaluate social capital in social networks is to consider voluntary association. There are a large number of associations given the population of the areas in the study (with approximately 250 associations for 30,000 residents). The majority of these associations exist at the municipal level. A few exist at higher levels in accordance with their objectives or their ties with other associations at greater spatial scales, including women's associations (which exist in many municipalities, are grouped together at the regional level, and are linked to other similar organisations at the national level). The oldest are hunting organisations, which are traditional in Spanish rural environments, and religious brotherhoods.

Three groups of associations can be differentiated with respect to their degrees of affiliation. First, there are those associations that one must be affiliated with if one wants to conduct related activities. These types of associations include hunting organisations. Second, there are those associations that one is not obligated to join but in which many people are involved, as is the case with women's, retirees' associations, and *peñas de fiestas* (the associations conducting the annual village festivals). All of these organisations have members from many social groups and offer activities for the entertainment of their members. Third, are other associations which have low levels of affiliation.

Non-farmer entrepreneurs belong to families that have been settled in the area for many years and are clearly integrated into local life; they participate in local festivals and other social events and are members of local associations. They also contribute economically to sustaining local activities such as festivals and sporting events.

Associations frequently appeal to them for help and, generally, these entrepreneurs respond positively to such requests. However, entrepreneurs mostly affirm that they do not engage in these activities to establish or consolidate professional relationships. Professional activities and personal lives are clearly separate; these activities allow people to get to know their businesses somewhat better, but nothing more. In other words, these activities are not an important source of social capital.

Local business and trust

Trust is an indicator of social capital. Thus, in interviews, we attempted to determine the degree of trust in rural society and among entrepreneurs. In these communities, there is a high level of confidence within families and among neighbours within the same village. Entrepreneurs rely heavily on their families in running their companies, feeling that family members will work harder than outsiders. Regarding neighbourhood relations, it can be said that the majority of entrepreneurs in the area prefer to hire neighbours as workers rather than outsiders, because of closeness and trust, as well as shared roots. When recruiting workers, entrepreneurs in the area use personal knowledge and references from people they trust. However, on many occasions they did not find people with adequate qualifications in the area. In these cases, they had to appeal to outside workers. Trust among business owners is also high; generally, they prefer to subcontract the provision of services or products to entrepreneurs from the area rather than those from outside. Of course, there are exceptions stemming from differences in price, quality, or technical specifications.

Conclusions

The European Union has assumed that neither agriculture nor other economic sectors in decline, such as coal mining, can continue to function as the economic bases for rural areas. Therefore, it is necessary to promote economic diversification. This process will have to include residents, given the lack of interest in these areas shown by entrepreneurs from outside. The results of this study illustrate that rural areas with low or very low population density have two important limitations that prevent endogenous economic diversification.

The first limitation is the existence of a weak, low-density business network that has problems in growing. There are few entrepreneurs in economic sectors outside of agriculture and mining in the study areas. These entrepreneurs have training that is based largely on practice and they do not have a highly developed business mentality. All of this limits their potential for expansion among existing businesses. Moreover, it will be difficult for the majority social groups to contribute to this diversification effort: farmers have a 'peasant mentality'; they are averse to risk and are also very tied to public support. Miners, in contrast, have a deeply ingrained 'worker mentality', which results in their unusual dedication to business activities. The second limitation is the lack of social capital. Local business associations are few and relatively recent. For this reason, they do not consist of dense networks with strong ties. There are bridges among these associations and regional and national business organisations. However, these

links do not exist between business associations and agrarian cooperatives or mining companies. Entrepreneurs are well integrated into associations at the local level, but these local networks are not a source of social capital for running a business.

This study has highlighted very high levels of trust as a positive element of society and as existing among local business owners. This trust constitutes the foundation for personnel recruitment as well as formal and informal cooperation between companies. However, trust has strict limits because of the limited human resources in rural areas and the weakness of business networks. Given both limitations, it is clear that economic diversification in rural areas with low population density will be a slow and long-term process as a result of both the scarcity of physical and human capital resources (which has been clearly documented for some time) and the scarcity of social capital, though the latter is considered to be the capital of the poor.

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Abstract

The objectives of this paper are as follows: first, to determine the characteristics of business

networks that can aid in diversifying the economic base of rural areas of low or very low population density; and second, to evaluate the role of social capital in this diversification process. As case studies, we chose two rural areas in Aragón (northeastern Spain), whose economy is based on agriculture and coal mining. Using a qualitative methodology based on semi-structured interviews, we studied the characteristics of the business community and investigated social and business networks as well as the role of trust in economic development. The results of the research show that there are few businesses dedicated to economic activities not directly associated with agriculture or coal mining. Such businesses have been created by social groups other than farmers and miners and have few business connections. Businesses owners are part of the local social networks, but these networks do not provide social capital for businesses. Levels of trust are high among business owners as well as in society as a whole; such trust forms the basis for staff recruitment and cooperation among entrepreneurs. We conclude that areas with low or very low population density rely on unstructured business networks and scarce social capital. Thus, the process of diversifying the economic base of these areas will be slow and long-term.

Keywords: Social capital; rural areas; business network; economic diversification

Chapter 19

Social Capital, Institutional Design and Regional (under) Development: The Case of the Upper Colorado River Basin (La Pampa, Argentina)

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Introduction

At present, social capital is considered to be a key factor for overcoming poverty, fostering competitiveness and the development of rural areas (Cernea 1985; Flora 1998; Woolcock 1998; Sorensen 2000; Flora 2004). A review of the literature shows that existing arguments about social capital, as far as rural development is concerned, revolve around two main issues: the types of social capital that favour development processes and the problems associated with their build-up in specific territorial contexts. One of the most widespread perspectives as regards overcoming poverty and encouraging rural development draws a distinction between ‘bonding’ and ‘bridging’ social capital (Narayan 1999). The former is related to the presence of strong social ties based on norms of trust and reciprocity that facilitate cooperation and community organisation. Its chief role is to confer upon the groups a sense of identity and common purpose, to facilitate collective action and reduce risks and uncertainty. The latter is associated with the notion of the weak links described by Granovetter (1973). Its main role is to facilitate access to resources that are not available in the community and to enhance social cohesion.

Several authors point out that the creation and operation of social capital are very closely related to the context in which this happens (Lowndes and Wilson 2001). Based on the work of Robert Putnam, a perspective has emerged and taken root which highlights the importance of the institutional context in the construction and destruction of social networks that are promising for development (Evans 1996; Woolcock and Narayan 2000). This approach has awoken special interest amongst those who study development processes based on irrigation projects where both the organisation by producers and the role played by the state are critical factors for success (Lam 1996; Uphoff and Wijayarathna 2000).

The context

The irrigation areas of the *Alto Valle del Río Colorado* (AVRC– upper valley of the Colorado River) constitute a development project launched by the government of La Pampa in the 1960s (Figure 19.1). It comprises 65,000 hectares out of which only

13,000 are currently being irrigated. The project is located in the south-western edge of the province, near the town of 25 de Mayo (6,900 inhabitants in 2001), a semi-desert area with a climate closer to that of Patagonia rather than La Pampa, with average annual precipitation of around 200 millimeters and an elevated temperature range (30°C), and whose main natural resource is the Colorado River ($148\text{m}^3/\text{sec}$).

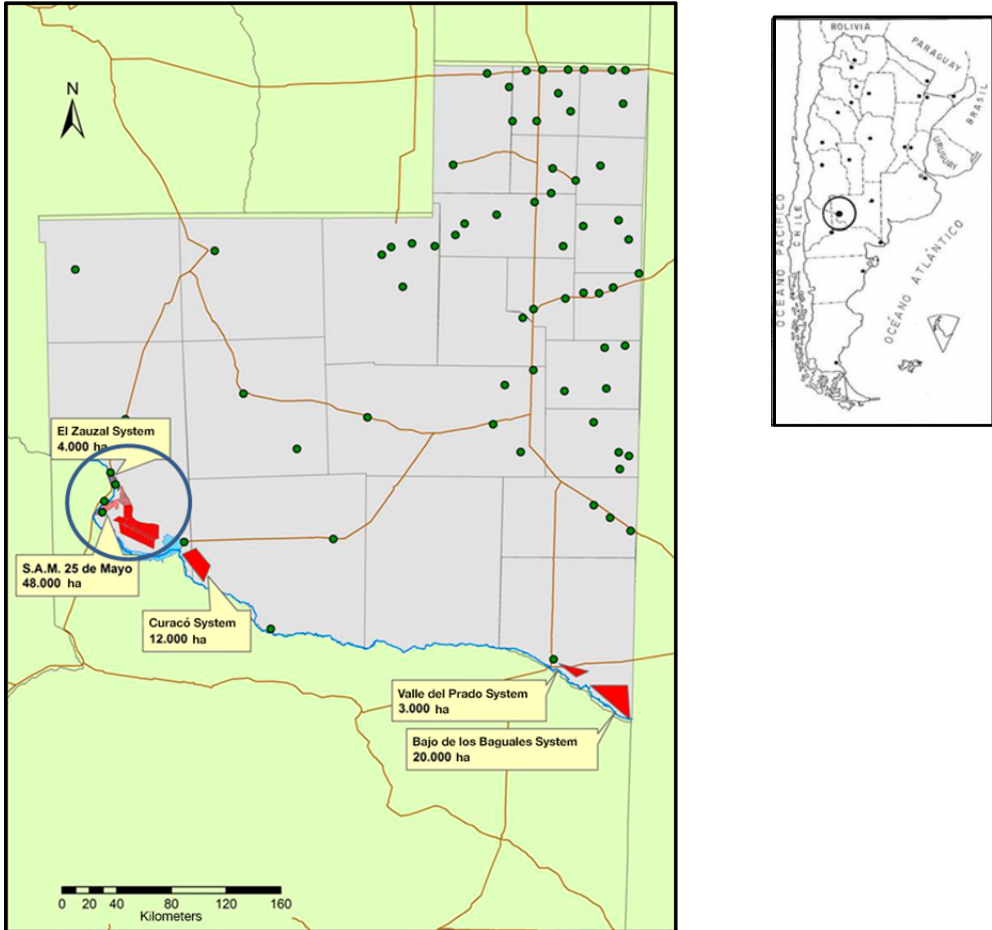


Figure 19.1 The Upper Colorado River irrigation project
Source: Author (2010)

This territory has a very low population density (less than $1\text{inhabitant}/\text{km}^2$) and its predominant economic activity is still raising cattle, goats and sheep, along with the exploitation of minerals (salt, gas and oil). However, according to Burgos (1974), the Colorado River Basin has one of the best agro-climatic aptitudes among basins in Argentina, demonstrated by the relatively large irrigated areas in the lower part of the basin (Buenos Aires and Rio Negro provinces). In addition, although there is some variability, the soils of the AVRC have been classified as suitable for irrigation by various studies (Rasp and Wirth 1958; Pontussi 1962).

The dominant activity before this project was initiated was animal grazing (cows, sheep and goats) by shepherds from Chile and the Rio Negro Basin, although subsistence agriculture also existed, with irrigation limited to small vegetable gardens and alfalfa fields. Later, the public sale of large properties attracted European settlers who founded large *estancias*. The largest of these was *Estancia 25 de Mayo* (better known as '*estancia de los ingleses*'), which belonged to Río Colorado Lands Company and covered 7,000 hectares, but only had a very incipient irrigation activity. This entire process was cut short, however, by a large river flood in 1914, and the area did not recover this activity until the middle of the 1950s, when the provincial government initiated irrigation projects (Morisoli 1983).

These large estates were eventually expropriated through Law 61/1954, which confiscated lands suitable for irrigation and, along with the remaining publicly owned land, they were allotted by the La Pampa government to the project to develop irrigation in the Upper Colorado, with the general goal of resolving the problem of rural poverty in the province through the distribution of land and the diversification of the provincial economy through agro-industrial production.

The *Ente Provincial del Río Colorado* (EPRC), which was created in 1962 along similar lines to the Tennessee Valley Authority (TVA), is in charge of the project although it has been subjected to strong political and economic dependence from the government of the province of La Pampa (Michellini 2010). In addition to the predominance of 'top-down' governance, there was little participation by the local basin authority (*Comité Interjurisdiccional del Río Colorado* – COIRCO), the 25 de Mayo municipality or other institutions (*Banco de La Pampa*, *Secretaría de Energía*), which results in a weak and fragmented governance context.

During the last four decades, irrigation activity has centred around fruit production, apples and pears grown on small plots of land with an average surface area of 16.8 hectares. The predominant economic agent from the start of the project has been small fruit producers (*chacarero*). In total, 152 producers have settled there under a system of 'social colonisation' using 'public tenders' (Provincial Law 497/73 and later Provincial Law 858/78 and 894/85) applicable to about 3,500 hectares. The idea was to find families with prior experience (either technical or cooperative) and a great deal of manpower within the family, but limited financial resources. The maximum amount of land that could be acquired was 20 hectares, considered the basic economic unit for a family to subsist on irrigated land. Most of these producers actually own the land. However, it is important to highlight that despite the social nature of the project, the land was not given on concession, just sold at market prices with favourable payment options (for example, very low rates and long payment schedules and a 2 per cent reduction in price with the birth of each new child).

Local processing of the production of these small fruit producers was one of the most important objectives of this project and key to its sustainability (Zamora 1974). However, local processing has been extremely limited; it never became consolidated and is currently almost non-existent. The settlers' participation in the regional production chain has been marginal and, after the second half of the 1990s, they strongly declined in numbers and the plots of land were progressively abandoned, involving a decline of -77 per cent (Table 19.1).

Towards the end of the 1990s, the growing influence of the neoliberal economic model implemented in Argentina and the hollowing out of the state led the provincial government to abandon the 'social' model and to base its strategy on the attraction of

large scale capital. Accordingly, in the last decade six companies were established, four local and two external, geared towards the production of alfalfa (seeds and fodder) and wine on 9,500 hectares of land. This production is sold in the national and the international market but such activities represent a 'productive enclave' that bears little relation to the territory where they are carried out.

Table 19.1 Typology of AVRC fruit growing farms

Typology	Average surface area	Total surface area (Ha)	%	Number of farms	%	Current situation	productive
1	20.3	386.82	15	19	13	Fresh fruit & juice production markets	
2	12.8	128.61	5	11	7.2	Mainly juice production market	
3	14.8	6104	24	41	27	Deterioration of plantation Abandonment of farmland	
4	17.7	1369.1	54	77	51	Deterioration of plantation Abandonment of farmland	
5	15.4	61.6	2.4	4	2.6		
Total	16.8	2556.5	100	152	100		

Source: Author (2010)

Methods

The analysis is based on quantitative and qualitative approaches. The data were collected between 2003 and 2008 during five field studies as part of a PhD project aimed at studying the development trajectory of this peripheral rural area. In total, 94 interviews were conducted, 53 semi-structured interviews with farmers and 41 in-depth interviews with farmers and agribusiness, government officials, representatives of local organisations and practitioners. Validation of information was carried out through triangulation by using official documents, newspapers and the statistical information that was available.

Results

The productive activity of the fruit growing farmers in the AVRC has been strongly conditioned by their difficulties in establishing cooperative relationships based on trust and reciprocity.

Social capital limits to territorial development

As far as bonding social capital is concerned, a series of shortcomings were found both in the build-up of formal organisational links and informal ones. In contrast to the other irrigation areas in northern Patagonia, where producer cooperatives are widespread and make up the basic organisational structure of the producers, only two cooperatives were set up in the AVRC over four decades of social colonisation. In both cases they operated briefly and erratically: the *Cooperativa Comahue* (1975–1988), the most important case and one that created greatest conflict, only encompassed 26 per cent of the settlers. The *Cámara de Productores Frutícolas* was even more short-lived (2001–2004) and unstable. It included 17 per cent of the producers. This had important consequences both in terms of productivity and as far as joining the regional fruit market was concerned. On the one hand, it affected the development of economies of scale and the creation of productive networks through the establishment of local packaging plants or factories for the production of juice and canned food. On the other hand, it forced the *chacareros* to participate individually in the fruit *filière*, increasing their dependence on the big national and transnational packaging and fruit trading monopolies operating in the Negro river Valley (Bandieri and Blanco 1994; De Jong 1996; Merli and Nogués 1996). Such a lack in organisational capacity, as well as the absence of irrigation consortia and other organisations, encouraged the predominance of individual links between producers and EPRC, which often led to clientelistic relations. It also prevented the strengthening of the local institutional context as well as the establishment of synergies between both sets of players.

Informal community links have also been rather weak. In this regard, the research has shown two large initial obstacles to the creation of community social capital. First of all, in contrast to the irrigation settlements of the Río Negro Basin, often organised around ethnic communities and supported by colonisation companies (Bandieri and Blanco 1998) at the end of the nineteenth century, the AVRC settlers were individuals transplanted into the territory with no prior social, historical or cultural ties.

Secondly, the manner in which the settlement process was carried out generated a heterogeneous set of settlers from the start, exacerbating the difficulty in creating social capital caused by the absence of prior ties. In order to attract more settlers to a territory with such a harsh climate, the conditions required by the provincial government to buy a plot of land were frequently eased, the result of which was that many settlers did not meet the required conditions. For instance, many had little or no cooperative or technical experience and others had substantial financial capital and were able to make large initial investments that other settlers could not. Furthermore, settlers were recruited from different regions, which highlighted the varying levels of prior experience and knowledge of the activity, especially among those who were recruited from irrigation areas and those who came from dry regions (such as those from other parts of the La Pampa province). Finally, it is also important to point out that the State did little to create institutional spaces that would favour the construction of social links between the settlers.

These initial problems were never completely overcome and they tended to be aggravated by the failures in cooperation experienced by the *chacareros*. For example, the evidence collected shows that almost half of those interviewed (47 per cent) declared that they never got together with other settlers, while 40 per cent described their encounters as ‘occasional’. The interviews held revealed that the persistence of this

situation prevented them from collectively confronting essential aspects of the productive process such as utilisation of machinery, purchase of agricultural supplies and consumables, investment in systematisation and plantation in the plots of land and employing hand labour.

This situation had the adverse effect of accentuating the initial differences among settlers who had greater technical and financial resources and those who were completely dependent on state assistance. The weak informal ties and the absence of formal organisations became two sides of the same coin. The initial lack of social capital conditioned the formation of cooperatives, irrigation consortiums and other intermediary institutions, yet their absence made it difficult to strengthen those ties. This set of circumstances illustrates how necessary it was for the EPRC to create conditions that would allow the ‘vicious cycle’ to be broken and a new ‘development sequence’ to be initiated (Hirschman 1986).

The research also revealed the existence of weak social links between fruit producers and local agro-industrial entrepreneurs. The absence of bridging social capital between the former and the latter has prevented the ‘socialisation’ of knowledge (technical knowhow, business management skills and information about how markets operate) and the economic potential provided by the new companies.

The social links of the *chacareros* with producers in nearby irrigation areas (especially in the Río Negro Valley, the core area of fruit production in Northern Patagonia) have been irregular, depending on the individual characteristics of each *chacarero*.

Successfully entering into the market has been associated with two main types of strategies to create social ties: relations created by the settler’s initiative to establish contact with producers and businesses in the region and relations built upon prior social ties. The first strategy has been employed by settlers with greater entrepreneurial capacity, more productive land (greater production of fruit and better quality) and greater financial capital, frequently derived from income earned by some family member in an economic activity carried out outside of the family’s land. In the second strategy, the *chacareros* enter into the production chain using information gained through prior friendships or family ties with settlers in the Río Negro Valley and, in some cases, by belonging to an ethnic organisation– Spanish, Italian, and so on.

Generally speaking, in the case of the AVRC, it was observed that while such bridging links have had a positive effect for some individuals, collectively they have had a rather negative effect. On an individual level those social ties provided a greater understanding of the fruit market, its actors and mechanisms. Thus, the few producers who established links with other producers or companies within the regional context have been able to join the fruit production chain and, more importantly, to do so with greater possibilities of success, since they had contact with more trustworthy economic agents. However, for the community this development intensified the differences between settlers, leading to ruptures and internal tensions that further weakened the limited social cohesion that existed.

Institutional design and social capital formation

A number of factors were found that seemed to be responsible for such a situation. As far as the *chacareros* were concerned, their economic conditions and heterogeneity in

terms of education, previous cooperative experience and socio-economic capacities were major obstacles in building dynamic organisational bonds of cooperation and reciprocity. Thus, to cope with this situation satisfactorily it would have been necessary for the State to ensure the creation of an environment that might permit these initial obstacles to be overcome. However, it was discovered that the institutional context, characterised by top-down relations and a high degree of politicisation of the project, was inadequate and unable to provide the basic conditions required for the formation of social capital. The absence of a stable regulatory framework together with the lack of efficient mechanisms that might ensure the fulfilment of the norms favoured a climate of uncertainty. This hampered the identification of the producers with the project and its territorial consolidation, thereby undermining their confidence in the will and capacity of the State to implement the project under the conditions envisaged.

The organisational structure of the EPRC reproduced a hierarchical and authoritarian model, with an increased predominance of its political structure over the technical abilities and weak representation of the settlers in the organisation. The exclusion of bottom-up initiatives prevented the building up of a 'local atmosphere' characterised by a sense of belonging to a common enterprise and the incentives for the organisation and collective participation in the project were very limited. As regards the establishment of local organisations (production cooperatives, irrigation consortia, etc.), the EPRC did not manage to create institutional structures for technical or financial support or those pertaining to knowhow. Nor did it encourage the collective establishment of routines and conventions based on cooperative practices. The build-up of informal links between producers was severely affected by faults and failures in the supply of tangible goods, financial support according to criteria of equity, and intangible ones, clear rules to be followed, technical training as well as in business management and organisational resources, that might enable them to establish links of cooperation and reciprocity.

Finally, the research showed the key role played by the State in the weaknesses of bridging social capital inside and outside the territory. At the local level, attracting agro-industrial entrepreneurs was not envisaged politically within the framework of an inclusive territorial project, but as an alternative to the failure of the previous model. Consequently, the *chacareros* were displaced in the future development strategies for irrigation, resulting in increasing conflicts between them and the State as well as indifference towards the agro-industrial entrepreneurs. As to the neighbouring areas outside the territory, the EPRC lacked any strategies that might facilitate the inclusion in the market of those producers who had no social links in the regional context. In sum, the deficits in terms of social capital and the absence of a solid and coherent institutional framework that might favour its formation reduced the possibility of establishing synergies based on mechanisms of complementarity and embeddedness in the terms described by authors like Peter Evans (1996) and Elinor Ostrom (1996).

Conclusions

In Argentina, the current policies of occupation of irrigation areas focus on the attraction of large agro-industrial companies, increasingly marginalising small producers. However, there are no clear signs of socio-economic revitalisation because

the former function as productive enclaves and do not contribute to slow down the demographic decline of such areas. The case that has been studied shows, first, the crucial role played by social capital and institutions in the development of the area. Secondly, it suggests that it is necessary to review the application of the policies that led to the abandonment of the settlement model based on small producers, before implementing uncritically strategies that do not seem to contribute towards overcoming the conditions of peripherality associated with such rural areas.

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Abstract

The abandonment of development projects involving large irrigation works in Argentina during the 1970s has been interpreted as a consequence of the failure of the so-called ‘top-down’ policies implemented by the developmental state. However, hardly any attention has been given to the application of these policies and the social, economic and institutional dynamics that they generated in the territory. In this regard, of particular interest is the build-up of social capital which represented an essential requirement for launching such projects. Drawing on institutional perspectives of social capital this study analyses the role played by social relations within a farming community in the failure of an irrigation project aimed at the development of the Upper Colorado River Basin (*Alto Valle del Río Colorado*, AVRC), La Pampa province, Argentina. The research revealed, first, that the weakness of social capital was a key factor that had a negative impact on the economic development of this area. On the one hand, it prevented the competitive access of economic agents to the regional fruit production chain. On the other hand, the inability to establish formal organisations hampered the formation of a thick institutional framework aimed at the technical and productive management of the area. Secondly, it was found that public policies and institutional design imposed strong constraints on the creation of social capital within the farming community, as well as with producers in the regional context and through the public–private boundary. The study contributes towards a critical review of the current state policies in most irrigation areas of Argentina, in the context of a generalised displacement of small farmers by agribusiness corporations, with almost no effects on local and regional development.

Keywords: Social capital; institutions; irrigation; development projects; Argentina

Part 5

Rural Tourism

Chapter 20

Tourism in Fishing Communities of Western Rio de Janeiro, Brazil: Conflict, Multi-functionality or Juxtaposition?

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Introduction

Fishing is not a common topic for rural geographers and when treated in the discipline the subject is usually related to environmental issues on a global scale (e.g. Mansfield 2011). However, the relationship between tourism and development has long been important for geographical research in both postindustrial and less industrialised countries, Pearce (1981), Mathieson and Wall (1982) and Smith (1983) being some early examples. Add to this the context of the case presented here, located within the Rio de Janeiro metropolitan region, and the study falls squarely within the interests of the IGU Commission on the Sustainability of Rural Systems, a group of researchers with a keen interest in peri-urban relationships related to rural multi-functionality and the prominent place of tourist activities within these.

Based on field research undertaken in the mid-1980s and updated in 2011, the interrelationship between fishing and tourist activities is evaluated in Sepetiba Bay, a spectacularly beautiful region with a mountain-sea landscape located in western Rio de Janeiro State (Figure 20.1). This long-term field study focuses on Jaguanum Island, situated seven kilometres from the mainland, where three phases of fishing and tourism were identified: 1) prior to 1960, when a small number of multi-functional fisher-farmers lived on the island, alongside a handful of weekend tourists; 2) 1960–1990, when road construction permitted access to the Rio market so that fishers concentrated on commercial fishing at the same time that day-trip and weekend tourism intensified; and 3) after 1990, when a combination of commercial drag-net trawlers and pollution from urban growth, industrial and port development caused a long decline in craft fishing and a shift to mass tourism.

The 1980s research involved a Political Ecology approach, in which issues concerning environmental degradation, peasant livelihoods and sustainable development were interrelated (cf. Redclift 1987; Paulson *et al.* 2003; Robbins 2004). The restudy in 2011 used a life history approach (cf. Marcus 1995) applied to the fisher families interviewed in the 1980s. The aim was to evaluate changing local livelihoods of fishers and their children (n=98) as the study area shifted from being a relatively isolated rural zone to an outer metropolitan area.

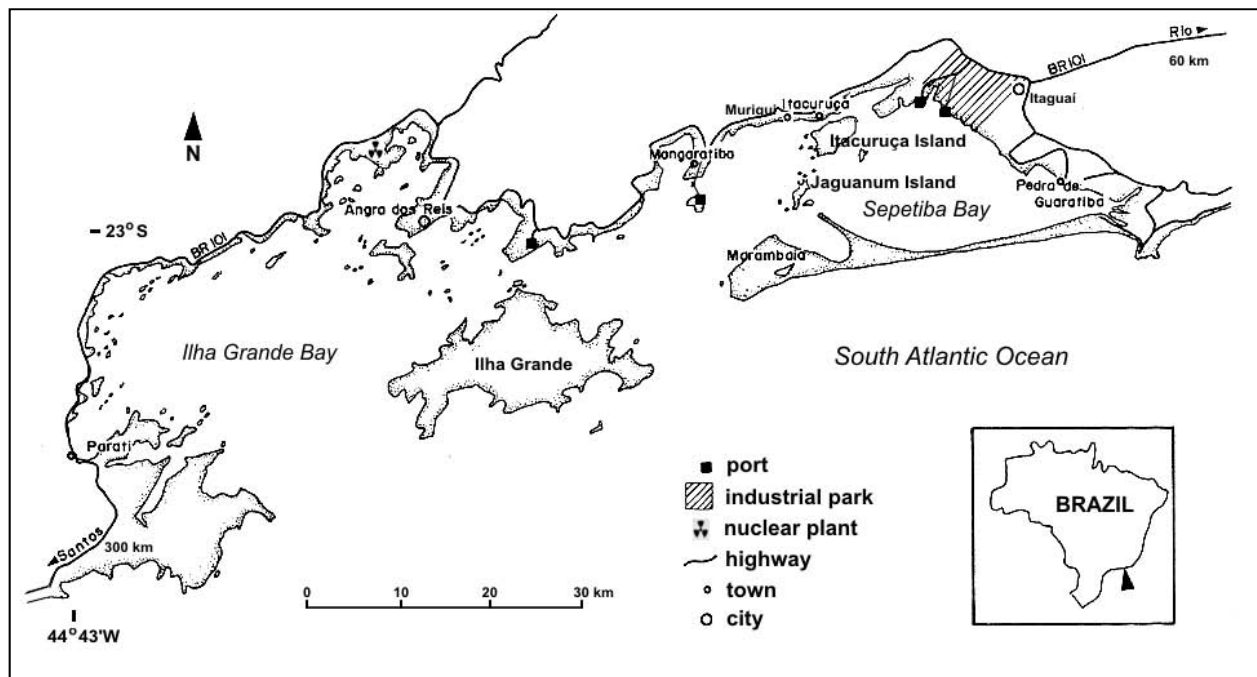


Figure 20.1 The Ilha Grande and Sepetiba Bay area

Multi-functional fisher–farmers and pioneer and veteran tourists

Craft fishing and seashore tourism in Brazil usually evoke images of unspoiled tropical paradises, which development and mass tourism violate and corrupt. One well known study along these lines, aptly entitled *Assault on Paradise*, showed how fishing communities were transformed by real estate speculation near the Salvador metropolitan area of Northeast Brazil (Kottak 1983: 2009). It must be made clear from the outset, that it has been a long time since Sepetiba Bay was any sort of paradise. In the nineteenth century the slopes of the islands were deforested to plant coffee at the same time that the bay was used to smuggle slaves past the British blockade. After a period of abandonment, banana cropping was taken up in the early twentieth century and some scattered fields remained until recently. Then in the 1960s, a Danish expatriate arrived and laid the slopes bare to produce charcoal.

This notwithstanding, in spite of the relatively close proximity to the city of Rio de Janeiro, access to the west coast of the state was relatively difficult until 1970. As a result, seashore tourism first developed to the east of the metropolitan area in the Cabo Frio area, where weekend tourists replaced fishers and sea salt extractors, who had been present for generations. As would happen later to the west of Rio, mangrove removal and urban sanitary pollution in the lagoons of the east progressively eliminated bay fishing so that only ocean fishing remained, an activity in which it is difficult to become an independent fisher (Guimarães 1987; Lima 1993; Biasotto 1995).

To the west of Rio, the Serra do Mar mountain range comes right down to the sea so that most of the Sepetiba and Ilha Grande bay area is surrounded by steep slopes. Historically, the mountains and rainy climate made road construction and maintenance a difficult and costly undertaking. Rail service was available to Itacuruça and Mangaratiba after 1914 but most unpaved roads to these places and other localities within the bay area passed through the mountains and were poorly maintained. This reinforced the relative isolation of the area, which after the brief period of coffee cultivation, had no other important economic activity which could justify improving the roads. The area remained lightly populated and functionally outside the major economic axis of Rio de Janeiro and São Paulo, which spanned these two important metro areas via an inland route through the Paraíba valley. Consequently, local fishers were less articulated to the market and an artisan economy existed until quite recently. Fishing methods were labour-intensive and most instruments of production and consumer goods were obtained through self-provision or from local crafters.

Before 1960 multi-functional fishing and farming were practised whereby fishing had a semi-subsistence focus generating some income for basic necessities and farming was for self-provisioning. Canoes were powered by sail and oar so that fishers only went to port occasionally. Surface nets with a 30 to 50 mm mesh were used, which allows small fish and shrimp to get away and as such craft fishing was a sustainable activity. Two men would fish together and a four-part division of the catch was made, one part for the canoe owner, another for the net owner and the other two parts for each of the fishers. Family labour was used, basically an older man fishing with his son or son-in-law or two brothers fishing together. Cotton and sisal nets were made locally by the users as were canoes and homes so that all had ready access to the instruments of

production and to housing. In the domestic division of labour women did not fish but could help mend nets onshore.

Given the difficult access to the outer islands of Sepetiba Bay, tourism was almost non-existent. In the 1940s a German had a weekend house on Estopa beach and in the 1950s the English manager of a ranch owned by a British meat packing firm located on the mainland built a rustic house on the same beach. This man would reach the island in the canoe of a fisher. Later two other English nationals working in Brazil, one for the same packing firm, and the Danish expatriate mentioned above, set up rustic houses on the same beach. Finally, to the distaste of the foreigners, a Brazilian also acquired a simple house on the beach. Using Valene Smith's topology of types of tourists (1978), these outsiders can be characterised, respectively, as 'pioneer' and 'veteran tourists'. Both kinds of tourist come for the simple life and do not provoke great changes in local livelihoods, which in the case studied, consisted of paying a low salary to a fisher-caretaker to keep an eye on the weekend house and paying a few days of work for domestic services from a wife of a fisher when the owner was present.

Commercial specialty fishers and new tourists

With the construction of the paved Rio-Santos highway in the 1970s, the western coast was opened to agents of urban-industrial capital from both metro Rio and São Paulo. In Rio the eastern coast became increasingly urbanised and the western coast became a rural hinterland with weekend recreation activities. As usually occurs in metropolitan settings, if on one hand small scale producers are threatened by urban penetration, on the other they can benefit from greater access to large urban markets (Lawrence 1988; Bryant and Johnston 1992). Selling more produce at higher prices permitted financing a process of capitalisation so that considerable technical intensification occurred during the heyday of small scale fishing from 1960 to 1990. Local fishers started using synthetic fibre nets, which are more resistant and require less repair work. They substituted sail and oar power with diesel motors and some substituted canoes with small fishing boats.

At the same time, local craft activities had been taken over by specialists on the mainland and by factories located outside the bay area. In addition, farming activities for self-provisioning were discontinued. With motorised canoes and greater emphasis on commercial fishing, they could go to town and buy food. Within this changed context, a greater need existed for earning more money. Fishers purchased nearly all their instruments of production and basic consumer goods. Elimination of part-time work and increasingly disadvantageous competition with fishing firms caused small scale fishers to concentrate almost exclusively on shrimp. No doubt they were earning much more than in the past but their greater dependence on the market and greater specialisation increased immediate production risk and threatened their livelihood in the long run when shrimp stocks fell over time.

Small scale fishers took advantage of the market opportunity of shrimp and at the same time tried to protect themselves from income fluctuation by adopting lower-cost and lower-risk production strategies which permitted them to progressively capitalise their methods. They did this by adopting innovations in a step-by-step fashion and by using non-salaried work relations. Family labour relations were adapted to

capitalisation by adding a fifth share of the catch for the owner of the motor. First, a person was given a net by his father or bought one with his share of the fishing catch on a relative's canoe. Then, he would buy or inherit a canoe (about 6 metres length, equipped with 9 hp diesel motor, costing about US\$2,500 in 1985). Later, this person would buy another canoe or, together with his brothers, pool their canoes to buy a small shrimp boat of 7–8 metres length, with a 22 hp motor, which cost about US\$10,000. The average yearly income of the crew members in 1985 was US\$1,824 while that of the canoe owners was US\$5,629 and the boat owners US\$10,470. For crew members buying a canoe represented 1.4 years of income and a boat 5.5 years, which was a feasible proposition, when done step by step.

Proletarianisation was evident in the fishing firm sector which progressively penetrated Sepetiba Bay during the 1980s. A medium scale was attained which required greater amounts of entry capital. This sector is still operating in the bay area but has also been negatively affected by declining fish stock, a problem intimately related to the unsustainable methods used. Large drag nets are employed and boats are equipped with sonar equipment for locating and positioning the net in front of a shoal of fish or shrimp. Fine mesh nets (10 mm) are dragged along the bottom, revolving everything and catching any fish or crustaceans along the path. The sole interest though is in a single species – usually shrimp, sardines or croakers – and anything else caught is thrown back dead. This type of fishing obviously represents a serious threat to the resources within the bay and local fishers complain that various species have been drastically reduced.

The investment necessary for the purchase of a shrimp boat or a sardine trawler was high by local standards. A shrimp boat of 10–12 metres length with a 60 hp diesel motor cost US\$25,000 in 1985, and a sardine trawler, 18 metres length with a 110 hp engine, cost about US\$45,000. Trawler crew members earned more than small scale fishers, averaging US\$6,264 in 1985 as opposed to US\$35,496 for shrimp boat owners and US\$104,400 for sardine trawler owners. However, an ordinary crew member had to save from 5.7 to 7.2 years of salary, respectively, to buy a shrimp boat or sardine trawler. Consequently, crew members were merely product-sharing workers without any perspective for becoming independent fishers.

With the tourist boom of the 1980s, tourism predominated and craft fishers disappeared in places of easy access for urban investors. On Itacuruçá Island, located near the mainland, only 50 houses in a total of 238 were found to belong to fishers in 1987. The other houses and buildings, 79 per cent of the total, served as weekend houses, caretaker quarters, hotels and restaurants. The remaining few concentrations of fishers were located in mangrove areas which city investors do not find attractive for a holiday house.

In more distant locations, like Jaguanum Island, local fishers were able to prosper alongside the tourists. The latter only had access to these islands by owning their own pleasure craft or by taking package day-trip tours. This was expensive at the time and so limited the number of weekend houses, hotels and restaurants. Consequently, with the exception of one beach owned by a hotel, there were fishers living on all of the beaches and a few beaches did not have any weekend houses. Weekend houses, restaurants and the one hotel of the island only made up 43 per cent of the buildings. Tourism-related employment opportunities basically benefited local women and adolescents. Family members could do part-time work as maids and in odd jobs in weekend houses or seasonally as maids and waiters in restaurants and bars. The principal problem with this work was the low salary, the minimum wage, being about

US\$720 a year in 1985. There was also the problem of the nature of the work. Gardening and other household tasks were generally not viewed as being masculine activities and this attitude only changed in the 1990s when fishing entered into decline.

During the heyday of day-trips involving international tourists in the 1980s there were over 50 schooners based in Itacuruça. Jobs were created and being a crew member of a schooner was deemed to be suitable work but only paid the minimum wage. Consequently, capitalised small scale fishing represented the best line of work for inhabitants of the distant islands and 93 per cent of the adult children of fishers interviewed at that time on Jaguanum Island continued to live there and work in fishing.

During this period, weekend tourism expanded significantly on the mainland and nearby islands, which involved middle-class individuals from the central and western metropolitan area. Weekend tourists on distant islands were members of the upper and upper-middle classes who lived in wealthy neighbourhoods of Rio de Janeiro and São Paulo. These were what Valene Smith called 'new' tourists, who were more demanding in how they want to spend their stay in the countryside and they sparked a chain reaction of house improvements. Veteran tourists had simpler tastes but they felt compelled to renovate their houses along the lines of their more urbane neighbours. On Jaguanum Island small rustic brick houses with simple cement floors were substituted by large houses with decorative ceramic and stone floors, luxurious sanitary installations, generator lighting and so on. New tourists also fenced their land and put seawalls on the beach in front of their house. Manicured lawns were planted, underbrush was cut in wooded area and the trunks of coconut palms were whitewashed.

Relations between tourists and fishers became cooler but even if there was less direct contact between them, the lifestyle of the fishers was still influenced by the presence of the tourists. More money was available from commercial fishing and fishers substituted their small, straw-roofed, wattle-and-daub huts with larger brick houses with tile roofing. Many installed bathrooms and running water. They purchased more domestic appliances such as televisions and radio-recorders. The young imitated the latest fashions in clothing and music, all of which caused generational conflict concerning taste and modesty. In other words, the young ceased being rural in perspective and became more like the youth of the poor outer suburbs of Rio.

Environmental degradation, blocked social mobility and the decline of fishing after 1990

As small scale fishing prospered during the 1980s dark clouds were forming on the horizon. Between 1980 and 2010 the population of Greater Rio de Janeiro grew by 35 per cent to 11,838,752 inhabitants (IBGE 2010) and the metro area expanded further west to embrace the eastern half of Sepetiba Bay. On the mainland, farm land was converted to housing developments, mangrove areas filled and more raw sewage flowed into the bay. As part of the process of deepening industrialisation in Brazil, logistical infrastructure expanded in the bay area with the installation of deepwater ports to handle exports from the Paraíba valley and from Minas Gerais State.

Ports were built in Sepetiba Bay to handle large scale iron and steel exports, the most problematic one being located at the far eastern end of the bay in a mangrove area which is a major nursery area for the bay's fish and shrimp. The port was situated near

an industrial park set up in the 1980s and large scale dredging was needed to open channels in this shallow part of the bay. Over the years the port quadrupled its ore export capacity and became the principal import–export container port for metro Rio. Local industries also expanded culminating in the new Thyssen–Krupp CSA steel mill. This project alone filled 16 kilometres of mangrove along the bay–front.

Fishing stocks fell drastically in the eastern half of the bay, particularly after two toxic effluent disasters in 1996 and 2002 when the stored pollutants of a derelict chrome factory burst the dikes and drained into the bay. The collapse of fishing in those years summed with declining yields after 1990 caused a surge of outmigration. Of the previously interviewed fishers and their families, 75.5 per cent of the individuals left, almost all of them going to live in the slums of the bay area cities. The work that an ex–fisher with low levels of formal education can find in town is as a crew hand on a tour boat, a restaurant waiter and a mason’s helper in construction. Schooner crew members earn the minimum wage, US\$4,450 annually in 2011, but international and elite tourism shifted further west to Angra dos Reis and Parati so that today there are less than ten schooners still operating out of Itacuruça. Consequently this kind of tourist work collapsed locally. Work as a waiter or cook pays the minimum wage but this kind of job also declined with diminished tourism. A bit more income can be earned in construction, about US\$6,000 a year as a mason’s helper or US\$9,000 as a mason. Half of the women became maids earning the minimum wage and the other half are housewives. Most of the adolescents are students who do not work. On the positive side, it should be mentioned that seeking higher levels of education as well as better health services available in town were pull factors which also motivated leaving the islands.

Back on the islands ‘mass’ tourists replaced the new tourists of the previous period. As Brazil boomed, middle and even upper–middle classes emerged in the western suburbs. Richer individuals like doctors and merchants bought expensive pleasure craft and pass weekend days on the beaches of the outer islands. Less prosperous day–trippers come by little taxi boats operated by fishers trying to supplement their income. These tourists pass the day drinking beer, barbecuing steak and playing loud funk music. With these changes, many of the older weekend tourists have sold out or simply died out. On Jaguanum Island the number of weekend houses increased by three fold, from 39 in 1988 to 124 in 2011. Mass tourists usually buy a house from a fisher who left for the mainland. Some improvement is made on the house but it rarely has the manicured lawn and other amenities of the new tourist houses of the past and so needs little upkeep.

The number of houses of full–time fishers fell from 103 in 1987 to 53 in 2011. These fishers still manage to make catches in the less polluted western outer part of the bay. However, the income of full–time fishers is inferior to that of the heyday of capitalised fishing, today ranging from US\$2,970 to US\$9,001 annually, the equivalent of 0.7 to 2 minimum wages, far below fishing incomes of 1985, which were the equivalent of 2.5 to 14.5 minimum wages. Many prosperous fishers of the past de–capitalised, shifting from boats back to canoes, and some poorer fishers back to using oars. At the same time, the number of fishers with multiple sources of income increased from seven in 1988 to twenty–one in 2011. They combine fishing with caretaking, with operating a bar and with working for the county government in maintenance, earning respectively US\$13,831, US\$13,400 and US\$10,738 in 2010. This new rural multi–functionality generates more income than can be made by most ex–fishers living in town but the number of jobs available on the islands is limited. The nature of mass

tourism restricts work because this kind of tourist has simple houses and at most when present may hire a day labourer. Food and drink are brought from the mainland and nothing is purchased locally, which is to say that mass tourism aggregates little value for the islanders, all of this vindicating many of the arguments made by de Kadt (1979) long ago against strategies basing development on mass tourism.

Which attack on paradise?

It can be concluded that little direct conflict exists today between tourism and fishing in Sepetiba Bay. Multi-functionality in the form of combined sources of income is important for the minority of small scale fishers who stayed on the islands but overall income is a shadow of the past. Mass tourism also does not create new employment so that the best overall characterisation of the relationship between the sectors is juxtaposition. Medium scale fishing and urban-industrial development to the contrary enter into direct conflict with small scale fishing because over-fishing, mangrove removal and water pollution have drastically reduced fish stocks. Consequently, in Sepetiba Bay the issue of conflict is not between fishing and tourism but rather between these sectors and urban-industrial development.

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Abstract

As fishing communities were drawn into the metropolitan area of Rio de Janeiro different forms of tourism developed over time, but rarely aggregated significant value to local livelihoods. Even with recent multi-functional combinations of rural activities with other sources of income, this only benefits a small minority of fishers while the great majority have left the islands in search of work on the mainland. Outmigration intensified over the last two decades as fish stocks fell due to overfishing and urban–industrial pollution of bays. In this context tourism shifted to mass tourism which creates even less work opportunity for local people.

Keywords: Fishing; tourism; multi-functionalism; environmental degradation

Chapter 21

A ‘Dutch Vision’ of Community Based Tourism: Dutch People in the Belgian Ardennes

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Introduction

Community based tourism is largely supported in the literature as a way to increase the sustainability of local development (Jones 2005; Saarinen 2006). Because of its local roots it should be less subject to delocalisation, be more connected with other local activities and be more respectful of local identity and heritage. This chapter questions this concept with reference to tourist development in the Belgian Ardennes, a rural tourist destination for more than 100 years. From an academic point of view, the Belgian Ardennes is strictly the old Massif, at an altitude between 350 m and 694 m, where recently planted coniferous forest dominates the landscape; nevertheless the name ‘Belgian Ardennes’ is commonly used to refer to a broader tourist destination that sometimes encompasses the whole of Wallonia (Figure 21.1). In this paper, the destination Belgian Ardennes will include the area south of the Sambre–Meuse Valley. At the European level, this is a regional destination attracting mostly Belgian (50 per cent) and Dutch (35 per cent) people (SPF Economie). The federal statistical data count 3 million commercial overnight stays and 2 million overnight stays in private rooms (SPF Economie). Second homes as well as one day recreational visits complete the tourist picture (Van Hecke *et al.* 2010). Mormont (1980) pointed earlier to the domination of external actors both in the formulation of development strategies and in the building of holiday resorts. He stressed the opposition between an artisan form of tourism developed by locals and the appearance, in the late 1970s, of industrial tourism development by companies from Flanders or foreign countries.

Based on key actor interviews and on in–depth analysis of the promotional material produced both by authorities and commercial companies, this paper examines the diversity of destination branding and the multiplicity of actors. These actors do not all originate from the Ardennes. The main hypothesis that will be discussed is: that, in the Belgian Ardennes, Dutch companies develop their ‘own’ community–based tourism. The analysis of this hypothesis highlights the predominance of the Dutch market in several tourist destinations and thus the better positioning of the clientele’s community than the host community to develop a tourist destination. This hypothesis leads to an important question with respect to local development: how can local authorities deal with this imported tourist development? The paper provides information about the actions of regional and local authorities concerning tourism development in the Belgian Ardennes and underlines a lack of concern about the origin of the actors who wanted to develop tourist activities. In future research, we would like to address more explicitly

the way local authorities do and may deal with the Dutch way of consuming the Ardennes.



Figure 21.1 The Belgian Ardennes

Source: Laplec

Community based tourism

According to Russel (2000: 89), community-based tourism should fulfil three criteria: “it should have the support and participation of local people; as much of its economic benefit as possible should go to people living at or near the destination; and the act of tourism must protect local people's cultural identity and natural environment”. So, community based tourism should increase the share of tourist expenditure that benefits the local community (Sebele 2010). First, it should lead to better employment of local people from both quantitative and qualitative points of view. Second, it should be well connected with the local economy and should reinforce local economic development through networking. Third, it should contribute to local heritage protection in order that

this heritage can become part of the tourist destination. Fourth, due to the presence of wealthy people it will require and should lead to the improvement of the provision of goods and services in the area. This could be of particular importance in quite remote low populated countryside. Finally, it should increase tourist development.

Nonetheless, this theoretical vision is often difficult to apply in practice, because tourism is an activity that often connects two different cultures with their own codes and behaviours. Attracting tourists and coming up to tourist expectations require different skills that are not always present in the host community (Bartholo *et al.* 2008). In particular, there is often a lack of market knowledge and of marketing know-how (Agndal and Elbe 2007). Public authorities have a role to play in professional education as well as in the production and management of a destination. Moreover, it is not always easy to find money to start and develop a tourist activity because of the absence of a tourist development culture. Financial dimensions have to be tackled. Local entrepreneurship needs to be encouraged and supported especially in remote rural areas.

The Belgian Ardennes

From an agricultural and historical perspective, the Belgian Ardennes is a poor area. The harsh climate, the slopes and the limited areas of productive soils explain why it has never been a suitable area for cereal production and why forest represents often more than 40 per cent of the land cover. The Ardennes was a place of the peasantry who shared their time between stock breeding and other activities such as forestry, quarrying, or pre-industrial ironwork. During more than a century, starting after the census of 1846, a rural exodus was marked due to both difficult natural conditions and proximity to major industrial centres such as Liège and Charleroi (Figure 1) (Christians *et al.* 1992; Schmitz 2001). Moreover the Ardennes was particularly affected by the Second World War; during the Battle of the Bulge most of the towns were destroyed. The Belgian Ardennes presents the lowest population densities of Belgium, with an average of fewer than 65 persons per square kilometre.

From a tourist perspective, the Belgian Ardennes was initially a destination to visit for its wilderness aspects (Lindley 1890). Hunting and the contemplation of scenery were some of the first tourist activities. It was also a second home tourist destination, especially for families who inherited a house but who lived in the main Belgian cities. Paradoxically, the Second World War contributed to the development of tourism because the Ardennes became a place of memory. Today, together with the 66 kilometres of seaside, the Flemish historical cities (such as Bruges, Gent, Brussels and Antwerp) and the tourist resorts in Campine, the Belgian Ardennes is one of the four major tourist destinations in Belgium. Analysis of tourist brochures and websites both from public authorities and commercial companies shows that seven ways of 'consuming' the Ardennes are presented: (i) The Ardennes as a quiet natural destination; (ii) as a family destination; (iii) as a perfect place for adventure tourism; (iv) as a good place for angling and hunting; (v) as a place of gastronomy based on forest products; (vi) as several spa locations; and (vii) as a place offering cultural and sporting events (for example, Spa Belgian Formula 1 Grand Prix, Liège-Bastogne-Liège World Tour cycling race, Houffalize Mountain Bike World Cup). These seven kinds of tourism attract different types of people, which may generate conflicts between

the different rural users. There are some issues attached to the combination of the different activities in the same areas including the difficulty of branding the destination clearly. Moreover the different clienteles of the Ardennes tend to consume the destination differently. For instance, while Germans are interested in nature, gastronomy, spas, and the Formula 1 Grand Prix, the Dutch have a special interest in family tourism and are by far the main customers of adventure tourism companies.

Dutch tourists in the Belgian Ardennes

Anyone who visits the Belgian Ardennes in summer notices that Dutch people seem to be in the majority. This may be because Dutch tourists are more visible than other tourists, especially domestic tourists (though confusion with Belgian Flemish speakers is possible) and, last but not least, because several restaurants, camping sites, B&Bs and other tourist enterprises have Dutch owners. Dutch tourists are very numerous in the Belgian Ardennes. Data from OPT (Office for Tourism Promotion) registered 1,750,000 official overnight stays by Dutch people in 2010 and 2,000,000 in 2003. Yet, according to a Dutch market survey concerning the holiday destinations of Dutch people, around 5,000,000 overnights are accounted for by the Ardennes, with 42 per cent in holiday homes, 21.5 per cent in camping sites and 15 per cent in hotels (CVO 2003). Depending on how the tourist period is reckoned and the sources of information used, this gives an average of 25,000 or 70,000 Dutch tourists per day in the Ardennes during the high season. The huge difference between the two sources leads one to acknowledge that a parallel market exists. Our hypothesis is that a huge share of this parallel market may not be counted by the official statistics because some Dutch owners deal directly with Dutch tourists. For instance, a Dutch person who has a vacation house in the Ardennes may rent their house or some rooms directly to Dutch tourists. Another source of underestimation could come from campsites that do not register all the overnight stays.

The motivations for Dutch people to select the Ardennes as a tourist destination are, first, the short distance between the Ardennes and the main Dutch cities (+/- 350 km) (Figure 21.1) and the relatively cheap cost of living (OPT 2008). Second, from a Dutch point of view, the Ardennes is the nearest mountainous area, a place of 'wilderness', where it is possible to climb, cave, and raft as well as ski in winter. Moreover, the Ardennes with this wilderness and a 'Latin' way of life offers a place to compensate for the frustration of an over-populated and over-organised country (Schmitz 2008). Last but not least, another component is the Dutch network that gives confidence relating to meeting expectations and promotes very effectively tourist products adapted to the Dutch market.

The Dutch network: a 'community' based tourism

In one sense, this Dutch network may be another form of community based tourism with the advantage that both supply and demand are Dutch. Indeed, several 'local' tourist enterprises are Dutch, especially camping sites, guesthouses, and adventure tourism companies. Moreover, Dutch people own a significant share of holiday homes to rent. For instance, in the area of La Roche en Ardennes, several campsites, several kayak

companies, and a third of the guesthouses are owned by Dutch people. In addition, Dutch Tour operators are powerful in the marketing chain, including for the Flemish market, because they know both the market and the language and are trusted by their compatriots (Henriksen and Halkier 2009). By using an appropriate communication strategy and by offering little services that make the difference, they also often seem more professional than the Walloon tourist enterprises. These Dutch tourist companies are also successful in grasping financial possibilities both in the Netherlands and Belgium.

Compared with the advantages of traditional community based tourism, discussed earlier, this tourist development in the Ardennes provides: (i) better employment opportunities especially for Dutch people because Dutch entrepreneurs prefer to hire employees who speak the language of both the clientele and the company, who share the same culture, and who are more trustworthy; (ii) economic development, that takes place especially in the Netherlands. Due to the relatively short distances, the common culture between Dutch providers and the tourist companies and Dutch food preferences and dining habits, tourist establishments have strong links with Dutch enterprises; (iii) a risk of altering local cultural heritages, because this tourist development is strongly adapted to the Dutch market. For instance, as Dutch people associate the Ardennes with wilderness, Dutch enterprises have developed rafting, tepee campsites and paintball fighting, so that the Belgian Ardennes looks a little like the American Far West; (iv) limited improvement in the local supply of goods and services because the tourism enterprises are not well connected with the local economy. In addition, several facilities are either not open to the local public or Dutch is the only language spoken within them. Notwithstanding these issues, the impact on tourism development is, of course, important. The establishments increase the number of visitors and overnight stays coming from the Netherlands as well as from Flanders; however the local economic impact could be much higher. Another important impact is the changing nature of the destination. Because of their influence arising from the number of tourists as well entrepreneurs, these Dutch enterprises change the destination physically and also in terms of branding. Considering that the primary motive of businesses is profit (Andriotis 2002) and that the market is more important than local heritage, this may lead to the development of non land-based tourism, 'disneyfication' and 'wildernisation'.

Tourism policy of local authorities

Dutch tourist development could be seen as a positive achievement for the authorities who would like to develop tourism in the Ardennes. There has been an increase in overnight stays and visitors; nevertheless authorities should also look to tourist expenditure, especially to who benefits from this expenditure. This information is often missing and local and regional authorities are not informed about this important feature of tourism. It may explain why the question of expenditure is neglected and so under-managed. Until recently, there was a naivety concerning tourism development in Wallonia. It was thought that all tourism development led to employment and economic development for the host region. Natural and cultural heritages were not seen as fragile resources that needed to be conservatively managed, especially in the distant, poor, war damaged, and abandoned Ardennes. A method of developing tourism as a tool for

regional development was unknown as was the importance of connecting tourist developments with other local economic activities. On the other hand, private local initiatives were rare and it may also explain why Dutch investors were so welcomed.

At the local level, finance was allocated to the promotion and especially the support of local development associations and tourist offices, and to facilitating tourism investment including physical planning issues. There was competition between local authorities to attract investors including Dutch companies. These investors could then bargain and go where it was more profitable for them. For instance, in the case of a holiday village in Vielsalm at the beginning of the 1990s, the company received different forms of support including physical planning derogations and did not have to pay several taxes for a period of fifteen years. This period of time coincided with the paying off period for the chalets when it was opportune to sell them to private citizens in order to avoid renovation and taxes. This complex functions as a ghetto where tourists stay and spend money in the restaurants and souvenir shops on site without visiting the town.

At national and regional levels, government authorities invest in the promotion of destinations. They also regulate the facilities and give financial support. In Belgium, tourist policies were first modelled on the needs of coastal and urban tourism (Mormont 1980). This support and promotion did not take into account the origins of the entrepreneurs or the specificity of rural tourism. Regional authorities also tried to improve knowledge relating to tourist activities in order to develop the quality of the destination and perhaps the links between tourist development and regional development.

Discussion and conclusion

This chapter has described briefly the development of a specific branch of tourism activity in the Belgian Ardennes that aims to meet the expectations of Dutch people. Because of the lack of local entrepreneurship in tourism and due to the dominance of the market in the development of the product, Dutch companies were successful in the Belgian Ardennes and are in the majority in specific locations and for specific activities. This may cause conflicts between different users who do not share the same visions of the countryside. This may also lead to a feeling of invasion by locals not only because of the over presence of Dutch tourists but also of Dutch operators. This also gives rise to questions about to whom the countryside belongs and who can financially benefit from its exploitation (Feng 2008). In this connexion, there are questions relating to the sustainability of imported tourism development with respect to local heritage and perspectives for the future.

A community based tourism framework underestimates the need for a tourism product to be connected with the market; it is an attractive framework that should be useful for local actors. Policies and supports in tourism development should attach importance to the real links between tourism development and the local economy. It is not enough to increase the number of visitors and overnight stays. Attention has to be paid to the expenditure by tourists and to who benefits from this expenditure. This paper, which is based on both past development and policies, points up several issues that are not specific to the Belgian Ardennes. Research on German tourism in the

Balearic Islands (Garin–Muñoz and Montero–Martin 2007), Spanish tourism in the Moroccan Rift Valley (Araque Jiménez and Crespo Guerrero 2010) or American tourism in Mexico (Brenner and Guillermo Aguillar 2002) also stresses the importance of the market and the presence of similar forms of imported ‘community’ based tourism to that of the Dutch investment in the Belgian Ardennes. A future research agenda will engage with the ways that local and regional authorities should deal with this form of imported tourism development.

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Abstract

One theoretical recommendation to develop sustainable rural tourism is to base its development on local resources. This should embed the tourist activity into the local society, avoid easy relocalisation of investment, and help to brand the destination. The Belgian Ardennes is a proximate recreational location for Dutch people. The paper lists the local resources that attract Dutch tourists and the ways in which regional and local authorities deal with this tourist development. Based on key actor interviews and in-depth analysis of the promotional material produced both by authorities and commercial companies, the paper underlines the hotchpotch of ways used in selling and consuming the Ardennes. Due to the lack of local entrepreneurship and because the Dutch tourism enterprises have better knowledge of the Dutch market, these enterprises control a huge share of tourism activities in the Ardennes. These Dutch investments change the destination as well as the local identity. Initially, Dutch companies developed a form of tourism based on nature and the rural landscape, but they diversified their activities into non land-based tourism (not involving the use of land as in *agriculture hors sol*) and the 'disneyfication' of places. This Belgian case study follows more or less the well-known 'tourist destination life cycle model', but the originality of the paper is to stress the difficulties posed for authorities to regulate tourism development and to maintain the quality of the destination.

Keywords: Community based tourism; the Ardennes; destination; networks; local development

Chapter 22

“Admission is Our Best Crop”: Growing Agritourism on Ontario Family Farms

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Introduction

Over the past 50 years, the vast majority of farms in the province of Ontario, Canada, have turned to industrialisation, specialisation and intensification in order to remain competitive in an increasingly global agri-food system. In conjunction with these changes, less labour is now required on the farm while farm sizes have dramatically increased. These global trends in agriculture have reduced the farmer to little more than a hired hand contracted to grow for corporately controlled multinationals (Power 1996). Alongside these dramatic changes occurring in farming, a widening gap has opened up between producers and consumers. In its wake agricultural modernisation has eroded and threatened the viability of smaller traditional mixed family farms. Recent awareness and interest in local food amongst consumers and the quest for authenticity while on vacation are, however, re-invigorating the public's desire to reconnect with farms and farmers. In response, enterprising family farms are beginning to diversify and welcome visitors to their farms, in what is now commonly referred to as agritourism.

Agritourism has often been viewed as synonymous with rural tourism and indeed the Canadian Agritourism Working Group's description views agritourism in this way as: “travel which combines rural settings with products of agricultural operations— all within a tourism experience” (Williams *et al.* 2004: 4). In contrast, others have suggested that agritourism is a distinct rural tourism niche characterised by occurring on a working farm and not just in a rural location (Barbieri and Mshenga 2008; Che 2010; Phillip *et al.* 2010). It has even been speculated that “in the future the term agritourism will be used more frequently than rural tourism” (Sznajder *et al.* 2009: 6).

Although in absolute terms the number of Ontario farms engaged in agritourism remains small, between 2004 and 2009 the number doubled to 750 farms with combined annual sales of \$210 million (Experience Renewal Solutions 2009). Those farms involved in agritourism within Ontario add pick-your own operations, farm tours, farm markets and scratch bakeries, or more staged ‘agritainment’ activities (e.g., corn mazes, haunted barns, farm animal petting areas, or shows) to complement their existing agricultural operations, typically growing commercial fruits, cash cropping, or raising livestock. Unlike other areas where agritourism is growing in popularity, overnight accommodation on Ontario farms is almost nonexistent. Ontario agritourism is also heavily dependent on day visitors and is highly seasonal, starting mid-summer with the ripening of strawberries through the harvesting of other crops, and includes events and festivals celebrating the Canadian Thanksgiving and Halloween in October (Jayeff

2005; Experience Renewal Solutions 2009). It is not unusual for successful agritourism enterprises in Ontario to welcome upwards of 10,000 people a day on a busy September or October weekend.

Although the popularity of agritourism is growing, our knowledge and understanding of the motivations for family farms to engage in agritourism and the impacts this is having on farm families is relatively limited. Early investigations noted that the adding of non-agricultural enterprises, such as agritourism, to a farm was for survival (Sznajder *et al.* 2009; Phillip *et al.* 2010). As a survival strategy agritourism brought in extra income and helped offset the diminished returns being received by the farm household from conventional agriculture. However, it is now suggested that when agritourism is added to a working farm it may also be associated with social factors, such as preserving a farming way of life (Ollenburg 2006; Che 2010). Further, non-agricultural enterprises added to farms are an indication of farmers acting in an entrepreneurial way (McGehee and Kim 2004; Haugen and Vik 2008; Mendoza 2008; Phelan and Sharpley 2011).

The purpose of the reported study was to explore the experiences of Ontario farm families starting and operating agritourism enterprises. In particular, it focused on the personal experiences of farm family members and the factors that led to the decision to engage in agritourism, how easy or difficult the transition was, the experience since the decision was made, the challenges the families continue to face, and what family members think about the future.

Methods

As researchers have become more aware of the complexity of issues and factors at the root of the family's decision to diversify their farm into non-farming activities, researchers have also begun to recognise the limitations of traditional survey methodologies in delving deeply into the complex web of social, economic and external factors motivating new enterprise start-ups on family farms. Many studies into agritourism thus far have privileged positivistic methodologies and quantitative approaches. Hence, to better understand the lived experiences of farm families who started and embraced agritourism and to more fully appreciate the intertwined and complex nature of factors involved in the decision, a more interpretative approach was required. A phenomenological approach allowed meaningful experiences and essential structures associated with the phenomenon of agritourism to be explored, from the perspective of those directly involved. In particular, Interpretative Phenomenological Analysis (IPA) guided the design, analysis and overall implementation of this study (Smith *et al.* 2009). Phenomenology is especially well suited for investigating the gaps between real-life occurrences and theoretical concepts, on the one hand, and an individual's interpretations of these occurrences on the other hand (Berglund 2007).

The sample for this study was determined through a two-step process. First, a short list of ten member farms was recommended by the Executive Director of the Ontario Farm Fresh Marketing Association (OFFMA) which she identified as having established successful agritourism enterprises on their ancestral farms and who were also currently involved in intergenerational succession on their farm. The second step involved the researcher reviewing each of the websites of the recommended OFFMA farms and

further ranking and prioritising each farm based on additional criteria. For example, the additional criteria looked at the farm history and family involvement to determine those farms most engaged in agritourism. In particular the added criteria used in the second step of creating a prioritised list of farms related to: the extent to which the working farm was combined with agritourism; the length of tenure the family had on the farm; and involvement of multiple members of the family across generations in the farm's operations.

The owners or managers of the three top-ranked agritourism enterprises were contacted by e-mail and telephone to elicit their interest and willingness to participate. In the case of refusal, the next farm on the prioritised list was contacted until three farm sites agreed to participate in the study. In using a phenomenological approach, insights could be elicited from individuals about their life experiences as being part of farm families engaged in agritourism. However, gaining insights from a variety of family members was paramount in the study to explore the family dimensions involved. Therefore, at each of the participating farm sites it was important to interview family members who were actively involved in managing the farm and/or the agritourism enterprise, as well as those family members not actively involved in the farm. The final sample included 17 family members from across the three farm sites (Table 22.1).

Table 22.1 Participants in the study

Farm	Family Membership	Age	Current Role on the Family Farm
A	Father	65	Farmer/Agritourism Co-owner
	Mother	64	Wife/Agritourism Co-owner
	Son	36	Agritourism Co-owner
	Daughter-in-law	34	Agritourism Co-owner
B	Father	62	Agritourism Co-owner/Farmer
	Mother	60	Wife/Agritourism Co-owner
	Son 1	37	Farmer
	Son 3	32	Not involved (Self-employed)
	Daughter-in-law	32	Not involved (Housewife)
	Daughter 1	29	Casual help (Employed off the farm)
	Daughter 2	29	Farm Market Manager
C	Father	51	Agritourism Co-owner/farmer
	Mother	51	Agritourism Co-owner/farmer
	Daughter 1	25	Farm Market Co-Manager
	Son 1	20	Farm Market Co-Manager
	Daughter 2	24	Casual help (Employed off the farm)
	Daughter 3	22	Casual help (Student)

Data were collected from each farm site in two phases. In the first phase, an initial farm visit was undertaken which was exploratory in nature, in order to become familiar with the farm operation and the family members. The second phase of the data collection

consisted of face-to-face active interviews (Gubrium and Holstein 2003) with each member of the farm family individually. The interviews were all audio-taped and transcribed verbatim to be used for analysis.

Phenomenological analysis is characterised by a set of common ‘processes’ (i.e., moving from the individual to the shared and from the descriptive to the interpretative) and ‘principles’ (i.e., understanding participants’ point of view and meaning-making) that are applied flexibly. The use of phenomenology places the participants in context; each individual in relationship to the farm, the other family members and the agritourism enterprise. The IPA framework allowed for data to be organised so that it could be traced back to the individual participants, as narratives from within the whole. Through the interweaving of the data collection and analysis steps, meaningful experiences and essential structures associated with agritourism on family farms emerged across individual cases. The next section captures the most salient themes.

Findings and discussion

The extant literature on what motivates the start-up of agritourism has predominantly concluded ‘economics’, often associating it with farm survival. However, the three farm families in this study did not describe agritourism being introduced on their farms as a desperate measure for economic survival. Instead the lived experiences of these families demonstrated optimism more in keeping with the ideas emerging of diversified farms being entrepreneurial. Further, for these particular families diversifying into agritourism was more of an evolution than a single, one-time decision. For them the coming together of conventional farm operations with new enterprises based in agritourism, or the ‘perfect storm’, as referred to in the following excerpt, may actually be helping to retain characteristics critical for them to continue a farming way of life: “To be lucky enough to choose a business you like and it’s connected to farming ... and hopefully it provides a return, it’s a perfect storm” (Father, Farm C).

Creating jobs and careers

At all of the farms, agritourism provided meaningful access to jobs for the children as they grew up on the farm. In the words of one farmer: “It was plain and simple an effort to make it ... so we could pay them for something that was useful” (Father, Farm A). The opportunity to come home and work on the farm was not an expectation placed on the children by their parents. Instead in situations where the younger generation decided to come back to the farm after completing their post-secondary education or working off the farm, the agritourism enterprises provided these adult children with opportunities to integrate new skills, talents, and gain independence and new responsibilities. For most of the participating families, substantial growth of their agritourism enterprises were directly attributed to times when the next generation returned home to work and live on the farm. “He [the son] decided he was going to come back home from university and work on the farm full time. His Dad said to give us both an income to live off of ... you’re going to have to come up with your own shtick” (Daughter-in-law, Farm A). Although the parents might have initially instigated the start-up of agritourism

they often spoke of emotionally, physically and financially supporting their adult children's interests and desires, or as referred to in the above excerpt the adult children's 'own shtick', through the expansion and managing of agritourism enterprises.

At none of the farms was the sole purpose for starting the agritourism enterprise entirely attributable to economics. Time and again, the participants identified a combination of reasons why their farm diversified into agritourism. Indeed, the motive of economics appeared to be somewhat superficial. Rather, the initial instigators of agritourism activities on these farms expressed interest in doing something new or wanting to get out of conventional types of farming.

We were a dairy farm and we started selling sweet corn off our front lawn and our sales just kept basically doubling every year. Eventually we started into pumpkins, we put in a petting zoo, and that's how we got started. It just kept growing over the years and eventually when it got so big we sold the dairy herd, expanded into the barn. Everything kind of grew a little bit each year.

(Son 1, Farm B)

Overwhelmingly amongst the families interviewed, their engagement in agritourism was not described as a single, one-time intentionally planned decision. Instead, getting into agritourism was described as a more organic transformation taking place over time, often years, as family members came into the farm operation.

Evolving and growing incrementally

Diversifying into agritourism was clearly articulated throughout this study as more of a process occurring over time in conjunction with other personal and family considerations than a one-time event. The farms transitioned incrementally into becoming agritourism destinations or agritainment attractions. Incremental changes to the farm could be attributed to numerous smaller decisions being made by various members of the farm family over many years. As one of the agritourism co-owners at Farm A helped explain, getting into agritourism is not an overnight transition: "Farms rarely just jumped in and dump up to a million dollars [to get started in agritourism]. No one really has that much to put in" (Son, Farm A).

The embracing of agritourism occurs organically and in the beginning was described by the participants as simply an extension of their conventional farming practices where very little input or conscious planning happened. However, as the agritourism operations became more prominent on the farms and required more energy, time and focus by family members, specific moments could be associated with the evolution into agritourism and decisions being more intentional and planned.

Charging admission

One very specific watershed moment marking the transition into agritourism was when an admission fee started to be charged for entering the farm. Described as a hard

decision or 'old style' farmer thinking, the value of what the farm had to offer visitors took time to be realised.

They'd come out here with a car full of kids and spend the whole afternoon because we didn't charge. It's that old style thinking like I don't know. I didn't think it was worth it or who's going to pay that? You just go "no one's going to pay to come to the farm".

(Mom, Farm C)

In an era where we are an increasingly urban society and distant from knowing where our food comes from, the farm and the farmer are of and in themselves valuable and of interest to visitors. However, at the participating farms the charging of admission often occurred alongside other decisions about adding entertainment, creating special events and shows, which were noted as ways to attract visitors. Decisions to sell prepared ready-to-eat foods to visitors while at the farm were also raised as value-added opportunities. When these more commercial-based activities were added the families could justify charging admission. However, in Ontario, such activities are not considered acceptable farm practices and therefore farms adding commercial activities are subject to various government regulations and policies. These farms are also subject to higher taxation levels as commercial or retail operations. In fact, incidences were raised by some of the family members about specific conflicts or issues with neighbouring property owners or government officials about the nature or scope of their operations no longer being considered as acceptable farm practices. Nonetheless, the individuals still strongly identified with being firmly rooted in 'farming'.

Being the face of farming

Although it might at times appear that those farms seriously engaging in agritourism in Ontario are more like theme parks, the study participants continued to strongly associate with being farmers. At Farm A the son who is the catalyst for their farm really getting into agritourism captures his strong feelings of still being a farmer:

Oh yeah, big time. I promote farming more than a thousand of our neighbours. I'm the one who is the face of farming to the public and especially when we're doing our school groups ... Yeah, we do know there's neighbours like kind of "oh, are they really farmers anymore?" But I don't see them producing and selling 100 per cent of what they grow to the public.

(Son, Farm A)

In our interview he went on to add that unlike conventional farmers tied into the global agri-food system, where they are price takers, he is making a decent living off the land, promoting farming, marketing what he grows, and also entertaining visitors to ensure his family's farm remains viable for the future of his own children. That is his goal and one which appeared to be strong amongst others who were interviewed for this study.

Farms and local communities were once interrelated and interdependent. Modern industrial agriculture has had dire consequence for the relationship between farms and communities, in a sense isolating one from the other. The intentional opening up of one's farm to the public is re-creating and re-establishing those lost connections.

People are starting to think that farming is turning into a corporation. Farming is commercial now and it's not family rooted. It's not related to a lifestyle anymore, but it is, I'd like to take it back, so to say ... [family farm values] are important to me and I feel it should be important to people. It could be a pipe dream.

(Son, Farm C)

Perhaps as a backlash to globalisation, those family farms embracing agritourism are now unwittingly playing an important role in re-localisation (Amsden and McEntee 2011), a strategy which aims to rebuild societies based on local food production and other local sustainable capacities. Embracing agritourism where one is able to continue having a fair and decent living off the land, while also re-engaging with community, has played a big part. The individuals participating in this study were very optimistic about farming and their own farms remaining viable for future generations of their families yet to be born.

Conclusions

It is of paramount importance to understand the complexity and essential structures of the lived experiences of deciding to transition into agritourism, from the perspectives of the individuals embedded in the families involved, in order to recognise that family farms are in a continuous state of change and are responsive, adaptive and flexible to change and opportunities. Consequently, if we are to truly support family farms starting and operating non-agricultural businesses, it is important to recognise and give greater attention to it being a transitional or evolving process. Supporting farms that choose to diversify into agritourism, therefore, is not a one-time, at start-up proposition; rather, support should be seen as a longer term commitment that requires different types and levels of business and family supports throughout the evolution and life of an agritourism enterprise.

It is hoped that the results from this study will have policy implication where programmes become better suited to helping farm families over several years as they transition into agritourism. Transitional loans as well as providing business skills supports suited to running family business may be considerations for implementation in Ontario. Likewise, consideration should be given to recognising the importance of new emerging enterprise opportunities available to Ontario farmers and permitting these as an expanded list of normal and acceptable farm practices.

The results found in this study illuminate the complexity of the lived experience involved as farm families transition out of a predominantly agrarian economy into new opportunities available to make good livings from their farms related more to the service-based and experience-based economies. The transitions occurring on some family farms may be in large part influenced by a new trend where farms are becoming

places of consumption rather than continuing to be places of production. Through embracing agritourism farms may be reclaiming key attributes essential for what it means to be a family farm as well as re-enforcing their farming identities.

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Abstract

As farms embraced intensive industrial agriculture it widened the gap between those growing food and consumers. The modernisation of agriculture has further compromised traditional family farms. In response, agritourism has been taken up by some autonomous family farms. Credited with bringing in extra income, agritourism has also fulfilled growing consumer awareness of, and interest in, local food and authenticity while vacationing. Although instances of starting non-agricultural enterprises are increasing, do we really know or understand the motivations for why family farms engage in agritourism and the impacts this is having on farm families? A phenomenological study carried out in Ontario, Canada, sought to answer these questions by exploring the experience of family farms engaged in agritourism. Unlike previous studies, which have tended to focus on economic factors, this study started from the premise that the decision to embrace agritourism is motivated by a complex web of factors beyond economic expediency. Such a premise is critical for moving forward the discourse on the future of the family farm in rural communities. The results revealed the lived experiences of 17 family members as agritourism enterprises were started and operated on their farms. An appreciation of the incremental evolution of farms as they transition into agritourism was illuminated, as were the essential experiences the families associated with their decisions to continue to be engaged in agritourism. The implication of this study may influence policies and programmes aimed at supporting farm families as they transition out of a predominantly agrarian economy.

Keywords: Agritourism; family farms; phenomenology; Interpretative Phenomenological Analysis

Chapter 23

The Pathway to Agritourism Development: From Constraints to Opportunities

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Introduction

In the northwest European countryside, diversification is a common option adopted to maintain a viable agricultural business. Many farmers have to restructure their activities and business structure in response to increasing pressures from global competition, the spread of suburbanisation, the tendency for young people to leave the countryside and rural transport problems. Pressures also include environmental challenges, climate change, reduced terms of agriculture trade, low income elasticity in commodity markets and over reliance on raw materials. Agricultural activities are declining, farmers are losing their economic and social importance and the development of farm tourism is one of the diversification strategies identified to improve the rural economy and to link producers and consumers (Evans and Ilbery 1989; Getz and Carlsen 2000; Nickerson *et al.* 2001; Garrod *et al.* 2006; McGehee *et al.* 2007).

On-farm tourism, known as ‘agritourism’, is a soft form of tourism that offers tourists closer contact with nature and the rural way of life. It corresponds to a range of activities through which the visitor has the opportunity to become familiar with the countryside, rural occupations, local products, traditional cuisine and the daily life of farm families, as well as with the cultural and authentic features of an area, while showing respect for the environment and traditions. On-farm tourism is an alternative accommodation choice to hotels and is a holiday option often chosen by families with young children. An agritourism diversification strategy is also a form of entrepreneurship for the farmer and his/her family, similar to the case of an existing organisation or when an individual establishes a firm (Busby and Rendle 2000; Nickerson *et al.* 2001; Roberts and Hall 2001; Hegarty and Przezborska 2005; Garrod *et al.* 2006).

In order to get a better understanding of the supply side of agritourism, the reasons why farmers adopt this means of diversification need to be considered. A study of the main motivations is of interest also in order to maximise the success of agritourism (Nickerson *et al.* 2001). The reasons for this form of innovation are categorised in several ways in the literature, including: achieving potential stability against fluctuations in agricultural incomes; creating employment for family members; establishing a new income source “in terms of offsetting falling income from agriculture” (McGehee and Kim 2004: 162); loss of government agricultural programmes; success of other farm recreational businesses; meeting guests and visitors; education of consumers; interest

and hobbies; tax incentives; and more effective use of farm resources (Nickerson *et al.* 2001; McGehee *et al.* 2007; Barbieri and Mahoney 2009; Sznajder *et al.* 2009).

These different motivations may change over time, although it is to be noted that the primary reason identified for developing agritourism is economic and financial. Motivations arise in response to a market opportunity and meeting demand in recreation and leisure markets, resulting from the segmentation of the tourist market. However, the second main reason is more socially-based, and includes sharing rural experiences with guests and with other residents, opportunities to socialise and meet people, or educating the public about agriculture, because of observing a decline in knowledge of rural life and farming (McGehee and Kim 2004). In addition, some authors argue that the lifestyle, including living in an appropriate environment, is an important reason that should be considered in diversification to farm tourism (Getz and Carlsen 2000; Barbieri and Mahoney 2009).

Researchers also suggest that in-depth studies should be conducted on the relationships between the motivations of the farmer and the characteristics of the farm. This highlights the influence of the type of farm, dependence on the farming operation, size of the farm and the surface area owned, number of years in agriculture and in agritourism, household income, the farmer's age, and proximity to a major urban market (McGehee and Kim 2004; McGehee *et al.* 2007; Barbieri and Mahoney 2009). Gender is also known to influence diversification into agritourism. Many differences in motivation exist between men and women agritourist entrepreneurs (McGehee *et al.* 2007): often the initiative and subsequent actions come from the female head of the household (for example, the idea of diversification and refurbishing old buildings, the production of homemade food like jams, welcoming tourists).

To examine the supply side of agritourism development, the chapter assesses the motivations for the selection of farm tourism as a means of diversification in Wallonia and in the Grand Duchy of Luxembourg.

Methods

The research is based on data collected by means of interviews conducted in agritourism accommodation premises in Wallonia (Southern Belgium) and the Grand Duchy of Luxembourg to explore the motivations for adopting this form of diversification (Figure 23.1). Agritourism in both countries differs and arises from different sociological contexts. In Wallonia on-farm tourism includes a range of types of accommodation and recreational activities. Tourists can also opt to discover local products and Walloon foods in small retail shops on some farms and on gourmet farms, as well as exploring the rural way of life and learning about farming as an occupation. In Luxembourg, on-farm tourism is a combination of welcoming tourists (who bring money and friendly contacts onto the farm) and introducing the rural way of life and the problems associated with farming to visitors. Agritourism is more developed in Wallonia than in the Grand Duchy of Luxembourg where, with some exceptions, it has never really worked because of the associated demands on time and personal investment as well as tradition.

We collected fifteen life histories between April and June 2011, of which ten are from Wallonia and five from the Grand Duchy of Luxembourg. In order to build trust,

interviews were from one to three hours long. In addition we selected farmers in different regions (different landscapes and agricultural processes) with established and recent experiences of agritourism (thirteen with more than five years and two with less than five years' experience). The selected farms have different types of specialisation: two are specialised in crop production, two in milk production, four in cattle, and seven have multiple forms of production. It should be added that all the life stories are success stories. The interviews were tape-recorded and transcribed verbatim. Finally we organised and analysed the qualitative data with the software NVivo®. The study used a content analysis aiming for a graphical representation of motivations with an adapted actantial model: a multi-scale analysis was used to identify the factors that supported and constrained the motivations. From the fifteen individual diagrams created, we obtained two synthetic diagrams: one for Wallonia and one for the Grand Duchy of Luxembourg.

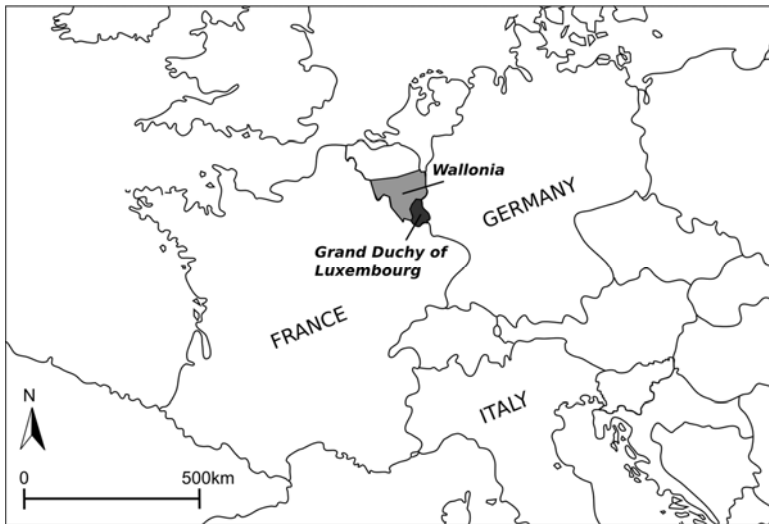


Figure 23.1 Location of the two study regions

Source: Laplec, with permission

The synthetic diagrams (Figures 23.2 and 23.3) have been constructed to represent, on the vertical axis, the supports and constraints relating to the decision to introduce diversification on a farm and to change and develop the business over time. Negative motivations are represented in the lower part of the graph and positive in the upper part. We have also added a spatial scale divided into four levels by dividing each of the two regions (Wallonia and Grand Duchy of Luxembourg) into the 'micro' level of the farm, the local level, the regional and the international level. The horizontal axis represents time and all positive and negative motivations have been located in the time in which they appear. Furthermore, each motivational box has been classified according to intensity of grey colour: the darker the shade, the more important the motive for all the local farmers interviewed.

This method is adapted from its frequent use in literature and works of fiction, where most of the time a hero continues to pursue an objective while being helped and hindered by a number of other actors. The qualitative and semiotic analysis proposes to

extract small narrative units of the general story structure (Aarva and Tampere 2006). It is postulated that a farmer who wants to develop a tourist activity as a form of diversification, while maintaining the long-term attractiveness of the experience supplied, is motivated by financial, social and practical considerations, while control is hampered by lack of time, organisational difficulties and financial considerations. This method is original and interesting in the sense that very few researchers have used the concept of actantial model to analyse and understand diverse complex processes and sets of relations. Saxena and Ilbery (2010) used it to analyse attitudes and practices that determine local responses of various actors to integrated rural tourism development and Van Rompaey *et al.* (2011) used it to synthesise the processes of attitude formation towards local wind turbine projects in Belgium. In our case, it concerns the incentives which intervene in the local farmers' success in introducing agritourism, distributed according to their belonging to one of the four spatial levels and ranked in order of importance.

Results

The time line is subdivided into three sequences: the phase before the establishment of the agritourism enterprise, the establishment phase and the period of evolution and adaptation. At the level of the farm in Wallonia (Figure 23.2), local farmers report that if there is no farm successor and that they want to stay in business, agritourism could be a great opportunity. Before starting this new on-farm activity, the presence of unused farm buildings and an attractive heritage are very important in the decision process. From the establishment and initial development, farmers refer to other factors such as additional income, a desire to provide a high quality service, providing information about farming as an occupation, providing knowledge about the region, and the availability of advice or support and training from tourist, agricultural and agritourist associations. Some of the interviewed local farmers also told of the opportunities to 'discover the world' through speaking with guests. There is therefore a sharing of experiences in conversations with tourists. But the main positive factor at the level of the farm and the immediate environment (local level), which motivated Walloon farmers since the establishment of their new business, is the pleasure of welcoming people to the farm, being hospitable, increased human contact and friendships; in other words a passion for this new enterprise. This main factor is present initially and throughout the development and evolution of the agritourist activity. For example, Mrs Prignon, a local tenant in Wallonia, said: "I have my pleasure and my happiness with people I meet. [...] If we do this for cash, it is pretty sad. [...]" (April 2011). During the development of agritourism on a farm, local farmers recognise that knowledge of foreign languages is a real advantage and this may motivate some of them to engage more readily. This influences the hospitable characteristics (the welcome provided and, more generally, positive contact between hosts and guests).

Other levels emerged as being important in the analysis: at the local level, there is the sharing of experiences and information between farmers or local tenants and a good farm location, in which words such as 'peaceful', 'accessibility' and 'tourist visits to do' are listed. At local and regional levels, the natural features and the touristic character of the region, as in opportunities for contact with nature, the presence of green and bucolic

spaces, picturesque towns, the existence of hot spots, visits and walks, are considered very important for all local farmers, even if it is an additional advantage more than a primary motivation. At regional and international levels, the incentives and various subsidies from ministries and the existence of demand are among the positive motivations. Advice, support and training from diverse associations are essential for success. At the level of the farm, but from a negative perspective, farmers are influenced by negative experiences of agritourism that they were told of or that they know. Even more important is the time required for the development and the maintenance of this new farm activity which needs to be combined with family life which is also time consuming. These two factors negatively influence the decisions of local farmers throughout all phases of development. There comes a point in agritourist development where changes need to be made. There is a search for other markets or other concepts. On the positive side, there may be a response to the evolution of demand (at regional and international levels) by the introduction of business tourism or group tourism. On the negative side, there may be a decrease in the attractiveness of the farm as a holiday destination for some tourists. In the future, these factors will influence the retention or the ceasing of agritourism diversification.

The motivational diagram for local farmers in the Grand Duchy of Luxembourg (Figure 23.3) corresponds in some ways to the Wallonia diagram (Figure 23.2). We focus here on differences with the pattern in Wallonia. A sequence of time is added to the time line for Luxembourg: the obligation to receive tourists for a period of ten years, if farmers wish to retain subsidies for their agritourism diversification. At the farm level, before the creation of the tourism activity, unused farm buildings and the architectural heritage of the farm are the most important positive factors; a good location including peacefulness, easy accessibility and places to visit are also advantages present initially and throughout the process. Thus, Mrs Kessler, a local tenant in the Grand Duchy of Luxembourg, said: “this building was an old cowshed and it was free for ten years, then we said we had to do something and not to leave it like that. We built a new farm hall and so we do not need that [the cowshed] again” (June 2011). From the establishment of agritourism on the farm and during the following decade, the motivations and involvement of the family are important, as well as the pleasure in providing hospitality and the potential contacts with and advice from associations; but these reasons are of secondary importance. Natural geographical features and the touristic characteristics of the region (hot spots, visits, walks and so on), seem to have less influence in Luxembourg than in Wallonia.

The last sequence of the timeline is particular to Luxembourg. Due to a growing demand from business people, local farmers were thinking about the possible development of the agritourism experiences that they offer. It may take the form of refurbishment of buildings and a total change of market to self-catering accommodation. Positive features are to have less work, in comparison with providing tourist accommodation, and to have permanent income. But changes in demand are also influenced by the decline in the attractiveness of farm tourism and by the fact that Luxembourg farms that are still in operation do not need income diversification.

Based on the actantial models, there are some differences in comparison with the scientific literature. In this literature, economic and financial factors, such as new income and employment, stability against fluctuations in agricultural markets, or a better use of farm resources, are the first motivations mentioned, followed by social and external factors. In our analysis, overall, social reasons and the adaptation and

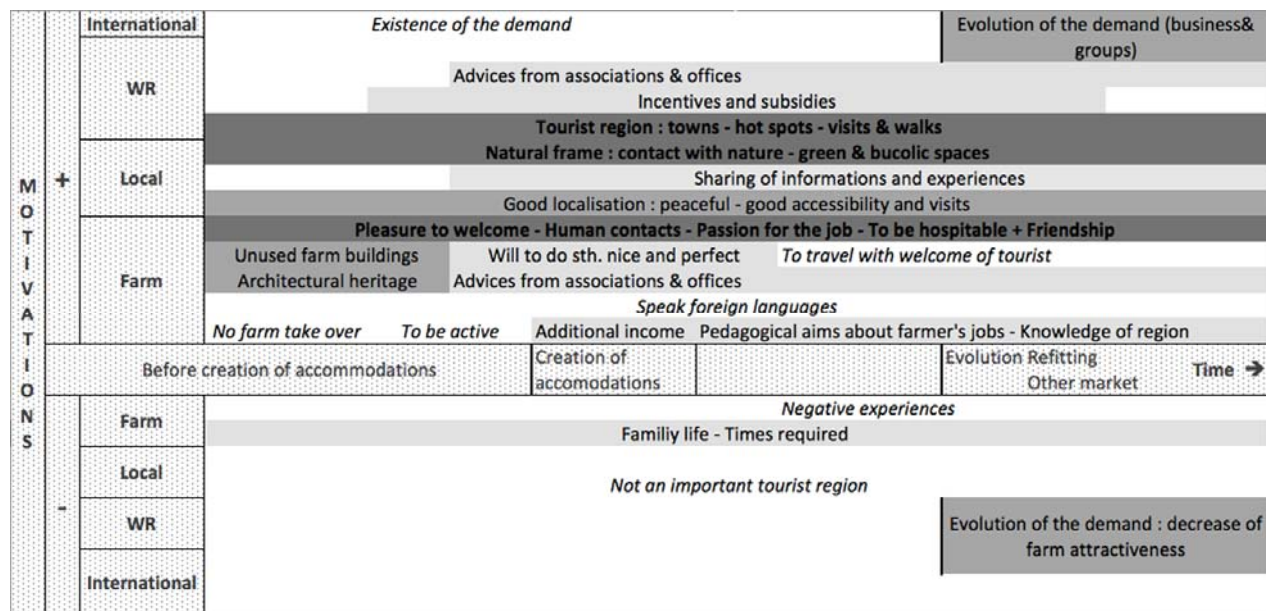


Figure 23.2 Motivational diagram relating to local farmers in Wallonia

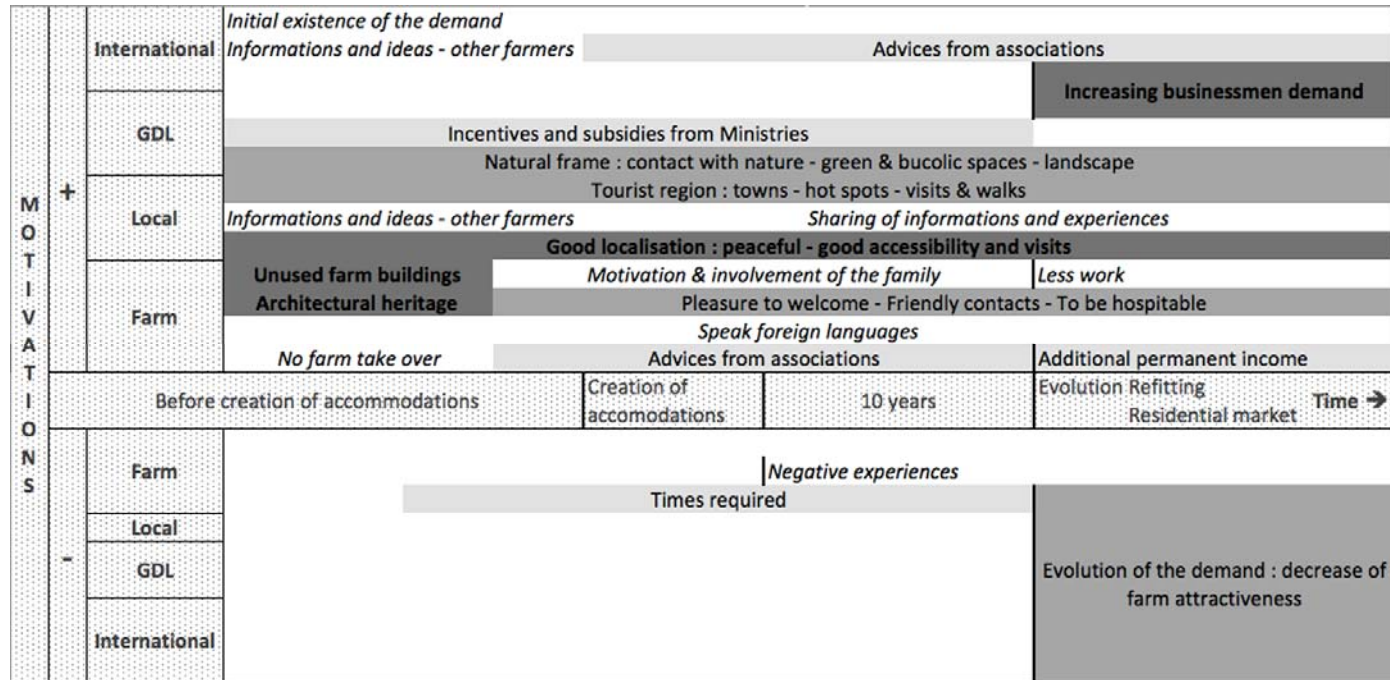


Figure 23.3 Motivational diagram relating to local farmers in Grand Duchy of Luxembourg

renovation of unused farm buildings are mentioned before economic motivations but they are often mentioned at the end of the narrative as something logical or, alternatively, are downplayed due to deep human and culturally rooted motivations. Specifically, farmers believe that they develop agritourist diversification for themselves, for friendly contacts or for their own desire for them as hobbies.

There are also differences between Wallonia and the Grand Duchy of Luxembourg. For Wallonia, welcoming visitors, human contact, personal investment and hospitality are mentioned before using unused farm buildings. It is the opposite for the Grand Duchy of Luxembourg. The first motivations in the Grand Duchy emphasise the response to a market opportunity and the assignment of new potential to unused farm buildings. Furthermore, entrepreneurship and opportunities are just as important as development based on survival of the farm.

Conclusions

Based on fieldwork and interviews, this chapter identified some of the motivations of local farmers with agritourism accommodation in Wallonia (Belgium) and in the Grand Duchy of Luxembourg. The results show many similarities with the scientific literature in terms of the behaviour of local farmers and their families. The same main reasons for becoming involved in agritourism, relating to income, sociability and built heritage emerged but not with identical importance. There were different conceptualisations of priorities and developments between the two groups of Walloon and Luxembourg respondents, the latter of whom highlighted their pragmatic approach. Social factors and the adaptation and renovation of unused farm buildings were listed before economic motivations, departing from the evidence in the academic literature. Also a trend involving a combination, omission and, or, addition of motivational factors existed. It is clear that the conceptualisation of on-farm tourism involves a reflective process and an ongoing need for such a challenge throughout the evolution of the concept. It is difficult to focus on motivation, because people do not tell their entire story spontaneously. It must be noted also that all the case histories discussed are successful, which does not allow negative dimensions to be explored in any depth in order to identify methods of maximising the success of agritourism development. Research on the negative factors from farms where agritourism failed would provide answers and complementary information to strengthen the two different model diagrams.

In addition to these main findings, we investigated if there is an evolution in professionalisation, when the first priority for local farmers is openness to the outside world when promoting local heritage and obtaining additional income. Entrepreneurship does influence motivations. Increasingly a dual system is observable where small farms are trying to survive and other farms, a minority but the largest in terms of size, develop diversification primarily and move away from the demanding world of agriculture. Diversification in agritourism is a life-course project in which motivations change over time. Agritourism in Luxembourg and Wallonia is a successful story for farmers who have the capacity to adopt it, but is not a decisive way to save vulnerable farms. Furthermore besides conventional on-farm tourism, business tourism or self-catering

residences are being developed indicating some changes in the market but also in the aspirations and needs of local farmers.

Acknowledgements

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Abstract

In the northwest European countryside, diversification is a common option adopted by farmers to retain a viable agricultural business, as they restructure their activities in response to increasing financial pressure. Many look to tourism as a means of diversification. This chapter investigates the reasons for choosing farm tourism from a supply perspective. Some of the main reasons have been highlighted in the literature. Economic and financial factors like sourcing new income and employment, stability against agricultural market fluctuations or better use of farm resources, are often the first influences to be mentioned. Also significant are social and external factors like sharing experiences, awareness of the success of other farmers, meeting people, educating the public and consumers, and personal interest as a hobby. Reasons for choosing tourism as a form of diversification may change over time, differ according to the characteristics of the farm, its development and its environment, or depend on gender. This chapter uses data from interviews conducted in agritourism accommodation premises in Wallonia and the Grand Duchy of Luxembourg to explore these motivations. The research is based on a content analysis aimed at a graphical representation of motivations using an adapted actantial model: a multi-scale analysis is used identifying the factors that support and constrain such motivations. The analysis for Wallonia highlighted a response to a market opportunity; the potential to assign unused farm buildings to new purposes was also observed, particularly in the Grand Duchy of Luxembourg. The results show also that over time entrepreneurship and opportunities become as important as development based on survival of the farm.

Keywords: Agritourism; Wallonia; Grand Duchy of Luxembourg; motivations; actantial model

Chapter 24

Territorial Integrated Tourism: Complementarity and Social Embeddedness in the Auvergne (France)

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Introduction

Public policies for tourism focus increasingly on its economic impact and positive outcomes in terms of employment. Negative impacts may also be observed, especially in the environmental and social fields. Two models of tourism, in particular, are present in the ideologies that guide collective or public action: ‘dispersed’ tourism and ‘concentrated’ tourism. The former is said to be less effective economically and the latter can have more negative impacts. The general objective of the research programme, on which the reported research is based (PSDR–Modintour), is to re-examine and advance tourism models and to deconstruct the opposition between dispersed tourism and concentrated tourism. We have hypothesised that in reality situations are usually hybrids, between the two extremes of all dispersed or all concentrated, which we describe as the ‘density of tourism’. This concept is used to select the case study described here. A second hypothesis is that territorially integrated tourism can contribute positively to the effectiveness of dispersed tourism, where integration includes complementarity with other local economic structures and interlinkages with (embeddedness) in local social systems (Jenkins *et al.* 2001). We deal with these questions through a case study in Châtaigneraie Cantalienne in the southern Auvergne region in France, an area considered *a priori* as a place of dispersed tourism and characterised predominantly by farming activity. The complementarity between tourism and farming is studied in relation to the social embeddedness of tourism.

Concepts and research questions

Commentators often see an opposition between concentrated tourism, which is viewed as being disconnected from a territory and its inhabitants, and dispersed tourism which is considered to suffer from weak economic outcomes. Concentrated tourism is defined in the literature as referring to tourist resorts and ‘mass’ tourism (Bachimon 1995). Dispersed tourism is defined either positively as an alternative to the saturation of mass tourism (Knafou 1995), or in a less flattering way, as described by Brunet *et al.* (1992), as involving an idea of dispersion which is not always defined clearly. It may be

produced by an ‘overflow’ of concentrated tourism although, as Violier (1995) has illustrated with reference to agritourism, dispersed tourism may also be the result of individual initiatives by versatile entrepreneurs. In reality, diversity exists in tourist destinations, as well as a range of mixed or hybrid situations, between the totally–dispersed and totally–concentrated extremes. We suggest in the Modintour project that dispersion and concentration differ on a dimension that we call the ‘density’ of tourism which may be ‘spatial’, ‘temporal’ or ‘organisational’.

The research presented is based on a model of ‘integrated tourism’ (IT) which refers explicitly to the economic, social, cultural, natural, and human structures of the areas in which it takes place. We propose that a better territorially integrated tourism leads to improved economic effectiveness (the assumed weakness of more dispersed tourism) and to a lessening of negative impacts on the territory (a possible weakness of highly concentrated tourism). The model of integrated tourism is characterised and evaluated along seven dimensions (Jenkins *et al.* 2001). These dimensions are regrouped into: (i) the density of tourism; (ii) its complementarity with other territorial activities (economic, social, or environmental); (iii) its social embeddedness among the population; and (iv) its governance. This chapter focuses in particular on complementarity and social embeddedness.

Tourism as the production of a service by a destination area

Essentially, tourism is a service activity. The economy and management of services consist of a triangular model with two poles representing the beneficiary and the service provider and a third pole called the ‘support–good of the service’. The management of ‘service production’ further distinguishes the components that are in contact with the beneficiary–client (front–office), and its support components (back–office) (Eiglier and Langeard 1987). This model was transposed from the business sector to the territory by the EU–funded Interreg Porta Natura programme team (2003–2006) where the entire territory is considered as the tourist service provider. All the local actors constitute the ‘service provider’ pole, and the dedicated or non–dedicated infrastructure (natural amenities, cultural heritage ...) constitute the ‘support–good of the service’. In the Modintour programme, we continue to improve and test this model by incorporating territorially integrated tourism (Marsat *et al.* 2009; Marsat and Bonniot 2010)

The study presented in this chapter deals with the complementarity between tourism and farming. It also deals with social embeddedness and, to a lesser extent, with governance. The model of territorial service production highlights three research subjects by situating the actors involved and their relations in a triangular diagram (Figure 24.1). The question of complementarity with agriculture involves farmers. They are in direct contact with the tourists when they engage in agritourism and more generally their activity affects the ‘support–good’ by its positive and negative impacts on the area, the roads, the landscape and the quality of the natural environment. The question of social embeddedness brings the population into play. They are in direct or indirect contact with the tourist, as well as being the regulators of tourism and of the territory (elected officials).

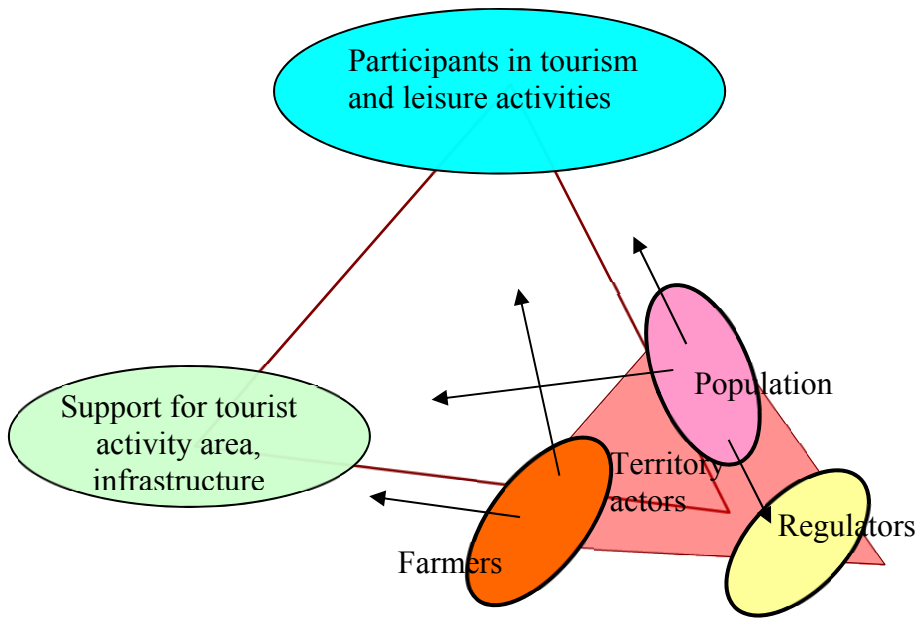


Figure 24.1 Complementarity to farming and social embeddedness in a territorial based tourist service

Analysis of the complementarity between tourism and agriculture

The literature identifies four main forms of relations between tourism and agriculture: (i) mixed activity, through farming diversification or agritourism; (ii) joint actions; (iii) positive and negative externalities of one activity on another; and (iv) less visible relations dominated by representations. The relations between tourism and agriculture have been explored, among other themes, in research on ‘territorial integrated tourism’ (Jenkins *et al.* 2001; Marsat and Bonniot 2010). This chapter deals only with agritourism, but the other three types of relations, which go beyond the field of agritourism, are concerned by it as well. Agritourism is one of the most widespread forms of diversification of farms towards services in mountainous areas in France (Simon 2002).

Diversification through on-farm production may relate to tourism and leisure activities when the farmer sells his products directly, and thus falls within the scope of agritourism. Anglo-Saxon researchers distinguish two agritourism practices: ‘tourism on the farm’ (when the environment and the essence of the farm are an integral part of the product, for example, help with work on the farm) and ‘farm tourism’ (when the accommodation is separate from the farm, such as a country *gîte*) (Clarke 1996, cited by Fleischer and Tchetchik 2005; Ilbery *et al.* 1998). Agritourism benefits from a distinctive image that cannot be obtained in other forms of tourism by incorporating activities linked to traditional farming production (Hjalager 1996). Additional benefits may accrue for farmers. Thus the ‘basket of goods and localised services’ model developed by Mollard (2001) and Pecqueur (2001) suggests that tourism produces non–

intentional beneficial effects for farming when it develops outlets for farming products, gains them notoriety, or increases the buyer's willingness to pay. More generally, synergy takes place when destinations gain an advantage by increasing supply. Fleischer and Tchetchik (2005) and Sharpley and Vass (2006) observe that the presence of other tourist activities in a region attracts more visitors than in the case of isolated farms.

The stakeholders

Farming in mountainous areas faces difficulties and farming and policy actors ask if synergy between agriculture and tourism can be a solution for some producers. In France, the number of farmers involved in agritourism is stagnating. One idea is to relaunch agritourism, both through internal agricultural channels and through specialised tourism structures. However, Nilsson (2002) more generally considers that agritourism is not a solution for all and that it is subject to more diverse forces of development than the search for revenue alone. He states that support of "farming interest groups" is therefore a determining factor (*ibid.*: 13). Specialised tourism organisations try to increase the value of territorial resources (regional products, landscapes, and other heritage). But specialised actors in agriculture and farming tend to deal with these questions separately and misjudge part of the other sphere.

Finally, the question of developing agritourism cannot be limited to the relations between agriculture and tourism; it focuses as much on factors and solutions internal to tourism. For example, the development of cooperation and strategic alliances should include specific national agritourism networks like *Bienvenue à la Ferme* or *Accueil Paysan*, more local networks such as wine or cheese routes, and other organisational forms (Telfer 2001; Vandecandelaere and Touzard 2001). Hjalager (1996) compared the wealth of formalised forms of cooperation in other farming spheres with their near absence in agritourism which she attributes to the difference in kind between material products and services. Morand's (1999) study of one of the rare cases of an agritourism cooperative in France is an exception in this regard. In relation to the general research question of the Modintour study, our starting point was the following premise: the development of agritourism can reinforce the qualities of dispersed tourism with reference to supply (criteria for quantity, variety, and quality) and demand (by responding to a specific demand).

Method and study area

The broader research project is inductive drawing on comprehensive case studies (Eisenhardt 1989; Yin 1994; David 2004). The Modintour programme included four case studies, differentiated according to the 'density' of tourism and varying according to the complementarity between tourism and other activities (culture, environmental management, agriculture). The Châtaigneraie Cantalienne case study was intended to explore a tourism context presumed to be dispersed in spatial and temporal terms where complementarity with agriculture was marked. The study is based on semi-structured interviews with actors sampled from a preliminary typology: 24 tourist service providers, the tourist office, 6 regulators and 4 support organisations (advisory services

and associations). With specific reference to agritourism, one part of the sample was reserved for agricultural service providers. Initially seven providers were selected from the catalogue *Bienvenue à la Ferme*; but there were also some farmers among other chosen service providers, bringing the total to eleven. Specific questions dealt with related to: relations with the farming profession such as union membership, recognition from other farmers, membership of agritourism networks and tourist views of agriculture.

The study area: Châtaigneraie Cantalienne in the Auvergne

La Châtaigneraie Cantalienne extends from the south of the valley of Cère and the Bassin d'Aurillac, to the Lot valley. Administratively the territory is made up of four federations of municipalities amounting to around 20,000 inhabitants. For the sake of feasibility and similarity with the other case studies, the study zone was limited to the two southernmost federations of municipalities (less influenced by the city of Aurillac), those of Maurs and Montsalvy.



Plate 24.1 The village of Mourjou (copyright C. Monin)

The relative isolation of the area in relation to the main highways assumes importance for tourism. There are, however, two north–south routes and it is at the intersection of two well-known tourist areas: the Massif Cantalien to the north and the Lot valley or Périgord to the south. The area contains architectural and cultural tourism resources

with many festivals, markets, or fairs linked to features of the territory (mushrooms, chestnuts, walnuts, baskets, horses) (Plate 24.1). It is a center for horse breeding and related activities, canoeing and kayaking on the Lot river, and dispersed outdoor sporting activities. There is a moderately diverse accommodation base (*gîtes*, bed and breakfast, campground, hotel, a vacation village) which is dispersed throughout the area. In the past the Châtaigneraie was a poor region, but it has developed a modernised agriculture which is relatively intensive for the Auvergne and is characterised by two major types of cattle production (for milk and meat) along with mixed farming, with medium-sized pork production as a complementary activity. The farm structures have remained medium-sized and the landscape is attractive.

Results

Observations of service providers on agritourism in Châtaigneraie

The sample included different types of accommodation (sometimes several types on the same farm), restaurants (farmhouse inn), leisure activities (farm visits, animal park, games, equestrian activities), and a combination of activities for 50 per cent of those interviewed (accommodation+activity or activity+activity). The study found a range of activities being practised which helped to better understand some of the variations observed. For example, the diversity of ways of commercialising processed agricultural products: on-site direct sales, summer markets, year-round markets, short distribution channels (supermarkets within a 50-km radius).

The agritourism providers were questioned about their personal motivations which are classified into four types: heritage (increasing the value of or maintaining a building), diversification (economic contribution), social (appeal of contacts, openness) and family concerns (employing a family member on site, especially the spouse). In more than half the cases, more than one motivation was mentioned. The service providers confirmed that they meet a specific demand from tourists which corresponds to what they supply, i.e., a quest for peace and quiet, interest in discovering farming. They also referred to the welcome extended, farm visits and explanations about farming as an occupation. In terms of production, there are cases in which the tourist activity does not lead to a modification of the farming activity (especially in accommodation). In other cases, concerns relate to the workload or the organisation of work. Constraints mentioned as applying to agritourism relate notably to regulations (safety and hygiene standards).

At the collective level, cooperatives, networks

The main network, in terms of the number of members involved, is that which the Chamber of Agriculture organises around a brand name, *Bienvenue à la Ferme*. This institutional actor plays the role of a 'pivot' or 'broker' (a central actor in the theory of strategic networks). The members of the network share promotional actions under a common brand for information purposes and the creation of collective products (for

example a bike tour of Châtaigneraie). This is a national network, which gives significant weight to the market as well as to authorities and other stakeholders. Farmers in agritourism can belong to other networks, either multi-service networks, such as *Accueil Paysan*, or those that specialise in one service. This is especially the case for accommodation where large national networks, *Gîtes de France* or *Clé Vacances*, are leaders. *Bienvenue à la Ferme* requires membership of these networks in order to guarantee the quality of the accommodation (which is evolving). The agritourism service providers have other local collaborations as well: customer referrals (between equivalent services) and recommendations (between complementary services).

The networks deal with promotional activities and some offer a reservations center. At the same time, service providers have their own channels of promotion, including regular customers. They have developed personal websites and may also link with internet operators who deal with reservations and sales: two of those questioned use the same operator which suits them and replaces more traditional approaches. The governance structure is therefore diverse and somewhat fragmented.

Relations with agriculture

One of the questions the study dealt with was the acceptance of agritourism service providers by their peers, non-diversified farmers. The answers were mixed, but not revealing real conflicts. One half indicated there were reservations, but most indicated that that had ‘settled down’. For others, there was no problem with acceptance, sometimes for personal reasons (“it’s a family tradition”, “my husband is the president of the local cooperative”, “we have had the advantage of being set up for a long time”). This does not guarantee that the atmosphere is positive everywhere, however. More generally, farming institutions (Chamber of Agriculture departments, local groups who organise farm visits, an agricultural union member) support agritourism.

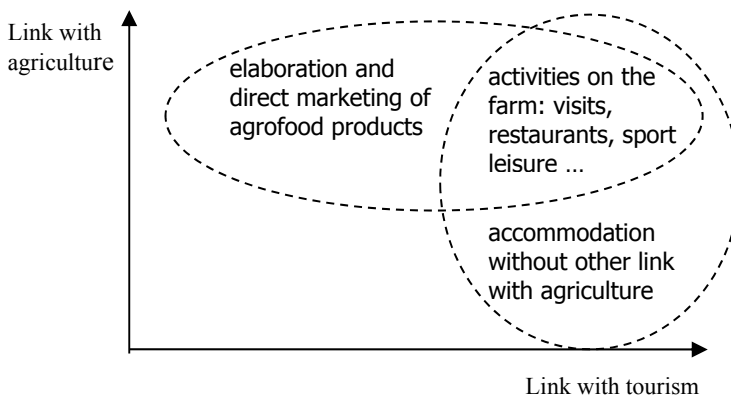


Figure 24.2 Typology of activities that fall within the scope of agritourism

Different actors define agritourism differently: some exclude direct sales of farm products because the link to tourism depends on local situations; others exclude

accommodation, if it is not linked with the activity of the farm. We propose the conceptual diagram in Figure 24.2 to situate the diverse activities by intersecting the link with agriculture and the link with tourism. These links can be used with different criteria, turnover, employment, or the experience of the tourist, and so on, which leads to different classifications. The study has taken into account all activities.

The importance of agritourism for local tourism in Châtaigneraie

This question is approached from the point of view of the specialised local tourism actors. First of all, half of the service providers think they have links with agriculture:

- Restaurants and bed and breakfast accommodation use local products; there are also exchanges of services, for example, farmers provide boarding for horses from the equestrian center;
- Purchases on the farm are deemed attractive by other tourism actors, for example, the main vacation village recommends farm visits;
- Some tourism actors recognise positive agricultural externalities: “they maintain the countryside”, “they built *gîtes*”; they also mention negative externalities, especially relating to water quality;
- Some resentment was observed, as in statements like “they have more subsidies than we do”.

The Tourist Office considers that agriculture and agritourism are important for local tourism: for the identity of the territory and for demand. Evolution is generally favourable but there are some current limits: “the market must be developed, more promotion is needed”, a demand that is addressed to the promotional organisations of the higher-level authorities. Finally, we asked for an indication of the proportionate share of agritourism in the total tourism product. The Tourist Office indicated that agritourism represents 33 per cent of *gîte* and bed and breakfast accommodation, a high proportion for this destination.

Observations on the social embeddedness of tourism in Châtaigneraie Cantalienne

For a tourism destination to survive, the local population must be behind it. They must be aware of the economic, social, and cultural benefits that come from tourism, for which they then become ambassadors and recognise their own role in the message broadcast by official organisations (Cohen–Bacrie 2003). These organisations are part of the ambience of the territory and of the tourist experience (Morgan *et al.* 2003).

The analytical framework for the study with reference to social embeddedness related to: (i) the effects of tourism on the population; and (ii) the participation of the population in tourism. The results of the research permit the following conclusions to be reached which point to good social embeddedness, based on observations in

Châtaigneraie, less by the general character of each account than by the aggregate evidence:

- Acceptance of tourism by the local population: three-quarters of those who participated in the research think that the population accepts tourism;
- Involvement of the population in the ambience of the territory: a certain pride is observed about the territory which also contributes to a role as ambassador;
- The liveliness of the territory throughout the year: “We feel a desire to actively participate in the territory throughout the year”. A commitment to associations is important. On the other hand, an evolution in the tourist sector was pointed out as a source of tension that can weaken part of this social embeddedness: the regrouping of tourist offices has led to greater professionalisation of personnel, but it has moved the organisation away from other actors– associations and elected officials;
- Shopkeepers have welcomed tourists: “they are fairly welcoming, they are open all day on Thursday, they are open Sunday morning, they are making an effort”;
- Service providers play the role of local guides;
- Welcoming tourists also takes time: “The tourists also like to be listened to, ... we spend a lot of time speaking to them”. “People take the time to share, a warm welcome ... they develop customer loyalty”;
- And agritourism service providers are at the center of this social embeddedness: “sometimes it’s too professional, it lacks warmth. I think that our farmers are between the two, they know how to welcome tourists”.

Conclusion

The Châtaigneraie Cantalienne provides an illustration of geographically dispersed tourism (but in a location close to major attractions in the Massif Cantalien and Périgord), with an average ‘organisational density’. It also represents a somewhat integrated and territorial form of tourism in which we can observe tourist–agricultural–local synergies. But these features do not compensate for the relative absence of a real alliance between tourism and agricultural actors, the need for investment aid and increased promotion, the absence of a local tourism strategy, a need for strong organisation between service providers, or certain difficulties with the reorganisation of tourism governance (difficulties not dealt with here). There are several lessons to be gained for collective public action concerning tourism: integration and organisation characterise this type of tourism, which should be taken into account by public policies aiming at increasing the advantages and removing difficulties.

The study enriches the initial conceptual framework in certain ways. The density of tourism model takes into account the geo–tourist relations between the destination and its neighbouring areas. The study of complementarity can be approached in several ways. In addition, we can more clearly postulate the difference between *de facto* synergies between two activities and real proactive strategies for cooperation between actors. We foresee some difficulty in linking the evolution of tourist governance and the continuation of its contribution to the social embeddedness of tourism. Tourist offices

are becoming more centralised and more efficient but more removed from the actors on the ground.

Limits of the research can be noted also. One case study cannot explore the whole field. In addition, the study of social embeddedness needs more input from the population itself. Further study is necessary with other case studies and a sharper focus on proposals that we have discussed here.

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Abstract

A model of territorial integrated tourism is used to study the relations between tourism and other activities (complementarity) and its relations with local population (social embeddedness) in an area of dispersed tourism in the Auvergne, France (Marsat and Bonniot 2010). Complementarity refers here to the relationships between tourism and farming. The literature identifies many relationships, including agricultural diversification or agritourism, which can considerably enhance the variety and quality of tourism supply and also benefit farming. As regards social embeddedness, a slower-paced tourism and particular types of hospitality (local festivals, the attitude of shopkeepers) facilitate useful exchanges between the population and tourists. With reference to the relations between tourism and the local population, we examine the outcomes for tourism and its local acceptance, the population's contribution to the attractiveness of places and the welcoming of tourists. A case study was conducted in the Châtaigneraie Cantalienne region in the southern part of the Auvergne. Because of its location, this destination is a hybrid of tourism models in which dispersed tourism benefits from the proximity of more concentrated tourist sites. Farming remains a dominant activity faced by increasing uncertainties. A significant part of tourism supply is derived from agritourism. Tourism provides revenue for farming and a showcase for rural products. The study identifies intersectoral synergies but few real alliances between the two sets of actors. Suggestions are made about how to develop a policy to benefit both tourism and agriculture.

Keywords: Dispersed tourism; integrated tourism; local territory; agritourism; social embeddedness

Chapter 25

Ecotourism Promotion Through a Network Approach: Ireland's 'Greenbox'

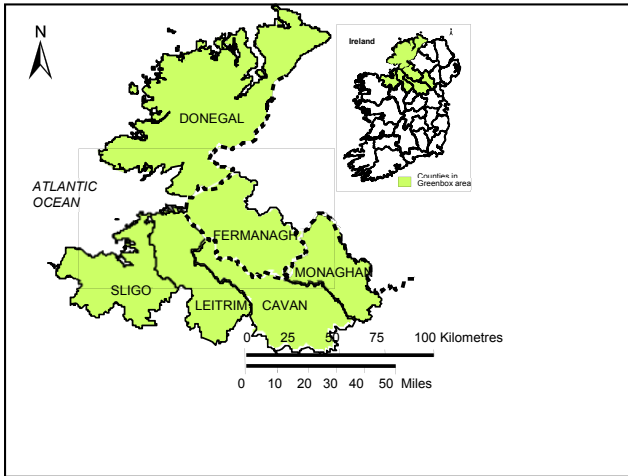
Thérèse Conway

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Introduction

Tourism is identified by national governments and international agencies such as the OECD (2006) and the European Commission as offering a potential source of support for rural economies and societies in areas undergoing agricultural decline (Hall *et al.* 2003). Many of the features that make such areas unprofitable for agricultural production are increasingly attractive to some contemporary tourists who seek recreational experiences based on nature and culture when on holiday (Urry and Larsen 2011). There is considerable evidence that strategic approaches to tourism development are required, if rural tourism is to be developed in holistic ways that support economy, environment, society and culture (Saarinen 2006). As a result increased attention is given to: (i) the forms of tourism that are promoted; and (ii) finding more effective methods of organising the often small scale enterprises that exist in the countryside. Ecotourism is a new niche form of tourism that has been identified as having potential for promotion in developed as well as developing countries (Fennell and Weaver 1997; Che 2006). Increased attention is being given also to the potential role of networks and associated networking in rural tourism promotion (Dredge 2004, 2006; Cawley *et al.* 2007; Michael 2007; Saxena *et al.* 2007). This chapter discusses an ecotourism network in Ireland.

Ireland's first ecotourism destination, the 'Greenbox', is based around the upper reaches of the River Shannon and the River Erne and the surrounding uplands, on the international border between the Republic of Ireland (referred to as Ireland) and Northern Ireland (Figure 25.1). The area was selected as a potential site for ecotourism development, following the cessation of civil unrest in Northern Ireland and the signing of the Belfast Agreement, in April 1998, when initiatives were sought to regenerate economically lagging rural areas. An organisational network, comprising representatives of pertinent local, regional, national and international interests was established in 2003 to develop ecotourism as a niche product. Special funding was available from national and international sources because of the border location and the post-conflict political context. The network operated for five years until 2008 but ceased to function when funding was no longer available. Evidence from Australia suggests that a short-term network can achieve longer-term effects (Dredge 2004, 2006). This chapter assesses the extent to which this applies to the Greenbox. It discusses the structure of the network, the networking that took place and its longer term implications for ecotourism promotion in the area.



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Figure 25.1 The Greenbox area

Concepts

Fennell (2009:372) dates the origins of ecotourism as a concept to Claus–Dieter Hetzer, an academic who organised tours to the Yucatán in the early 1970s, but states that “much of the literature supports the fact that Ceballos–Lascuráin was the first to coin the phrase”. The latter defined ecotourism as “travelling to relatively undisturbed or uncontaminated natural areas with the specific objective of studying, admiring and enjoying the scenery and its wild plants and animals as well as any existing cultural manifestations (both past and present) found in these areas” (Ceballos–Lascuráin 1991 cited in Fennell 2009: 372). TIES (The International Ecotourism Society) (2011), follows these principles broadly in its definition of ecotourism as, “responsible travel to natural areas that conserves the environment and sustains the well-being of local people”. Inherent in this definition are ideas of attracting tourists with interests in the physical environment of relatively unfrequented areas and promoting forms of tourism that do not damage the environment and from which the local community benefits economically. The idea of educating the visitor is also present in most definitions of ecotourism. There is broad agreement that ecotourism may include local culture as well as the physical environment and its flora and fauna. From the perspective of supporting local communities, ecotourism was promoted initially in areas of the tropics where it caters to both specialist scientific and cultural interests (Fennell 2009). Partly because of its perceived advantages as a form of tourism that promotes holistic sustainability, ecotourism has also become associated with less economically developed areas of developed countries where the impacts of modernisation are less evident in ecosystems, landscapes and traditional cultures (Che 2006). The Greenbox was envisaged as such an area.

Networks and networking have been studied as methods of effective management, knowledge exchange and organising economic activities in tourism (Dredge 2004; Saxena 2005; Scott *et al.* 2008). In the context of rural tourism, they have been shown to help offset geographical and product fragmentation (Cawley *et al.* 2007; Michael 2007). Micheal (2007) suggests that the communication through the network (networking) is more important in terms of outcomes than the network *per se*. A number of concepts from geography and sociology assume importance with reference to networking. From a geographical perspective, local (horizontal) networking and vertical (extra local) networking have been recognised (Saxena *et al.* 2007). The effectiveness of the former is known to be influenced by the extent to which it is linked into local organisational structures (embedded) and that of the latter by the extent to which it is disembedded to extra-local structures. Research by Saxena *et al.* (2007) and Cawley *et al.* (2007) illustrates that local embedding is important in rural tourism business establishment and development and that extra-local disembedding is influential in accessing funding, advice and tourists. The formality of networking is also recognised as being pertinent to understanding the operation of networks. Thus, Saxena (2005) has illustrated that ‘informal’ (personal) as well as ‘formal’ (institutional) ties may exist between members of a network and may be equally influential in attaining ends. The reported research investigates both the direction of the networking and the types of ties involved in the context of promoting ecotourism in the Greenbox.

Study area and methods

The Greenbox was established formally as an area and a Private Limited Company (PLC) without share capital in 2003. A management structure of 11 members consisted of the Chief Executive Officer (CEO) of the PLC and representatives of the following: local authorities in two of the counties involved (Fermanagh District Council– FDC and Leitrim County Council– LDC), the two national tourism authorities in Ireland and Northern Ireland (Fáilte Ireland– FI and the Northern Ireland Tourist Board– NITB), a regional development body in Ireland (the Western Development Commission– WDC), a local rural development organisation in Northern Ireland (South West Area Rural Development– SWARD), a public private partnership in the tourism sector in Northern Ireland (Fermanagh Lakelands– FL), and three ecotourism producer representatives. Seventy five percent of the €1.38 million funding allocated to the project for the period 2003–2008 was obtained from the European Union (EU) Interreg IIIA Programme, which is designed for cross-border locations such as this. The remaining 25 per cent came from an EU Peace Fund, the philanthropic International Fund for Ireland, private sources, two local authorities (LDC and FDC), and the WDC. According to the CEO, the network had three main areas of responsibility: (i) the administration of a capital development programme to provide grant aid to suitable (eco) businesses; (ii) the development and management of a network of ecotourism providers; and (iii) the marketing and promotion of the Greenbox as a geographical region and ecotourism destination nationally and internationally (#1: 2011).

The Greenbox adapted the TIES definition of ecotourism to meet its purposes as “travel which is small scale, low impact, culturally sensitive, community orientated, primarily nature based, educational and capable of broadening people’s minds and

enlivening their souls but providing a unique experience, firmly grounded in sustainable principles and practices” (Fáilte Ireland and the Greenbox 2007: 5). The EU Flower award was selected as a form of eco-certification and relates to “products and services that have reduced impact on the environment throughout their life cycle” (<http://ec.europa.eu/environment/ecolabel/>). The label applies to the physical structures and energy and water use in accommodation premises only and non-accommodation activity businesses are ineligible to apply. Training and advice were available to tourism providers who applied for the certification, which was accredited by the Department of Agriculture in Northern Ireland and the National Standards Authority in Ireland. The number of staff reached a maximum of 7.5 (full time equivalents) in 2006/2007 but consisted of the CEO only, in early 2008, when the PLC and the network effectively ceased to operate. To avoid confusion, ‘Greenbox’ is used here to refer to the area; the organisational structure which is the focus of the paper is described as the ‘network’ or the network Board of management, as pertinent.

The research followed a qualitative approach to data collection, based on face-to-face, semi-structured interviews of approximately 1.5 hours in duration. In total 21 representatives, from a range of pertinent organisations from local to international level were interviewed, as was a sample of 37 tourism providers. Purposive sampling was used to identify all interviewees. This chapter discusses findings relating to the eight organisations that were members of the Greenbox and the networking that they conducted internally and externally to that network in order to promote ecotourism (three private ecotourism providers who were board members were interviewed also but are not discussed in detail because their networking mainly served an information function between other providers and the Board). The organisational interviewee in each case was the executive who held the primary role for tourism or ecotourism. Respondents were assured anonymity during the interviews and quotations are numbered to protect that anonymity. The group was predominately aged 45 years or older and members held a university degree or its equivalent. Most of the qualifications did not relate directly to tourism, being in marketing, business or administration. Six members were in post over ten years and had experience relating to tourism. Only two had taken up their current post since the Greenbox PLC was established.

The interviews queried the views of the organisation that the interviewee represented; if personal views were mentioned they were recorded. The issues which are analysed here relate to: defining ecotourism as a concept; the understanding held of ecotourism in the Greenbox; and networking with members of the Board and other entities in promoting ecotourism. The horizontal and vertical trajectory of the networking, its formal or informal character and purpose were registered. The interviews were recorded, with permission, and typed verbatim into a data base. Key profiling features were identified and textual statements were analysed qualitatively in order to identify important themes and sub-themes, using an iterative approach, following Bryman (2004).

Research findings

The main policy document of each organisation was analysed, before interviewing was conducted, to obtain an understanding of the extent to which tourism and ecotourism

were included. Policy documents in general were dated after the designation of the Greenbox; therefore the organisations would have been aware of its existence when preparing documentation. All organisations had a policy relating to tourism development. Tourism development is a clearly defined remit of the district councils in Northern Ireland, whilst the tourism-related responsibilities of the county councils in Ireland pertain more to their physical planning functions and provision of buildings and sites for events. Not surprisingly, the Greenbox PLC had the most clearly stated ecotourism policy. Although there was no statutory obligation for the other organisations to prepare an ecotourism policy, six made explicit reference to endeavouring to promote ecotourism development. In general, organisations had statements relating to promoting environmentally friendly tourism activities and sustainable forms of tourism. Maximising the economic benefits of tourism was central to most of the plans. Adhering to proper planning principles and sustainable development was also mentioned. Overall, ecotourism was supported but as part of a broader remit for tourism rather than being prioritised as a niche activity and it was not defined as a specific product by the national tourism promotional and marketing organisations.

Discussion during the interviews relating to the way in which ecotourism was defined by the organisations and the understanding of the role of the Greenbox PLC revealed varying perceptions. In response to a question about how the interviewee's organisation defined ecotourism, two representatives referred to the technical and environmental criteria of the Greenbox definition. One of these respondents represented a local authority in Northern Ireland and the other represented the regional development body in Ireland which had been involved in establishing the Greenbox (Table 25.1). The other six respondents referred to ecotourism primarily in terms of being based on natural resources, outdoor activities (angling, hill walking, cycling) and 'an ethos' more than something that could be defined strictly. A local authority representative reflected a more broadly held view:

That's a good question... there are 100 different definitions ... responsible tourism is the one we would go on, and we would rather promote it as the experience so that people could come and have a full experience, I know you can't have a full eco experience from the minute you go...we would never promote it as 100 per cent but you know, you are looking at a good 80 per cent (#2: 2011).

Further discussion suggested that the EU Flower certification criteria, relating to conservation of electricity, heat (through insulation of buildings) and water, provided an agreed basis for ecotourism promotion and business support by the Greenbox Board but that some members would have preferred a definition that included features of the physical environment. The EU Flower was adopted because of being an existing label that could be certified by the National Standards Authority in Ireland and the Department of Agriculture in Northern Ireland. The emphasis placed by some organisations on the role of the natural environment in attracting ecotourists is important, not least because of reflecting awareness of a need to protect the quality of the physical environment. The emphasis on 'grey' (functional and technically based) criteria which applied to accommodation premises for certification purposes (Buckley 2002) meant, however, that only such businesses could be funded to attain certification

through the Greenbox budget. Twenty three businesses obtained the EU Flower. An additional 57 providers were members of the Greenbox at some stage, two of whom obtained funding to upgrade premises to apply for certification but did not obtain the label. The remainder obtained information relating to ecotourism and membership was therefore an awareness raising experience for them; all businesses benefited from the promotion and marketing of the Greenbox as an ecotourism destination. Many were, however, dependent on organisations other than the Greenbox for development aid more generally. In this context, the organisational members of the Board, other than the Greenbox PLC, assumed importance.

The organisational membership of the Greenbox network arose from the geographical area that was selected, the sources of funding available and the focus on ecotourism. The network did not grow in an organic way. This appeared to have implications for the extent to which the organisational representatives perceived the objectives of the Greenbox as an area and a network and the role of the professional staff. The Northern Ireland local authority member and the WDC representative had a clear understanding of both because of their active involvement. Responses from some interviewees indicated that it took some time for the multiple roles of the professional staff in promoting ecotourism to be understood clearly. One said: “to be honest at the start it was probably a bit confusing ... We weren’t quite sure were they (the professional staff) training people, were they advising people, were they marketing people, or what they were doing” (#13: 2011). However, all of the Board members networked with each other, with providers and with other organisations in the context of promoting ecotourism (Table 25.1). The CEO of the Greenbox had the widest range of links because of liaising with all other partners in the network on all issues relating to the Greenbox and ecotourism.

Table 25.1 Links within the Greenbox network

	LCC	FDC	FI	NITB	G	FL	WDC	SWARD	Provid- ers	Others
LCC			✓		✓				✓	✓
FDC	✓		✓	✓	✓	✓		✓	✓	✓
FI	✓			✓	✓				✓	✓
NITB		✓	✓		✓	✓		✓	✓	✓
CEO	✓	✓	✓	✓		✓	✓	✓	✓	✓
FL		✓		✓	✓			✓	✓	✓
WDC						✓				✓
SWARD		✓		✓	✓				✓	✓

LCC=Leitrim County Council; FDC=Fermanagh District Council; FI=Fáilte Ireland; NITB=NI Tourist Board; CEO=Greenbox CEO; FL=Fermanagh Lakelands Public Private Partnership; WDC=Western Development Commission; SWARD= South West Area Regional Development. Providers=ecotourism providers; Others=other organisations. **Note:** reported links are not all reciprocal

The remits of the organisations were important for the types of support that they provided for business owners. Thus, local authorities in Ireland do not have a tourism funding role, although they promote their counties and tourism businesses on their web sites and provide resources such as parking space during events. Their counterparts in Northern Ireland, by contrast, may provide grant aid for individual businesses. The

national tourism authorities in both states did not prioritise ecotourism for any special attention but both were considered to be of greatest importance in tourism promotion by the other organisations and important to link with.

The purpose of the networking that took place in association with delivering support to the ecotourism providers was analysed on the basis of five functions: advice, training, funding, product development, promotion and marketing. Advice relates to providing information relating to all aspects of establishing an ecotourism business and qualifying for the EU Flower label. Training involves training in attaining ecotourism standards, web site design, promotion and marketing and other aspects of business development. Funding relates to direct provision of grant aid to establish or expand an ecotourism business (in preparation for application for the EU Flower certification). Product development relates to strategic planning surrounding the development of ecotourism products and activities. Promotion and marketing relates to the promotion and marketing of individual providers and the Greenbox as a destination.

Table 25.2 Networking relating to ecotourism promotion in the Greenbox

Organisational Type and Trajectory of Link	Purpose of networking				
	A	T	F	PD	P&M
<i>Local authority, Ireland</i>					
Horizontal					√
Vertical					
<i>Local authority, Northern Ireland</i>					
Horizontal		√			√
Vertical				√	
<i>National tourism authority, Ireland</i>					
Horizontal					√
Vertical				√	√
<i>National tourism authority, Northern Ireland</i>					
Horizontal					
Vertical				√	
<i>Greenbox PLC</i>					
Horizontal	√	√	√	√	√
Vertical	√		√		
<i>Public private partnership</i>					
Horizontal				√	√
Vertical					
<i>Regional Statutory Body</i>					
Horizontal					
Vertical					√
<i>Local area partnership</i>					
Horizontal	√		√		
Vertical					

A=advice; T=training; F=funding; PD=product development; P&M=promotion and marketing

The Greenbox CEO engaged in networking across the five functions identified (Table 25.2). This included vertical extra-local formal networking to source advice relating to the EU Flower from the EU Commission and funding from the Irish Cross-Border Area Network (ICBAN) of councils and from the Peace Fund for disbursement to providers to enable them to meet the criteria required to gain EU Flower certification. Vertical networking took place also with the Irish Standards Authority and the Northern Irish Department of Agriculture and Rural Development in relation to the certification process *per se*. Horizontal links existed with Sligo Institute of Technology to gain advice on ecotourism development and to provide training to the Donegal LEADER company. A local authority representative in Northern Ireland had the next most extensive pattern of networking in terms of functions and his activities are discussed below. The networking conducted by other organisations related to fewer functions. Nevertheless, because this networking continued after the cessation of the Greenbox PLC and the management Board it continued to benefit ecotourism providers as a component of tourism businesses more generally. The organisations had wider remits but understanding of ecotourism had been gained as a result of being members of the Greenbox Board.

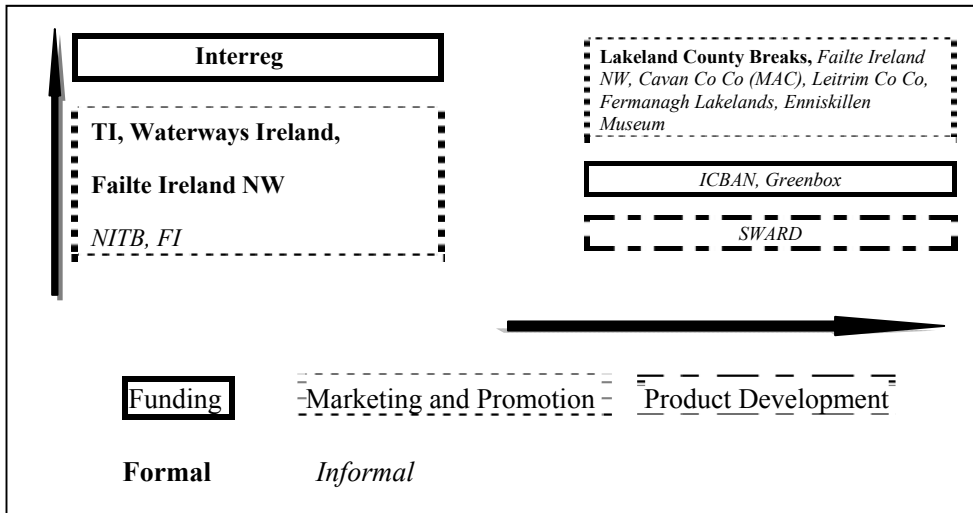


Figure 25.2 An actively networking local authority

The male representative of the Northern Ireland local authority was aged 55–64 years and had worked in its tourism section for over 25 years which provided him with a wide range of personal contacts with other organisations (Figure 25.2). He defined ecotourism as the TIES definition and was involved in the adoption of the definition for the Greenbox. Apart from his direct involvement as a member of the board of the Greenbox, ecotourism providers benefitted from other networking in which he engaged. He sourced funding for local development projects through formally liaising with the Interreg representative body in Dublin. He also liaised through formal meetings with Tourism Ireland and Waterways Ireland to promote tourism and ecotourism in County Fermanagh and, informally, with the regional tourism body in northwest Ireland (Fáilte

Ireland North West) for collaborative promotion. At a horizontal level, his organisation is a member of Lakeland County Breaks local tourism organisation. Based on professional and personal contacts he also had informal links for promotional and marketing purposes with a promotional group (Fermanagh Lakelands), a local museum and with his tourism counterparts in county councils in Ireland. All of these links continued after the disbandment of the Board in 2008 and ecotourism businesses were eligible to apply for the range of supports provided. Some of the businesses established a new web-based marketing initiative called the 'Greenbook', reflecting their learning experience.

Conclusion

This chapter discussed the experience of a short-term ecotourism network, the Greenbox, in northwest Ireland and its longer-term impacts. The network was established jointly by the Irish and Northern Irish governments as a method of promoting rural development and benefitting from EU and international funding for border and post-conflict areas. Professional staff was employed, grant aid of accommodation premises to qualify for eco-certification for the EU Flower ecolabel took place and the area and the providers were promoted during a five year period. Thereafter funding was no longer available and the network ceased to function. The extensive horizontal and vertical networking through formal channels and personal informal relationships that took place during the previous five years served as a learning experience in relation to ecotourism which the organisations introduced into their tourism policies. Support therefore continued for ecotourism and the area as an ecotourism destination after the demise of the Greenbox network, reflecting Dredge's (2004) finding that longer-term benefits may emerge from short-term networks.

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Abstract

This chapter assessed the role of a short-term network and the associated networking in contributing to ecotourism development in a border area in northwest Ireland. The area was selected because of a need for intervention and the availability of funding from EU and other sources in the wake of the Belfast Agreement of April 1998 that brought an end to 30 years of conflict in Northern Ireland. The area was relatively undeveloped economically but has a rich environmental resource base. Ecotourism was to be promoted through an organisational network and a professional staff. The initiative ran between 2003 and 2008 and ceased because of the non-availability of continued funding. Assessment of the networking that took place illustrates that awareness of ecotourism increased and ecotourism was incorporated as part of broader tourism policies. These features have positive implications for ecotourism in the area, even in the absence of a management network *per se*. By way of illustration a new provider led network, the Greenbook, has emerged and receives support from several of the former Greenbox network members.

Keywords: Ecotourism; networking; Greenbox network; Ireland

Part 6

Engaging with the Complexity of Rural Systems

Chapter 26

Quantum Dreaming: The Relevance of Quantum Mechanics to Geography and Sustainable Systems

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I think I can safely say that nobody understands quantum theory.
(Feynman 1965: 129)

Perceptual and economic processes have no demonstrable
correlations with sub-atomic states.
(Campbell 1995: 217)

Doubt is not a pleasant condition, but certainty is absurd.
(Voltaire, *Candide*)

Introduction

My presentation is a thought-piece designed to set fellow delegates thinking about a complex and rapidly changing world in which our conventional thinking, knowledge and modes of analysis about sustainable rural systems may increasingly be ineffective and unreliable. It will hopefully cause at least some of you to question your ideas and refine them, as has happened to me repeatedly in recent years. This task draws heavily on my article entitled 'Quantum Dreaming: the relevance of Quantum Mechanics to Regional Science' (Sorensen 2011). That article ranges more widely than I am able to do here, but it is also less focused on the issue of rural sustainability, which I aim to rectify. As the title implies my analysis is draped around the ideas of quantum mechanics, the premier body of theory explaining processes shaping the universe. In recent decades, however, social science researchers, including many geographers, have appreciated its potential insights into the ways in which economy and society function and much else besides. The link in most of these cases is the notion of uncertainty and how humans adapt to it in everyday living. Quantum mechanics is, as we shall see, embedded in uncertainty. Despite such august antecedents, I engage you in a discussion featuring Quantum Mechanics with some trepidation, for I lay myself open to ridicule as the initial quotes from Feynman (1965) and Campbell (1995) suggest. On the positive side, my work on this subject over the last two years has given me considerable vicarious fun and pleasure, as it is continuously evolving into a meta-theory of human uncertainty, which appears to have reached an apogee under rapidly evolving

technologies, globalisation, and economic mismanagement of the kinds inherent in the Global Financial Crisis (GFC).

Links between the physical and social sciences

A good starting point is to question the relevance of our borrowing ideas from the physical, and, indeed, the environmental or biological sciences to understand human affairs. This marriage of ideas is not a recent phenomenon, but goes back to the days of Plato and Aristotle or maybe earlier. The trigger in the modern era was the enlightenment period between roughly 1650 and 1900. During this period, the likes of Newton, Boyle, Faraday, Darwin, Kelvin, Mendel, and Einstein created a rigorous scientific world of celestial clockwork, a term first coined by Newton in 1687. Rather later, starting slowly in the mid-eighteenth century, social sciences emulated the physical sciences by attempting to uncover invariable principles governing economic and social structures and processes. Prominent thinkers included, for example, Say, Smith and Marshall (economics), Bentham, Mill and Marx (political philosophy), and Parsons and Merton (who coined structural functionalism in sociology). Economics was the first cab off the rank, and geography a relative late-comer, but those two disciplines, which are married in the sub-discipline of regional science, are still avid proponents of social clockwork in the development of their models, though such mathematical reductionism probably reached its apogee between the 1970s and 1990s. Salient ideas and their proponents include, in rough date order:

- *Homo Economicus* (see Sen, 1977 for a critique of this elemental notion);
- Economic equilibrium (a nineteenth century concept, which Samuelson [1983] thought resonates with the first law of thermodynamics);
- Central place theory (Christaller 1933);
- Game theory (von Neumann and Morgenstern 1944);
- Rational expectations analysis (see Muth 1961);
- Innovation diffusion models (Hägerstrand 1967);
- Regional multiplier analysis (whose evolution is charted by Ten Raa [2005]);
- Distance decay functions (Wilson 1971);
- The efficient market hypothesis (EMH) (Beechy *et al.* 2000); and
- Computable general equilibrium (CGE) models (Dixon and Rimmer 2002).

Yet, from the start of the twentieth century, the physical sciences became increasingly aware that the celestial clockwork had a few loose springs and that uncertainty lay in waiting to trap the unwary. New theories began to demonstrate increasing degrees of instability in physical processes. Onnes's work on superconductivity showed that physical properties can vary with temperature. Einstein's special and general relativity showed that light could be bent and that the passage of time slows with increasing speeds. Planck, Bohr and Heisenberg developed the weird world of quantum mechanics (including the later Copenhagen extension) in which particles could be in several states and locations simultaneously, but where measurement of those locations and states could change their properties. Then we discovered that evolution is far from simple and contains elements of: (i) non-linearity; (ii) random, but deterministic, mutations; (iii)

sensitivity of speciation to initial conditions; and (iv) somewhat chaotic fractal patterning. These resemble a kind of Lamarckian inheritance. More recently, we have embraced the uncertainties of climate science, discovered the mysteries of black holes and event horizons, learned to separate space and time (which Einstein thought were closely intertwined), revised the Alpha (fine-structure) constant (approx. $1/137$), which seems to vary slightly across the universe, and discovered, through String Theory, up to 11 dimensions of space— not the four we are accustomed to.

And once again, we, in the social sciences, are playing catch-up. We are now becoming aware how brittle is our understanding of process, where exceptions abound and we confront large scale uncertainty in geography, economics, sociology and psychology. Uncertainty is also potentially damaging to us because we are now far more future-oriented than in the past, a trait that is vital for human adaptation to fast changing circumstances. We may define uncertainty as ‘a lack of assurance or conviction’, but it is relatively mild compared to other states arising from lack of knowledge such as doubt, scepticism, suspicion, or mistrust. Nevertheless, error in our assessments will occur about one time in twenty— a probability of occurrence <95 per cent. Many theories (in both physical and social sciences) incorporate uncertainty (and associated probability functions) formally or inferentially in their analysis. These include: (i) quantum mechanics; (ii) chaos theory, and its social science counterpart, complexity theory; (iii) tipping point theory (again prominent in both physical and social sciences); (iv) information theory; and (v) socionomic theories of investment. Uncertainty also haunts the well-known ideas of (super-) wicked problems (Rittel and Webber 1973) and Horn and Weber’s (2007) idea of social messes. Wicked problems and social messes have, by definition, low probabilities of being understood accurately. Uncertainty, then, is widespread and difficult to assess, but we in the social sciences have been late to arrive at this uncomfortable conclusion.

Sources of uncertainty

It is time to unpack the sources of uncertainty to better appreciate the difficulties we face in understanding the world around us or charting desirable, attainable and sustainable courses to the future. Our approach will incorporate analogies with processes in the physical sciences, starting with quantum mechanics (QM). Economy and society may not at first sight resemble anything in particle physics, yet there is a large literature on the application of QM ideas in geography, economics, sociology and even, I am informed, psychology such is the lure and practicality of analogy. Massey (1999) and others, believe that such use of analogy frequently extends and enlivens our understanding of social science processes, extends our own work in unexpected and imaginative ways, and helps to sell our findings or ideas as we bask in the reflected glory of rigorous and highly respected scientific processes. Economists frequently use such analogies: Thurow (plate tectonics), Schumpeter (gales of creative destruction), Adam Smith (invisible hands), Kondratieff (long waves), and perhaps the idea of equilibrium inherent in thermodynamics. Geographers are part of the game.

QM has five dominating themes which we should explore briefly while offering analogies with rural systems of the kind we study. The first theme is *Wave-Particle Duality*, which holds that all matter exhibits both wave and particle properties. For

example, light comprises particles (photons) travelling at high speed in wave formation. A photon's position in space at any moment is a combination of forward velocity and position in the wave cycle. On brief reflection, it appears that many aspects of the economy, both macro and micro, also exhibit a form of wave-particle duality. For example, producers, consumers, suppliers, distributors, and money can all be considered as economic particles or quanta. Individually and collectively, all such quanta have mass, typically measured in US dollar terms or maybe volume of output, inputs or consumption. They also exist in wave forms and have velocity in time and space! Examples of economic waves include:

- Kondratieff (long waves), sparked by such inventions as the steam train, telephones, automobiles, computers, shipping containers and the internet;
- Periodic Schumpeterian gales of creative destruction, partially tied to the Kondratieff cycle;
- Semi-regular business cycles which average, under Australian conditions, perhaps 6 years from peak to peak in terms of GDP growth;
- Business life-cycles from birth to demise or large scale reinvention;
- Product life-cycles of hugely varying duration, but now typically shorter than before;
- Fluctuating currency, commodity and share values;
- Logistic curves in the case of many consumer staples; and even
- Moore's Law (clock speeds of computers).

Moreover, these waves often operate in space as well as time and are therefore of intrinsic geographical interest. We study such themes as the ebbing of power from local to global or the cycles of growth and decline between nations. For example, global growth is currently shifting to many parts of Asia, including China, India, Vietnam and Indonesia, or to Brazil, and China in particular is reclaiming former leadership and influence. Within nations, the wealth and status of regions rise and fall over time, mediated by:

- The quality of their resources;
- Changing geographical accessibility, especially where new technologies reduce the friction of distance;
- Infrastructure investment decisions;
- Regionally endogenous endowments of social and human capital;
- Efficiency and probity of governance; and
- Access to finance capital.

Note, too, that wave amplitude also varies over time and space. Right now we have a coincidental raft of global systemic shocks like the GFC, peak oil, food shortages, and rapid GDP growth in a raft of developing nations. In addition to systemic shocks, the velocities and amplitudes of economic cycles (or waves) are also growing over time, aided by a constellation of transforming technologies like those in medicine, energy, agriculture and materials (like graphene nano-particles). Unsurprisingly, these also trigger faster product invention and obsolescence.

There are even cycles in the technologies of the market–place, domestic governance, and international trade, and these are often spatially variable to the extent that some countries are privileged for a while, only to be superseded by other countries whose administration is better suited to the prevailing conditions. For example, there are several options for the production and distribution to market of goods and services, and these exchange processes include theft – which still exists in the world’s kleptocracies – barter, command economies, and market systems of various efficiency. Over the last four centuries, international relations have gone through several overlapping phase shifts: colonialism, mercantilism, free trade, socialism, and globalisation. Moreover the pace at which all these settings change varies across spatial scales from regions to the international economy, mediated to some extent by the same six qualities mentioned previously. Such economic and comparable social waves intersect in complex ways as shown in Figure 26.1 (‘waves’ are shown as straight lines for convenience). The growing number of both economic quanta and their associated waves fuels rising system complexity and ultimately system uncertainty.

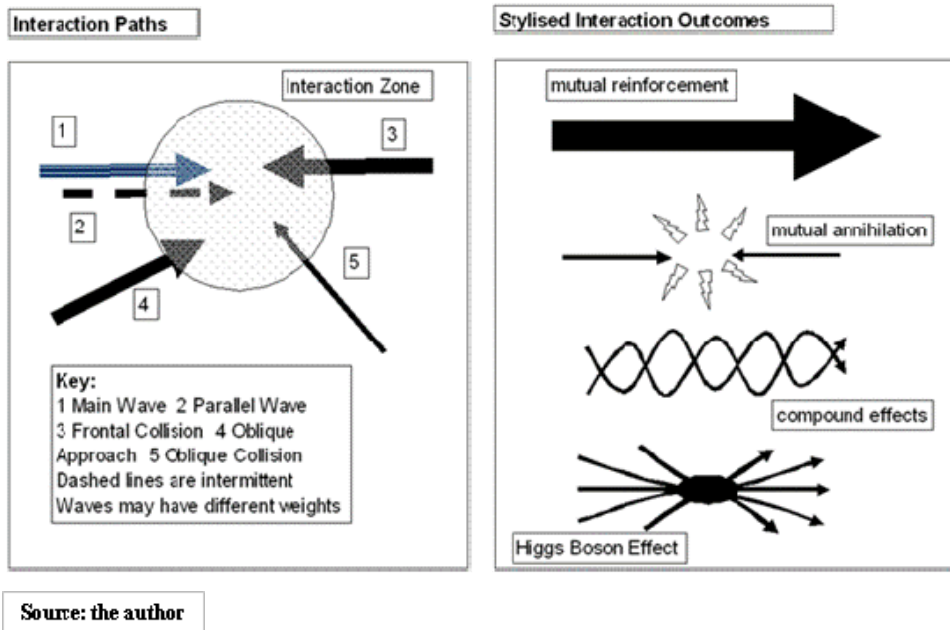


Figure 26.1 Interaction of economic ‘waves’

Under the Copenhagen School’s interpretation of quantum mechanics, Heisenberg developed the *Uncertainty Principle*. This asserts that a phenomenon like light can be viewed accurately in one way or the other (as wave or particle), but not both simultaneously. The two dimensions are complementary, but the more accurately we measure say particle speed the less accurately we can measure its wave function. Likewise, economic waves are also difficult to locate in economic space. Economic

quanta exist at a myriad of bewildering speeds and wave amplitudes. Worse still, they interfere with each other and, in the process, alter their mutual wave amplitudes and trajectories— often in unpredictable ways. Reserve bank governors, who are charged with managing overall economic velocity and amplitude, have only summary details on overall velocity (like GDP growth) and a few key indicators of wave amplitude (like unemployment, household debt and expenditure, or wage rates). Unsurprisingly, their raft of policy instruments, including discount rates and control of money supply, is similarly blunt and incomplete. The effects of such instruments, in terms of speed and magnitude of impact, on individual economic quanta are little understood. However, they are likely to be hugely variable given that they are applied to economies and societies functioning in more like ten-dimensional hyperspace and many extra dimensions when we add in several overlapping spatial scales from the local to the global. In fact, can we ever adequately describe economic conditions at any single point in time? Increasingly, perhaps, we resemble Christopher Columbus who, at the start of his voyage, did not know where he was going. When he arrived in the Americas he did not know where he was; and on his return he did not know where he had been!

Superposition is another challenging concept about the nature or behaviour of matter at the sub-atomic scale. It amounts to the claim that, while we do not know what the state of any object is, it is actually in all possible states simultaneously, as long as we don't look to check. Measurement itself causes the object to be limited to a single possibility. This led to Schrödinger's famous (1935) 'proof' that a cat could be simultaneously alive and dead. Can we observe superposition in economic space? The answer is 'yes'. Just about all economic quanta can exist in multiple forms, and we do not know which form it will take until observed in use. Suppose you're looking at a sheep in a field. What does it represent in economic terms? It could produce wool for clothing, hides for floor coverings, or meat— or some combination of all these. However, we might not know exactly at any instance in time. Likewise, a field of corn could be destined for immediate human consumption, hog production, or distilling barrels of ethanol. A dollar bill could be exchanged for gold bars (a store of wealth), goods and services, or maybe even used as a toy. Finally, by way of example, a waterfall could provide a variety of environmental services or generate electricity. Moreover, uses can switch at high speed and with little or no warning. Over the last 20 years, Australia's sheep industry has veered significantly from wool production to sheep-meats as the cost of wool soared relative to other fibres and the demand for meat rose sharply in developing Asian nations. Likewise, the arrival of peak oil production, coupled with rising prices on the back of rising Asian demand, saw the sudden diversion of some US corn output to ethanol production.

Quantum Entanglement was described by a sceptical Einstein as 'spooky action at a distance' and certainly it voids the idea of 'local realism' in which every event has an immediate cause. On my immediate assessment, the entire corpus of research within the Commission on the Sustainability of Rural Systems assumes 'local realism'. However, quantum systems may contain two or more distinct objects (A and B) where the measurement of one immediately alters the properties of the other, even at large and arbitrary distances. Conventional causality is suspended when a sudden change in the properties of B follows the measurement of A, while no information is passed from A to B. Such events have been observed by experimental physicists, but under extra-ordinary circumstances. What, then might economic entanglement look like? Perhaps, for example, an economic (or even social) event occurs in two or more separate locations

without communication. This occurred round 10,000 years ago when agriculture sprang up in various parts of the world, and none of the participants could have known about the other events (see Figure 26.2). Of course, agriculture might have been developed much earlier at some unknown, but central, location during humanity's exodus from Africa. Perhaps, also, it is part of being human to enquire into ways of life more familiar and secure – in effect, a form of culturally embedded risk avoidance– that makes simultaneous discovery more likely. Should either of these conditions exist, then a form of 'local realism' exists, but is essentially invisible. I will leave it to the individual reader to think about this issue and arrive at their own conclusion. However, we have to thank quantum mechanics for raising the idea in the first place. Even today, scientific discoveries or their application to the production of new goods and services emerge simultaneously at multiple locations– just recall the various patent battles currently in train.

Finally we come to the process of *Decoherence* which explains, in particle physics, the apparent collapse of wave-functions. A quantum particle is rarely completely isolated from its environment. Rather, the particle and the environment are bound together as one system– including any observer as part of the environment. For example, scientists, using matter wave interferometry, have observed the loss of spatial coherence in the extended wave function of C70 fullerene buckyballs due to collisions with background gases. The loss of coherence also grew with increasing gas pressure. Economic and social decoherence is undoubtedly common, for society consists of innumerable interacting businesses and communities, individual or collective. Indeed, opportunities for decoherence within society are immense, shaped by conflicts of

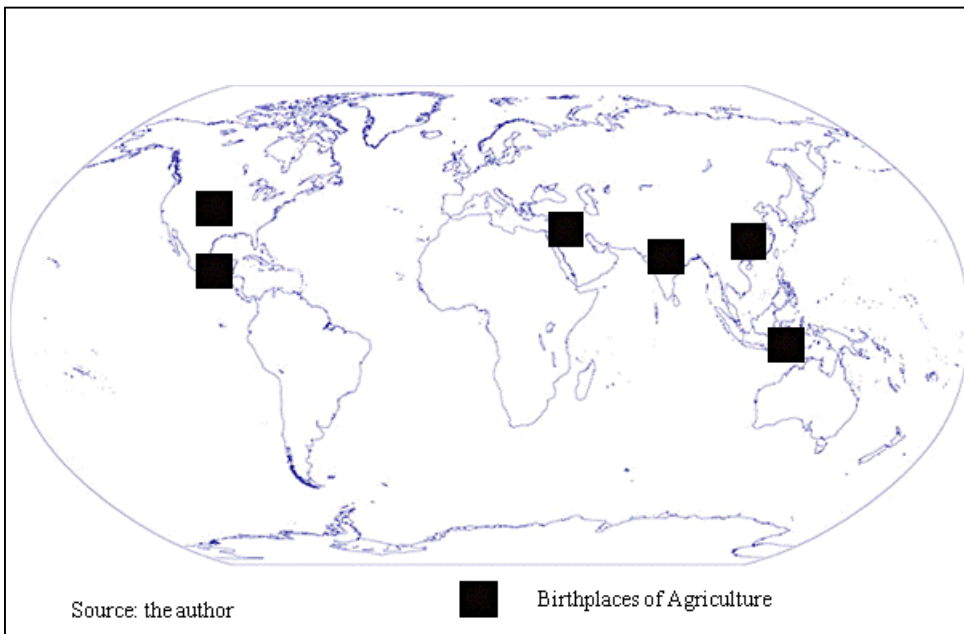


Figure 26.2 The multiple development of agriculture 10,000 years ago

interest among firms, products, regional economies, communities, infrastructure, and many other economic quanta. Decoherence is not planned. Dissipation is accidental and strongly influenced by competition for wealth and resources on an ever changing stage set by environment and technology. The collisions of economic quanta observed in Figure 26.1 assist in this process.

Other chapters in the story

So, quantum mechanics offers, via analogy, many insights into the uncertainty enveloping the economic processes helping to shape, among other things, the space economy in general and rural society in particular. Our five dimensions of quantum uncertainty interlock with several other important sources of uncertainty, to which we will now turn. Let us start with *Chaos and Complexity Theories* which are interrelated with the former occupying a niche in ecology, while the latter refers more to human action. Chaos theory describes highly leveraged, but non-linear processes in complex and opaque systems which are also sensitive to initial conditions. For example, a butterfly in the Amazon jungle could leverage a hurricane in the Atlantic under some conditions, and such outcomes are essentially untraceable and unexpected! I have long suspected that an excellent example of chaos theory at work in economics is the GFC, which was triggered by development of complex collateralised debt obligations which were wildly misdescribed and on-sold globally to gullible investors. Suddenly, dodgy US home loans created the largest and most disastrous recession since the 1930s. This was then kicked along by sovereign debt crises in several European countries, exacerbated by currency inflexibility introduced by the common currency – the Euro. Debt-financed investment in bad assets leveraged itself almost uncontrollably, triggering successive global recessions. In addition to the leverage aspect, modern economies are increasingly complex. This results from an intersecting combination of:

- An ever-expanding range of technologies, which raise the number of variables in play, and the range and speed of interconnections between them;
- A widening range of choices or options available for producers, consumers, and regulators alike;
- The growing length and recursive nature of feedback loops;
- Rising interregional or spatial complexity, of which globalisation is part; and
- Falling lapse time between economic triggers and individual or collective responses, with collective action taking much longer to organise than private calculus and being hampered by the need to negotiate compromise actions.

A simple system with three operational variables has $(3^2 - 3)/2$ pairs of variables (= 3) and double that number if two way cause-effect relationships between the variables occur. I have forecast future agricultural systems using >60 operational variables. That gives us about $(60^2 - 60)/2$ pairs of variables (= 1770, or 3,540 counting recursive possibilities)! Complex systems are likely to be more uncertain than simple ones.

Tipping Point Theory is associated with the contrasting work of Gladwell (2000) and Diamond (2005) in sociology and ecology respectively. Economic, social and environmental systems can appear normal on the surface, but may have rotten- but

barely visible—cores. A mild trigger event can then cause total and largely unexpected system ‘collapse’ (the title of Diamond’s book on the subject). One famous example of a rural system in collapse is the decimation of Easter Island’s Rapanui population in c.1680 as the result of deforestation. Another more recent example is the collapse of the cod fisheries in the Canadian Maritimes in 1992, which devastated the coastal economies of Newfoundland and Nova Scotia. The demise of the Soviet Union in 1989 had both economic and social dimensions, but also took much of the world by surprise. So, remember that what you see and analyse may be dramatically impermanent. It could be gone tomorrow with little or no warning.

This brings us to the question of *Information Theory* and *Socionomics*, both focusing on uncertainty created by the quality and quantity of the information we analyse and the way we do it. To be blunt, human society faces a massive and possibly overwhelming task in collecting, storing, verifying, and even analysing the data or information thrown up by contemporary economic and social systems. This has led Kurzweil (2005) to announce that the ‘singularity is near’: the point when humans will have to artificially enhance their on-board information storage and analysis capacities! Interestingly, data quantity and quality differ across spatial scales. They are possibly best at the national and international scale for macro-economic conditions, sourced from reserve banks, bureaux of statistics, and the trading floors of stock, currency and commodity exchanges. Their quality and recency often diminishes through smaller spatial scales until it is patchy and maybe substantially tacit at the local level. Prechter (2001), the founder of socionomics, argues that the efficiency of economic systems is heavily compromised by a range of psychological and behavioural factors. Markets, for example, are driven by greed and fear, causing financial markets to overshoot and undershoot dramatically (exaggerated wave cycles). Greed and fear are poor handmaidens of analysis! Sorensen (2010) identified 40+ different behaviours / psychologies impacting on local economic development, concluding that regional development strategy is largely a behavioural activity. This applies equally to our desire to foster rural sustainability. The complexity and volatility of behaviours’ probability adds considerably to economic and social uncertainty. And to these we might add increasing moral relativism, of the kinds addressed by Spinoza and Hume, and a range of ideological preferences, all of which increase uncertainty and the difficulty of holding civil discussion on any topic.

Discussion

We have examined briefly numerous interacting and often very different dimensions of uncertainty. Those interactions have partly additive and partly cumulative impacts on uncertainty. For example, if event A has an 80 per cent chance of occurring and B 75 per cent, the combined probability of both A and B occurring is $0.8 \times 0.75 = 60$ per cent. If, however, A and B have positive causal association, the combined probabilities will turn out >60 per cent. If negatively interacting in some downward spiral, the chances of A and B occurring will tend to be < 60 per cent. Either way, we have yet another source of uncertainty—uncertain interactions between the dimensions of uncertainty. We may be at risk of overstating uncertainty, however. Many sources of uncertainty may be mild or, in the case of tipping points, extremely rare. Many systems may be simple in the form

of few operational variables, with limited feedback loops. System data may, on occasion, be numerous, timely and accurate.

That said, we wouldn't be far wrong in concluding that we live in a turbulent world full of fuzzy processes, large scale uncertainties, and massive data shortages, a situation that's getting worse. But we also have to live with it and try to make rational sense of it to our maximum capabilities. With minimal capacity to analyse conditions accurately, we could not define sustainability, or frame clear public policy directions and strategies to attain it. With that in mind, two writers I am aware of, Bohm (1980) and Isard (1986), conclude that there is what Bohm terms an 'implicate order' underlying what on the surface may appear to be a chaotic social mess! They're probably right in some instances, for we still develop models and search for statistical patterns in data with a degree of success. BUT we are confronted still by Rittel and Webber's (1973) archetypal wicked/super-wicked problems and Horn and Weber's (2007) social messes that often defy analysis. Some areas of study, and especially geography which adds a spatial dimension to the mix, are likely to suffer from uncertainty more than others because of:

- Greater data deficiencies, especially at small spatial scales;
- Higher degrees of system complexity;
- Greater numbers of variables in play (environmental, economic, social, behavioural);
- More numerous, longer, and more circuitous feedback loops;
- More interaction across spatial scales, especially bringing into play the conflicting laws and regulations of different governance systems;
- Dynamic industry mixes, which are connected interregionally;
- In Australia's case, a strong market orientation in which competitive environments generate rapid economic change, especially in the farm sector;
- Lack of adaptive capacity in many places, which exacerbates uncertainty of outcome;
- More volatile operating conditions, e.g. regions variably subject to droughts and floods;
- Producers' lack of political/market power (because of small scale operations).

I suspect then that rural sustainability lies at the outer edge of system uncertainty since rural economy, society and environment score highly in the uncertainty stakes and are prone to substantial, and often uncontrollable, pressures for change, issues discussed by Sorensen (2009). Countries, and regions within them, will also fare differently according to local circumstance, and rural Australia perhaps faces a most uncertain future in terms of structure and function – with few recognisable landmarks in place – though with likely strong profitability/wealth outcomes based on high adaptive capacity and first-class resources. However, much of my research has demonstrated an interesting paradox. Greater uncertainty often begets higher order adaptive capacity, so that uncertainty may also be a beneficial trigger to greater opportunity and achievement by private actors (economic quanta). Finally, what are we to make of the idea of sustainability under conditions of acute uncertainty? If we polled delegates to this meeting about the meaning of 'sustainability' we could well find that we arrive at a clear definition. Moreover it is likely that we would regard sustainability as desirable,

see it as society's task to steer communities and regions in sustainable directions, and view favourably the notion that public action can be both feasible and effective. Alas, if this presentation's analysis of the strength and pervasiveness of uncertainty is true, then none of the above propositions is certain or indeed, excuse the pun, sustainable!

I also suspect that the rising tide of wicked problems and social messes has major political / policy consequences. Most single party states proved in the twentieth century their inability to think through complex problems (China and Vietnam are notable survivors). Two party states, in contrast, at least generated vigorous debate until Fukuyama (1992) could claim (in *The End of History and the Last Man*) the superiority of market economics as a discovery mechanism under high uncertainty. At that point, the major political groupings in many countries (certainly in the US, Australia, Britain, Canada and New Zealand – the Anglo world) became for me largely indistinguishable as Hotelling (1929) forecast in his famous analysis of ice-cream salesmen on a beach! At that point, political duopolies substituted slanging matches for rational debate, aided and abetted by moronic media unable or unwilling to embrace and explore complex multilateral arguments, and explain them clearly to a bemused or unsophisticated readership. Both politicians and the media are perpetually looking for cheap and simple answers when none exists. Complex and uncertain problems require complex discussion and the insertion of multiple perspectives into debate. I suspect that two-party systems and the conventional media are unable to handle the situation, leaving us with a democratic deficit. Perhaps the political future lies with electing numerous political independents, harnessing the potentialities of the internet to get complex cases across to the electorate! Or have I taken the quantum dream too far?

I will give Plato and Montaigne the final word, for both grasped uncertainty's nature and extent:

Some things always are, without ever becoming; some things become, without ever being.

(Plato, 424–348 BC, *Timaeus*, remarks attributed to Critias)

Rejoice in the things that are present; all else is beyond thee.

(Michel de Montaigne, 1533–1592, in his *Essais*, asserted, like Edmund Burke two centuries later, the value of experience)

Rural systems, it seems, inhabit a world of becoming, but are so uncertain that living beyond the present is hazardous. What matters is that we create adaptable societies, capable of navigating the shoals of uncertainty in positive and open frames of mind.

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Commentary on ‘Quantum Dreaming’

Professor Sorensen invited comments on his Keynote Address. Dr Aidan Kane of the School of Business and Economics at NUI Galway read the paper and provided written comments to which Tony Sorensen responded. Because of the innovative nature of the paper and the thoughtful commentary, the editors decided, with both authors’ permission, to include the comments and responses in the published proceedings. The points at which Tony Sorensen responded are numbered in Aidan Kane’s text and the former’s responses follow.

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The author opens this “thought-piece” engagingly and modestly, admitting vulnerability to ridicule for the views set out. Ridicule would not be fair for any such honest contribution, and the manifesto of challenging conventional thinking in the light of inadequacies is admirable, but the piece ultimately does not make a convincing case for its strong claims. More than that, in my view, the piece really moves too fast from advocating analogical thinking to a particular set of analogies (although the limits imposed by permitted wordage may have some influence here). Three elements merit further reflection: one conceptual; the second, a set of specific problems of analogy with substantive proposals put forward; and, third, a missed empirical opportunity.

The conceptual weakness is the light treatment in the piece of how, in the social sciences, and economics especially, we do and should use analogies and metaphors. This may seem an unfair assessment, in that a perfectly good set of examples of “borrowings from science” is set out around pages 1–2. However, this is adduced by way of a purported answer to a question of the ‘relevance’ of those borrowings. It establishes that the practice is widespread, but it leaves as implicitly understood that natural/physical analogies are fruitful in general, even if in particular cases we now need merely to move further on, as the piece puts it on page 2, because we are “playing catch-up” to the presumed idealised standard of enquiry. A similar line of thought is evident, under “Sources of Uncertainty”, where apart from advocating this practice for all the good reasons, there is a surprisingly cynical tone to the argument that this “helps sell our findings as we bask in the reflected glory of rigorous and highly respected scientific processes” and the nearby ambiguous observation that geographers are “part of the game”. (1) Do geographers want to be part of that game? Does that avowed aim not risk uncritically accepting the argument that the methods of the natural sciences are appropriate to, even ideal for, the social sciences, as this passage seems to imply? Surely not, or at least not without a pause or two! (2)

These borrowings from ‘real science’ have indeed been deeply embedded in social sciences and economics especially, and Mirowski (1988, 1989) in particular showed how deep and unacknowledged the borrowings have been in his view, without serious understanding of the sources and with deleterious consequences for classical and neoclassical economics. There is a diverse tradition which regards the practice as profoundly misguided, reserving the term ‘scientism’ for the inappropriate application of scientific norms to the understanding of human purpose, perhaps most famously in

Hayekian philosophy, for example von Hayek (1989). (3) Perhaps most importantly, economists have been challenged to think specifically about the logic of their unacknowledged metaphors, their pose as ‘scientists’ and their practices as rhetoricians in a large literature seeded by McCloskey (1983). This is not to say that any piece such as this needs to re-argue a vast methodological and historical debate or, still less, adopt the particular positions specifically cited (doubtless debates have both moved on and fizzled out). But it is surely necessary to have better warrants for the shift in thinking advocated than those advanced or pointed to as the piece stands. (4)

The consequence for the substance of the piece then is that naturally doubts arise as to the salience of some of the key analogies advocated, unless they are intended in the most general way possible. (5) Specifically, the treatment of uncertainty seems to conflate categories in economics long understood as distinct, such as the ‘sheer ignorance’ involved in ‘Knightian uncertainty’, which can confound orthodox analyses, treated equally here with standard classic measurable ‘risk’, which can be assigned probabilities and often traded in markets, and has been handled neatly for decades in canonical models. That either of these uncertainties (certainly not the second) have anything to do with quantum uncertainty in any meaningful sense would need much firmer foundations than are provided to warrant a second thought. (6)

Similarly, that economists have long observed and modelled waves and cycles is too weak a basis on which to look so quickly towards “wave–particle duality” as much more than a linguistic accident. Economic agents may loosely be thought of as ‘particles’, but it is quite a leap to say they are meaningfully also at the same time waves, when the economic waves at issue are not these particles themselves, but aggregations or consequences of their behaviours. It seems a needless complication not robustly motivated in the piece. (7) Equally, adopting a language of ‘superposition’ for the examples cited in the piece frankly seems a pretentious way to dress up a mundane (but true) observation that the same economic object of enquiry may have a range of distinct attributes/characteristics, or can adopt (or may be viewed as adopting) different roles in different contexts (consumer, producer, citizen, scholar). (8) The discussion of ‘entanglement’ (9) in the context discussed appears to be a solution to a non–problem, which the piece comes close to acknowledging, i.e., the ‘problem’ of explaining simultaneous independent discoveries as anything other than a consequence of humans being at some level similar and at some level responding to similar constraints in similar ways. Quantum effects seem distinctly surplus to explanatory requirements in this case also. The discussions of “decoherence”, and of other quantum concepts are of a similar nature. The opening remarks of the piece however modest and honest, would not immunise these later discussions from harsh critical attention in the manner of Sokal and Bricmont (1998).

The piece begins with a promise to focus more than in previous work on rural sustainability. There are intriguing and informed remarks throughout which hint at real policy and analytical questions in rural sustainability that established methods fail to truly encompass, and it is right that foundations are therefore questioned. That argument could probably best be made, ironically enough, by a fine-grained study with empirical content, grounded in a very non–quantum reality.

Author's Response

(1) I was deliberately being cynical because I suspect that, for example, the quantitative revolution in geography deliberately and misleadingly sought in my view to puff up the discipline as a 'clockwork' science. The Marxist 'revolution' from the 1970s onwards attempted the same with political philosophy, and with disastrous results. In this sense, geographers were part of the game ... and so were economists in very similar ways.

(2) In many ways, the natural sciences can be emulated and for good reasons, especially in two ways. First, all scientific theories are regularly subject to thorough testing; and secondly, the physical sciences have probably gone further down the path than geographers or economists into realising complexity and uncertainty: in biology, earth sciences, chemistry and physics. I did pause considerably, but am subsequently convinced that the ways of thinking in the social sciences (and interestingly especially economics) could be improved by the lateral and imaginative thinking often adopted by physical scientists. The handling of the current GFC has greatly been worsened by adherence to improper assumptions and theories by central bankers ... with two exceptions being Ben Bernanke (US) and Glen Stevens (Australia), who have played their financial systems with great psychological finesse.

(3) Mirowski and Hayek are in some senses right – in line with my first comments; but my argument in comment 2 is that science is also often much more subtle than the social sciences in accepting strange perspectives, acknowledging uncertainty (not just in terms of 'we don't know', but also recognising that we cannot know), and recognising gaps in knowledge. Social systems ought to be much more uncertain than the physical sciences given their human decision-making content, but I feel that somehow we make our analyses much too rigid, whereas scientific method would focus much more on the uncertainties – which is what I was trying to do.

(4) In a way, my edifice of massive sources of uncertainty, and not just from quantum mechanics perspectives, attempts to do just this. Indeed, I feel that much of economics is incredibly naïve in its understanding of the real world. Take the current crisis over fraudulent banking – Barclays, others and LIBOR. Although I'm an economic libertarian, I recognise that leading executives of most companies (including banks) have their hands in the financial till. This disastrous state of affairs comes about because of sloppy regulation and woefully insufficient penalties. As any criminologist will tell you, a high chance of detection and stiff penalties do act as a deterrent. In fact, all over the world, banks have got away with murder – except perhaps in Australia where they're heavily supervised and very well run! Supervision/regulation is an integral part of a market system, but this is little acknowledged. Moreover, the big penalty for dud companies is to let them fail and lose shareholder capital, but governments are loathe to let that happen – except perhaps in the odd Lehman type instance. So market systems also intersect with incompetent politicians.

(5) Indeed the case.

(6) Herein lies my view that uncertainties in economics are more extensive and subtle, than conventionally understood. Knightian sheer ignorance can involve situations where data are unavailable or cannot be measured, processes are not understood, and situations have never previously arisen. I am also aware of conventional definitions of risk. However, all my contributing dimensions of uncertainty sit aside from these in many respects, but are real and perhaps need much great recognition in both economic theory and practice. There are many factors for example which should be factored into risk analysis for sake of completeness and which we know are happening– but for which cannot be timed or measured accurately or whose inter-linkages and therefore downstream impacts take time to assess. Some of these in quantum mechanics and other terms can possibly be measured, but the difficulties and costs involved rule them out of analysis. I'd venture to suggest that most risk assessments are inherently flawed and understated!

(7) I take this point– which is really saying that economic waves are compound events involving multiple actors, whereas photons are individual and mostly quite separate particles with a fixed wave pattern and amplitude. However, I'd also argue that compound waves (in particular national or regional economies, or industry sectors, or labour markets, or product/enterprise life cycles) do have asynchronous patterns that may mutually reinforce or destroy or reconfigure each other. And the valid analogy, I think, is that we often know very little about either the form of the waves themselves or their amplitudes, or their mutual interactions, so that policy issues like setting reserve bank discount rates is often little more than guesswork. We do know that the waves themselves project through time, like photons or other particles. I rather like the analogy also because the asynchronous rise and fall of economic quanta makes it doubly difficult to say how well an economy is performing at any one time. It also forces regulatory agencies and businesses alike to make big calls they are often ill-equipped to do – another form of uncertainty.

(8) I think this observation has some validity, but I asked myself whether I'd have thought of it independently rather than as a consequence to deducing propositions by analogy. Again, this is a strong argument for using analogy, i.e. that it broadens the scope of analysis and of our imagination. However, I'd go further and argue (using quantum thinking) that economic quanta can exist simultaneous in two or more forms and that we do not know what use will be made of those quanta until someone makes a decision (analogous to Schrödinger's mind game with the cat).

(9) The reviewer has a point here and I found it more difficult to think of an appropriate economic analogy here than for the other three dimensions. However, I want to make the point in the hope that other readers will supply better analogies.

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The Sustainability of Rural Systems: Global and Local Challenges and Opportunities

The chapters in this volume were among papers presented at the 19th Colloquium of the Commission on the Sustainability of Rural Systems (CSRS) of the International Geographical Union, held at the National University of Ireland Galway. The chapters were peer reviewed. They are organised under four main thematic headings which reflect key research interests of CSRS members: Land Use, Agriculture and Food; Rural Population; Rural Development; Rural Tourism. The chapters are preceded by the text of four keynote lectures. Guy M. Robinson conceptualises agricultural sustainability with reference to local challenges in a global context. Michael Woods invokes the ‘relational politics of the rural’ as a framework for gaining insights into global challenges and responses. Ana Maria de S. M. Bicalho and Lucette Laurens illustrate how local actors exercise agency in responding to contemporary challenges in the very differing environments of Amazonia and the environs of Montpellier in France. The volume ends with the text of a fifth keynote lecture by Tony Sorensen who encourages geographers to expand their theoretical frameworks in studying the sustainability of rural systems.

Editors

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