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Unfolding Webs: The Dynamics of Regional Rural Development

Jan Douwe van der Ploeg & Terry Marsden (eds)

ಾತಿ Van Gorcum

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Preface: Exploring the Rural Web

Terry Marsden and Jan Douwe van der Ploeg

Just as social capital cannot be created through direct investments, as Tisenkopfs *et al.* argue in this book, rural development cannot be induced directly by either political interventions or the associated financial flows. Rather, rural development is grounded in, and driven by, what we refer to throughout this book as the *rural web*. This is a complex set of internally and externally generated interrelationships that shape the relative attractiveness of rural spaces, economically, socially, culturally and environmentally.

Rural development stems from combining a wide range of different and often refigured rural resources in new ways, as a result of which they flow into a set of new activities, interactions, transactions and networks. The effects of this become more evident when these activities, transactions, and relationships start to mutually reinforce each other. This is when synergy is created, especially when new town-countryside relations emerge that support and reproduce these newly emerging activities, relations, and internal and external networks. In this sense rural development, whilst characterized by distinctive features and processes, cannot be seen in isolation from the wider regional context in which it occurs. It is an embedded and dynamic feature of regionally differentiated development.

The contributions in this volume help expand our understanding, both conceptually and empirically, of these creative patterns which shape resources, activities, transactions and networks and which build new relationships between them. In so doing they result in a range of positive externalities which can further strengthen these patterns. Throughout the book these patterns are referred to as rural webs. It is argued that rural development processes occur as a result of the continuous unfolding of rural webs in and through different regional spaces. They are not simply a direct outcome of, or response to, policy interventions. This is not to understate the relevance of the latter - the point is that such interventions should be informed and shaped by the specificities of the web. When rural development policies aim to strengthen the rural web, their impact

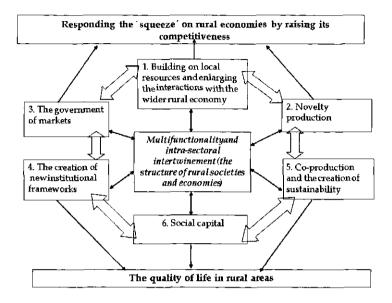
in (indirectly) facilitating and supporting rural development can be considerable.

The contributions to this book have been developed in the context of the ETUDE programme, currently being conducted (in the period 2007-2009) within the 6th Framework of the European Union. This programme aims at 'Enlarging The Understanding of rural Development in Europe' (ETUDE). Scholars from six European countries, all actively involved in rural development processes, have been engaged in a series of 'études': interpreting and analyzing a wide range of rural development experiences, at different levels, in order to conceptually grasp the underlying complexities, similarities and dissimilarities which make each and every experience unique. Previous European research programmes on rural development¹ were also revisited. Thus, the common and the exceptional, the old and the new, became pathways for understanding the 'music' that is currently being composed and played out in Europe's rural regions. Often this music has fallen on deaf ears, due to conventional, sectoral, approaches to rural development. What is needed, as we outline in this volume, is a new theory of rural development that integrates social and spatial approaches; a theory that enables scholars, policy-makers and practitioners to fully appreciate the rich and manifold expressions of differentiated rural development. The researchers have sought to embed their findings within general theories of social science, thus seeking to provide a maximum of transparency and accessibility.

Chapter 1 offers a general discussion of the rural web, whilst also paying attention to changing town-countryside relations, the large heterogeneity of rural regions and to the actual and potential meaning and significance of rural and regional development processes. This chapter argues that rural webs are multidimensional, consisting of some key conceptual building blocks: of which endogeneity, novelty production, sustainability, social capital, institutional arrangements and the governance of markets are the key dimensions (see Figure). These building blocks are seen and located in the dynamic context of 'responses to the squeeze on rural economies through raising competitiveness' and attempts to generally improve the quality of life and sustainability of rural livelihoods.

The following six chapters (2 to 7) discuss each of these dimensions in turn and also pay considerable attention to how they relate to, and translate into, the others. These chapters can equally be read as a critical review of the relevant literature concerning each dimension.

¹ These are (following the normally used acronyms): DORA, RUREMPLEO, CORASON, SINER-GI, COFAMI, MULTAGRI, SUS-CHAIN, TRUC, CAMAR and IMPACT. Much use was also made of the NWO funded AGRINOVEM programand Welfare Quality program funded by the Italian Ministry of Agriculture.



Empirical examples have been included to illustrate the theoretical arguments. Chapter 8 ties together the different lines of argumentation into a new synthesis. The central keywords and concepts here are complexity, networks, coherence and territorial capital (the integrated whole of resources needed for rural development).

Chapter 9 presents the main results of the first systematic application of the rural web model to a wide range of highly divergent empirical cases, drawn from different rural regions of Europe. It shows that the rural development processes that European rural regions are currently undergoing are underpinned by a range of different rural webs, each with its own dynamics. The chapter shows, in short, that rural development occurs as the unfolding of the rural web. Chapter 10 focuses specifically on the role played by policies for rural development (at multiple levels) in the cases analyzed in the previous chapter.

In the final chapter we present a critical reflection on the different aspects and outcomes of our conceptualization of the rural web, and our understanding of rural development more generally.

We are very grateful to Nicholas Parrott (at TextualHealing) for having corrected the texts of contributors who are non-native language English speakers (not in itself a disadvantage, we believe) and to Ans van der Lande for having copy-edited this volume.

1 Towards a Framework for Understanding Regional Rural Development

Jan Douwe van der Ploeg, Rudolf van Broekhuizen, Gianluca Brunori, Roberta Sonnino, Karlheinz Knickel, Talis Tisenkopfs and Henk Oostindie¹

In the year 2000 a multidisciplinary team of social scientists from several European countries argued, in a joint article published in *Sociologia Ruralis* (2000), that rural development basically was *practice without theory* (van der Ploeg *et al.* 2000)². Since then, rural development processes in Europe have gained considerable momentum and resulted in a dazzling array of new practices characterized by new dynamics and unanticipated impacts. Nevertheless, in 2006 the OECD again referred to the need for 'a new research agenda in rural development' (2006:19), implying that the nature, dynamics and heterogeneity of rural development processes, as they unfold in practice, were inadequately expressed in new theoretical frameworks. At the same time, rural development policies have continued to develop at supra-national, national, regional and local levels and, in the social sciences there have been some major shifts (away from earlier and, in retrospect, too limited and inflexible, models) that allow for a better understanding of a rapidly changing world.

At the crossroads of changing practices, policies and theories it is now possible, we believe, to make a substantive step forward. What we aim for, in this collection of papers, is to tie together the many recent and significant achievements in practice, theory and policy in order to outline a comprehensive theory on rural development. The attempt to construct such a theory also corresponds to a call, formulated by the European Commission in its 6th Framework Programme, for an 'analysis of conceptual aspects of sustainable and integrated rural development' (EC 2005:32). Departing from the observation that

'a living countryside is essential for farming, as agricultural activity is essential for a living countryside', this call signals that 'rural development policy is [...] no longer based on agriculture alone. Increased diversification, innovation and value added of products and services, both within and beyond the agricultural sector, are indispensable in order to promote integrated and sustainable rural development' (ibid).

The FP6 document also observes that:

'Rural development policy has been [...] reinforced by CAP reform [which is] characterized by new measures designed to promote a living countryside, to preserve its diversity and to ensure restructuring and the improved competitiveness of the farming sector'.

It therefore proposes that

'a key theme for research, strengthened by this widening of the rural policy area, is the mutual interactions that take place between agriculture, the environment and other aspects, social and economic, of the wider rural development processes' (ibid.).

In short, the 6th Framework Programme calls for a reconceptualization of the role of agriculture within the framework of wider rural development processes. This reconceptualization must account for, and simultaneously reflect, the large heterogeneity of Europe's rural regions, thus allowing for adequate inputs into the processes of policy formulation and implementation. At the same time, it must go beyond former sectoral approaches: it is to be interdisciplinary and holistic (*ibid*).

Central to the approach that is to be introduced in this volume are the closely interconnected notions of (1) rural development, (2) the web that underlies and shapes rural development processes and (3) the diversity of rural regions. Rural regions differ in terms of their webs; in turn, the specificity of the web helps to explain the particularity of a rural region and its development trajectory. The web that we refer to is the pattern of interrelations, interactions, exchanges and mutual externalities within rural societies. This pattern embodies and describes the mutual interactions that take place between agriculture, the socio-economic context in which it is embedded and the rural development process(es) within which it is a constituting element. In short: the web interlinks activities, processes, people and resources and, simultaneously, it shapes the ways in which they unfold. A central hypothesis underlying this text is that the development of such a web, contributes to the performance of regional rural economies. We hypothesize that the presence of a smoothly functioning and comprehensive web explains the performance of a regional economy, its comparative advantages, its competitiveness, innovativeness and sustainability, as well as the quality of life that it offers to its people. Important features of such webs are their density, multi-dimensionality, impacts and dynamics.

Rurality and rural development

The rural is the place where the ongoing encounter, interaction and mutual transformation (in short: the co-production) of man and living nature is located. This encounter occurs through a wide range of different practices, which are spatially and temporally bounded. These include,

agriculture, forestry, fishing, hunting, rural tourism, rural sports and living in the countryside³. Through co-production living nature is used. reproduced and transformed into a rich variety of often highly contrasting expressions. Particular landscapes, containing specific land-use and settlement patterns, specific levels of biodiversity, but also particular breeds and food products, are among the many outcomes. Co-production equally shapes and transforms the social - the rural has been characterized, from ancient times onwards, by particular institutions (such as the family enterprise, the centrality of crafts), relations (e.g. particular town-countryside relations), identities and subcultures. Within the framework of the rural both the social and the natural co-evolved in a specific, and often mutually reinforcing, way.

Throughout history (and especially in recent decades), there have been major shifts within the co-production and co-evolution of man and living nature. On the one hand, the composition of the practices that together make up the rural economy has shifted dramatically. While agriculture is. in many areas, a declining activity (at least in quantitative terms), rural tourism, rural housing and rural sports have become, in many places, important new elements of the regional rural economy. This is reflected in the frequently used statement that the rural has changed from being a place of production towards being a place of consumption. Consequently, new frictions have emerged between former, once dominant carriers and relatively new ones: the countryside has become contested.

On the other hand, the interrelations between man and living nature as such have also changed. This is especially true within agriculture. Although far from being a generalized process, in some sectors and in some places, farming has increasingly been separated from living nature. It has become increasingly based on artificial growth factors, and thus ceased to contribute to the reproduction of landscapes, nature and a healthy environment. Instead, agriculture rather became a threat to these amenities.

Rural development is, essentially, about revitalizing and strengthening the rural. Rural development cannot simply be equated to economic growth or development of rural regions (although rural development processes might turn out, at least in some instances, to be important drivers of the latter). Rural development aims to reposition the rural within the wider society, by making the rural more attractive, more accessible, more valuable and more useful for society as a whole (including rural dwellers). Rural development is essentially what the concept literally says: it is development of the rural⁴. It is about the further unfolding (or revitalization) of the amenities (or resources) contained in the rural - amenities that are important to society as a whole.

Rural development is based on natural resources: it reproduces and further develops these resources. Consequently, co-production is crucial to rural development. Through rural development the rural economy, in as far as it is grounded on sustainable use of natural resources, is strengthened. Rural development is not to be equated, in a unilinear way, to the growth of the rural economy. Not all forms of economic growth in the countryside can be defined as rural development. More often than not, indiscriminate forms of the former are highly detrimental to the latter. Only when the use and development of rural resources translates, directly or indirectly, into (new) economic activities and the associated production of Value Added, is there an alignment between rural development and rural economic growth.

Rural development repositions the rural regions (and the elements that constitute them) within society as a whole. This repositioning occurs through elaborating new interlinking mechanisms, new forms of governance and re-patterning the processes, activities and networks within rural regions. Rural development regards all the elements that together make up the rural – especially, though not exclusively, the wide range of activities that together make up co-production – precisely because it is through these activities that the natural and the cultural features of the countryside are shaped and re-shaped.⁵

The historical, social and politico-economic background of, and need for, rural development lies in the complex post war transition of the European countryside. Alongside the emergence of growth poles that contained specialized, intensive and often large scale farming, a widespread process of marginalization occurred that resulted in the creation of new peripheral areas where farming disappeared or was reduced to the delivery of cheap raw materials for the growth poles. A massive rural exodus was followed by new forms of counter-urbanization that equally tended to erode the rural. Environmental pressures grew exponentially nearly everywhere. Within this new and contradictory scenario, farming (as well as several other rural activities as e.g. forestry) increasingly ceased to be the nexus (the liaison) between society and nature. This prompted a new, multifaceted search for rural development, both at the grass-roots and policy levels6. Thus rural development became a new empirical, albeit contingent phenomenon. It reflects the widely felt need to restore the many interrelations between man and living nature (including through reconstituting the farming sector), whilst also representing a many-sided, complex and insecure search for, and construction of, new interrelations between the urban and the rural7. This search interacts with and further strengthens inter and intra regional heterogeneity in Europe.

In this chapter we will first briefly present a typology of rural regions, then proceed to a more extended discussion of the concept of the rural web and then explore, in more detail, the interrelations between diversity and webs.

An introduction to rural diversity

Rural Europe is witnessing a multiple process of regional differentiation that is being driven by a range of different, but often interrelated, influences. Through this (partly ancient, partly new) process of regional differentiation, a spatial diversity is emerging that is characterized by five extreme poles (Figure 1.1) and one interlinked, somewhat floating, category. These are:

- a Specialized agricultural areas, where farming shows high degrees of specialization, intensity and scale and where other economic sectors are only weakly connected to agriculture. Flevoland in The Netherlands and/or the Paris Basin in France might be taken as an emblem of this type
- b Peripheral areas: These are regions where farming never played a major role (as in the extended Finnish woodlands). This category also includes areas where agriculture was once significant, but is currently in decline. In the most extreme examples, these are areas where the decline of agriculture contributes to depopulation and/or deprivation. This latter type is exemplified by vast areas of the Italian Mezzogiorno and large parts of Eastern Europe.
- c New rural areas8, where agriculture is developing along the lines of multifunctionality, and is increasingly intertwined with the regional economy and society, thereby contributing to regional qualities (as biodiversity, landscape, the supply of services, quality of life, energy production, etc). In these areas multifunctionality is often articulated at the level of the enterprise and the multi-product enterprise is a distinctive feature of these regions. *Tuscany* is a telling example here.
- d Segmented areas, where alongside specialized agriculture other, equally specialized sectors (e.g. housing, tourism, and nature) are emerging. In these areas multifunctionality at the level of enterprises is lacking. Instead, the region as a whole offers a broader range of juxtaposed services and goods. Multifunctional land-use (at the regional level) is the distinctive feature. The Italian Pianura Padana, the Po Valley, is a striking example.
- e New suburbia, where agriculture is declining and where new, often dispersed, settlement patterns are emerging, in which commuting provides a major link with the urban economies. The surroundings of big cities such as Dublin, Rome and Madrid are good examples.

f A final category is 'dreamland'. Dreamland falls outside the classification elaborated so far. It reflects additional and highly contingent tendencies. It is the place where, indeed, dreams are bundled. These might be stable places, but mostly they are places whose popularity waxes and wanes. A good illustration of dreamland can be found along the Latvian Coast. On a strip of land (between the sea and the woods of the hinterland) there are many leisure houses (especially for the rich). In the summer this strip of dreamland is a lively place, full of activity and luxury. In the winter it is abandoned, empty and desolate. Dreamland can very well overlap with parts of the types discussed above.

Figure 1.1 A preliminary typology of rural regions

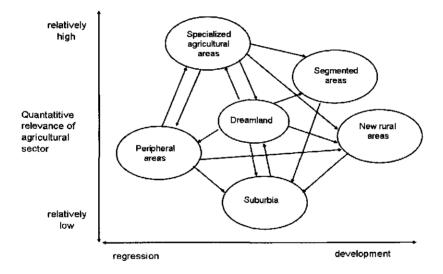


Figure 1.1 illustrates these ideal types. In reality these idealized types will include aspects of other types too: a specialized agricultural area, for instance, might contain *some* multifunctional enterprises, some housing and some spots dedicated to nature, although specialized farming will remain the core activity. Figure 1.1 shows that the rural is moulded (or: patterned) in mutually contrasting ways. Consequently, rurality takes different forms, which are appreciated in different ways by different groups within society at large. Hence, Figure 1.1 also summarizes different patterns of interaction between the rural and the urban.

The arrows in Figure 1.1 refer to possible processes of transition. Specialized agricultural areas, for instance, might change into segmented

areas, new rural areas or peripheral areas. Examples of such transitional trajectories abound. However, it might also be possible that, due to the rise of bio-fuel production, the barren lands of peripheral areas are turned into new spaces of production of energy; then they are reconstituted (again) into specialized agricultural areas. And so on and so forth.

A brief introduction to the notion of rural web and its constituent dimensions

The network that patterns regional rural societies and economies (i.e. the web) is multilayered. Empirically, a rural web is composed by the interrelations, interactions, encounters and mutualities that exist between actors, resources, activities (be they social, economic, political or cultural), sectors and places within rural areas. The more interrelations, connections, encounters and combinations there are, the higher the density of the web. The rural web is, to echo a well known concept in social sciences, the more or less coherent whole of the actor-networks that exist within the rural. The web, i.e. the conglomerate of actor-networks, is multilevel; it covers the local and the regional and this, in turn, influences the interlinkages with higher levels of aggregation. The stronger these interlinkages, the more extended the web is, as a whole. Rural webs involve many actors, institutions, enterprises, state agencies and social movements. They are, in short, also multi-actor. When comparing these networks, one finds great heterogeneity: they differ considerably from one region to another. The morphology of rural webs shows considerable variation, as we will demonstrate in Chapter 9 of this volume. Equally, such networks are not fixed; they can and do evolve over time. They are dynamic. Webs might support (translate into) the strength(s) of regional rural economies and societies, but they might also reflect the overall weakness(es) of particular rural regions. Webs will contrast greatly and there will be notable differences in their dimensions (discussed below). Rural development implies the evolution of webs, which can, at least in part, be inspired by goal-oriented interventions and adaptations. To extend the analogy, there are not only webs, but also spiders.

At the empirical level a rural web is composed by actors, resources, activities, etc. and especially by the interrelations between them. From a theoretical point of view, this same web emerges as the intersection of several dimensions. We will distinguish and elaborate six dimensions, each of which highlights particular features of the web.

Figure 1.2 outlines these dimensions. They are derived from a review of available attempts at theorizing rural development processes as well as from the general literature on development (these reviews are reported in

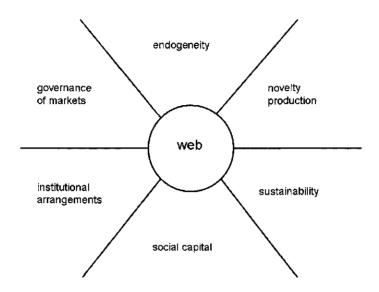
the following chapters)⁹. The dimensions included in Figure 1.2 are also based on ongoing discussions about rural development processes and policies – discussions that are currently taking place everywhere in Europe.

It is important to stress that, although these dimensions might readily be distinguished from each other (at least theoretically), they cannot be separated from each other. In practice they are almost always intertwined – albeit in highly variable ways. A multidimensional web cannot be broken down into separate segments, each corresponding to a particular dimension. The interrelations, interactions, exchanges, positive externalities, etc. – in short: the web – are expressed simultaneously across all dimensions (in positive, neutral and/or negative ways).

It is also important to stress that the concept of web is *not* limited to the agricultural sector. It integrates all the possible elements that share the same geographical space: small and medium sized manufacturing firms, local tourist-oriented clusters of services, entrepreneurs in the building industry, cultural associations, regional and local political institutions, etc. It is only when this wider set of interdependencies, interactions and the implied synergies and externalities are taken into account that the notion of web becomes meaningful. Agriculture might play an important role within such a web or it might be marginal or even absent. This can only be assessed through empirical research. Finally, it should be noted that we are not dealing here with 'formal' dimensions (e.g. the economic, the social, the political), but with substantive ones that aim to identify the underlying patterns that explain the strength of rural regions and associated rural development processes.

Endogeneity refers to the degree to which a regional economy is grounded on regionally available (and regionally controlled) resources. The concept of endogeneity makes no claim to 'exclusivity' in the sense that regional economies are solely based on regional (and local) resources. The concept refers to the balance of endogenous and exogenous resources and the control exerted over that balance (i.e. whether regionally or externallybased) and to the destination and use of the produced wealth (i.e. within the region or channelled to other locations). The level of endogeneity is not given or fixed but can be improved (in different ways and directions) or can deteriorate. Endogeneity refers, in a way, to rootedness: to the degree to which a regional economy is grounded on regionally specific resources and, simultaneously, it develops them. More generally: endogeneity refers to the relevance of space and to the capacity to organize, use and develop it. We hypothesize that the more endogeneity is developed, the higher the competitive advantage of the region concerned will be.





The notion of endogeneity does not only refer to material resources. The concept equally (if not especially) refers to social resources, to local, intangible assets such as entrepreneurial and civic culture, patterns of cooperation between economic and social agents and institutional quality. Such 'social' resources can be the carriers that bring uniqueness and distinction to rural economies (as will be spelled out in Chapter 3). Such features might in turn pave the way for a broad vision of endogeneity that not only refers to products, but also to production and commercialization processes especially. Thus, the intertwinement of social and material resources might produce synergistic effects that otherwise would be missing.

Novelty production refers to the capacity, within the region, to continuously improve processes of production, products, patterns of cooperation, etc. Novelties are crucial. They provide new insights, practices, artefacts, and/or combinations (of resources, of technological procedures, of different bodies of knowledge) that enable specific constellations (a process of production, a network, the integration of two different activities, etc) to function better. Novelties are, at least initially, not elaborated in terms of codified (or scientific) knowledge.

'Novelties are located on the borderline that separates the known from the unknown. A novelty is something new [...]. At the same time, [they] are, as yet, not fully understood. They are deviations from the rule. They do not correspond to knowledge accumulated so far – they defy, as it were, conventional understanding. Novelties go beyond existing and explained regularities' (Wiskerke and van der Ploeg 2004).

Novelty production is strongly associated with contextual knowledge (and therefore is unique to a specific region)¹⁰ and, at the same time, it can strengthen the dynamism and competitiveness of rural regions.

Sustainability has been conceptualized in a variety of ways and it is impossible to find a single unifying definition. Nonetheless, the notion of sustainability as the existence of the social and ecological conditions necessary to support human life at a certain level of well being through future generations (Earth Council 1994) is generally accepted. Through sustainable development

'The often competing needs of economy, society and nature can be met [and aligned], with special attention to the requirements of economic growth, social justice, ecological protection and inter-generational equity' (Kitchen and Marsden 2006:11; Huber 2000:270).

Chapter 2 focuses on sustainable rural development and argues that

'Through sustainable rural development new sources of income are currently being mobilized to augment otherwise stagnating agrarian incomes. Rural development practices have also facilitated the elaboration and implementation of new, innovative methods to combat increasing costs. In short, sustainable rural development reconstitutes the eroded economic base of both the rural economy and the farm enterprise'.

Social capital is understood, in this volume, as the ability to get things done collectively. Social capital is a co-operative way of getting things done and is embodied in the ability of individuals, groups, organizations and institutions to engage in networks, to co-operate, to employ and use social relations for a common purpose and benefit. Thus, social capital contributes to achieving goals on the basis of relationships that exist between different actors, be they individuals, groups, firms and organizations.

Institutional arrangements can, in a more generic perspective, be understood as structures and mechanisms of social configuration and cooperation. Institutions are most commonly understood as sets of regulations, laws, norms or traditions that are shaped through human interactions and that often are manifested in an organizational structure (Bowles 1998, Diaz-Bone 2006, Fürst 2001a and b). Institutions can also be seen as social constructions, artefacts of a particular time, culture and society, produced by collective human choice. They emerge, develop and function in a pattern of social self-organization, which goes beyond the conscious intentions of the individuals involved. In terms of rural

development processes, institutions have the task of solving coordination problems and supporting cooperation. They can consist of legal frameworks that allocate specific rights to a certain actor or they can consist of values that, to a certain extent, regulate the actions of organizations/actors. A key question is which institutional arrangements provide effective incentives for building trust and facilitating collective action (Gatzweiler 2003).

The last dimension, market governance, refers to the institutional capacity to control and strengthen markets and to construct new ones. This is related to the way in which specific supply chains are organized, how the total realized value is shared (between actors but also spatially) and how the potential benefits of collective action are delivered (Saccomandi 1998).

We do not intend to use the concept of web as yet another structuralist interpretation of regional and/or rural development. The web, as outlined in Figure 1.2, refers to the dimensions through which human agency is expressed; these summarize, as it were, the many fields of activity in which human actors operate and within which they actively construct (or fail to construct) sustainability, governance, novelties, etc. The web, as an analytical tool, offers an instrument to assess the effectiveness and comprehensiveness of actors' activities in successful constructing development trajectories that can restore the rural.

Towards empirical analysis

As reported in Chapter 9 of this book, the ETUDE programme has carefully documented, described and analyzed 63 empirical expressions of rural development in order to explore the wide variety of rural webs and to 'test and 'load' the theoretical model outlined in Figure 1.2. The 63 cases cover nearly all the countries of the EU and include successful rural development experiences as well as aborted, failed or partially failed ones. Some of the cases were almost exclusively agrarian, while others are not related with agriculture at all. Most cases, however, embrace both the non-agrarian and the agrarian side of the equation and often the interactions and the synergies between the two is a decisive feature.

Without pre-empting the detailed discussion entailed in Chapter 9 we will present here some of the general methodological (and theoretically relevant) findings of this exercise. Firstly, it turns out that the six dimensions (summarized in Figure 1.2) are time and again identifiable in all the examples of rural development. Whatever the specific range of activities, practices, processes, interrelations and mutualities, the six dimensions emerge - separately and as an integrated, mutually reinforcing whole - as relevant and exhaustive. Together, they allow for a comprehensive description, representation and understanding of the constellations explored. This applies to agrarian and non-agrarian cases, to women's groups and the activities of new rural dwellers; to energy production and newly emerging rural co-operatives that try to link the production and consumption of food along new, short and sustainable circuits. The model as a whole also helps to identify missing links, e.g. a lack of social capital in the building of new regional development trajectories. It helps, technically speaking, to elaborate an integral, comprehensive and exhaustive 'SWOT' type of analysis for highly differing situations

Secondly, the application of the 'web model' shows that actions, plans, and processes that unfold along one dimension (whichever it is) only become successful in terms of rural development, if and when they translate (and link) to other dimensions (that is, if and when they go beyond the limited nature of the current project approach). Rural development proceeds as an unfolding and further strengthening of the rural web. It materializes as a re-patterning of (previously existing) relations, routines, lacunae, sets of often negative externalities, products, services and institutions that positively influences all the dimensions within the web.

Finally, the application of the analytical model also allows for a clear diagnosis of those settings where rural development is not materializing in one way or another. This is the case in e.g. the Wolden, a rural area in The Netherlands, where the connections required for rural development are not being created. In a similar way, Spanish researchers (Arnalte and Ortiz 2004; Moreno et al. 2004) have highlighted how the implementation of rural development strategies based on multifunctionality have been frustrated. They showed that direct payments and agro-environmental payments to large, cereal-producing and sparsely populated areas have failed to revitalize the countryside. Landowners and professional farmers in these areas are taking advantage of the improved transport facilities and the low labour requirements of these cereal crops, to live in the cities, thus becoming 'inverse' commuters who divert direct and agroenvironmental payments towards the cities. This led the researchers to question the suitability of agriculture as the main channel for rural development in such areas where farm income support and agricultural modernization are increasingly disassociated from rural vitality. 11

Taken together, the six dimensions describe the regionally available social and natural resources and the specific ways in which these are combined and developed. Put differently: the web is not only about *flows* (entailed in the many interactions, interrelations, encounters, etc). It simultaneously refers to the regionally available *stocks* (or *funds* or *assets*). Thus, the web summarizes and characterizes the regionally available natural and social

resources and, especially, their development and the ways in which they interlink.

Although social and natural resources evidently cannot be separated (their combination into specific socio-material constellations is central to the notion of a web), three of these dimensions emphasize the 'natural' side of the equation. These are endogeneity, novelty production and sustainability. Endogeneity specifies the origin of resources, particularly natural ones; novelty production refers to the capacity to unfold these resources further; and sustainability locates their use along the time dimension by illustrating whether or not they are being reproduced and reconstituted.

Social capital clearly relates to some major aspects of social resources: the way in which they are mobilized, interlinked and produce linkages through which they are strengthened. Institutional arrangements refer to the way in which social and natural resources are governed and shaped into specific socio-material constellations. Finally, the governance of markets influences the specific ways in which products from different socio-material constellations are marketed and valorized.

As discussed in several of the following chapters, the notion of 'capital'12 might be used to further specify these dimensions and their interrelations and intertwinement. Thus, endogeneity and sustainability (and indirectly novelty production) refer to the ecological capital available in the region. Novelty production also refers to (one aspect of) human capital. Social capital and institutional arrangements refer to social capital in the broad sense of the term. Economic capital is found in endogeneity, sustainability and, especially, in the governance of markets, Finally, cultural capital (the capacity to produce distinction) might reside in all these dimensions but especially in the governance of markets through which the regional economy is articulated to wider society via, for example, distinctive products (that command a premium price).

Our analysis proposes that these different forms of capital can be summarized in the broad notion of territorial capital. This refers to the amount and intertwinement of different forms of capital (or different resources) entailed in, mobilized and actively used in (and reproduced by) the regional economy and society. This composite territorial capital provides the means for the (re-) production of wealth, competitiveness, innovation sustainability and the quality of life. Such an approach is in line, we believe, with the perceptive characterization of 'territory' recently developed by Roberto Camagni (2007). Territory, he argues, is

'a system of localized proximity relationships which constitute a 'capital' - of a social, psychological and political nature - in that they enhance the static

and dynamic productivity of local factors' [and also] 'a system of rules and practices defining a local governance model'.

Following this line of reasoning we should also highlight the inter linkages between territorial capital and the rural web in which the latter defines the composition, richness, extension, value and reproduction of the former. Indirectly, the web also underpins the productivity of territorial capital, i.e. its contribution to the competitiveness of the regional economy and its contribution to the quality of life.

The 'web' and regional diversity

We consider the web (and the dimensions that converge in it) to be first of all an *analytical tool*. As such, it allows for a thorough exploration of the empirical characteristics of specific localities, wider regional settings and the development initiatives and processes within them. Application of this analytical tool will reveal large differences between regions, some characterized by a dense web that links sectors, institutions, people, expectations and processes together, while other regions will lack, or have a less widely developed web. The analysis will expose different degrees of e.g. endogeneity, institutional arrangements and sustainability, and especially the way in which these, and the mechanisms through which they operate, impact upon each other.

The different types of rural spaces illustrated in Figure 1.1 will show webs whose size and structure radically diverge. They also will have different co-ordinates, i.e. different points of reference that orient and order their development trajectories. Typical co-ordinates for specialized agricultural areas are the world markets for agricultural commodities, the rules introduced by agribusiness and large retailers, levels of expected competitiveness, etc. On the other hand, the proximity of large cities and the demands that they place upon the countryside are significant co-ordinates for new rural areas, segmented areas and suburbia. More specifically, specialized agriculture areas and marginal areas are of *little relevance* for large urban areas and their populations in that the actornetworks entailed in farming will have little relation with, or impact upon, the actor-networks within the cities.

In the same way, new suburbia and forms of dreamland might mainly be seen as *overflows* for metropolitan areas (especially for better off people), while segmented areas and new rural areas emerge as the new *spaces of consumption* (especially urban consumption). Here, urban actor-networks and rural ones increasingly flow together; fusing into one and the same rural web. This is reflected in new initiatives in large metropolitan areas (e.g. London and more recently Amsterdam) that design programmes that

explicitly aim at a new intertwinement of town and countryside. More generally speaking, national and regional policies can play an important role in defining the co-ordinates that strongly influence whether rural areas are moving towards becoming suburbia, segmented areas or new rural areas.

The dimensions that make up the different webs will be expressed in contrasting ways in different types of regions. New rural areas, for example, will probably have a far higher 'score' in terms of endogeneity and novelty production than other regional settings. Equally we think that differently patterned regions will show different development trajectories, some of which will emerge as 'rural development trajectories', while others will divert considerably from this trajectory.

Applying the concept of the web (and the dimensions that converge in it) to different regions (those in Figure 1.1), will expose differently patterned webs. In this sense, the concept of the web is an analytical tool for empirical analysis. It does not represent a normative stance. Its application to the wide regional diversity that exists in rural Europe and to the widely diverging development trajectories that are currently unfolding reflects, and helps to highlight and explain, the many differences. It does not imply a normative evaluation and/or hierarchization. We expect that the empirically different webs will help to explain the sources and dynamics of rural development, especially (though not exclusively) within the new rural areas.

We anticipate that empirical analysis will also show that the significance, role, value and impact of agricultural sectors will differ considerably between different areas and within and through the particular development trajectories that characterize these areas. In nearly all rural economies, the largest share of economic activity nowadays is in services, manufacturing and housing. Applying conventional analysis leads to the conclusion that the role of farming is secondary or even marginal. However, when analyzed in terms of its contribution to the maintenance (and further development) of territorial capital (or more specifically: its contribution to the development of a regional web), farming might turn out to be - at least in some territories and in some development trajectories - strategic. Although the economic and social fabric of European rural areas is no longer centred on farming, the latter might remain a crucial prerequisite for the former. It might equally be a driver for an overall strengthening of the competitiveness of rural areas and their quality of life (Ventura, Milone and van der Ploeg 2008). Again: whether or not this is the case, and in which areas and within which trajectories, is open to empirical research.

Although a normative stance is – deliberately – avoided here, researchers should be aware that the spatial constellations illustrated in Figure 1.1 are far from neutral. They are all associated with, and reflect, specific interests. This applies even in marginal areas that embody, for example, environmental interests and the possibility of a return to 'paradise untouched' (where bears and wolves might be reintroduced or reappear). These interests translate into particular and mutually contrasting, if not competing, narratives or discourses (Frouws 1998). Rural development is one such narrative. We are very aware that it competes with other narratives, such as that of professional farmers' unions, who argue the case for specialized production areas where farming should be unimpeded by other (e.g. urban) interests and claims.

Reconceptualizing the rural

For many decades rural regions have been understood (and managed) on the basis of the classical urban-rural continuum. In this view the urban and the rural are polar opposites along one singular dimension in which more urban translates into less rural and *vice versa*. This is still echoed in OECD categories as urban, peri-urban, peri-rural, rural, and deeply rural – categories that are based largely on demographic criteria with a high population density representing the urban side of the equation and a low density the rural side. The limitations of this approach are many and have been widely discussed in the literature.

We believe that a discussion on rural development, webs and the diversity of rural spaces allows for a different approach, which does not assume that the rural and the urban are mutually exclusive. The simple divide between urban and rural no longer fits with the spatial, cultural, economic and social characteristics of 21st Century Europe. There are as many interrelations between the two as separations. Town and countryside are intimately linked and interdependent – to the extent that urbanization is currently creating the need for more rurality in order to maintain a balanced society and an acceptable quality of life (as argued by e.g. the Dutch Council for the Rural Areas – RLG 1996).

What is increasingly *distinctive* is, in the first place, that the rural is no longer the antipode of the city, but above all a multi-facetted *prerequisite*. Secondly, the reconceptualization of the rural needs to be grounded in the recognition that town-countryside relations are, especially in the current epoch, far from uniform. The sets of interrelations that link the urban with the rural and that co-constitute both the former and the latter are highly heterogeneous. Hence, rural regions should be conceptualized and

delineated in terms of, and according to, the specific interdependencies that link them to urban concentrations.

As argued before, certain rural spaces might be of relatively little interest for (and to) the cities. These spaces will include marginalizing areas and, increasingly, specialized agricultural areas. In an era of globalization, food can come from anywhere. There is no longer a need to have 'nearby' areas to provide food for the cities (as assumed in the classical Von Thünen model)13. Equally farmers operating in specialized agricultural areas tend to minimize their direct contacts with urban people (partly due to hygiene regulations but also to avoid indirect spatial limitations). Maybe the notion of reservoir is appropriate here. These are 'fenced-off areas' where contacts with the outside are avoided, and where both inflows and outflows are strictly controlled. In this sense specialized agricultural areas are the 'reservoirs' where food ingredients come from, Peripheral areas are - especially at the level of the EU as a whole - the reservoirs from which a cheap labour force originates (and from which, in the future, the biomass required for energy might originate). If none of these functions are met, these spaces become forgotten places. Nobody will care about them (apart from the few remaining inhabitants).

Other rural areas emerge as the loci that offer the space that is increasingly lacking within cities. These areas are the newly emerging and rapidly expanding areas where suburbanization materializes. Suburbia offer space, some green, safety, quietness (even, sometimes, a terribly boring quietness). In short, they are the opposite of overcrowded, noisy, dirty, full, unsafe, (etc.) cities. Suburbia might contain some pockets of (declining) agriculture, but its presence is more decorative: ensuring and reproducing the desired green areas. Dreamland also offers space; in this case literally for dreams. And since most people hardly need farming for dreaming, agriculture is mostly absent: if not materially, than at least symbolically.

A third set of interrelations critically assumes the existence of an agriculture that actively articulates with the new needs that are emerging from the cities: high quality products, regional products that carry an identity, care facilities, energy production, attractive landscapes, attractive expressions of nature and biodiversity, possibilities for housing, recreational facilities, etc. In new rural areas, considerable parts of agriculture are developing into new forms of multifunctional farming (Knickel et al. 2004) that respond to this broad range of new needs and are simultaneously transforming themselves into new economic pillars for the regional economy. Thus, these new rural areas are the spaces in which new urban needs and new rural supplies are interacting and simultaneously shaping and reshaping each other. 14 Here, most of all we

find that the 'rural' is being made to blossom again. In this respect it might be argued that the agricultural area called Waterland (an area located North of Amsterdam) is far more rural than e.g. the sparsely populated Finnish Woodlands, precisely because it is valued by many inhabitants of Amsterdam who like to take their leisure there.

Finally, the segmented areas represent another set of interrelations for which *mediation* is probably the keyword. Within these areas (mostly through tight government planning and control) specialized, large scale and intensive farming is still promoted, while urban demands are simultaneously addressed. Technically this is done through segmentation. Areas are zoned: one zone for farming, one for leisure, another for luxury housing, yet another for nature, probably an nth strip for water retention, etc. The success of such ordering critically depends upon the number of claims, the availability of space and the mediation of the different interests.

In short: the different ideal-type areas that have been proposed (see again Figure 1.1) all present a unique set of typical town-countryside relations. According to these relations, the rural is patterned differently and societal needs are met in different ways. Together with this goes a differently positioned and differently structured agricultural sector. Depending on the area and web, the role of agriculture in rural development processes will differ significantly.

In the foregoing discussion reference was made to the classical Von Thünen model that explicitly linked farming and territory (by presenting concentric areas around large centres of consumption: with vegetable production and dairy farming located in the inner circles, grain production and meat production in the outer circles). Such a geographical ordering no longer applies when we have peppers coming from Africa and asparaguses from Peru and China. However, when attention shifts towards the public goods provided by agriculture (landscape, biodiversity, accessibility), an adapted version of the Von Thünen model still seems to be applicable. Landscapes and attractive natural values are, as the modern jargon goes, definitively non-importables. Their location matters and so does the one of agriculture in as far as it actively provides such nonimportables. The same applies to the wide array of new (private) products and services that are provided by multifunctional farm enterprises to meet the new societal demands emerging from the cities (e.g. recreational facilities, care and regional specialties). The demand and supply of these new public and private goods and services are increasingly (re-) defining and materially (re-)constituting such regions, just as the demand and supply of other, classical commodities (e.g. potatoes, meat, asparagus, etc) that, at least partly, define other regions. Cities and metropolises

articulate different sets of interrelations with rural regions and help shape the typology of regions (Figure 1.1). Some area types are located around cities or historically are recognized as attractive areas; others are not locationally specific and can therefore be 'mobile'. 15

Rural regions reconsidered

While the notion of the region (and consequently, of regional economy and regional society) might appear to be self evident, we think that it is important to discuss the conceptual complexities and the strategic importance of this notion. Nowadays, any reference to the region (a placebounded constellation) necessarily and unavoidably intersects with the debate on the changing interrelations of the local and the global and the ways in which these are to be conceptualized. By putting the region centre-stage, we argue that the region is far from being a non place. It is not just an accidental (and easily changeable) set of co-ordinates where globally and freely flowing commodities are converted in other flows that subsequently can go anywhere else (or nowhere). A region is definitely not a non place (although, admittedly, some regions are increasingly being converted into such non places). Regions are far more than a more or less accidental location through which different flows do (or do not) go through. As argued before, the region is the location of specific funds (the regionally available materials and social resources or forms of capital), which in turn generate and receive specific flows. This territorial capital and the associated flows are bounded to the region - in the best of all cases, they even carry the 'logo' of the region. Funds and flows within the region are combined in particular and sometimes dynamically evolving ways¹⁶ that may be both sustainable and productive and create a distinctive performance. In short, regions are (or might be) an important counterpoint to a rapidly globalizing world.

Secondly, we emphasize that we are talking about rural regions here. As indicated before, the rural is often defined in a negative sense, i.e. as the opposite of the urban (with the rural thus figuring as the non-urban). We believe that a discussion on rural development critically needs a positive definition. Therefore we will introduce here three key features of the rural. These features help both to describe the rural and are also crucial for any subsequent discussion of the dimensions of rural webs.

a As discussed before, the rural is the place of co-production between the social and the natural, between man and living nature. Co-production embraces many forms and activities, such as agriculture, forestry, hunting and fishing, but also a range of other and new activities. Examples of the former are bird-watching, outdoor walking, biking,

playing golf, *ljipaai sykje* (gathering the eggs of the lapwing – even though it is formally forbidden), housing, spending the weekend in a little country house or caravan, etc. The rural is, in summary, *also* a place that is increasingly consumed by the cities and metropolises. If the rural was not there, it would, for sure, be invented and created from within the cities. Examples of *newly invented* forms of coproduction include agro-tourism, care farms and new forms of energy production.¹⁷

- b The rural is characterized, in relative terms, by a predominance of small and medium enterprises (SMEs) that sometimes group together in clusters or districts, which, in turn can offer a range of positive externalities (Noronha Vaz, Morgan and Nijkamp 2006). The presence of many SMEs relates, at least partly, to the nature and dynamics of coproduction and the associated labour processes. It is also an expression (at least partly) of the search for productive employment in one's own region and often translates into considerable regional dynamism and innovativeness.
- c A third aspect, partly related to the previous two, needs to be considered: Within rural areas, forms and mechanisms of non-commodity exchange (that is: socially or institutionally regulated exchange and the non-market regulated use of natural resources) are relatively important. This helps to create a certain resilience vis-à-vis abrupt movements in the markets.

The specificity of these three features will play, we think, an important role in the elaboration of a comprehensive theory of rural development at the regional level. It might be hypothesized, for instance, that the *specific* balances of the formal and informal and of commodity and non commodity circuits implies that the rural might contain more 'space' for experimentation (and novelty production) than urban spaces.

New sources for a theoretical understanding of rural development

At the beginning of this text, reference was made to the 'lack of an adequate theory'. This lacuna was especially felt at the beginning of this century. Now we think that it is possible to outline the contours of a solid theory on rural development. This is due to major developments in social science theories and in the practices and policies of rural development. Together, these provide the sources from which a new, comprehensive theory on rural development can be derived.

At the end of the 20th Century a major shift took place in the social sciences, the components of which had been maturing for several decades.

The essence of this shift (or 'turn' as it is sometimes referred to) is that social life should no longer be understood as being produced by some underlying structure. Rather, the explanation of social life is thought to be encountered within social life itself - not outside of it. Social life is both explanans and explanandum (that which explains and is to be explained): it can only be explained by itself. This essentially non-deterministic approach has several important advantages. It allows us to come to grips with heterogeneity. It also allows for the inclusion of actors and agency within the analysis and it facilitates a reconceptualization of the notion of structure¹⁸. Actor and structure are no longer seen as mutually exclusive entities: structures are multiple, contingent, variable and actor-dependent, just as actors face a range of routines, vested interests, shared expectations, etc., with which they necessarily have to deal, without being completely governed by them.

Although there are many 'steps of translation' through which this general point of view can be applied to specific theorization about rural development processes, the web, as a central category of the latter, clearly reflects the epistemological position summarized above. Without neglecting wider patterns, such as the international division of labour, the performance of regions can only be explained by and through the regions themselves, while differences between regions become strategic for understanding their differential performance. From this perspective, the particular way a specific region is patterned (i.e. its web)¹⁹ is central.

Associated with this point, another cornerstone of our analysis needs to be introduced. Development (as the dynamic flow of situations, patterns, activities and events through time) cannot be understood as the result of one single logic that necessarily unfolds into one trajectory²⁰. There are many different and mutually contrasting development trajectories; each with its own historical roots, mechanics, dynamics and impact. Each trajectory is built on particular resource combinations and embedded in particular patterns. Each trajectory involves particular actors (in particular roles), implies specific interrelations between different levels, follows particular directions, relates with interests and prospects in specific ways and assumes its own conditions and prerequisites. Competing trajectories can be encountered often within one given spatial setting and the interrelations between these and the resultant outcome can provide a complex, and often unstable, interplay.

It follows that regional (rural) development cannot be conceptualized as the (somewhat accelerated or retarded) application (or outcome) of a general set of 'laws' that are assumed to govern the development process. Regional development, although conditioned by the many relations between the region and its wider context, is basically constructed regionally. Here, the web as the pattern of interactions, exchanges, relations, shared experiences and expectations, mutual interdependencies and externalities, emerges as a strategic and theoretically grounded notion. It is within the region that the explanation for a particular performance is to be found and from where the road towards the future is to be constructed. This does not deny the relevance of wider patterns within which the region is embedded; what is crucial is how these wider patterns are perceived, translated, faced, mediated and countered at the regional level.

Other important theoretical advances are also helpful in constructing a renewed and extended understanding of rural development processes. These will be discussed in the following chapters, each of which discusses a particular dimension of the regional web. The concluding chapter on the web (i.e. Chapter 8) notes that, over the last 20 years, rural studies had to stretch beyond several dichotomies that previously acted as constraints. These are: structure/agency, society/space, nature/culture and self/other. Other closely related dichotomies have also paralyzed rural studies for many years (such as e.g. global/local, innovation/novelty, market/non-market relations). The result of these theoretical changes is, as we will argue throughout this book, that regional rural development can now be conceptualized in a completely renewed way.

The many *practices* of rural development encountered throughout Europe provide a second important source for formulating a new approach. Agrarian-based rural development practices are no longer limited to individual projects, as they were ten years ago. They increasingly depart from, and unfold through, wider networks that link many different actors (including both farmers but also many non-agrarian actors), several different levels (the local, the regional) and are articulated on many different dimensions. Initially, the impact of rural development initiatives was most relevant at the level of individual enterprises. However, there is now an increasingly significant impact being felt at the regional level as is amply documented and quantified in van der Ploeg, Long and Banks (2002, especially Chapter 13).

This implies that the region will be the decisive level in forging a new theory on rural development. Rural development increasingly impacts upon the regional level (quality of life, employment levels, increased value added, synergy effects, etc). At the same time, it is within the regional context that rural development emerges as a concrete interest to be defended and strengthened by regional institutions and through regional policies.

Rural development proceeds along different lines. There are endeavours to stimulate the emergence of new enterprises in rural economies, whether new tourist enterprises or new ICT based enterprises. Rural proceeds through development development also the multifunctionality at the level of the enterprise, in which existing enterprises (not only agrarian ones) develop new economic activities alongside the existing ones. These new activities are not just additional; by making multiple use of available resources they produce a range of interconnected products and services that together allow for new economies of scope²¹ and synergy. Thus, multifunctionality emerges as a place bounded form of inter-sectoral cooperation and intertwinement.

There are important differences between the first line (creation of multifunctional land-use at the regional level through the juxtaposition of different enterprises that belong to different sectors) and the second one (integration of different branches into one and the same multifunctional enterprise). The latter approach faces far lower transaction and transformation costs than the former, which is an important benefit.

The widespread dissemination of multifunctional farm enterprises within the green regions of Europe provides an important cornerstone for theoretical elaboration. While it is widely recognized that rural regions need to move beyond agriculture, the rise and massive dissemination of multifunctional farms shows that agriculture itself is moving beyond the limits of a strict specialization in the production of raw material for the food industries.²² Thus, the phenomenon of multifunctionality emerges as one of the cornerstones for the new theory on regional rural development²³.

Another important cornerstone can be found in changing rural development practices. As noted by Bernard Kayser (1995), rural regions contain 'attractiveness', which turns them into areas of consumption (as opposed to areas of production only). The 'repeuplement de la campagne' (i.e. the process of counter-urbanization) is just one of the many expressions of this new tendency. The countryside in general, and (changing) agriculture in particular, offer a wide range of products and services that contribute to the quality of life, both in the countryside itself and also in neighbouring cities and metropolitan areas. This gives rise to new problems, such as how to remunerate the contribution that agriculture makes in providing public goods (such as attractive landscapes, biodiversity, accessibility, quietness, etc) and how to align the provision and supply of these public goods with other activities that threaten them.

A third important source for the development of a new theoretical framework of rural development is located in changing rural policies. Just a decade ago these were mainly (albeit not exclusively) limited to agricultural policies and to structural and cohesion policies aiming to redress lagging areas. Subsidies prevailed over investments and, as a whole, these policies tended to reduce the 'beneficiaries' to passive receivers of schemes developed elsewhere by others. All this has begun to change considerably, with the Cork and Salzburg Conferences on rural development being major milestones that established the basis for changing policy direction. Alongside the first pillar a second policy domain was created to specifically facilitate rural development. The principle of subsidiarity has been translated into giving increased space for local participation and, to a degree, a democratization of rural policies. In the already quoted overview of the OECD, this aspect is referred to as representing a paradigm shift.

Place (or territory) is increasingly replacing 'sector' as the focus of European interventions and support and there is a rapidly growing consciousness and body of experience about rural development at the regional level, with a broad spectrum of different regional policy programmes providing interesting possibilities for comparative analysis. Importantly, in several regions rural development is managed as a reflexive process, in which the outcomes are monitored, evaluated and discussed in order to continuously adapt the policy process²⁴. The flexible character of the RD framework at EU level strongly supports such practice.

The emergence of the region as new arena within which rural development is specified, constructed, contested, adapted, renegotiated, etc., underlines the need for a rural development theory that allows the *insertion of the regional specificities* so they can be met and strengthened (thus rural development theory definitively goes beyond any blueprint). At the same time, rural development theory needs to be practice-oriented and of relevance in finding appropriate solutions at the regional and local level, while simultaneously informing the (re-)formulation of rural development policies.

Relocating rural development theory in time and space

Rural development processes represent a wide and multi-dimensional range of reversals of long term tendencies; hence they represent a major transition. The ETUDE programme has particularly focused on two major types of reversals. The first, which has already been discussed, is about making the rural more attractive, more appealing, more relevant, etc., to society as a whole. The second is the reversal of the economic decline suffered by rural areas as a consequence of the squeeze exerted on agriculture. Rural development (especially the creation and further unfolding of multifunctionality at the individual farm level) is not only

triggered by this squeeze; it is also a response to it. This type of rural development effectively reverses the tendency towards a declining valueadded at both the farm enterprise and the regional level.

Another important reversal is related to the quality of life, which in rural areas has sometimes been under severe pressure as a consequence of large modernization projects. Landscapes have become degraded, biodiversity reduced, access reduced, the quality of food came under pressure, resources became contaminated, population declined and levels of service provision sharply reduced. The outcomes have included monotonous segmented areas, often (though not always) strongly degraded peripheral areas, inaccessible specialized agricultural areas and ugly and chaotic suburbia.

Rural development tends to reverse this tendency - both directly and indirectly. The quality of life is understood here as the simultaneous presence of, and coherence between, three axis. The first is a physical one that especially, but not exclusively, refers to the attractiveness, sustainability and accessibility of the landscape (or habitat). The second axis relates to social life: networks and shared sets of norms, rules and expectations that allow for, and facilitate, interactions and a 'sense of belonging' (in short: social capital). The third axis refers to economic life: to the availability of services and opportunities for earning a living.

In synthesis: our research is not interested in just any web of regional interactions, transactions, externalities, etc., but, rather, in those webs that positively translate into an improved quality of life and generate the required responses to the squeeze that rural economies are experiencing. This is especially the case when these positive contributions derive from enlarged endogeneity, increased novelty production, sustainability, strengthened social capital, new institutional arrangements and an adequate governance of relevant markets.

Notes

- 1 The authors of this chapter are very much indebted to the members of the European Experts Forum who critically discussed a previous draft (Frankfurt, 30th of November 2007). Ref. ETUDE 2007.
- 2 In itself this is not a strange phenomenon. Cannons were shot long before engineers formulated the ballistic laws that represent (or 'govern') the trajectory of the cannonballs. The same applied to ships. They floated the seas centuries before Archimedes discovered and formulated the 'law of upward forces'. And continuing with ships: having no nautical maps at his disposal, Columbus nevertheless discovered 'Las Indias'. This said, it is far preferable to have an adequate theory than none at all. It allows for better targeted, more effective and more adequately coordinated actions. Adequate theories help to improve and further unfold human actions.

- 3 There are, evidently, also encounters between man and living nature in urban contexts. Parks, home gardens, pet animals, etc., are but a few expressions. On the one hand these expressions indicate that the 'rural' is valued by considerable sections of the urban population. On the other hand their limited character underlines that this co-production is of limited importance within urban areas. In the countryside it is precisely the other way around. Here the encounter, interaction and mutual transformation of man and living nature is central (van der Ploeg, [1997] 2008).
- 4 The concept of rural development is both ambiguous and contested. This ambiguity is not intrinsic to the concept, but due to the many social struggles (including 'classification struggles') at the many interfaces within the agricultural sector, between agriculture and wider society, within society, and within policy (between e.g. the classical CAP and newly emerging RD policies, between the first and second pillars, etc).
- 5 New and important fields of activity as e.g. nature development and nature management are also part of this wider category of co-production. However, this does not imply necessarily that they are efficient, effective or widely accepted forms. The same applies e.g. to rural housing: which can both revitalize and embellish the rural as much as it can destroy it
- 6 There is an important historical parallel: The first round of massive industrialization in European cities triggered a large campaign to counter the multi faceted degradation and impoverishment that this had created. Cities were upgraded (a process that continues to be repeated periodically). Following this line of reasoning it could be argued that the massive industrialization of European agriculture that took place from the 1960s onwards is now triggering a process of *rural* restoration. The historical specificity of this process resides in the fact that it is associated with a general decline and crisis of agriculture.
- 7 As argued convincingly by Pezzini (2001), rural areas can help to enhance the quality of life of European citizens by providing public goods, such as a clean environment, the protection of cultural heritage and attractive landscapes, which can be the source of amenities that in turn may create a favourable scenario for economic development.
- 8 We are partly following here the classification elaborated in an Italian research programme on 'the quality of life rural areas' (see Ventura, Milone and van der Ploeg 2008). However, the same classification might also be derived from Marsden and Murdoch (2006). One point of relevance here is that the Italian study shows that the presence, strength and form of social capital significantly differ between different types of space.
- 9 Several of these dimensions are also mentioned in 'Conference Proceedings: Regions for Economic Change Fostering competitiveness through innovative technologies, products and healthy communities, EU/Regional Policy, 7-8 March 2007' and OECD, 'Building Competitive Regions: strategies and governance' (Paris 2005). However, we think that the list of six dimensions presented here is more integrated.
- 10 It is not yet codified as innovation and can not (yet) travel to other places. Thus it might give a particular region a competitive advantage.
- 11 The sequence of conditions that allow for effective rural development through multifunctional farming emerges here as strategic issue (see also Arnalte and Baptista 2007). This refers to the strategic relevance of the typology discussed previously. In specialized agricultural areas the support measures for Rural Development might have effects that completely differ from those in e.g. new rural areas.
- 12 Here we follow Bourdieu (1986:241): 'The social world is accumulated history [...and] one must introduce [therefore] the notion of capital [...]. Capital is accumulated labour (in its materialized or its embodied form) [...]. The structure of the distribution of the different types of capital at a given time represents the immanent structure of the social world, i.e. a

set of constraints, inscribed in the very reality of that world, which govern its functioning in a durable way, determining the chances of success [...]'

13 Currently, specialized agricultural areas are linked to urban markets (even those of nearby cities) through global circuits, networks and mechanisms. Their location does not matter anymore.

14 This particular type of rural development evidently requires specific conditions in terms of farm size, the size, composition and educational level of the farming family, the quality of the landscape, the proximity of large urban centres, etc. However, research also demonstrates that the involved actors are able to go beyond the immediacies of such conditions through novel arrangements (use of the internet to link with distant consumers; co-operation to go beyond limited farm or family size; new patterns for the division of labour in order to reduce entrance barriers, etc). This illustrates how new institutional arrangements and new forms of governance are crucial dimensions of the rural web.

15 The differentiated nature of rural areas and the associated heterogeneity of development trajectories raises a number of challenging questions:

- 1) Is it possible to understand all the different and mutually diverging development patterns as 'rural development', or is a stricter (and therefore more normative) notion of rural development needed?
- 2) Is it reasonable to try to initiate rural development processes all over Europe (regardless of the nature and location of the area)? Related to this, is it reasonable to dilute, to almost homeopathic levels, the 'Pillar 2' funding for rural development by spreading it over all regions?
- 3) What new relations of inter-regional competitiveness are emerging within rural Europe? At the regional level, rural development processes nearly always create positive outcomes. But will this hold true as more and more areas try to position themselves as spaces for urban consumption?

Should 'segmented areas' and 'new rural areas' be treated as equivalents in terms of rural development, or are there important differences (in terms of investment, the priority that public funding and policy should treat them with, participation, consumption, accessibility, Benefit/Cost ratios, etc)?

16 See also OECD (2005), 'Building Competitive Regions: Strategies and Governance'. The OECD approach is however limited to mainly two dimensions: governance and innovativeness

17 Needless to say that classical and new forms of co-production might clash; however considerable synergy might also arise.

18 In this respect we refer to the strategic contributions emerging from neo-institutional economics. Instead of representing 'the market' as a fixed structure that unilaterally determines the operation and development of the productive units embedded in it, neoinstitutional economics focuses on the differentiated interrelations that are established between these units and the markets. Thus, heterogeneity, flexibility and differential development patterns become theoretically possible (Long and van der Ploeg 1994).

19 Or to put it differently, the way in which agency unfolds as well as the way in which actors' projects interlock (Long and van der Ploeg 1994)

20 Within such a view, the many differences at the empirical level were mainly reduced to differences in 'speed'. The category of 'lagging areas' is, in this respect, a very telling one. It is, as it were, a spatial reflection of 'diffusion-of-innovation' theories.

21The concept 'economy of scope' refers to cost efficiencies realized by the joint production of several products and services within the same production process, making use of the same resources. 'Economy of scope' represents an alternative to 'economy of scale', the strategy of decreasing the cost price through scale-enlargement, specialization and intensification.

When applied to farming 'economy of scope' refers to the practice of multi-functional farming, practising a way of agriculture that (re)integrates a range of new functions and adds to the farmer's income as well as to rural sustainability. At the farm level, multifunctional agriculture rests on two main pillars: the delivery of new rural services (as nature and landscape management, agri-tourism, care and educational facilities) and the production of extra value added. The latter is gained by responding to '(c)onsumers concerns with regard to the environment, animal welfare and health as well as growing consumer demand for regional specific products of high quality.' (Oostindie et al. 2002)

- 22 The importance of multifunctionality at the farm enterprise level (especially when it is strengthened through new regional networks) relates directly to the centrality of the 'web'. Almost by definition multifunctionality equals to (and empirically triggers) new interrelations, positive externalities and new inter-level relations.
- 23 While pluriactivity was, for many decades, an important linkage between the agricultural and other sectors, a linkage that helped sustain farming, multifunctionality is now increasingly emerging as another important linkage. Its importance partly resides in the fact that it considerably reconstitutes farming as a socio-technical practice: it shapes agriculture into a distinctive practice one that is different from agriculture that relies on pluriactivity and highly different from farming shaped by ongoing processes of specialization, intensification and scale increase. It can be argued that multifunctional agriculture is better aligned with the needs of society as a whole.
- 24 In this respect it is important that several Member States (e.g. Italy) have experienced far reaching processes of decentralization that imply an important shift of responsibilities for rural development to the regional level. Equally important are the restitution processes in the United Kingdom and the long-established special policies in Nordic countries relating to sparsely populated areas.

2 Sustainability and Rural Development

Roberta Sonnino, Yoko Kanemasu and Terry Marsden

The term 'sustainable development' has largely been promulgated by the industrialized nations in the context of global environmental processes and concerns, and it has catalyzed attention on the relationship between economic growth and the natural resource base on which this depends (Redclift 1987). Although the term has been used in a variety of ways since its early conceptualizations in the 1980s (see e.g. Murdoch *et al.* 1994:263; Langhelle 2000:306; Lockie *et al.* 2006:31), broadly speaking, the notion of sustainable development highlights the existence of the social and ecological conditions necessary to support human life at a certain level of well being through future generations (Earth Council 1994).

Notwithstanding the diversity of existing conceptualisations and approaches (see, for example, O'Riordan and Voisey 1997; Daly 1996), the main principle underlying the idea of sustainability is that environmental conservation and economic development should become interdependent and mutually reinforcing goals. In other words, through sustainable development

'the often competing needs of economy, society and nature can be met, with special attention to the requirements of economic growth, social justice, ecological protection and inter-generational equity' (Kitchen and Marsden 2006:11; see also Huber 2000:270).

Conceptualizing rural sustainability

In the past decade, there has been an increasing scholarly interest in what may be described as 'a new development trajectory' (Knickel and Renting 2000:512) in rural Europe, which has emerged as a series of responses to the limits and contradictions of the earlier development paradigm of modernisation (O'Connor *et al.* 2006:5; van der Ploeg *et al.* 2000:392). While not all scholars use the term sustainable, this new rural development model, as many refer to it, encompasses the general principles of sustainability outlined above¹.

Like sustainable development, sustainable rural development tends to be seen as socially and politically constructed (Sonnino 2004) and, at the same time, as an ongoing and evolving process that requires constant reappraisal. For this reason, rather than seeking a single definitive formulation, it may be more fruitful, as van der Ploeg and Renting (2004:234) suggest, to attempt to capture the dynamics of sustainable rural development in a critical manner. As Murdoch *et al.* (1994:262) stated over a decade ago:

'Sustainability has a broader meaning encompassing the viability of localities and communities on which the maintenance of both the environment and economic activity ultimately depends. For those concerned with the economic and social development of rural communities, this is obviously crucial. ... In addressing issues of rural sustainability, one vague term meets another. Finding a precise definition of rurality has been a long and largely fruitless enterprise (Newby 1986), and we may have to be satisfied with a use of the term which is purely descriptive. However, we may address the general processes that have given rise to contemporary changes in rural areas. Rural social change has been experiencing bifurcatory processes. One the one hand, industrial agriculture is being increasingly vertically integrated into the modern agro-food system. On the other hand, there has been a horizontal disintegration and recombination of the spatial structure of society induced by the changing geography of capital accumulation'.

Historically, sustainable rural development emerged in opposition to two alternative paradigms (Marsden 2003:1-21): the *agro-industrial* and the *post-productivist* paradigm. The agro-industrial paradigm, which emerged in the 1960s, is informed by a neo-liberal virtual logic of scale and specialisation that ties farms and agri-food into an industrial/bio-science dynamic. The imperative of cost/price reduction through continued adoption of technological advancements and continued scale enlargement has locked large areas of rural space in the 'treadmill' of production and profit maximisation (Ward 1993), where they are unable to compete in the 'race to the bottom' (Marsden *et al.* 2001:77; van der Ploeg and Renting 2000:529).

By the mid-1980s, this development paradigm came increasingly under attack (Whitby and Lowe 1994), and a post-productivist paradigm began to emerge. In contrast with the agro-industrial paradigm, the post-productivist paradigm challenges the relevance of industrialised agricultural production in rural Europe and extols the construction of the rural landscape and its protection (Marsden 2003:95-96). While agro-industrialism sees rural nature as an obstacle to overcome, post-productivism defines rural nature as a consumption good with an aesthetic value. Despite these differences, the two paradigms share a marginalisation of nature (or, at least, a residual definition of it) and a

tendency to downplay the social and environmental role of agriculture (ibid.: 9-10; van der Ploeg and Renting 2004:234).

More recently, in the context of the continuing crisis of conventional agriculture - expressed in growing health risks, environmental loss, overproduction of low-quality products, decline in the number of producers and farm workers, etc. - a new paradigm has begun to take hold in different parts of rural Europe: sustainable rural development. In contrast with the agro-industrial and post-productivist paradigms, which assume the atomistic nature of farms (and of the land associated with them), sustainable rural development suggests the potential symbiotic interconnectedness between farms and the locale: it implies a reconfiguration of the asymmetrical relationship between society and nature, technology and expertise (Marsden and Murdoch 2006:7). On this basis, we define sustainable rural development as territorially-based development that redefines nature by re-emphasizing food production and agroecology and that re-asserts the socio-environmental role of agriculture as a major agent in sustaining rural economies and cultures (Marsden 2003).

The centrality of agriculture (and its multifunctionality) to the rural development paradigm

The positioning of agriculture is one area in which the significance of sustainable rural development vis-à-vis the two competing paradigms is particularly evident. Within the agro-industrial model, the sole function of agriculture is to provide food for the expanding cities (Lowe et al. 1995:89). Post-productivism, on the other hand, marginalises agriculture with its vision of the consumption countryside and farmland diversification, whereby agricultural land use is assigned productive, ecological, social and aesthetic functions that can add to a farm's income (Marsden 2003:12; van der Ploeg and Renting 2004:234).

By contrast, the sustainable rural development paradigm attempts to reintegrate agriculture as a multifunctional set of practices that have the potential to enhance the interrelationships between farms and people, both within rural areas and between rural and urban areas. Marsden (forthcoming) points out that over half of all farmers in Europe are actively engaged in some rural development practices (see also van der Ploeg and Renting 2000:538) and that this reflects the socio-environmental role of agriculture and other land-based activities as a major agent in sustaining rural economies and cultures. In this context, agriculture acquires a more comprehensive meaning and displays significant integrative potential in that it is recognised as a central vehicle for delivering sustainable rural development benefits (Marsden and Smith 2005).

Several scholars have developed this view. For example, van der Ploeg et al. (2000:401) have argued that, despite its declining economic significance, the agricultural sector continues to be a 'seedbed' for sustainable rural development, with farmers assuming a strategic role (van der Ploeg et al. 2000:404; van der Ploeg and Renting 2000:531). Underlying this idea is the notion of 'repeasantisation' of European farming, whereby farmers make decisive contributions to rural development through their highly diversified flow of outputs, regrounding of productive activities in relatively autonomous and historically-guaranteed types of reproduction, and increasing control over the labour process (van der Ploeg et al. 2000:403). Through creative activities, networks and initiatives of farmers and other rural actors, agriculture plays a crucial role in the development of sustainable rural economies and cultures. It follows, then, that from the perspective of sustainability, the socio-ecological role of agriculture needs to be reinserted into the broader rural development discourse (Marsden 2006:201).

In short, although sustainable rural development may assume a variety of forms, there are three key expressions of this emerging paradigm:

- 1 It is a response to the price/cost-squeeze on agriculture. It adds income and employment opportunities to the agricultural sector by enlarging value added;
- 2 It expresses new relationships between the agricultural sector and society at large. It contributes to the construction of a new agricultural sector that corresponds to the needs and expectations of society at large;
- 3 It implies a redefinition, recombination and/or reconfiguration of rural resources (Marsden 2003:186; see also van der Ploeg *et al.* 2002:13).

As we will argue in the next section, the relevance of this paradigm (and the need for policies that strengthen it) lies in these three dimensions.

The relevance of sustainability for rural areas

The emerging paradigm is especially relevant to the future of rural areas for three main reasons. First, rural development is a response to the 'squeeze' on European agriculture. As van der Ploeg *et al.* (2000:395 2002:9-10) note, it is through sustainable rural development that new sources of income are currently being mobilised to augment the otherwise stagnating agrarian income. Rural development practices have also

facilitated the elaboration and implementation of new, innovative methods to combat increasing costs. In short, sustainable rural development reconstitutes the eroded economic base of both the rural economy and the farm enterprise.

Second, among the key manifestations of sustainable rural development is the emergence of new interlinkages between agriculture and society. development entails Sustainable rural the creation products/services, new markets and new forms of cost reduction that often coincide with the needs and expectations of society at large. As van der Ploeg et al. (2000:396) claim, sustainable rural development implies a reconstruction of agriculture and countryside and their realignment with European society and culture.

Third, sustainable rural development also concerns the redefinition and reconfiguration of rural resources. Through sustainable development, rural resources - land, labour, nature, eco-systems, animals, plants, craftsmanship, networks, market partners, town-countryside relations – are reshaped and recombined, as it has happened, for example, with the emergence of alternative food supply chains (van der Ploeg et al. 2000:398). In other words, through sustainable rural development

'new resources are mobilised and combined with existing ones along new lines that secure ecological sustainability and new, robust economic constellations; the new resource combinations allow also for new multifunctional enterprises and new networks interlinking the rural and the urban' (van der Ploeg et al. 2002:13).

Some researchers have somewhat downplayed the relevance of the emerging rural development paradigm. In his discussion of the earlier productivism/post-productivism debate, Wilson (2001) warns about the danger of dualistic approaches. Noting the plurality of actions and thoughts among grassroots actors and large temporal differences in the transition towards a new development trajectory in advanced economies, he maintains that such transition should be seen as 'a spectrum of different views rather than two easily definable and separate entities on their own' (ibid.:78, emphasis added). Morris and Potter (1995) and Shucksmith (1993) also highlight the complexity and diversity of farmers' attitude and action. A particularly forceful critique has been presented by Goodman (2004), who argues that the current situation should be seen not as a paradigm shift but as 'continuity in change'. In his view, rural development scholars, especially those who highlight alternative food networks as symptomatic of the rupture, press

'The case for paradigm change in vivid binary contrasts: old and new, crisis and rupture, modernisation and alternative models. ... These oppositions overlook the complexities of transition, its uneven spatial and temporal intensity, and the possibility that processes of change may not engender convergence, but rather accentuate existing dualisms' (ibid.: 10).

In this context, social justice is another point of contention. Critics have claimed that the paradigm shift advocates tend to ignore the issues of power beyond the farm household — that is, the question of how, for example, alternative food strategies are to mitigate long-standing rural problems such as income inequality, low paid employment, rural poverty, social exclusion and uneven development (Goodman 2004:7). From this perspective, the advocacy of paradigm change is indeed far removed from pressing contemporary rural development issues and more aligned with an idealised vision of a rural Europe of resourceful yeoman farmers and the era of high farming (ibid.: 8). Goodman (ibid.: 12) hence proposes a 'weaker formulation', whereby alternative food networks are given no more significance than that of extending the repertoire of rural 'survival strategies.'

Van der Ploeg and Renting (2004) have responded to these claims by showing, among other things, that rural development activities have considerable political and economic effects in Europe. While these activities are not immune to the expropriation and subsumption processes of globalised capitalism, they pave the way for 'potentially viable institutional defenses to continue distantiating the local from the global' (*ibid*.: 238). The authors identify 4 key differences that set sustainable rural development apart from the dominant modernisation dynamic – that is, its economic, social, cultural and environmental sustainability:

- 1 Sustainable rural development practices aim to, and to a considerable degree actually lead to, the creation of wealth within the agricultural sector and the rural economy [i.e. economic sustainability];
- 2 Sustainable rural development practices create and strengthen new institutional patterns for the production, distribution, processing and consumption of food and green services [i.e. socio-economic and potentially environmental sustainability];
- 3 Sustainable rural development practices entail new gender relations, new patterns for the social and spatial division of labour, new identities and new forms of cooperation [i.e. socio-economic sustainability];
- 4 Sustainable rural development entails a *shift in power relations* by diminishing, both symbolically and materially, the dependency on financial capital, agro-industry, the global commodity markets and the big retailers, while also re-grounding agricultural production on ecological, social and cultural capital (*ibid.*: 233).

In this perspective, sustainable rural development processes are likely to result in drastic, far-reaching and multi-level transformations in rural economies and societies. These may include (van der Ploeg and Renting 2000:530-531):

- The re-integration of tasks and activities externalised in the past
- The creation of multi-product, multi-functional farms
- Changing roles and patterns within the farm, especially gender relations
- The emergence of new networks, new dialogues and new institutional arrangements
- A shift from economies of scale to economies of scope
- The elaboration of responses to the cost-price squeeze
- The re-localisation of production-consumption patterns.

In short, the sustainability domain holds a significant development potential; from both a theoretical and a practical perspective, its relevance is linked to the effects that its unfolding may have on rural economies, societies, cultures and natures. To begin assessing these effects (real and potential), it maybe helpful to turn to some of the debates in agro-ecology, a related discipline that provides some key conceptual building blocks for the analysis of human-nature relations and rural development (Marsden et al. 2001:79-81; see also Marsden 2003:172-175; Hecht 1987; Altieri 1987; Sevilla Guzmán and Woodgate 1999). Its key principles and features include:

- a lternative definitions of modernity: the process of emancipation from the strictly intensive economic sphere (and the gradual re-embedding of ecology in the institutions of economy) is a central aspect across different spatial scales (e.g. local, regional, national and international) and it creates spaces for a socio- ecological as well as economic rationality. This involves aspects of co-evolution, which incorporates the autonomous development of socio-ecological practices and principles within wider political and institutional structures.
- b Co-evolution: agro-ecology also refers to the co-development or coevolution of society and natural factors. It is recognised that farming systems are essentially a product of co-production, that is, the ongoing interaction, mutual transformation and dependency amongst humans, animals and nature; and that the agri-industrial model has created a biotic, biological and metabolic rift amongst these elements (van der Ploeg 2000). The question then becomes how reversible processes can be put in place to regenerate interdependency over time -- for instance, in recreating natural manuring, rearing and feeding techniques (Stuiver 2008). More recently, co-evolution also represents the new reconnections that groups of consumers are making with co-production at the farm-level.
- c Local farmers' knowledge and innovation systems: local peasant or indigenous knowledge needs to be seen as significantly different from standard scientific knowledge in that it is embedded in local ecologies

and it is encoded in local and regional cultures, rather than in more abstract, generic and reductionist notions. Whereas dominant notions of science tend to be independent of social and local context, agriculture is actually defined both by its bio-physical context and by its localised socio-political elements. It is based upon the interdependent accumulation of local, natural and social resources and practices. These are not just about maintaining 'old cultures'; they involve novelties, or the reshaping of knowledge systems around, for instance, new entrepreneurial and social networking and marketing skills (Morgan et al. 2006).

- d Endogenous potentialities: Under the assumption that all agro-ecological systems have their own endogenous potential, a major question concerns how such potential can become valorised/commodified through social and political mechanisms. In fact, endogenous potentialities often produce social struggles amongst local groups who attempt to resist, oppose and actively construct alternatives to industrial standardisation and modernisation. In the South (in Kenya, for instance) there are many examples of local groups of farmers who attempt to protect their rights and practices concerning the production of local seed varieties in the face of their appropriation by corporate seed firms (see Marsden 2006). Creating and sustaining endogenous potentialities, which is a key feature of agro- ecology, implies the development of forms of cooperation and collaboration within farming and rural communities.
- e Collective forms of social action: Agro-ecology, therefore, also relies upon new or re-created collective forms of social action:
 - i) amongst producers;
 - ii) between producers and consumers and between producers and other key actors in the supply chains (such as processors and retailers);
 - iii) between different types of rural and urban actors who are associated with, to varying degrees, the rural ecological resource base.

New associations and combinations are forged that enable re-connections between production and consumption, not only of foods but of amenity and rural experience.

Systemic strategies: a broad range of bio-physical factors, such as water, soil, solar energy and plant and animal species, interact not only among themselves but also with social actions and practices. This dynamic requires an understanding, for instance, of energy, material, cash and knowledge flows generated in the processes of production and exchange of goods and services associated with the farm. Moreover, ethical decisions, for instance those concerning animal

- welfare and human diets, are crucial to progress more systemic sustainable systems.
- g Ecological and cultural diversity and agricultural multi-functionality; agroecology aims not only to celebrate cultural and natural diversity, but also to materialise it in new co-evolutionary ways. It accepts that there are diverse pathways of agro-ecological development and that this is based, on the one hand, upon both local and regional forms of embeddedness; on the other hand, on complex social-natural relations and producer-consumer linkages. This places an emphasis upon the multi-functionality of farming (and related practices) on the farm and, at the same time, on the need to re-create multifunctional linkages between farms and the wider rural and urban community. This multifunctionality, which is seen as a central plank of moving towards a more sustainable society, emphasizes the food security, ecological and social benefits provided by a much more diverse agriculture, especially in the South. It is now much more accepted that agroecological methods do not necessarily result in lower yields. Whilst global industrial agriculture serves the world's population with 90% of its calories from a mere 15 species of crops, organic and agro-ecological farmers are providing a vital service in maintaining genetic diversity for the future. For instance, indigenous farmers in Peru cultivate more that three thousand different types of potato, and there are more than five thousand varieties of sweet potato cultivated in Papua New Guinea. In West Java, researchers have identified more than 230 species of plant within a dual cropping system, which includes 'agroforestry', home gardens and outfields. In Mexico, the Huastec Indians manage a number of plots in which up to 300 species are cultivated (Parrott and Marsden 2002; Marsden, forthcoming). Agro-ecology can thus be extended from food to fibre and forestry.
- h Encompassing the social ecology component: agro-ecology embraces both de facto and certified organic, both of which are now rapidly growing in terms of production systems and markets. However, compared to the strictly organic approach, where the focus is often more strictly tied to verifiable technical standards, agro-ecology contains a more explicit social component. Many agro-ecological movements do not provide internationally recognised standards and are culturally and locally more specific -- often tied to a 'farmer first' approach. Nevertheless, it is important to view agro-ecological developments as complementary systems with the more rules-based organic approaches, as they both are significant components of the widening vector of sustainable agriculture and agri-food. The systems share common methodological and theoretical ground also in their use of

participative approaches to agricultural and rural research and development.

Interactions and exchanges: sustainable rural development and the rural web

Van der Ploeg *et al.* (2002:11) note that sustainable rural development is a multi-faceted process that 'unfolds into a wide array of different and sometimes interconnected practices.' Among them are organic farming, production of high quality and region-specific products, direct marketing, landscape management, conservation of new nature values and agritourism². An important conceptual question is how, and under what social conditions, these practices can become linked together across both rural and urban spaces of production and consumption.

In the conceptualization of sustainable rural development that we propose, the best example of the contribution that this domain makes to the rural 'web' (defined as the interrelations and positive exchanges within rural society that strengthen their economies) is provided by agriculture. Sevilla Guzmàn (in Marsden 2006:207) offers a useful insight in this regard:

'Sustainable societies can only be constructed on the basis of sustainable, locally relevant agricultures ... implying a complete rejection of the homogenising tendencies of the neo-liberal, global modernisation project and the re-direction of co-evolution towards more sustainable ways of living that are based upon the endogenous potential of an infinite diversity of locally relevant agro-ecosystems'.

This vision of agriculture is fundamentally different from the one presented by the agro-industrial model. Whilst the latter rests on the ongoing specialisation and segregation of agriculture from other rural activities and the wider society (van der Ploeg *et al.* 2000:393), the sustainable rural development model re-integrates agriculture into local ecology and into both urban and rural society through a wide variety of multidimensional and integrated activities. These activities fulfil multiple functions not only for the farm household but also for the region and the society as a whole (Marsden and Sonnino 2008; Knickel and Renting 2000:513). Here the *multifunctionality* of agriculture reveals its central importance.

The multifunctionality of agriculture may be simply defined as 'the existence of multiple commodity and non-commodity outputs that are jointly produced by agriculture' (Carhill and Shobayashi 2000, in O'Connor 2006:10). Multifunctional agriculture thus challenges 'the classic sectoral vision of farming as an exclusively productive enterprise' (Lowe *et al.* 2002:14-15). Although, as Marsden and Sonnino (2005a; 2005b)

show, the term has been accorded different interpretations, when seeing in the context of sustainable rural development, agriculture must meet the three conditions identified above:

- It must add income and employment opportunities to the agricultural
- 2 It must contribute to the construction of a new agricultural sector that corresponds to the needs and expectations of the society at large;
- 3 It must imply a radical reconfiguration of rural resources, to varying degrees, in and beyond the farm enterprise (Marsden and Sonnino 2008: Marsden and Sonnino 2005b:4).

In other words, we can argue that there can be a direct relationship between the specific conditions of multifunctional agriculture and the broader rural development paradigm discussed above.

In contrast with the manner in which farm diversification and pluriactivity have been defined by the agro-industrial and postproductivist models, multifunctional agriculture is more than a survival strategy for farmers; it is a proactive 'development tool to promote more sustainable economies of scope and synergy (Marsden 2003:185, emphasis added). Farm enterprises actively and creatively redefine their activity and identity by shifting away from the traditional economies of scale towards a more multi-faceted approach focused upon economies of scope (ibid.:179; see also Ventura and Milone 2000:455; Miele and Pinducciu 2001:157). The significance of this approach is summarised by van der Ploeg and Renting (2004:235) in their observation that agriculture, as conceived by the agro-industrial paradigm, was

based on resources obtained mainly (though not exclusively) through the markets. It was to produce raw material that entered into the agro-industrial chains. .. Through rural development, the agricultural enterprise 'jumps,' as it were, over the outlined boundaries. ...we might define rural development as a boundary shift'.

If sustainable rural development denotes the emergence of a dynamic and complex web of activities and networks that 'jumps' the conventional boundaries as it redefines and reconfigures rural resources (as well as the relationship between rural areas and society at large), then we may say that the sustainable rural development potential of agriculture is crystallised in its multifunctionality (van der Ploeg et al. 2000:399; Ventura and Milone 2000).

Multifunctional agriculture is also inextricably linked to another key postulate of sustainable rural development: synergy amongst compatible and mutually reinforcing activities (Marsden 2003:185). In their case study on the Costa degli Etruschi wine route in Tuscany, Brunori and Rossi (2000) show that the synergies and coherence between wine production and

various rural development activities not only add value to the existing activities (i.e., they have a localisation effect); they also open up new opportunities for farm activity (i.e., they have a synergy effect) (*ibid.*: 413). This synergy may also have more than economic sustainability effect. Drawing on their study of organic farming in Tuscany, Miele and Pinducciu (2001:157-60) argue that farmers' choice of the organic method creates a virtuous circle, in which the typical and environmentally-sound production system enhances related activities (such as direct selling, agritourism, craft activities, recreational services). This, in turn, facilitates the connection between the farming family and urban life and indirectly contributes to enhancing the image of the farms and the identity of the farmers.

In sum, the synergetic relationship amongst rural development activities has social and environmental, as well as economic, benefits (see also Knickel 2001:132; 2002b:133; Renting and van der Ploeg 2001:95). It creates a rural web of symbolic and socio-economic networks that mobilizes and, at the same time, integrates rural natures, cultures, societies and economies to create what we might term a 'rural eco-economy'.

Sustainable rural development and the eco-economy

Whilst accepting the centrality of multifunctional agriculture to sustainable rural development, it is also important to see it as a *potential platform* or *springboard* for a more varied spectrum of rural development activities. Based on a web of interconnected activities, meanings and networks, sustainable rural development culminates in the creation of an *eco-economy*. Drawing on Brown (2001), Kitchen and Marsden (2006:5) define eco-economy as:

'The effective management of environmental resources in ways designed to mesh with and enhance the local and national ecosystem rather than disrupting and destroying it. That is, the eco-economy consists of viable businesses and economic activities that utilise the varied and differentiated forms of environmental resources of rural [areas] in sustainable ways that do not result in a net depletion of resources but provide net benefits and add value to the environment'.

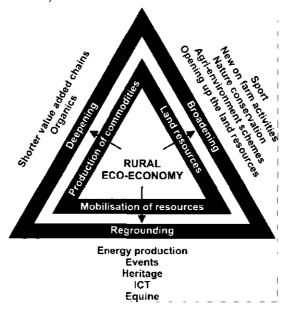
This notion of eco-economy builds upon the work of van der Ploeg *et al.* (2002), especially their theoretical model of how farm enterprises acquire new skills and move towards multi-functionality through the processes of rural development. As illustrated by Figure 2.1, the traditional rural economy has three key aspects: 1) agricultural production; 2) interaction with the rural landscape and its inherent values; 3) mobilisation and use of resources.

Figure 2.1 The three sides of the rural enterprise (Kitchen and Marsden 2006:84)



Through the processes of rural development, the relations between these three aspects are both reproduced and transformed (van der Ploeg et al. 2002: 12-13; van der Ploeg and Renting 2004:235). First, as van der Ploeg et al. explain, agricultural activities are deepened, transformed and expanded by the linkages and associations with new actors and agencies, as farm enterprises seek to deliver new products that entail more value added because they better meet the demands of society at large. This is referred to as the deepening process, which is exemplified by organic farming, high-quality food production and the creation of new short food supply chains. Second, the interactions with the rural environment are broadened through the inclusion of new non-agricultural activities that are located on the interface amongst society, community, landscape and biodiversity. This constitutes the process of broadening, which occur through activities such as agritourism, nature and landscape management, new on-farm activities (e.g. the integration of care activities and on-farm processing) and diversification (e.g. energy production). Finally, through the process of re-grounding, farm enterprises are grounded in new or different sets of resources and become involved in new patterns of resource use. Van der Ploeg et al. (2002:12) identify pluriactivity and farming economically as two major examples of this process. Figure 2.2 illustrates the dynamics of sustainable rural development and of the eco-economy. Figure 2.3 provides an example of rural eco-economy in a coastal area.

Figure 2.2 The dynamics of sustainable rural development at the enterprise level (Kitchen and Marsden 2006:85)

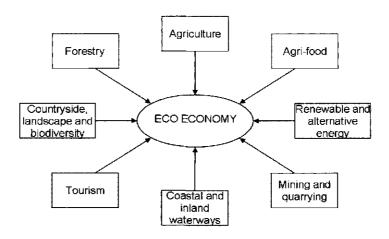


Taken together, deepening, broadening and re-grounding processes reshape the farm into a multifunctional enterprise that delivers a broader range of products and services (O'Connor *et al.* 2006:16), thereby jumping over the conventional sectoral and spatial boundaries and facilitating the boundary shift discussed above. In the following sections, we will examine the key features of deepening, broadening and re-grounding activities with particular attention to their relevance to sustainable rural development and to their interrelationship with the other dimensions of the rural web (i.e., novelty production, endogeneity, new forms of governance based on the principle of subsidiarity, construction and consolidation of markets, development of social capital).

Unpacking the rural web: sustainable rural development, endogeneity, novelty production, governance, markets and social capital

The interrelationship between sustainability and the other dimensions of the rural web can be analyzed through reference to the deepening, broadening and re-grounding activities that characterize both the sustainable rural development process and the rural eco-economy that such process potentially originates. In this section, we will then critically analyze the three activities and attempt to highlight how they affect (and, at the same time, are affected by) the other dimensions of the rural web.

Figure 2.3 An example of rural eco-economy in a coastal region



Deepening

Deepening activities are widely discussed as examples of strategic responses by farm households to the cost-price squeeze on agriculture³. These activities typically generate more value added through the development of products and services that better meet the needs of the wider society (van der Ploeg and Renting 2004:235; Kitchen and Marsden 2006:84). For instance, alternative food networks not only allow producers to recapture value in the supply chain, thereby adding income and employment opportunities to the agricultural sector; by reconnecting producers, consumers and the locality of production, these activities also facilitate the re-localisation of the food system, thereby contributing to the emergence of an endogenous development model that relies upon contextual, localized and often tacit knowledge (or novelties) and builds on local resources (Sonnino and Marsden 2006b:300). In this sense, the significance of deepening activities and other emerging rural development practices lies in part in their capacity to potentially reconstitute nature-society relations and facilitate a re-embedding of farming practices in local ecologies (Marsden 2001:76; Sonnino 2007a).

Some scholars have questioned uncritical assumption of these sustainability implications. Basing their arguments on case studies in California, Buck et al. (1997), Guthman (2004), Goodman (2000) and Allen and Kovach (2000) have variously highlighted the contradictions and tensions within the organic sector, especially its conventionalisation and the implications this may have for sustainability goals. Similar critiques have been presented in regard to re-localisation, especially in the US. Born and Purcell (2006) warn of 'the local trap', or the tendency of food activists and researchers to assume that local is inherently good – i.e., to conflate the local scale, which is a means, with desired ends, such as ecological sustainability, social justice, democracy, better nutrition, food security, freshness and quality. In their view, 'localisation raises no a priori assumptions; instead, it points to an ongoing struggle among competing interests' (*ibid*.:199). Hinrichs (2003) also questions the assumption that localisation provides the 'antidote' to globalisation by distinguishing two types of localisation:

- Defensive localisation, which imposes rigid boundaries around the spatial 'local' and stresses its homogeneity in the name of 'local good' (ibid.: 37); and
- Diversity-receptive localisation, which embeds the local into a larger national or world community with greater receptivity towards (and incorporation of) diversity (*ibid*.: 43).

The question of power is also the main concern of Allen (1999:121), who stresses that localism 'can subordinate material and cultural differences to a mythical community interest.' In a similar vein, DuPuis and Goodman (2005:360) contend that 'unreflexive' localism neglects the potentially unjust politics of the local and becomes vulnerable to corporate cooptation. Hence, Allen *et al.* (2003:61) ask whether re-localisation initiatives are truly oppositional attempts to create a new structural configuration, or alternatives contained within the overall structure of the current agrifood system.

The dangers of this dualistic thinking have been acknowledged by some researchers. Sonnino and Marsden (2006a) note that a simple dichotomy between conventional and alternative food networks does not reflect the present reality of the food sector, which is characterized by often ambiguous and highly competitive relationships between different networks. Morgan *et al.* (2006) discuss alternative food initiatives in California as a highly contested space and add that it is not merely the 'label' of local that is important but whether or not these emerging networks represent the evolution of a more sustainable rural economy based around the redefinition of social, economic and agri-ecological resources (*ibid.*: 81).

In this context, the emphasis on embeddedness has also been criticized. Winter (2003) calls for critical scrutiny of the concept, pointing out that the turn to quality has no single defining set of characteristics based around connectedness to local ecologies and that it 'may cover many different forms of agriculture, encompassing a variety of consumer motivations and giving rise to a wide range of politics', far from its proclaimed goals

(*ibid*.: 23). Thus, the question of power and justice comes to the fore again. Hinrichs (2000) and Goodman (2003) question the tendency among alternative food network researchers 'to celebrate social embeddedness particularly in the guise of social familiarity, trust, civic engagement and the like - and to minimise any evidence of marketness or instrumentalism on the part of actors in the local food system' (Hinrichs 2000:297). Krippner (2001:698) concurs by saying that the 'focus on embeddedness can inadvertently produce an overly benign view of economic relations and processes' at the local level.

In response to these criticisms, we argue that sustainable rural development promotes a form of endogenous development that is not merely a return to localism. It is a dual process of rebuilding local resources and enlarging and deepening the interactions with the wider economy (Marsden forthcoming). Similarly, while sustainable rural development is a 'new' development dynamic expressed in many novel initiatives and activities, it is not simply about 'adding' new activities, tasks and identities to established situations. Van der Ploeg and Renting point out that the 'addition' of a new activity almost always involves a reconfiguration of pre-existing constellations' (2000:530, emphasis original). Sustainable rural development, then, entails both continuity and change:

'Continuity, since rural development processes basically reproduce and reaffirm the central features of farming as socio-technical practices. And change, because these basic features are at the same time transformed' (van der Ploeg et al. 2002:12).

It is about the construction of new networks, revalorisation and recombination of existing resources, co-ordination and (re-)moulding of the social and the material, and (renewed) use of social, cultural and ecological capital (van der Ploeg et al. 2000:400).

Broadening

Broadening, as discussed above, refers to the inclusion of non-agricultural activities located on the interface amongst society, community, landscape and biodiversity, such as agritourism, nature and landscape management and energy production. These activities notably generate new value added (van der Ploeg and Renting 2004:235; see also Kitchen and Marsden 2006:84; O'Connor et al. 2006:15). However, as with deepening activities, the sustainable rural development potential of broadening activities exceeds their economic benefits. Ventura et al. (2002)'s study of agritourism in Umbria, for instance, demonstrates that broadening not only increases farm family income and supports the socio-economic foundations of rural communities through income/employment generation; it also builds linkages of respect, knowledge and communication between rural and urban communities by attracting

urban-based clients and promotes the local/regional image and identity. In this respect, broadening activities contribute to strengthen the area's *social capital* -both by enhancing participation in social networks and through the creation of a renewed sense of place and belonging.

It is in the context of broadening activities that the multifunctionality of agriculture – the boundary shift – is most readily discernible. Here, agriculture moves beyond its conventional confines of food production to meet the needs of wider society, such as those for environmental goods and recreation. As Banks and Marsden (2000:466) explain, 'consumers and citizens in Western Europe look to agriculture to provide a wide range of goods and services, including landscape management, access to land, environmental management and conservation, and of course food.' From this perspective, environmental management, along with agri-tourism, is an element of multifunctionality; in Gorman *et al.* (2001:144)'s words:

'Environmental goods represent a broadening of the pool of livelihood assets from which the farm family can generate an acceptable standard of living. They can be purely public goods or they can have a marketable nature, for example provide the basis for a tourism or recreation enterprise.'

The emerging multifunctionality of agriculture and its sustainable rural development potential are evident in the case of energy production. Knickel (2002a:50-51) makes useful observations with regard to energy crop production in Germany. First, the cultivation of energy crops directly responds to new societal needs by offering an alternative to fossil fuel energy sources, which could eventually lead to a more sustainable redefinition of agriculture in society. Second, it diversifies agricultural production, which potentially creates additional income and also diversifies landscape. Third, by moving into non-food production, it represents a reconfiguration of the use of rural resources. A similar analysis is also offered by Kitchen and Marsden (2006) in their study of a variety of broadening activities in Wales, including a community wind energy cooperative and sport/leisure amenity provision, which broaden agriculture by integrating non-agricultural activities in the context of a wider sustainable rural development dynamic.

It is especially in the context of the broadening activities characteristic of the rural development paradigm that issues of *governance* and the *creation/consolidation of markets* become significant. Sustainable rural development is a multi-level process that may be identified at the levels of: the global interrelations between agriculture and society; the agricultural sector; individual farm households; the countryside and its economic actors; and policies and institutions (van der Ploeg and Renting 2000:531; van der Ploeg *et al.* 2002:10-11).

In practice, however, the sustainable rural development paradigm seems to suggest a revised and more proactive role of the local and the regional state. Indeed, it is at this level that effective mechanisms can be put in place to protect and foster local forms of innovation (particularly, but not exclusively, in the agri-food sector). In countries like Italy, where the emergence of regional institutions with some responsibility for the agrifood sector dates back to the 1970s, regions such as Tuscany have managed to devise their own sustainable rural development model, based on the re-localization of the food chain, on agricultural multifunctionality and on the development of appropriate marketing strategies for local products (Marsden et al. 2008). In countries like the UK, by contrast, new or revised state instruments, such as 'the Second Pillar' (or the Rural Development Regulation), are incapable of positively supporting multifunctional models. For instance, despite the political rhetoric associated with the mantra of 'competing on quality and not just on price', in the UK the State has failed to effectively deal with the market power of corporate retailers. Moreover,

'in its response to the food security crises, it has been hyper-bureaucratic and hyper-hygienic, attempting to roll out standardized, rather than customized, traceability systems and continuing to dwell on conditionality and the overpolicing of the 'dirty-business' of food and farming' (Sonnino and Marsden 2006b:315).

At the same time, the dominant political discourse in the UK has assumed that it can leave the creation and mobilization of agri-food alternatives to some generalized and revived neo-classical notion of the market (Sonnino and Marsden 2006b). Hence, the State is omnipresent in one sense (with more initiatives and agencies, for instance), but more neutered in another. In this sense, one can argue that the new agrarian eco-economy of agrifood emerging in regions like the South West of England is forged despite, rather than because of, State action. This might support Wiskerke and van der Ploeg's argument (2004:12) that 'novelties are, in one or more ways, at odds with the reigning regime'. Hence, the emergence of the sustainable rural development paradigm is highly contested and variable across European nation states and regions. This can be seen as a cognitive as well as a material battleground over the meaning of sustainability.

For the rural development paradigm to be successful, alternative development strategies need less high profile projects and more innovative forms of demand management from the State. From this perspective, the central concern with regard to the future of the rural development paradigm is whether or not different rural areas will have the institutional capacity to create synergies between the heterogeneity of production and the heterogeneity of marketing and demand -or, in other words, to promote economies of scope and diversity, rather than of scale.

In Tuscany, for example, we have witnessed the emergence of new *institutional frameworks* (such as agricultural cooperatives and consortia) that are helping producers to manage a volatile quality supply and demand for new or re-invented local and locality foods (Morgan *et al.* 2006; Sonnino 2007a). At the same time, in this region, as elsewhere in Italy, we are witnessing the development of sustainable forms of public food systems (especially in the context of school meals) that have significant benefits at both the production and the demand side of the food chain. Indeed, on the one hand they are creating new and reliable markets for local and organic producers; on the other hand, they are also empowering consumers by using local food products to strengthen their local identity and sense of place (Morgan and Sonnino 2007) – an issue that raises important questions about *social capital* and its potentially positive interrelations with the rural *web*.

Regrounding

Regrounding refers to the process through which the mobilisation (and reproduction) of resources are withdrawn from the circuits controlled by financial capital, leading to cost reduction and corresponding increases in value added at farm level (van der Ploeg and Renting 2004:235; Kitchen and Marsden 2006:13; O'Connor *et al.* 2006:15-16). Here it becomes clear that, although sustainable rural development is often associated with the introduction of innovative activities (like much of broadening and deepening), in reality some sustainable rural development activities have been around for decades in rural Europe.

Farming economically and pluriactivity are examples of re-grounding practices (van der Ploeg 2000:497). Farming economically is an alternative strategy of cost reduction, which involves 'a reduction of external inputs and an efficient use of internal resources' (Kinsella *et al.* 2002:150). Like all other rural development activities, farming economically is essentially a response to the cost/price-squeeze on agriculture. It responds to this squeeze not by intensifying production or pursuing economies of scale, but by seeking to make better use of on-farm resources (van der Ploeg and Renting 2002:160; van der Ploeg 2000:499). Hence, in addition to enhancing the economic sustainability of agriculture as an effective cost-reduction strategy and to promoting environmental sustainability through its low level of dependency on external inputs, farming economically also implies a creative, multi-purpose use of rural resources (van der Ploeg 2000:501-502; see also van der Ploeg and Renting 2002:160; van der Ploeg and Saccomandi 1996:13-15).

Pluriactivity may be defined as

'the combination of agriculture with other economic activity by farm households' or 'the spread of family labour activities in addition to conventional farming' (Fuller and Brun 1991, in Wilson et al. 2002:164).

Conventionally regarded as an expression of poverty and 'insufficient agriculture' (Kinsella et al. 2000:482), it is today increasingly recognized for its potential as a viable and sustainable livelihood strategy (Renting and van der Ploeg 2001:87). In addition to its economic sustainability potential for securing farm family income and employment, pluriactivity also contributes to the maintenance of rural nature and landscape and encourages farm households to secure and revalorise the assets they have available (Kinsella et al. 2000:492). Knickel (2002c:177) points out that pluriactivity may also contribute to rural, green or agritourism, which often results in reduced levels of farm abandonment (see also Sonnino 2004). Thus, in Kinsella et al. (2000:492)'s view, pluriactivity is about 'making the best of both worlds', which minimises the dependence of farm households on external factors. These initiatives 'reground' agriculture by securing it in new patterns of resource use.

Sustainable rural development: emerging challenges

In an enlarged Europe, increasing flows of goods, services, knowledge and people are creating shifts and tensions that challenge the traditional notions of rural embeddedness and continuity. Rural development increasingly needs to be understood as a process that takes into account the mobile as well as fixed assets in and across rural and urban spaces.

Whilst it has been recognised for some time that rural areas owe much of their development and trajectory to their particular regional contexts (see Murdoch et al. 2003), and that these have not only economic but also social and political dimensions (Paassi 1991; Keating 1997), it is now also clear that this regional context holds important ecological and eco-economic flows and fixities that interact with the economic, social and political arenas. At the same time, rural development must cope with the variable and growing public expectations about the function and purpose of rural areas - for example, consumer demands for quality foods, amenity, tourist spaces and areas of environmental management. In this sense, rural areas are variably coming under increasing pressure from urban populations to deepen, broaden and reground the rural eco-economy. Hence these processes are not just endogenous to rural areas; rather, they are increasingly interactive between different and more fine-grained producer-consumer networks (both of rural goods and services). These are not always regionally specific or necessarily very stable. In some cases, the demands for rural goods and services are based upon consumption

cultures and constructions that may be influenced by wider media, such as corporate retailers, tourist advertising, scientists and experts, ethical concerns. Hence the *quality as well as the quantity of knowledge flows between rural and urban networks* are likely to become more important in sustaining eco-economic relationships in the context of rural sustainability.

Changing urban demands can also affect the sustainability domain. For example, fostering urban-based forms of public and private food procurement could have a major impact on rural areas located around large urban centres - as it can easily be understood when considering that a city like Rome provides some 27 million school meals/year (Sonnino 2008). Innovations in bio- and renewable energy can also have an impact here. Under conditions where towns and cities begin to adjust to the increasing costs and protracted demise of the carbon-based economy, this is likely to change flows of foods, energy, transport, as well as a range of household goods and services. So the sustainability of the rural resource base will have to be linked with the rise of 'green cities' and the new 'webs of interaction' that these begin to create. In other words, the recalibration of urban demands with the reconstitution of the rural resource base is an important area for development - one that the rural development policy community needs to take into serious consideration not only in terms of the protection or preservation of environmental resources, but also in their redefined social and ecological utility. Indeed, we need new definitions of utility maximisation of multi-functional rural resource use that stem the urban-rural divisions of the past.

Clearly, these emerging, but potentially volatile, forms of mobility and vulnerability are posing threats as well as opportunities to the process or condition of sustainable rural development. There is then a theoretical need to start dealing with the complexities that such forms are creating – through comparison with rural development trajectories that are developing outside of Europe as well as through a more interdisciplinary perspective that integrates differing approaches to global problems of uneven development, rural welfare and socio-environmental security.

Limitations of the sustainability domain

The literature produced so far makes clear that agriculture plays a central role in the creation of rural sustainability. However, as we have seen in the second part of this chapter, this needs to be seen as conceptually embedded and integrated into a wider and multifunctional context in which agriculture and other forms of co-production sit alongside wider eco-economic and land-based activities. In market-based economies, these developments are inevitably going to lead to new and more complex

forms of commoditisation, as well as community development and social capital; the question then becomes how sustainable these forms are going to be over the longer term.

In addition, it is important to recognise that the capacity of rural sustainability to take hold in any one place will be directly affected by the dominance (or lack of) of the conventional and 'race to the bottom' tendencies inherent in the agro-industrial model and its associated hygienic-bureaucratic state apparatus. This involves, for instance, the continuing operation of a regulatory system that perpetuates the traditional cost-price squeeze of production and ties producers in to a lock-in situation or a combination of a technological and regulatory treadmill. So far the current literature, as explored in this chapter, has insufficiently dealt with this tension at the spatial and scalar level; that is, how can rural sustainability co-exist and develop in and through space? How can it develop as a dominant paradigm in the context of the prevailing cost-price squeeze and hygienic regulatory tendencies? For instance, in the UK, despite all the discussions about sustainable agriculture and food since the Curry report in 2002 (DEFRA 2002, Curry Commission), the continuing implementation of a retailer-led rationalist supply chain paradigm, combined with the hygienic and corporate retailer-led regulatory state, has led to a continuing decline in the number of dairy farms. These have decreased by 53% of since 1995 due to the deepening of the cost-price squeeze. At the same time intensification persists, with a decline of 550,000 dairy cows since 1995 and an increase of the average milk yield per cow up by 28%. Cows and farmers are working harder, with 16% of dairy farmers planning to leave in the next two years. Thus, the productivist paradigm sits alongside, but it also potentially undermines and marginalises the rural development paradigm. Under the latter, every dairy farm lost is a potential eco-enterprise lost, and every farm amalgamated into a larger productivist enterprise is another parcel of land taken out of its multi-functional potential. National governments are reluctant to address these structural questions, preferring to leave them to (highly constructed) 'market' mechanisms. National food self-sufficiency continues to decline, a trend that, ironically, continues to be supported under the neo-liberal logic of free markets.

In sum, crucial to the analysis and further development of the sustainability paradigm is the spatial and scalar significance of the costprice-squeeze model and all of its specific regulatory effects. This is, of course, highly spatially variable and dependent upon the degree to which many landholders begin to detach themselves from it. A key question then becomes: how and under what circumstances are landholders (farmers and others) becoming more capable to rupture from the prevailing paradigm? How

can new regionally-based state and institutional structures facilitate these ruptures? And how can these new rural development pathways be sustained and developed over time? It may be that it is specifically through the articulation of real rural sustainability gains, conventions and utilities that both producers and consumers will become increasingly attracted.

Some conclusions: The prospect in the 2000s

The sustainable rural development paradigm we have discussed distinguishes itself from other paradigms because it holds the potential for a reconstituted agricultural and multi-functional land-based rural sector. Based on what we have referred to as eco-economic forms of broadening, deepening and re-grounding activities, this paradigm is a potentially new driving force for rural development.

Indeed, in all of these processes of deepening, broadening and regrounding, *synergy* emerges as a key element. In fact, these processes are not mutually exclusive but interrelated and mutually reinforcing within an emerging *rural web* of interrelations and positive exchanges occurring within the rural society that also contribute to its economic development.

Notes

- 1 In our analysis of sustainable rural development, we will not distinguish between the literature on rural development and that on 'sustainable' rural development on the grounds that sustainability is the central principle in most conceptualisations of the new rural development paradigm.
- 2 The diversity and impact of such activities can be seen in a series of research work conducted under the IMPACT programme (Socio-economic Impact of Rural Development Policies: Realities & Potentials) (see Brunori and Rossi 2000; Marsden et al. 2000: de Roest and Menghi 2000; Ventura and Milone 2000; Banks and Marsden 2000; Kinsella et al. 2002; van der Ploeg 2000; van der Ploeg and Renting 2000; Renting and van der Ploeg 2001; Banks and Marsden 2001; Knickel 2001; Gorman et al. 2001; Miele and Pinducciu 2001; Mielgo et al. 2001). The recent volumes Living Countrysides (2002) and Driving Rural Development: Policy and Practice in Seven EU Countries (2006) provide an especially useful atlas of the wide range of rural development activities taking place across Europe.
- 3 See, for example, Lowe et al. 1995: 89-91; Renting et al. 2003: 398; Marsden, 2003; Raynolds, 2000; Brunori and Rossi, 2000; Murdoch and Miele, 1999; Miele and Murdoch, 2002; Ventura and Milone, 2000: 458; Morgan et al. 2006: 85

3 The Endogeneity of Rural Economies

Henk Oostindie, Rudolf van Broekhuizen, Gianluca Brunori en Jan Douwe van der Ploeg

Two interrelated notions are central to the concept of endogenous development. These are local *resources* and local *control* (van der Ploeg and Long 1994; van der Ploeg and van Dijk 1995; Remmers 1996). The endogeneity of rural economies refers to the *degree* in which local and regional rural economies are

- a built on local resources, ¹
- b organized according to local models for resource combination, which also implies local control over the use of these resources,
- c strengthened through the distribution and reinvestment of the produced wealth within the local or regional constellation.

The degree of endogeneity is the outcome of particular development trajectories within and through which the balance of local and external resources is continuously being redefined and reshuffled. Some rural economies are more endogenous than others. A high degree of endogeneity can offer a range of specific advantages. These will be spelled out later in this chapter.

Endogenous development processes may have different sources. Some of these processes, and the associated rural economies, will have ancient roots. One such example is the production, processing and marketing of Chianina meat in Umbria in Central Italy (see e.g. Ventura 2000; van der Meulen 2000). There are also many cases that have more recent roots: emerging as a *response* to and mirror image of globalization. Multinational companies tend to control a large and increasing part of the value created in food production. Moreover globalization often tends to be a development process that is out of balance with the networks and social relations geared to the interests and prospects of local actors. The spatial consequences of this are that many rural societies are reduced to merely being producers of raw materials, with little influence over how these are produced or marketed.

However, the forces that drive global integration also generate counter tendencies. In this respect, Gouldner refers to the iron law of opposition to oligarchy:

'Tendencies toward system integration [...] are always interpreted and implemented by some system part which has its own distinct drive toward functional autonomy. Correspondingly, [...] oligarchic tendencies that threaten the autonomy of the other parts of the system, generate opposition to oligarchy, polarize the system around an internal conflict, and, in effect, constitute an iron law of opposition to oligarchy' (1970:216).

Endogenous development and the related (re)- localization often emerge as reactions to external influences and global trends. As globalization progresses, locality increases in meaning and more opportunities for distinction and specific local exceptions arise. Hence, globalization and relocalization (or, endogenous development) are two sides of the same coin. Regional endogenous development cannot be properly analyzed without looking at its relation with globalization.

In many regions actors are actively looking for mechanisms and instruments to create new balances between exogenous and endogenous resources that fit better with the local situation and the interests and opportunities associated with it. These actors often revitalize local cultural repertoires in order to retain control over their own production systems and make them profitable. Regions are not disconnected from global tendencies. Therefore many actors try to maintain, utilize, reproduce and renew the specific local characteristics and, by doing so, to create some distance and distinction from 'the global' (they create, in short, relative autonomy). These attempts are grounded in the economic interests of (groups of) local actors, local history, the passions of civilians and consumers, policy interests, etc. These give rise to practices that can be understood as examples of endogenous development which implies that development is at least partly initiated and controlled by local society.

It has to be stressed that endogenous development is not the same as autarchic development. Endogenous development doesn't imply any attempt to minimize external influences. On the contrary, as Long (1988: 121-122) states:

'All forms of external intervention necessarily enter the life-worlds of the individuals and groups affected and thus, as it were, come to form part of the resources and constraints of the social strategies they develop. In this way socialled external factors are internalized and may come to mean quite different things to different interest groups or actors. Externally-originating factors are therefore mediated, incorporated, and often substantially transformed by local organizational and cognitive structures'.

Therefore, initially exogenous resources might be transformed into selfcontrolled ones that strengthen endogenous development. External factors do not determine 'the optimal solution' but can be read, translated and transformed in a way that strengthens locally specific development and local control. Even if there are, initially, important and objective differences between exogenous and endogenous factors, the rules of the game can be (re-)negotiated and (re-)defined locally. Again: endogenous development does not mean that 'external' or 'extra-local' links and influences are to be avoided and resisted. Rather it implies the active selection of external links and the construction of a self-controlled interaction between the local and the extra-local/global². Thus the autonomy created is relative rather than absolute.

Equally, new resources might be created, whilst others lose their function. Through a repatterning of the regional rural economy unused assets might be turned into important new resources. 'Making reconnections' (Watts, Ilbery and Maye 2005) therefore emerges as important, maybe even strategic, feature of the social construction of endogeneity as a dynamic, although sometimes blocked, process.

A final crucial aspect of endogeneity is what Bolton (1992) referred to as the sense of place, or sense of belonging as it is referred to in other research traditions.

"The returns to the sense-of-place asset are a general measure of security security of stable expectations, and security of being able to operate in a familiar environment and to trust other citizens, merchants, workers, etc. (1992:194).

Bolton also argues that sense of place is an 'intangible location-specific' mix of different forms of capital and that this mix has two important consequences: 'one can identify behaviour that is the investment that creates sense of place, and one can identify returns to the asset' (ibid. 193). In this respect Polese (1994) and Maillat (1995) refer to the 'value of place'. According to Polese,

'both Bolton and Maillat define the value of community in terms of greater security and reduction of uncertainty. The milieu [i.e. the 'place'] is seen as a collective vehicle, via a myriad of contacts (both formal and informal) and shared values and interests, for reducing information costs and transaction costs'(1994:101).

This important socio-cultural component of endogeneity is further expressed in shared histories, shared views on future regional development, specific features of regional resource utilization (e.g. landscape resources), etc. These shared histories and views are rarely formulated explicitly; nonetheless, they are crucial for trust, cooperation and collective action and thus for endogenous development.

Relation to the territorial capital asset approaches

The Italian literature on economic districts has extensively documented and analyzed the elements discussed above (Iacoponi 2000). This body of literature stresses that such districts are often deeply rooted in local history and culture. It also stresses the aspect of *uniqueness* or *distinction*. Districts often excel in making goods and services that cannot be easily 'copied' elsewhere. This distinction (an important competitive element) may reside in the *superiority* of the created products or services (which may go back to superior resources and/or process of production); buy may also reside in a well patterned network that links producers and consumers in a sustained way. High levels of internal co-operation, trust and innovativeness are other important features of such districts.

Several European research programmes (such as DORA, RUREMPLO, New Rural Economy and CORASON; see a.o. Bryden and Hart 2001; Dargan and Shucksmith 2006) have shown how the economic performance of rural areas is linked to the presence of different forms of capital (e.g. human, social, cultural, economic capital, etc.). Capital is used to refer to the 'capacity to produce profits and to reproduce itself in (an) identical and expanded form' (Bourdieu 1986:241). In this respect, Ray (2002a:228) argues: Each form of capital can be invested to earn profits – either financial or in kind – which, according to the Weber's spirit of capitalism would be retained in the form of an expanded stock of capital. The point about *forms* of capital is that separate profit-earning and accumulation are *interrelated*. The active combination and intertwining of different forms of capital creates an expanded stock of capital, with 'distinction' and 'attraction' being two of the elements through which such expansion occurs.

This last point is also highlighted in the growing international body of literature in which notions as 'territorial capital' or 'countryside capital' are used to highlight the importance of the mutual presence, intertwining and strengthening of different capital assets (ESPON 2006a and 2006b; European Commission 2005; Okpala 2003; LEADER Observatory 2000). Our approach converges to a certain degree with these different models of territorial capital assets. Ecological capital (which emphasizes the sustainability dimension), social capital, human capital (which finds one expression in the capacity to produce novelties), cultural capital (associated with circuits that centre on particular regional products and benchmarking these), etc. can all be found in our rural web model (Chapter 1, Figure 1.2), in which the notion of the web stresses the intertwining and mutual strengthening of these different forms of capital. Through the search for, and construction of, endogeneity, locally (or regionally) available forms of capital are interrelated, intertwined and

strengthened. This in turn creates a situation where it becomes more attractive for carriers of human capital (e.g. promising youth, capable entrepreneurs, etc) to stay in the area rather than opting for out migration. As this specific local intertwinement proceeds and unfolds, the available territorial capital increases.

While the rural web model converges to some degree with these territorial capital assets approaches, we believe that it also moves beyond them in a decisive way, by explicitly including the dimension of endogeneity. This extra dimension allows a range of strategically important questions to be raised. These include:

- > To what degree is the available set of territorial capital assets specifically linked (or tied) to the territory (or can this construct be readily replicated elsewhere)?
- > To what degree does a specific set of territorial capital assets create uniqueness (or is it readily transferable)?
- > To what degree does this uniqueness (or distinctiveness) contribute to an improvement in competitiveness?
- > To what degree is a specific set of territorial capital assets *controlled* by local actors (and institutions) (or is its composition, its organization and development subject to external loci of control)?
- > To what degree are the obtained benefits appropriated and re-used within the territory (or are they drained away towards other places)?
- > To what degree are the obtained benefits (the additional wealth produced) re-invested in the territory itself, thus contributing to a selfpropelled (or self-sustained) process of development?

Following on from this, territorial capital can be seen as having the following key characteristics:

- > the simultaneous presence, intertwinement and mutual strengthening (in short: the synergy) of different forms of capital (ecological, economic, social, cultural and human);
- > forms of capital that emerge from, and are tied together and strengthened by, the region (the socially defined territory) which provides an indispensable framework, with the region in turn being enriched by and through the combination and development of these forms of capital:
- > the combination and simultaneous development of different resources (or forms of capital) is crucially influenced by the active creation of coherence; which is a decisive characteristic of the region as framework;
- > equally important is that the ongoing and well co-ordinated development of regional resources creates continuity.

Taking these points into consideration, endogeneity can be viewed as the degree to which these foregoing conditions are met. That is, endogeneity refers to the degree to which different forms of capital assets are materially intertwined and producing synergistic effects that would otherwise be missing. Not all forms of territorial capital are identical or replicable. There are important shades and nuances that can be grasped through the notion of endogeneity. These would include the regional (non material) capacity to co-ordinate, to control and to strengthen endogenous development.

Applying the concept of endogeneity

Endogeneity is a concept that can be used in empirical research, rather than a normative notion. We do not imply that areas, activities, processes, etc., should seek to become as 'endogenous' as possible. What matters is which *forms* of endogeneity (which *specific* balances) enhance a region's performance and prospects. The degree, and forms, of endogeneity are characteristic of an area as a whole. It does not necessarily apply to all enterprises within an area since rural communities rarely are homogeneous wholes but generally contain different perceptions and conceptions and opposing coalitions. Endogenous development occurs when there is sufficient consensus about the goals of development and consequently about what can be considered as local resources and the value of local entities as resources.

A high degree of endogeneity within an area may well result from a division of labour between enterprises and a subsequent co-operation. *Materially*, endogeneity implies that:

- a The area 'imports' relatively few resources. The processes of production are mainly, though far from exclusively, built upon local and/or regionally available resources.
- b The main exports from the area are highly elaborated final products (as opposed to raw materials and partially fabricated goods).
- c As a consequence, the Value Added (VA) is relatively high (compared to areas with a lesser degree of endogeneity).
- d This VA is mainly (re-)used in the area itself, thus adding an element of self-strengthening to the local (or regional) economy.

Symbolically, endogeneity implies the availability of a self-constructed (or historically provided) local model (as opposed to global blueprints) that defines the combination, use and further unfolding of available resources (and, consequently, of the local economy). Probably one of the decisive elements of endogeneity is the local capacity to actively unfold the available resources in a way that provides a specific framework that offers attractio, accessibility, multiple useability, distinctiveness and, probably most decisively, the autonomous capacity to generate growth and development at

regional level. The essence of endogeneity is not the availability of rich resources that have been there 'since Genesis'; the crux of it lies in the capability to create, use, unfold and strengthen resources into a whole that is far more polyvalent than the original set of resources (or assets).

Empirical assessments and comparisons of different levels of endogeneity need to focus their attention on origin, simultaneousness and translation. For example locally available ecological capital (breeds, meadows, etc) can be translated into a regional specialty, the processing of which translates into local SMEs and associated employment (economic capital) and skills (human capital). This same ecological capital can simultaneously result in beautiful landscapes (and, maybe, high biodiversity) that translates into the strong development of recreation and tourism (which may simultaneously build on local history and culinary traditions). Such situations and their continued synergies represent a high level of endogeneity.

To offer an example the city of Sneek (in the north of The Netherlands) has a worldwide reputation as a centre for water sports (sailing on the Frisian lakes). Overtime this has been translated into the development of a 'district' containing a range of SMEs specialized in yacht construction and the delivery of associated services. Sneek is also surrounded by a beautiful farming landscape and a high quality dairy farming sector. Hence, it could be tempting to connect these attributes. This, aside from a few, almost accidental, exceptions has not happened. Thus, the endogeneity of the city and surroundings of Sneek are less elevated than it could be.

This gives rise to the following operational questions:

- 1 What are the *origins* of the various forms of capital used in the area?
- 2 Are they combined and used according to regionally specific models?
- 3 Is there multiple use of the same set of resources? Is the presence and use of particular resources actively translated into strengthening other resources?
- 4 Are there (regional) institutions looking for opportunities for successful repatterning, resulting in new interconnections?
- 5 Does the endogeneity of the area translate into higher levels of Value Added?
- 6 Does endogeneity translate into distinctiveness, higher product quality, attraction and accessibility of the area etc?
- 7 What is the degree of local relative autonomy and control, how are local actors involved?
- 8 Are regional and local actors able to adapt to post-productivist rural economies which are increasingly based on services and immaterial goods?

The relevance of endogeneity

The *material* relevance of 'endogeneity' (of building on local resources and the subsequent enlarging of interactions with the wider economy) resides in its contribution to a strong and dense web (i.e. the multifunctionality and intra-sectoral intertwinement in and of rural economies). Its *symbolic* relevance lies in the contribution it makes to creating a sense-of-place.

Both components are crucial in acquiring a certain degree of control over the social construction of distinctiveness, attractiveness, resilience capacity and/or the reduction of vulnerability and exchangeability, all of which are key characteristics of endogeneity. This applies primarily to rural or regional territories, although it could be argued that endogenous development should also explicitly examine urban-rural relationships. The growing international body of literature on rural areas as a consumption space for urban citizens (e.g. Marsden 1998), expresses the growing exogenous influences on rural areas, and highlights new sets of opportunities for new rural production methods and new rural goods and services that draw upon distinctiveness and attractiveness in meeting changing urban demands. As such the ongoing dynamism in urban-rural relationships might provide important stimuli for endogenous rural development. This in turn raises the question of the extent to which rural areas can succeed in maintaining a certain degree of control in translating changing urban demands into new rural activities, services, goods, etc.

This last point emphasizes the need to rethink the notion of rural regions, in a way that includes both the demand and the supply side. In Chapter 1 a proposal for such a reconceptualization has been presented.

Interrelations with the rural web

The rural web model indicates that endogeneity might be perceived as a process that is critically dependent on sets of activities that unfold along the other dimensions of the web. In this respect the territorial capacity to create *coherence* between sets of activities is of crucial importance. In the following we will focus on how endogeneity translates to these other dimensions.

The creation and further unfolding of sustainability

As outlined in the previous chapter, endogeneity represents a specific trajectory towards sustainability for rural economies (including an important role for agricultural activities). The issue of sustainability can be used to highlight a fundamental distinction between endogenous development in general and rural endogenous development. In the latter, natural capital – or, better, environmental capital, in which human

activity plays an important role - is of primary importance (unless we simply consider rural development as 'growth in rural areas'). For this reason, the reproduction of natural/environmental capital is an inherent part of rural development.

Food production can contribute in different ways to sustainable rural/regional development, as amply documented in the European SUS-CHAIN programme. Building on empirical evidence from several food chain initiatives in seven EU member states, the SUS-CHAIN programme distinguished three typical trajectories with specific drives and scopes. Each of these represents a different pathway towards sustainability, and has different impacts on sustainable rural development (Roep and Wiskerke 2006).

SUS-CHAIN concludes that the impact of 'territorially embedded' food chains is highly significant at the regional level due to the presence of different kinds of synergistic effects (e.g. positive effects on rural tourism, rural landscapes, regional distinctiveness, etc.). The high impact is also due to the integration of vertical and horizontal configurations of networks. The growing body of literature on alternative food networks increasingly recognizes that territorially based configurations of networks are a critical success factor in sustaining food production and retaining Value Added. These territorially based food chains make a significant contribution to strengthening rural economic activities, through actively constructing dense webs of relations and positive externalities.

The potential for territorially (re-)embedding food chains as a response to the exchangeability risks of conventional food chains is currently subject to much debate within social and agricultural sciences (Goodman 2003; Evans et al. 2002; van der Ploeg and Renting 2003; Mattiaci and Vigniali 2004; Watts et al. 2005). Changing professional identities in agriculture (an endogenous driving force par excellence) is one of the most debated issues. Several studies suggest that farmers are increasingly seeking to distance their farm management strategies from the logic of modernization and actively engaging in alternative development strategies. This was highlighted in a trans-national survey of some 3,000 farmers in 6 EU countries (Netherlands, UK, Ireland, Germany, Italy and Spain). The findings indicate that more than half of professional farmers are currently engaged in one or another form of economic diversification; with even more expressing an interest in taking up new activities (Oostindie et al. 2002).

Research increasingly shows that agricultural activities are at least partly the outcome of non-economic driving forces. In more general terms this raises the possibility of endogenous changes. Studies on new types of

pluriactivity and hobby farming illustrate that agricultural activities are frequently driven by non-commercial motivations like the appreciation of rural values, the desire to live in attractive, green residential spaces, and the wish to contribute to preserving rural landscapes (Gasson 1988; Jervell 1999; Primdahl 1999; Kinsella et al. 2000; Jong 2001; Busck 2002). Studies on the motivations of full-time farmers in engaging in new rural development activities (see e.g. Oostindie and Parrott 2002; van der Ploeg and Renting 2000) also point to the relevance of non-economic driving forces, such as the desire to contribute to an improved public image of farming, increased work satisfaction and farmers' internalising wider societal concerns. It is important at this juncture to emphasize that terms such as non-commercial motivations or non-economic driving forces refer to deviations from the assumed entrepreneurial logic of homo economicus. Different theoretical perspectives, such as the rural livelihood strategies approach or sustainable development approaches, show such motivations and driving forces to have a clear (long term) economic rationale (e.g. optimizing household income, strengthening resilience and maintaining and strengthening regional distinctiveness, etc.).

The creation of new institutional arrangements

Historically the modernization of agriculture has strongly contributed to the dismantling of many localized, community-based social mechanisms. More specifically it has reduced the institutional environment of farm households to relations with market agencies, farmers' associations and state apparatuses belonging to the agricultural expert system, that is to sector based institutions (Renting and van der Ploeg 2001). These sector based (or vertical) networks are increasingly at odds with the diversified nature of rural areas, which are no longer automatically strongholds of farming but rather represent 'multiple realities' with which agriculture has to co-exist, negotiate and build alliances with other actors and interests (through new horizontal networks) (Marsden 1998; Murdoch 2000). Beyond this, farm enterprises are increasingly operating in a multiplicity of markets, in which the viability of their activities critically depends on successfully enrolling other actors. This is especially the case for activities like direct marketing or agri-tourism, which depend on attracting new client groups to valorize the products and services on offer. The articulation of politically constructed 'markets' e.g. for nature and landscape management also often critically depends on mobilising extra-local support (van der Ploeg 1992).

More generally, endogeneity requires new kinds of co-operation, collective action by farmers, between farmers and other rural actors and new institutional arrangements. With agricultural objectives shifting to include a combination of environmental and productive goals, the

relevant management level is often no longer that of the farm, nor that of the central state, but a small territorial area, such as a watershed or landscape unit, in which farmers and other land users need to develop common rules and protocols and adjust their practices. Across Europe, these changes have given rise to the emergence of range of new, often territorially based, institutional arrangements such as wine routes, territorial co-operatives and farmers markets.

In the food sector a growing number of alternative food networks can be observed that combine specific quality claims (organic, local, animal friendly, etc) with innovative organizational structures, which frequently involve consumers, citizens, and local institutions (Jervell and Jolly 2003; Ilbery and Kneafsey 1999; Cochet and Devienne 2002). There are other examples of policy driven arrangements, such as the French Contracts Territorial d' Exploitation (Kroll 2002; Durand 2003) or local action groups as established within the EU LEADER programme for rural development (Ray 1998 and 2000b; Buller 2000; Doria et al. 2003; Shucksmith 2000). The agrienvironmental (or territorial) co-operatives in The Netherlands, which were founded by farmers to operate in the newly emerging markets for nature and landscape management, provide another interesting example (van der Ploeg 1992; van der Ploeg and Renting 2003; Wiskerke et al. 2003; Polman and Slangen 2002).

In spite of their diversity, these initiatives share several common components of endogeneity such as struggles for local control, local resource valorization and the (re-) enforcement of the sense of belonging. While many of these initiatives are still vulnerable; others, such as Tuscany's wine route organizations have managed to mature into robust territorially based institutions with significant positive impacts on rural economies (Brunori and Rossi 2000)

Building on social capital

There is a rapidly expanding body of literature on the central role of social capital in rural development processes. Many such studies contain more or less explicit references to endogeneity (Lee et al. 2005; Field 2003; Ray 2002b; Shucksmith 2000; Flora 1998; Woolcock 1998; Kilpatrick 2001). Following Putnam (1993), social capital might be understood as a dense set of interlinked and well functioning networks that link people together through sets of shared norms and beliefs. This definition is close to the one of the World Bank:

'Social capital refers to the norms and networks that enable collective action. Increasing evidence shows that social cohesion – social capital – is critical for poverty alleviation and sustainable human and economic development' (2008).

Social capital is a vehicle par excellence for constructing interrelations and as such it features prominently in the rural web model. The strengthening of regional autonomy, and the creation of distinctiveness and attractiveness, are decisive elements of endogeneity that critically depend on the presence and development of social capital.

As explained in Chapter 5 of this Volume, endogeneity can be grounded on different forms of social capital. Harper (2002) argues that it is necessarily to make a distinction between bonding and bridging social capital, with bonding social capital characterized by strong bonds, (e.g. between family members or members of ethnic groups). Such ties are particularly important for 'getting by'. Bridging social capital is characterized by weaker, less dense but more cross-cutting ties and is of particular importanc for getting ahead. Flora and Flora (2006) emphasize that the combined presence of both forms of social capital is of crucial importance for community development. High levels of bonding social capital make communities vulnerable to conflicts with outsiders and internal factionalism, whereas a shortage of it raises the threat of dominating power elites or extra local bosses. In such cases, issues of power and hegemony are important. The combination of high levels of bonding and bridging social capital contributes positively to endogeneity. This is illustrated in Figure 3.1 (derived from Flora and Flora 2006) that relates a typology of social capital to community change (defined in a way that shows a considerable similarity with the concept of endogeneity).

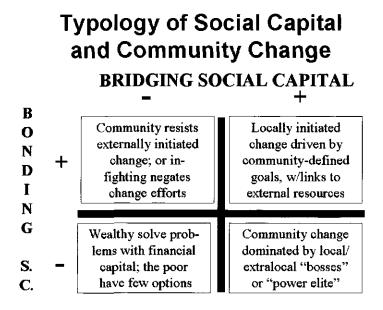
Strengthening novelty production

Novelty production is almost by definition an important element of endogeneity, since this concept highlights the relevance of context-specific knowledge in innovation. Contextual knowledge is crucial for recognising local entities as resources. It is also a constitutive element of the capacity to use these resources to produce use and exchange values that meet local groups' objectives and needs. Together these features are strategic aspect of endogenous development processes. This means that local sociotechnical systems or regimes should be adapted in order to successfully make use of these resources and realize endogenous development.

Novelties might induce new low-cost agricultural practices that considerably improve sustainability and economic performance. This is illustrated in ongoing research on agri-environmental cooperatives in the north of The Netherlands (Groot *et al.* 2007; Ploeg *et al.* 2006; Stuiver 2008). Novelties often materialize as 'deviations from the rule' as in the example of newly emerging short food chains and in new forms of food quality management (see e.g. Roep and Wiskerke 2006). It is also an important

feature in evolving practices for nature and landscape management (Swagemakers 2008).

Figure 3.1 Social capital and endogeneity



Novelty production not only involves using local knowledge (be it tacit or formalized) in designing and implementing agricultural and rural development strategies. It also draws attention to the question of how externally formalized knowledge can be transformed in order to meet and adapt to specific local conditions, demands and necessities (see e.g. Ward et al. 2005). The way in which exogenous knowledge is contextualized and specified strongly depends on the availability of local and tacit knowledge. Therefore, novelty production is highly dependent on the interaction of different types of knowledge and the active combination of different sources, referred to as heterogeneous knowledge management (Stuiver 2008).

Improving the governance of markets

The interrelations between endogeneity and the governance of markets are critically dependent upon the construction of local control (as opposed to external control). For example, several food chains show manifest tendencies for appropriating symbolic (or cultural) capital. Multinationals operating in the Italian wine sector seek to increase their control over other chain actors, not by conventional methods such as the standardization of food quality criteria, but by appropriating symbolic capital grounded in regional typical wine quality and regional identity. Obviously, this has negative impacts on specific elements of endogeneity, such a loss of control over the creation of regional value added and distribution as well as a growing vulnerability to regional exchangeability (since multinationals might in time lose their interest and opt for other regions).

This struggle for control of foods markets also reflects the paradox of liberalism: food markets are increasingly being replaced by supply chains dominated by internal conventions (with more emphasis on supply chain models and management). This 'camouflaged monopolization' of food markets could be perceived as a decline of central control over food markets due to diversifying food quality conventions. Similarly, the emergence of new non-food markets (e.g. energy production), growing urban demands for rural tourism, leisure and attractive rural living spaces, increased societal demands for public goods as nature and landscape, etc. represent new opportunities for territorial control over rural markets. This struggle over food markets and supply chain management is linked and interacts with a struggle over regulations and standard-setting. For example PDO and PGI regulation have strongly affected the governance of Mediterranean food systems, giving producers a role in defining food standards. On the other hand, standards as Eurep-Gap dispossess farmers and localities of control over standard-setting and therefore over their means of production and production techniques.

The following factors are decisive in influencing territorial control over rural markets: 1) broadly shared views about local/regional development; 2) the creation of synergy effects through multiple resource use at different scale levels (i.e. farm, local, regional) and 3) territorial embedding/hybridization of networks (Murdoch 2000; Sonnino and Marsden 2006).

Borderline cases

Endogeneity can be blocked by a variety of factors. Rural areas might have a highly limited stock of local resources (physical, human, social, cultural capital), a poorly functioning institutional environment or one that is strong but inert. Imbalance or underdeveloped social capital, an absence of rural markets and high levels of outmigration, will also have negative effects on endogeneity.

What are the options for rural areas facing serious limitations on their endogenous development? Is it possible to envisage alternative endogeneity approaches that are less reliant on multifunctional agriculture? In rural areas suffering from severe depopulation (and which

consequently face the loss of human, social and cultural capital), endogeneity could imply the possibility of allowing the development of 'primeval' nature, which might evolve into attractive future 'rural' markets for tourism and leisure activities. For (relatively) weak rural economies in The Netherlands this type of scenario has been seriously explored, albeit without any attention for endogenous involvement or control.

Other alternative approaches could build rural energy landscapes, that is to say rural economies that focus on producing renewable energy based on wind turbines and/or biomass production. This approach is relatively independent from nearby markets and perhaps appropriate for more remote areas.

We realize that such ideas might seem at first sight rather exogenous. However, they could be included in the definition of endogeneity, provided that they are guided by local resource valorization and local commitment.

Notes

- 1 The concept of resource is a relative one. To be considered as a resource, something has to be recognized by someone as potentially useful and able to fulfil his/her objectives. Endogeneity starts from this process of recognising local resources.
- 2 In recent literature the notion of endogenous development often is referred to as 'neo endogenous development' (e.g. Ray 2002a and b and 2003; Cabus 2003). This 'neo' prefix is used to distinguish it from one-sided 'bottom-up' perceptions of endogeneity.

4 The Dynamics of Novelty Production

Henk Oostindie and Rudolf van Broekhuizen

A recent and multidisciplinary research programme that centred on novelty production in rural development processes (AGRINOVIM, realized in Italy, South Africa and The Netherlands), defined novelties as

'[being] located on the borderline that separates the known from the unknown. A novelty is something new: a new practice, a new insight, an unexpected but interesting result. It is a promising result, practice or insight. At the same time, novelties are, as yet, not fully understood. They are deviations from the rule. They do not correspond with knowledge accumulated so far – they defy, as it were, conventional understanding. Novelties go beyond existing and explained regularities' (van der Ploeg et al. 2006:200).

Thus, novelty production is about new insights, practices, artefacts, and/or combinations (of resources, of technological procedures, of different bodies of knowledge) that carry the promise that specific constellations (a process of production, a network, the integration of two different activities, etc) might function better. Novelties can be embodied in particular artefacts, in new organizational devices or consist of particular institutional arrangements. Novelties are, as yet, unelaborated in terms of codified (scientific) knowledge. Novelties can not easily be transported from the specific context from which they emerged and germinated, into other contexts. This is a major difference between a novelty and an innovation. An innovation is an expression of codified knowledge that is embodied into an artefact and which can travel globally. A novelty, by contrast, is associated with and is part of a system of tacit knowledge and is highly bound to (and rooted in) a local context.

Wiskerke and van der Ploeg (2004:1-2) use seed as a metaphor to emphasize three essential elements of a novelty.

'First, novelties need time - just as seeds require cultivation and nourishment to germinate, grow, flower and set fruit. They follow a specific unfolding through time before the final outcome (their 'usefulness') can be assessed [...]. Secondly, seeds require a particular ordering of space, or more generally: a particular organization of context. Sowing seeds on rock bed or in a desert is useless. One needs a well prepared seed bed, a well organized distribution of

water, proper crop protection, and so on [...]. Thirdly, the inherent insecurity needs to be stressed. Just as harvests may fail, novelties might turn out to be failures as well. Novelties are related to expectations. It is, however, far from evident whether the eventual outcomes will match the initial expectations'.

In short, a novelty is, to echo Rip and Kemp (1998), 'a new configuration that promises to work'. In retrospect the impact of novelties has been expressed with the concept of X-efficiency (Yotopoulos 1974). X-efficiency refers to a superior economic performance: in which economic results exceed the level that can be explained by the available factors of production and technology. X-efficiency is the 'unknown part' (hence the X), which can nonetheless be very important. Novelties, then, are a decisive ingredient in creating X-efficiency. Novelties make the economy perform better: they drive the 'frontier function' in an upward direction (Timmer 1970) and are decisive in 'disembodied technological change' (Salter 1966).

Novelty production, learning, contextual knowledge and territory

Novelty production is closely associated with contextual knowledg'. With more (and deeper) contextual knowledge there will be more novelty production. On the other hand, high levels of formalization and centralization (and a subsequent marginalization of tacit knowledge) will hinder novelty production. In this sense it can be argued that contextual knowledge is a crucial and indispensable ingredient of the rural web. Following Nonaka and Takeuchi (1995), Belussi and Pilotti (2000) identify four important learning processes that flow together to create contextual knowledge. These processes are:

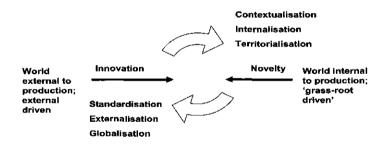
- a socialization, where individuals collectively share their tacit knowledge;
- b externalization, in which this tacit knowledge is transformed into codified knowledge, a necessary step for diffusing knowledge in a larger circuit beyond the original group;
- c recombination, this involves the reuse of various types and sources of tacit and codified knowledge to create new knowledge, through the use of inter-firm networks and other linkages;
- d internalization, which describes the process through which firms absorb external knowledge and transform it back into tacit knowledge.

Together these learning processes flow into the 'stock of contextual knowledge'. Contextual knowledge can be understood as the social output of a historical process of the accumulation of technological capabilities and skills. This occurs only when knowledge is actively mobilized, circulated and further developed within a given territory. Contextual knowledge is an important source of novelty production¹.

Novelties embody new (and often unexpected) combinations of heterogeneous elements of knowledge contained in the stock of contextual knowledge. Experiences obtained with the practical use of novelties will, in turn, enlarge the territorial stock of contextual knowledge.

Figure 4.1 summarizes some of the crucial differences between the learning processes underlying novelties and innovations. It shows that novelties are primarily 'grass-root' driven, grounded in the worlds and processes of production and labour and spurred by learning process that occur through contextualization, territorialization and socialization. By contrast, innovations primarily stem from worlds that are external to the sphere of production: expert-driven learning processes that are characterized by standardization, externalization and globalization. These processes can also translate novelties into innovations and the opposite might also occur: with innovations being translated at the grass-root levels into novelties through contextualization, territorialization and internalization.

Figure 4.1 Novelties and innovations



The existing literature identifies a number of mechanisms that can favour the emergence and further unfolding of novelties.

- 1 The presence of knowledgeable agents (potentially individuals, firms or institutions), and their capability of combining dispersed bits of knowledge through channels that allow for repeated interactions (Horlings 1996).
- 2 A diffuse social system of SMEs, with low levels of internal organizational costs, high levels of mutual trust and a high 'birth-rate'

- of new firms (often founded by employees of technologically advanced firms, who start their own new enterprise).
- 3 Specialization at the regional or district level (reflecting the Italian 'districts') in combination with a well-developed division of labour organized through inter-firm relations of subcontracting.
- 4 Awareness within the firms and institutions about novelties and the ability to absorb and assimilate new knowledge.
- 5 Artisanal processes of production, which emphasize skills and skilloriented technologies (Bray 1986), coupled with demanding and discerning clients.
- 6 Networks that allow for learning (as outlined above); which can sometimes be explicitly organized as e.g. *field laboratories* (Stuiver *et al.* 2003).
- 7 Internal differentiation (in the Dutch horticultural sector there are the small enterprises that have room for experimentation once a new product or procedure is 'ready' it is passed onto the large ones).
- 8 R&D institutions that collect and build upon local novelties. Vijverberg (1996) studied innovations and novelties in glasshouse production in The Netherlands and came to the conclusion that novelties that are derived from practice are more successful and more widely taken up than innovations that have their origins solely in the agri-expert system.

Trajectories of novelty production in agriculture

The history of agriculture is a history of novelty production. Over the centuries farmers have introduced, on purpose or unintentionally, small changes in the process of production, resulting in a steady but ongoing increase in yields. This process has been amply documented (see e.g. Slicher van Bath 1960; Boserup 1965; de Wit and van Heemst 1976; de Wit 1983; Richards 1985; Bieleman 1987; and Osti 1991). Analytically speaking it might be argued that novelty production is intrinsic to agriculture as a result of co-production, i.e. the ongoing encounter, interaction and mutual transformation of the social and the natural (Toledo 1992; Rip and Kemp 1998; Roep 2000; van der Ploeg 2003). Peasant innovativeness, (Ventura and Milone 2005a) unfolds along different trajectories that are all grounded, in one way or another, in co-production. These trajectories centre on:

- 1 Improving resources
- 2 Fine tuning (of growth factors)
- 3 Boundary shifts
- 4 Re-patterning resource use

We will briefly illustrate and discuss these trajectories with examples from farming. This should not be taken imply that novelty production is limited to agriculture. On the contrary, it is very much present in small and medium enterprises, as is clearly demonstrated in the Italian literature on economic districts (Schiavone 2005; Dargan and Shucksmith 2006; Maillat 1995; Camagni 1995). The examples we have selected share several common features: they contribute to an improvement in the economic performance of farm enterprises (and as such are one of ever so many responses to the squeeze on agriculture); they enhance sustainability and they also imply learning processes, often of a joint nature.

Improving resources²

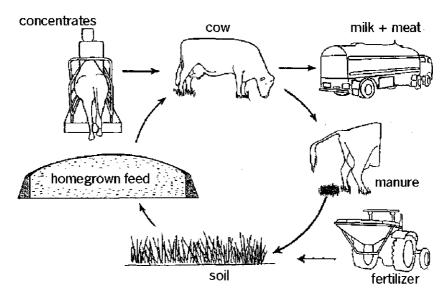
Agriculture is constantly differentiating and transforming itself (Altieri,1990; Toledo 1992; Sevilla Guzman and Gonzalez 1990). New constellations emerge, containing remoulded resources and new combinations of resources. Hence, the nature entailed in farming is 'not the one from Genesis' as Koningsveld (1987) beautifully phrased it. Instead, living nature is constructed, reconstructed and differentiated within long and complex historical processes, which build particular characteristics into resources, giving rise to particular regularities that characterize the behaviour of the resources. These regularities are neither fixed nor universal: they might be *modified*, at particular conjunctures in time, into other possibly even contrasting, regularities (NRLO 1997; Ploeg 2003; Groot *et al.* 2006).

In theoretical terms this implies that the behaviour of natural resources cannot be properly understood outside the pattern of land use (or style of farming) within which they are combined (according to a particular balance) and through which they are reproduced, developed and particularized into distinct entities that fit optimally with the other entities that form part and parcel of the same land use pattern (Sonneveld 2004). Concrete resources are the outcome of co-production: they are shaped and reshaped in and through the constantly evolving interaction between man and nature. That is, co-production feeds back on the resources on which it is built. Farming is not a uni-directional process. It is not simply based on resources, but also entails feedback effects through which resources are unfolded and improved in differentiated ways.

In the Dutch context 'good manure' is probably one of the most telling but also one of the most contested novelties for illustrating these different feed back mechanisms. The background of this particular novelty lies in the modernization process that deeply restructured farming practices and the resources drawn upon. 'Well bred manure' once was a highly valued resource. It making and use were closely embedded in local cultural repertoires. However the modernization trajectory led this valued resource to be converted (unintentionally) into a waste product.

For some farmers this somewhat worrying state of affairs triggered a multi-facetted search to recreate good (or at least better) manure. Thus, the search for good manure started as a critique on inefficiency and losses (Verhoeven et al. 1998). It also departed from the careful observation and interpretation of heterogeneity: the grassland of some farmers was far more productive than that of others in the same neighbourhood; and it was suspected that this could be related to the differences in the manure used in the fields.

Figure 4.2 Cattle-manure-soil-fodder balance



For the farmers involved, 'good manure' was far from being an isolated artefact. Rather it is the outcome of a rebalanced resource use that can best be illustrated by reference to Figure 4.2 (derived from Verhoeven et al. 2003). Technically speaking, good manure is slurry with an elevated C/N ration and a relatively low concentration of ammoniac nitrogen (and consequently an elevated concentration of organic nitrogen). These and many other features are now (after nearly 15 years) well known, documented and scientifically explained (see e.g. Verhoeven et al. 2003; Sonneveld 2004; Goede et al. 2003; Reijs et al. 2004 and 2005; Reijs 2007). At the beginning, though, there only was the expectation that manure could be made better. This also applied to the constellation as a whole (see Figure 4.2). It was expected that rebalancing the constellation (Verhoeven et al. 2003) would render positive outcomes – especially since the modernization trajectories had been focussed nearly exclusively on one component of the relevant whole (the cow) and had created many frictions and setbacks.

At the beginning good or improved manure clearly represented a novelty. It was different in terms of composition, outlook, smell and its effects. It differed also in as far as its history, i.e. its making was concerned. At the time, many exponents of the Dutch agricultural expert system considered good manure to be a *monstrosity*. Currently, though, 'good manure' is the logo for new practices that are now spreading widely across The Netherlands. Its effects include improved economic performance (by reducing costs: see van der Ploeg *et al.* 2003; Groot *et al.* 2006) and providing more opportunities for further farm development.

In a similar vein, Milone (2004) analyzed the novel experiences of shepherds in the Abruzzo mountains, an Italian region that had suffered a decades-long process of slow, and seemingly irreversible degradation of the mountain pastures. This process was due to the strong decline of sheep farming: a process that the modernization of regional agriculture did little to correct and ironically, even accelerated.

In this context, an initially small group of young shepherds started to reuse these mountain pastures. Just as with manure in the Northern Frisian Woodlands, it was a forgotten (or at least neglected) and degraded local resource that became the starting point for novelty production. Rebalancing was also a key here. The use of the mountain meadows was combined with the choice and selection of sheep breeds that are highly adapted to the difficult mountain conditions. The choice was made to focus on cheese production and to this end new, and mobile, cheese processing units were designed. After considerable and well phased experimentation a range of new cheeses (some of which, such as Gregoriano, a soft cheese, and a smoked ricotta cheese were new types) was brought to the market. This initial development opened a range of other circuits over time, including the group's own shop and restaurant (linked with agro-tourism services) and internet sales (which now reach as far as the USA and Germany). These same circuits were also used for selling meat and, in a later stage, for wool and derived products.

Today the enterprise employs the equivalent of 20 full time employees, with an index of 26 adult animal units per unit of labour force. This indicator is a remarkable contrast with conventional sheep breeding (1 labour unit for 60 animal units) and particularly with industrialized meat production in the nearby Po Valley (1 labour unit for 500 adult animal units). Thus, the initiative in the Abruzzo mountains gives far higher

employment levels than conventional agriculture. This is especially important in a marginalized mountainous area. In several respects the novelty production represents a rupture with the past. It has created new networks (with consumers, wither workers and between the shepherds) which are in stark contrast with the atomization of actors and the anonymity of markets that prevailed before (and this also represent a new embeddedness; see Capter 8 of this book).

An important feature of Milone's study is that it meticulously explores the economics of this novel way of production. Table 4.1 (derived from Milone 2004) summarizes the main findings.

Table 4.1 Economic performance (Euros per sheep)

Typology	Specialized	Specialized breeding		Novelty	
Total revenue	208.60		296.00		
Breeding and milk production costs					
- Feed	38	19%	23.6	14%	
- Family Labour	42	21%	28	17%	
- Employed labour	90	45%	<i>7</i> 5	45%	
- Rent for pasture land			16	10%	
- Technological costs	20	10%	15	9%	
- General costs	9	5%	8	5%	
Milk processing costs			57	52%	
- Family labour			32	29%	
- Employed labour			15	14%	
- Technical costs			10	9%	
Marketing costs:			53	48%	
- Family labour			20	18%	
- Employed labour			10	9%	
- Technical costs			23	21%	
Total costs	199		275.6		
Net profits	9.6		20.4		
Labour income plus net profits	141.6		210.4	. . -	

These data show, in synthesis, that this novel approach to shepherding yields 50% more Value Added per sheep than conventional, specialized sheep breeding. In addition the novel approach is also leading to an increase in the size of flocks, while the conventional approach continues to result in further decline. This illustrates the superior performance (see also Chapter 1 and 3) that novelty production can give rise to.

Table 4.1 also shows that novelty production not only affects the technical side of farming, but that it simultaneously re-patterns the socio-economic structure. It is an appropriate response to the squeeze on agriculture. Similar differences have been found for novelty production in other sectors and other regions (see e.g. Swagemakers 2002; Wolleswinkel *et al.* 2004; ADAS 1996 which show how agrarian programmes for nature and landscape preservation have also increased employment and increased the total Value Added in the regional economy).

Fine tuning3

Secondly, novelty production in agriculture may emerge out of (and proceed as an improved) the coordination and fine tuning of the extensive range of growth factors entailed in agricultural production processes (de Wit 1983). Examples of growth factors are include the amount and composition of nutrients in the soil, the transportability of these nutrients, the root capacity to absorb them, the availability of water and its distribution over time and so forth. Even the cultivation of wheat involves more than two hundred such growth factors and more emerge as our knowledge grows. It is important to reiterate that these growth factors are not constant over time. For example, the amount and composition of nutrients in the soil are modified through the work of farmers (see Hofstee 1985 for an impressive discussion of farmers' management of soil fertility before chemical fertilizers were available). A decisive feature of farming is that these growth factors critically depend on the active and deliberate behaviour of farmers. These growth factors form the many elements of a socio-technical constellation within which the 'technical' (or 'natural') and the 'social' cannot be separated; in practice they fuse together. The 'transportability and distribution of nutrients', for instance, depends on ploughing, while the availability of water is regulated through irrigation and drainage. In general, every growth factor depends on (and is calibrated by) a specific task within the labour process.

In the end, yields depend on the most limiting growth factor, as illustrated in Figure 4.3 in which the growth factors are represented as the staves of a barrel (von Liebig, 1855). The water level, i.e. the yield, depends on the shortest stave. Within their *praxis* farmers are continuously looking for the 'shortest stave', the limiting factor. Through complex cycles of careful observation, interpretation, re-organization (often initially taking the form of experiments) and evaluation, novelties are found and/or created. That is, existing routines are changed. This is an ongoing process: once the original limiting factor has been corrected,

another will emerge as the newly limiting one (an extended discussion of this is given in van der Ploeg et al. 2004).

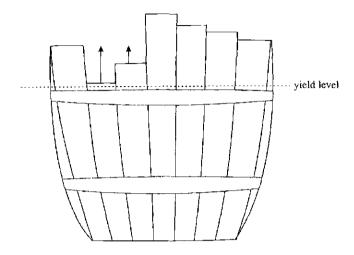
During the modernization trajectory the driving forces of agricultural growth changed in a radical and far reaching way. Whilst for centuries it was farmers who searched for and then corrected the limiting growth factors (the 'short staves' of figure 3), the era of modernization saw agrarian sciences take over this role of upgrading specific growth factors (and subsequently adjusting others). In consequence a new division of labour emerged: farming became increasingly embedded in, and dependent on, socio-technical regimes and the process of upgrading was considerably accelerated.

The accelerated upgrading of growth factors, and the associated intensification. specialization, spatial concentration and enlargement, increasingly ran into a range of social and ecological limits and reactions. The more so since the natural growth factors entailed in the local eco-systems were replaced by artificial growth factors: with the 'art of farming' becoming increasingly disconnected from locally available resources and the eco-system and from local socio-economic patterns and relations (Altieri 1990; van der Ploeg 1992). This has increasingly blocked novelty production by farmers (and not only farmers).

In contrast with the logic of modernization, novelty production in agriculture is a highly localized process: that is dependent on local ecosystems and on the local cultural repertoires in which the labour process is embedded and organized. This localized character implies that novelty production is highly interwoven with the endogeneity of the rural economy. The latter feeds the former; and the former often strengthens the latter. This is especially relevant today when the search for sustainability often requires a generalized and well co-ordinated 'down-grading' of growth factors, which often crucially implies (re)centring around the specificity of the local eco-system (van der Ploeg et al. 2004).

This localized character also implies that what emerges in one place (and at a particular time) as an interesting novelty, will probably not pop up in another place, or that if it does it might have adverse effects or hold little or no promise. Novelties are always built upon (and hence dependent on) a specific balance between tacit and codified knowledge. Before novelties can 'travel' from one area to another they have to be 'unpacked' from the specificities of the local (including local knowledge) and then to be 'repacked'. The learning processes that draw on socialization, internalization and recombination, are very important in this complex trajectory.

Figure 4.3 The growth factors that influence agricultural production processes (von Liebig 1855, De Wit 1992)



Boundary shifts4

Thirdly, novelty production currently involves the extension of farm boundaries, and this is particularly the case in the context of rural development processes (described in Chapter 2). The inclusion of new domains and associated activities into the farm enterprise (e.g. food processing, food marketing, nature protection, agro-tourism, etc; see Figure 2.2 in Chapter 2) implies boundary shifts. In this respect rural development might be equated to 'entering into the unknown'. New experiences are translated into new knowledge which in turn inspires new practices. This is necessary since a simple and straightforward adoption of e.g. industrial technologies for food processing in the (changing) farm would be absolutely inappropriate, just as the retail techniques used in supermarkets cannot be used for farm shops. New techniques, new approaches, new artefacts, new networks, etc. have to be developed. Consequently, new knowledge is needed. This applies not only to the creation of new activities and new networks that add income and employment opportunities; it is also valid for the construction of new responses that correspond to changing needs and expectations of society at large and for the reconfiguration of rural resources. Ventura and Miloni (2004:57) define this type of novelty production as a 'redefinition of farm boundaries' and emphasize that in the case of farming it is 'likely to be faced with complex innovation processes that ultimately might lead to a redefinition of the very boundaries of the farm/firm'. In this respect, rural development processes currently constitute extended processes of learning and

knowledge sharing. These processes are driven forward by novelties, just as they result in novelties. Novelties are, in a way, the carrier of knowledge dissemination. Ventura and Milone specifically argue that farms that reorganize their entrepreneurial activities towards multifunctionality (and thus actively redefine their farm boundaries) are characterized by complex innovations of product, process and organization and are highly dependent on internalizing learning processes within the farm. This represents a remarkable contrast with conventional innovation paths in agriculture, which are far more characterized by the 'expropriation of the cognitive element of innovation, leaving the farm only the work of implementation' (ibid. 2004:79).

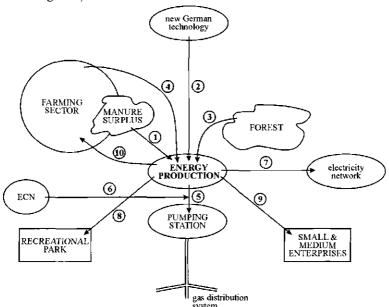
Re-patterning of resource use⁵

Fourthly, novelty production in agriculture can also refer to an active repatterning of resource use. This can be illustrated by an initiative in the Dutch village of Zwiggelte, located in the northern Province of Drenthe (this illustration is derived from van der Ploeg 2008). From the early 1990s onwards, 7 farmers from this village started to look for alternative farm development opportunities. Their initial proposal is illustrated in Figure 4.4. It highlights an important design principle: that the art of farmerdriven innovativeness centres on the creation of new, as yet not existing connections. Of particular interest here is that the territory, instead of the sector, is both the context for and the locus of the construction of such new connections.

A first connection (at that time not widely known) was the one between manure surplus and energy production. However, the efficiency of a straightforward conversion of manure into energy turned out to be very low. Here a second connection turned out to be decisive. They came to find about a new technology - developed in Germany - that considerably increases the efficiency by fuelling the process with carbon. After a study tour to Germany (this is the second connection) they concluded this could be applied to their own situation, especially as they had a possibility to create a third and fourth connection: by maintaining the local forests they could 'harvest' a lot of the required carbon, and could also use agricultural waste. Conversion of carbon enriched manure provides gas. This provoked the fifth connection: an ancient pumping station could be re-used to pump the gas directly into the delivery system. To convince the company (Gasunie) that controls gas distribution, a sixth connection was created and used: the Petten research institution (ECN) was asked to make a chemical and physical analysis of the gas to be produced. It turned out to have the same characteristics as natural gas; hence it could be introduced without into the delivery system any inconvenience.

Being shrewd operators, the Zwiggelte farmers immediately realized that one of the main risks would be their nearly complete dependency on the Gasunie network, which controls all gas distribution. Thus a seventh connection was studied: the possibility of using a turbine to convert the gas into electricity and to channel it into the regional distribution network for electricity. This would provide them with more flexibility. However, their conception of a new pattern did not stop here. Producing electricity from gas produces a lot of heat, which is normally lost. Hence connection number eight was invented: channelling the heat towards the local bungalow park and its swimming pool for continuous heating (implying that the open air swimming pool could be used for a far more extended period in the year which in turn made the park more attractive). A ninth connection that was explored was the direct delivery of electricity (through a new cable) to the local small and medium enterprises. Connection number ten regards the use of the Value Added realized within the local community.

Figure 4.4 Re-patterning of resource use by Zwiggelte farmers (derived from van der Ploeg 2008)



Although we have certainly not mentioned all of the relevant interconnections in the Zwiggelte case, our main point is clear. Novelty production proceeds through the re-patterning of resource use and the capacity to make new territorial connections that strengthen the local setting. These connections are not only material (or technical); each and

every link simultaneously involves negotiations, renegotiations, and possibly the creation of new institutional relations (Rip and Kemp 1998; Roep et al. 2003).

As indicated this re-patterning is not strictly limited to farming, but flows over sectoral boundaries. In Figure 4.4, the agricultural sector interlinks and increasingly intertwines with the industrial the energy and the tourism sectors, and establishes important interrelations with forest management as well. As a result, considerable synergies (at the level of the rural economy as a whole) are created.

It is interesting to note that novelty production currently enters domains that have previously been hardly explored, such as e.g. meadow bird protection (Swagemakers 2008). The particular combination of the tacit knowledge of farmers and bird watchers and the organizational skills of staff members of new territorial co-operatives allows for novel approaches that go far beyond the standard routines advocated and adopted by specialist nature organizations. Here the interrelations between novelty production and new institutional arrangements came to the fore as a strategic driving force (see Hees et al. 1994; Stuiver et al. 2003 and 2004; Wiskerke et al. 2003; Stuiver 2008).

The relevance of novelty production and its interrelations with other domains

The relevance of novelty production, as illustrated in this chapter, can be synthesized into the following points:

- 1 Novelty production strengthens the transformation of (potentially) available resources into territorially specific resources; it supports territorial distinctiveness.
- 2 Novelty production creates capacity to 'perform better' and in that way increases the competitiveness of agriculture and rural economies (OECD 1996).
- 3 Novelty production allows sustaining and extending local control over resource valorization.
- 4 Novelty production can be a stimulus for further developing contextual knowledge.
- 5 Novelty production can mobilize creativity that is underutilized or completely denied within conventional Research and Development systems.
- 6 Since novelty production strongly intertwines with endogeneity, it tends to construct more sustainable solutions.
- 7 Novelty production increasingly crosses the borders of the agricultural sector and puts 'the territory' centre stage.

The interrelations between novelty production and the other dimensions of the 'rural web model' (see Chapter 1 for a general discussion) can therefore be summarized as follows:

Endogeneity

Novelty production is intrinsically interwoven with endogeneity: as conclusion explicitly drawn by Belussi and Pilotti (2000), who state that contextual knowledge, as the locally constructed mix of tacit and codified knowledge sources for novelty production, is a 'strategic but immaterial resource, which is essentially territorial specific' and, therefore, an endogenous resource. The empirical examples provided in this chapter made it clear that novelty production is often also about escaping from control imposed by the state, expert-systems, vested farmers' unions, food chain partners, etc. This struggle for (relative) autonomy, further illustrates the close relation between novelty production and endogeneity.

Sustainability

The good manure case (discussed above) clearly demonstrates that the translation of environmental progress into economic gains (as implied by the new balance) was primarily secured through farmers themselves creating new relations of sustainability that both reconstitute rural resources and re-ground farming practices within local eco-systems. This is in stark contrast to decades of highly institutionalized productivist perspectives on Dutch agriculture, which considered diversity and local specificity to be obstacles to development and growth. Today, novelty inspired solutions offer new alternatives, because they combine the dynamics and malleability of farming with new societal demands and expectations.

New institutional arrangements

New institutional arrangements are intrinsically related to novelty production and novelties may even take the form of a new institutional arrangement, as in the example of the Dutch territorial cooperatives. These cooperatives aim to significantly improve the relations between farmers and the state through introducing new forms of local self regulation and new strategies for 'negotiated development' so as to overcome the existing institutional barriers. The WRR (2003) argues that constructing sustainable rural economies requires new forms of regional cooperation, and that only through such new forms of cooperation can the many frictions and limitations inherent to the general rule sets defined by expert systems and the state, be successfully redressed. At the same time 'rural estates', a classical but nearly forgotten institutional arrangement, are re-emerging as potentially valid responses to modern problems

(Broekuizen and van der Ploeg 1999 and 2006; FPG 2005)6. They offer the promise of being a highly relevant mechanism for 'governing the commons' (Ostrom 1990),7

Governance of rural markets

If sufficiently protected and facilitated, novelties can contribute significantly to the competitiveness of rural economies. The presence and ongoing unfolding of novelties can lead to production, distribution, etc., becoming more efficient, improving the quality of products and services on offer and/or contributing to new forms of synergy (Brunori, et al. 2000, Swagemakers 2002). This is particularly relevant when novel products, processes of production and/or re-assembled resource bases create uniqueness (unique products and services of known and valued origin, etc.). This in turn is associated with 'embeddedness' (see Chapter 8) which can result in the creation of 'nested markets' (markets that by virtue of their specific and normative networks set themselves apart from the mainstream and 'anonymous' markets), thereby adding a new or additional component of competitiveness.

Social capital

Different forms of social capital are needed at different stages of the life cycle of novelty production. When novelties are emerging the presence of bonding social capital is particularly important, as shown by empirical evidence on novelty production in Italy (Scettri 2001). The emergence of novelties is strongly dependent on strong, territorial and trust based networks. Subsequently, the availability of bridging social capital becomes important in the unfolding of novelty promises and the associated processes of negotiation and obtaining recognition for them.

Secondly, (different forms of) social capital might also be an outcome of, as well as a prerequisite for, novelty production. Novelty production can also contribute to the active re-construction and/or strengthening of trust based relationships, which are a key component of social capital.

New tendencies

Sawhney et al. (2006) recently argued that the innovation efforts of large companies are often undermined by management approaches that perpetuate various 'myths' about innovation. These myths are summarized below:

- 1 we need more ideas (lack of recognition of the innovativeness of direct stakeholders):
- 2 innovation exclusively takes places in specific departments (idem);

- 3 *people just need space to innovate* (denial of the relevance of institutional embedding of innovations);
- 4 innovation entails radical breaks with the past (successful innovations would be mostly all but radical);
- 5 *mistakes are expensive* (instead of recognizing that early experiments allow for fine-tuning);
- 6 *avoid by-passes* (instead of recognizing that alternative directions could at later stages become promising application fields).

Institutional settings can respond in different ways to changing ideas on innovation processes. In The Netherlands, especially in the past decade, a variety of multiple stakeholder innovation networks have been created in agriculture and rural development. Some of these networks actually function as 'communities of practice' (Wenger,1998 and 2002), actively searching for and facilitating 'practice' driven novelties that contain specific sustainability promises (Wolleswinkel *et al.* 2004). For a number of reasons (including a lack of institutional and professional interest in field research, the complexity of multidisciplinary research, ideological preferences, etc.), many of these networks are primarily driven by 'top-down' approaches, 'high tech' biases, and rely on the dominant doctrines of scale based efficiencies, etc.

The literature increasingly recognizes that the barriers can be conceptualized in terms a need for strategic niche management (SNM). SNM has been defined as 'the simultaneously managing of both technical and institutional change and smoothing the diffusion process of promising novelties' (Hoogma 2002; Moors et al. 2004). Roep et al. (2003) emphasize that SNM is about bringing together the knowledge and expertise of users and other actors, such as policy makers, researchers or representatives of public interests into a process of smart experimentation that actively creates and maintains sufficient space for novelty production and experimentation by farmers or others (Wiskerke 2002; Roep and Wiskerke 2004).

In recent years comparative international research has focused on a range of successfully managed strategic niches in which a wide range of novelties have been produced and given the required protection in order to mature (see for example Roep, *et al.* 2003; Milone 2004 who compares Italian and Dutch cases; Ventura and Milone 2005b, who compare different municipalities; and van der Ploeg 2008 for an overview). In all these studies the success of strategic niche management is related to the 6 dimensions summarized in Figure 4.58.

Effective and Autonomy and Governance progressive agency reformism **STRATEGIC** NICHE MANAGEMENT Integration **Politics** Knowledge

Figure 4.5 Dimensions of strategic niche management

The governance dimension refers to the capacity to play simultaneously on different chess boards and to co-ordinate the differently located 'moves' within an adequate and progressively evolving flow through time. Governance is about negotiated development in the different domains of state regulation, about the creation of exemptions to certain of these rules and/or about other ways of dealing with highly disarticulated routines and procedures. If governance of the strategic niche is successful, it can provide the space to unfold and tie together promising novelties, thereby enhancing the capacity to deliver. In Figure 4.5 this is referred to as effective and progressive reformism. This refers to newly induced practices (hence, reforms) and to the associated results and outcomes that are superior to the ones normally realized (hence, effective). Effective reformism refers to the capacity to get things done, it strengthens the strategic coalitions required for governance as well as those within, for example, the realm of politics.9

Integration refers to the need to glue different activities together in a seamless pattern. It implies going beyond the many contradictions and ambivalences engendered by the generic and segmented regulatory schemes of the central state. Integration might also occur within a wider network, by for example coordinating local activities in such a way that they fit into provincial programs.

Knowledge is the next crucial dimension. In today's 'knowledge based societies' it is increasingly the case that the only things that are allowed are those that have been 'proven' to function well. Thus, a timely construction of new knowledge (or at least the timely design of appropriate research proposals) becomes crucial, not only at the interface between the territorial constellation and the state apparatuses, but also for the participating actors: as indicated earlier, novelties have to be 'unpacked' and to be understood, if they are to be developed further.

Strategically managed niches as outlined in Figure 4.5 require considerable *agency* and (relative) *autonomy* is crucial in unfolding this agency. If novelties are moulded, within such niches, into potentially effective reforms, then these niches can, indeed, be understood as *spiders* (see Chapter 1) that strengthen and unfold the rural web.

Notes

- 1 Some novelties arise by 'accident' or through 'errors'. Even so, contextual knowledge is crucial to recognize the potential value of the 'error'. See e.g. Remmers (1998) for a beautiful example on how a local cheese specialty in Andalusia can be partly traced back to the recognition of unexpected opportunities from 'accidents' that occurred during the labour process.
- 2 The following section is based on Ploeg, Verschuren, Verhoeven and Pepels 2006
- 3 The following section is derived from van der Ploeg, Bouma, Rip, Rijkenberg, Ventura and Wiskerke 2004
- 4 This section draws heavily on Ventura and Milone 2004.
- 5 The following section draws on van der Ploeg 2008 (Chapter 6)
- 6 The same applies to e.g. comunità montane in Italy (see Ventura and Milone 2005b).
- 7 The 'commons' is used here to describe public goods such as attractive and accessible landscapes, a high level of biodiversity and valuable but non-commoditized resources, such as clean water.
- 8 Figure 4.5 and the following discussion are derived from Transforum 2007.
- 9 Politics refers to the capacity to involve, engage, mobilize and use the support of 'others' in order to create, to defend and to expand the required room for manoeuvre.

5 Social Capital

Talis Tisenkopfs, Ilze Lace and Inta Mierina

The aim of this chapter is to provide a relevant conceptualization and definition of social capital that can be applied in the study and analysis of rural development processes. The chapter starts with a literature review and the presentation of a conceptual model. The forms, institutions and measurement of social capital are discussed. This is followed by an analysis of the formation and use of social capital that draws on case studies that pay special attention to the East of Europe. We relate the different aspects of social capital to rural development processes. Finally we discuss the potentials and limits of social capital in contemporary rural development.

With respect to rural development processes social capital might be defined as the capacity to get things done collectively. Social capital is a cooperative way of getting things done. It is embodied in the ability of individuals, groups, organizations and institutions to engage in networks, to cooperate, employ and use social relations for common purpose and benefit. Thus social capital is seen as contributing to goal achievement on the basis of relationships. Actors may be individuals, groups, firms, organizations or societal institutions.

Similar definitions can be found in the literature: 'Social capital refers to the norms and networks that enable people to act collectively' (Woolcock and Narayan 2000). This simple definition serves a number of purposes. First, it focuses on the sources, rather than the consequences (Portes 1998) while recognizing that important features of social capital, such as trust and reciprocity are developed in an interactive process. Second, this definition permits the incorporation of different dimensions of social capital. Third, while this definition presents the community (rather than individuals, households, or the state) as the primary unit of analysis, it recognizes that, as members of a given community, individuals, households, enterprises, local groups and institutions, can develop and use social capital for local development purposes and communities themselves can build a structured relationship with the state.

Social capital critically assumes the existence and importance of networks, social relations, practices of engagement and participation. It is anchored in shared values and norms, as well as in supporting institutions. Social capital enhances trust between individuals, groups and institutions, which in turn enables collective action and the achievement of common goals. In sum, social capital is a qualitative dimension of economic and social life. At the same time it has to be learned, developed, and practised by social actors. When considering rural development processes, both the opportunities and limitations of social capital should be taken into consideration.

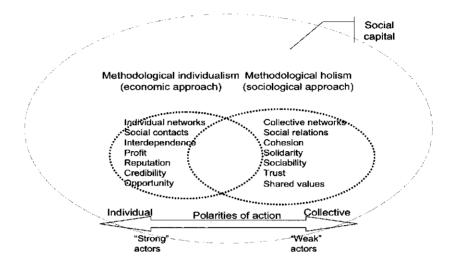
Overview of social capital theories: Theoretical perspectives and approaches

Theoretical definitions of social capital highlight a variety of approaches and perspectives: Pierre Bourdieu defines social capital as social resources that provide access to economic capital; Robert Putnam defines it as networks that enable cooperation; James Coleman understands social capital as shared values and trust. The list of definitions can be continued.

The concept of social capital is basically rooted in the two disciplines of sociology and economics. This is part of the reason for the tension or ambiguity that seems to be inherent to the term (Castle 2003, Portes 1998). 'Social' presumes the existence of networks, shared norms, collective action, whereas capital implies an individualistic approach and rational choice. Other authors (Murray 2005) have pointed to an associated contradiction that emerges at the methodological level: the tension between individualistic and holistic perspectives towards social capital (Figure 5.1).

Individualistic perspective: Within the economic literature on social capital, mainstream economics adheres to methodological individualism (Van Staveren and Knorringa 2007). There are three different ways in which social capital is integrated in mainstream economics: it is perceived as an individual resource owned by individuals or firms (Paldam and Svendsen 2004); it is regarded as an instrument for reducing risks in bargaining and contracting processes (Dasgupta 1999) and it is seen as a tool to reduce transaction costs (Szreter 2000). Transaction cost economics argues that investments lose much of their value if the relationship breaks, thus social capital can yield benefits for economic parties through creating reliability, credibility and trust between partners. On the other hand it may create risks of dependence if relationship becomes asymmetric (Williamson 1985).

Figure 5.1 Perspectives on social capital



In sociology, the individualistic version of social capital theory was first systematically developed by Pierre Bourdieu (1986), working within neo-Marxist class analysis of social reproduction. He emphasized the intangible character of social capital which is embodied in the structure of human relations. He defined social capital as:

'The aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition' (Bourdieu 1986).

This approach is instrumental: while the source of social capital is collective, its accumulation, mobilization and use is inherently individualistic; it is dependent on actors' class position, access to power and social habitus. Thus social capital is primarily an individual means (personal, family, household, the group's, petty-bourgeois etc.) to reproduce status, power and social class.

The individualistic vision also appears in Nan Lin's (2001) and Ronald Burt's (2000) analyses. They interpret social capital as an individual endowment, which originates from his/her involvement in social ties or communities of association. Social capital is an asset that can be purposefully generated and skilfully employed by an individual or a group, for example, by enlarging a network of friends. Actors expect returns on their investment in social capital. This theoretical line gives primacy to individual ability to accumulate and manage social capital. These theories of methodological individualism emphasize importance of individual interests and behaviour in the use of social

capital and hint at potential conflicts between individualistic and collective strategies in rural development.

Holistic perspective: The other line of theoretical reasoning about social capital conceptualizes it as an essentially collective good that is collectively embodied and best used in collaborative way (Coleman 1998; Fukuyama 1999; Portes 1998; Putnam 1993). Its essence is seen as being within networks, shared values, norms and trust. Reciprocity, participation and solidarity are central features. According to Brehm and Rahn (1997) there is a reciprocal relationship between civic engagement, interpersonal trust and confidence in the government. Francis Fukuyama (1999) defines social capital as the institutionalized complex of informal values and norms which makes cooperation possible, and analyses networks and the radius of trust. Fukuyama (1995) also suggests that trust leads to efficiency in the market, the effective functioning of formal institutions and increased prosperity. Robert Putnam (1993) argues that social capital is embodied in forms of social organization such as civic and religious groups, informal community networks, bonds of kinship and friendship, norms of altruism and trust. Putnam emphasizes the importance of civic engagement and participation in voluntary organizations, which he refers to as a civic virtue. Social capital is related to traditional virtues like honesty, keeping commitments and the like. Engagement is the key to generating social capital and encourages cooperation, strengthens social relations and thereby improves the economic performance of enterprises and the effectiveness of government.

Social economics has developed a holistic perspective on social capital. This led to the argument that relations matter: the economy is embedded in social relations (Van Staveren and Knorringa 2007). Granovetter (1985) refers, in this respect, to relational embeddedness. Many economists agree that social relations are the cement (Repetti 2002) or lubricant (Field 2003) of economic interactions.

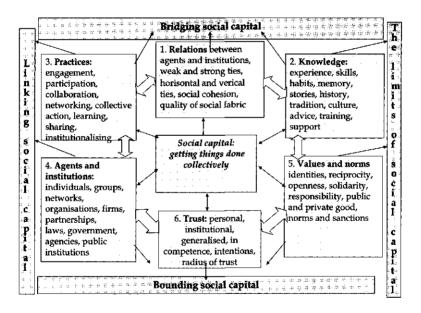
These perspectives have further implications for the use of social capital: within the individualistic perspective social capital is considered as a valuable resource for 'strong actors', for example – educated professionals, entrepreneurs, innovative SMEs, to enhance their professional or commercial performance through skilful using their social contacts. By contrast the holistic perspective highlights social capital as an option for 'weak actors', for example – unemployed or excluded groups of the population to solve their problems through engagement in mutual support networks. In studying rural development the methodological holism approach opens a broader perspective as it allows for the exploration of communities of values, relations between individuals,

groups and institutions, the role of trust and the formation of common alliances for rural development.

A comprehensive model of social capital

Social capital contains of a great variety of elements: networks, actors, institutions, values, norms, practices, trust and others. Figure 5.2 proposes a theoretical model of social capital as it functions in rural development. Here we apply the web metaphor (outlined in Chapter 1) to conceptualize the main constituents of social capital and their inter linkages. The model seeks to grasp the complexity of social capital, whilst simultaneously paying attention to structural elements and dynamic processes. It also delineates the forms and limitations of social capital.

Figure 5.2 Elements, structure and forms of social capital



Relations: Relations are seen as a *core* of social capital, especially within the holistic perspective where the focus of analysis is more towards relations between individual actors and institutions. Granovetter differentiates between weak and strong ties and horizontal and vertical relations. Relations matter as they are a glue of society, simultaneously keeping it differentiated and integrated. Ideally, social capital enhances cohesion and social integration. It is important to acknowledge that relations can be inter-personal, inter-group and institutional. Societies with high levels of civic involvement are thought to have a higher quality of social relations.

Practices: Social capital is practiced through a wide range of activities including civic engagement, participation, establishing contacts, networking, collaboration, undertaking collective action, sharing and learning. According to social learning theory (Elkjaer 1999, Wenger 2003) these activities can only be learned by doing. If communities of practice, for example rural groups or partnerships develop a shared development strategy and learn to cooperate in solving individual or collective problems it is possible that the process will also strengthen mutual trust, improve network organization and lead to the adoption of new institutional norms. Social capital increases through being exercised and used.

Values and norms: Shared values are often seen as strategic elements that underlie and sustain social capital. Values can be linked to history, tradition, identities and social structure. They are stable and encoded in culture principles, ideals, and criteria of human action. They have a collective origin and a longitudinal character, which differentiates them from interests. Values also maintain continuity between the past and the future. The basic values of (positive) social capital are: openness, mutuality, reciprocity, solidarity, public good and responsibility. Norms are based on values but they are seen more as practical principles and guidelines for action. Norms are also related to sanctions. Francis Fukujama emphasizes the difference between formal and informal norms. At some instance practices have to become institutionalized with common norms and patterns of behaviour becoming fixed so as to regulate collectivity and allow enrolment of new members.

Agents and institutions: The agents and institutions of social capital can be varied: and include not only individuals, groups and networks, but also economic organizations such as firms, cooperatives, as well as government institutions, media and civil society organizations. It is important to emphasize that social capital is not solely an asset of small civic groups but an asset of a range of societal actors. Recent studies have increasingly focused on analysing networks; as these are seen as one of the most important components of social capital (Schuller 2007). However, from a methodological point it is important not to overlook the diversity of civic, market and governmental actors and their role in the formation and use of social capital.

Knowledge: Knowledge is a somewhat neglected aspect in studies of social capital even though it is very important. Many successes and failures in the use of social capital can be explained by differences in knowledge, experience, tradition, skills, collective memory and the routines that specify how social capital is applied. We may distinguish between

individual, group, community, organizational and institutional knowledge of social capital.

Trust: Trust is another key component of social capital; and some argue that it is the main element as it both a precondition and an outcome of social capital. Bradach and Eccles (1984) define trust as a type of expectation that alleviates the fear that one's exchange partner will act opportunistically. Trust is both a type of behaviour and an underlying disposition: it has the intrinsic value of moral reliability and the extrinsic value of reducing the risks of relationships (Nooteboom 2007). The literature differentiates personal, institutional and generalized trust and distinguishes trust in competence (ability to perform activity) and trust in intentions (ability to perform activity in accordance to shared values and good will). Trust can be built through personal relationships as well as impersonally, through and with institutions (institutional trust). There are linkages between personal and institutional trust. Francis Fukujama proposes the notion of the radius of trust. Even small groups can create a vast radius of trust

Forms of social capital: bonding, bridging and linking

The literature differentiates between two main forms of social capital: bonding and bridging (Woolcock 1998, Putnam 2000). Some authors (Woolcock 2001, Evans 1996, Fox 1996) distinguish linking social capital, which connects civic groups to institutions and enhances vertical integration, as a separate form.

Putnam defines bonding social capital as reciprocity within a group and bridging social capital as solidarity in wider society. Bonding social capital refers to links with others who are similar; bridging social capital refers to the links a community has with others that are different (Schuller 2007). Bonding social capital emerges from strong social ties based on identity and group belonging, for example a family, community, religious group or organization (Korringa and van Staveren 2007). Bridging social capital describes more distant connections between people and is characterized by weaker, but more cross-cutting ties e.g. with business associates, acquaintances, friends from different ethnic groups etc. Bonding capital provides stronger ties than bridging capital (Granovetter 1985). The importance of these different forms of capital can differ: bonding social capital is good for 'getting by' in life; bridging social capital is good for 'getting ahead' in life (Woolkock and Narayan 2000).

Linking social capital describes the ability of groups to engage vertically with external agencies, either to influence policies or to draw upon resources (Woolcock 2001). It is different from bonding and bridging

social capital, as it involves relations of hierarchy between groups having different positions of power. In the context of rural development, linking social capital is important for strengthening the external capacity of farmers - their ability to negotiate with the state and other relevant actors (Carroll 1992; Bebbington 1998). A lack of linking social capital may often hinder the potential of other forms of social capital.

There are both complementary and conflicting relationships between bonding and bridging social capital. Strong bonding capital can provide significant support and access to resources but might imply limitations upon individual freedom, hamper the participation of outsiders and create power asymmetries and inequalities vis-à-vis other groups in society. It can be both an enabling and a limiting factor. High bridging capital empowers actors, opens up new opportunities and provides access to more diverse information, knowledge and resources. However it might not be accepted within the narrower community. Woolcock and Narayan (2000) concluded that the different *combinations* of bonding and bridging social capital influence the range of outcomes and the dynamics of which imply that these combinations change over time.

The scope, limits and adverse effects of social capital

James Coleman (1998) reminds us that social capital not only provides the basis for cooperation but can also be a source of control. Alejandro Portes (1998) identified four negative aspects of (mainly bonding) social capital: exclusion of outsiders from the networks, making excessive claims on network members, restriction of individual freedom, and downward levelling norms. Van Staveren (2003) noted some other adverse effects of social capital: which can be used to limit competition (through for example by fixing prices in cartels), or to limit membership by increasing the entry barriers in professional associations. Evidence shows that strong bonding social capital can have a negative effect on economic performance, whereas weak bonding ties may create binding ties and bridges across different communities, fostering knowledge sharing and the diffusion of trust, and therefore benefiting the process of development' (Sabatini 2006). Fewer negative effects have been reported for bridging social capital, although the associated loss of identity, weakening of community ties and dis-embedding (i.e. a reduction of bonding ties) can all have negative implications.

Social capital can be used to promote or to undermine the public good and does not necessarily promote the development (economic or otherwise) of a community (De Filippis 2001). If the inner bonds of organizations and groups are strong, but the groups are isolated and lack

intercommunity ties, they can exclude and discriminate against members of other groups. Protection of the interests of group members can result in corruption, nepotism and criminal behaviour, with negative effects for society at large and its development. Fukuyama identifies this in his discussion of the 'radius of trust'. If people care only for their immediate group or family, they can justify an unfair treatment of others. De Filippis argues that social capital is about getting access to resources and information that others do not have, which is what makes it a form of 'capital'.

Social capital can have a negative effect if it leads to irrational and irrelevant economic decisions. For example, if an entrepreneur hires a person because of acquaintance and not by selecting the best candidate in terms of professional capabilities. In addition, trust-based networks can invite free riders within networks not to work as hard as they might, or have to, if they were not connected. Such patterns of behaviour between enterprises and government agencies can be especially harmful.

Informal networks are often established and provide the greatest value for their members, when existing formal institutional agreements are failing and the economic and social spheres are poorly organized (Rose 1999). This can lead the people with the most valuable networks to have little interest in seeing the system be better-organized or formalized, as this would take away the benefits they receive from their existing networks. Equally, it can be hard for people to adjust and to comply with formal requirements, if they are used to making agreements and cooperating informally.

One acknowledged positive effect of social capital (in particular, strong inner bounds within a community) is fostering compliance with norms. But this can also have a negative effect. The same ties can hold back not just opportunistic behaviour but also positive individual initiatives and efforts - to study or work hard and to be successful, to move to other regions, to cooperate with local government agencies (if the overall attitude towards them is negative), to be creative or to try new things.

Questions about the negative or adverse consequences of social capital are related to questions of ownership and control. Several studies have highlighted that social capital is most efficiently accumulated and used by educated and better-off groups in any population. They have more resource-rich networks that embody more power, which can yield more substantial returns to their members. In rural areas these are active individuals, members of local elites, commercially successful farmers, entrepreneurs and other 'strong actors' who generate additional resources and can tap into public support through developing strategic contacts and consolidating their social capital, often at the expense of 'weaker' actors. One example of this is the powerful large producers' organization in Latvia *Zemnieku Saeima* which has lobbied for subsidies for big farmers and abandoning area payments for small land owners. This example shows that social capital may have an arbitrary role in discussions over distribution of EU agricultural subsidies.

When discussing social capital we should not forget the legitimacy of actors also acting in their self-interest. In certain situations people are likely to give preference to their individual interests over collective ones. When researching rural development processes this means following a balanced approach and being sensitive to differences and inequalities in the access and use of social capital in rural areas. This applies particularly when social capital generates power asymmetries, social inequalities and the overexploitation of public goods.

Measurement and indicators of social capital

This section reviews the measurement and indicators of social capital and in so doing explores the empirical components and aspects of the theoretical models discussed above.

There are many examples of how social capital is being operationalized and measured in surveys and in specific and comparative research. Two indicators appear to be central and widely used. Putnam suggested measuring social capital through the density of voluntary organizations. Association membership and network participation are established as major indicators of social capital. Following Fukuyama (1995), the other mains indicator is trust. This has been widely used in World Values Surveys (Inglehart 1994) to assess the level of social capital in different countries.

Attempts have been made to develop aggregate measures and complex indicators of social capital. Paul Bullen and Jeny Onix (1998) propose six indicators: participation in networks; reciprocity; trust; compliance with social norms; working for the common good and empowerment. The World Bank Social Capital Implementation Framework applies five indicators: groups and networks; trust and solidarity; collective action and cooperation; social cohesion and inclusion and; information and communication. Sandra Franke (2005) argues that much research has a shared set of indicators such as: trust; civic engagement; voluntary activities; participation; charity; and compliance with obligations. Paldam (2000) argues the that choice and difference in indicators depend on the theoretical approach: the economic rational choice approach focuses on individual strategies; the sociological network approach focuses on civic

associations; and the institutional approach, based on the political sciences, focuses on institutions of social capital. In studying rural development it is important to take into consideration the complex nature of social capital, which cannot be grasped just through one or a few indicators. While there are certain core indicators, such as participation and trust social capital is nowadays seen as including many new aspects such as, tolerance, openness, learning, innovation, responsibility, transparency and others that should be also included in any analysis.

Institutions of social capital

Social capital is often taken to refer to voluntary micro-level relationships between people. However, it is important to recognize that it also refers to relationships between people and organizations, institutions, and between organizations themselves. Apart from the civic engagement dimension, social capital has a strong institutional dimension. Thus, governmental institutions, municipalities, public agencies, educational institutions, rural support services, knowledge support centres and similar institutional agents are important in the formation and use of social capital. Social capital is sometimes measured as trust in public institutions.

It has been argued that in contemporary societies institutional trust (trust in government, policy institutions, rule of law, and effective, accountable and responsible governance) is more important than interpersonal trust. In other words, in highly individualized societies citizens tend to rely on institutions rather than on collectives.

Research has shown that social capital is stronger when there are institutions that support collective activity and encourage groups and networks. At macro level much can be done by the state, for example through the educational system. Bourdieu emphasizes that social capital is most actively built up in educational institutions like schools and universities. Some institutions have an (implicit or explicit) role of building social capital, such as churches and schools. These often have a long history and are well established within their societies.. Overall however these traditional macro and meso level institutional forms of social capital, (also including the bureaucratic state and traditional cooperatives) are in decline.

At the meso and micro levels important support institutions for social capital in rural areas include community centres, cultural houses, clubs, pubs, cafes, public libraries, local media and, more recently, rural IT centres. New opportunities for supporting social capital are provided by the media, modern means of communication, websites, virtual meeting points, and the like.

Development of social capital

In practical terms, social capital is developed over time through:

- Engaging in networks, relations, and collective activities;
- Practising relations and activities;
- Learning and experiencing how to interact and cooperate, overcoming difficulties;
- Benefiting from collective gains, creating positive results and externalities;
- Institutionalizing the norms and habits of cooperation;
- Placing social capital in the context of the other resources for rural development.

There are crucial steps in the formation of social capital which cannot be omitted. Firstly, it is important to become connected to the informal networks that allow one to engage in initiatives and shared practices. Secondly, it is crucial to get connected to the institutions and organizations that provide support and a kind of security net. And thirdly, it is essential to get connected to common identity platforms (ethnic, territorial, social etc.). If activities, institutions and platforms can be aligned there is a good chance of forming solid social capital.

On the other hand, the factors that hinder formation of social capital can include: civic passivity, alienation from government, scepticism towards public institutions, technical factors (such as distance, inadequate infrastructure for communication) and social factors such as belonging to a disadvantaged group, lack of education and skills etc.

Social capital cannot be created through direct investments. Chloupkova and Bjornskov (2002) argued that, in the Czech Republic, social capital should be created and strengthened through a 'legal and economic environment conducive to building social capital from the bottom'. A detailed study of villages in Sweden revealed that, in sparsely populated areas where institutional presence and the provision of social services is made difficult because of financial and other reasons, part of the institutional vacuum can be filled by the social capital created by local development groups (Westlind, Forsberg and Höckertin 2002).

The development of social capital can be further clarified by distinguishing between the levels of application (micro, meso and macro), the actors involved, problems addressed and solutions identified (Table 5.1). The table is based on research findings from the following EU projects: SINER-GI 'Strengthening International Research on Geographical Indications: From Research Foundation to Consistent Policy'; COFAMI Encouraging Collective Farmers Marketing Initiatives'; MULTAGRI 'Capitalization of Research Results on the Multifunctionality

of Agriculture and Rural Areas'; SUS-CHAIN 'Marketing Sustainable Agriculture: An Analysis of the Potential Role of New Food Supply Chains in Sustainable Rural Development' and TRUC 'Transformation of Rural Communication'.

Table 5.1 The levels and use of social capital in rural developme

Levels and structures	Actors and networks	Problems addressed	Solutions identified
Macro level: European Union State institutions Educational system Political parties	Government International NGOs National associations Policy networks	Sustainability Rural development Competitive agriculture	Integrating Agricultural and Rural Development Policies; Multifunctionality
Meso level: Regional Associations Enterprises Universities Innovation centres	Regional and local governments Partnerships Environmental and food movements	Competitiveness of regions	Marketing the region Building alliances Governing the region
	Food supply chains (FSCs) Enterprise clusters COFAMIs ¹ Cooperatives	Marketing	Innovating in products and services Modernising, up- scaling, re-embedding and governing FSCs Marketing collectively
Micro level: Neighbourhood Community Family School	Local initiative groups LEADER groups	Quality of life	Improving rural communication Empowering rural actors Enhancing livelihood assets Improving living and working conditions

¹Collective Farmers' Marketing Initiatives

Another view is proposed by Woolcock and Narayan (2000) who categorize the research on social capital and economic development into four distinct perspectives: the communitarian view, the networks view, the institutional view, and the synergy view. Table 5.2 summarizes the key elements of the four perspectives on social capital and the corresponding policy prescriptions.

The communitarian perspective equates social capital with local organizations such as clubs, associations, and civic groups. This perspective centres on the number and density of these groups in a given community. It also holds that social capital is inherently good, that more is better, and that its presence always has a positive effect on community welfare.

The networks approach attempts to account for both the positive and negative side of social capital and stresses the importance of vertical as well as horizontal associations between people and organizations, such as community groups and firms.

Table 5.2 Four views of social capital

Perspecti ve	Actors	Policy prescriptions
Communitarion view		
Local associations	Community groups	Small is beautiful
	Voluntary organizations	Recognize social assests of the poor
Network view	T	
Bonding and	Entrepreneurs	Decentralize
bridging community	Business groups	Create enterprise zones
ties	Information brokers	Bridge social divides
Institutional view		
Political and legal	Private and public sectors	Grant civil and political liberties
institutions	·	Institute transparency,
		accountability
Synergy view		
Community	Community groups, civil	Coproduction, complementarity
networks and state-	society, firms, states	Participation, linkages
society relations		Enhance capacity and scale of local
•		organizations

The institutional perspective argues that the vitality of community networks and civil society is largely the product of the political, legal, and institutional environment and that the capacity of social groups to act in their collective interest depends on the quality of the formal institutions under which they reside (North 1990). Corruption, frustrating bureaucratic delays, suppressed civil liberties, inequality, ethnic tensions, and failure to safeguard property rights are major impediments to prosperity (Knack and Keefer 1995, 1997). It also stresses that the performance of states and firms themselves depends on their own internal coherence, credibility, and competence and on their external accountability to civil society.

And finally, the recently emerging synergy view centres on the view that governments, corporations, and civic groups are partners in attaining collective goals. Neither states, nor firms, nor communities have the resources themselves that are needed for broad-based, sustainable development. Complementarities and partnerships forged both within and across these different sectors are required. The state's role in facilitating positive developmental outcomes is the most important and problematic. The state is the ultimate provider of public goods and the final arbiter and enforcer of the rule of law, property rights, freedom of speech and association. The state is also able to facilitate enduring alliances across the boundaries of class, ethnicity, race, gender etc. Communities and firms also have an important role to play in creating the conditions that produce good governance. Woolcock (1998) developed

these ideas and showed that a range of development outcomes flowed from different types and combinations of community capacity and state functioning. Similarly, Berry (1993) argues that when representatives of the state, the corporate sector, and civil society establish common forums through which they can pursue common goals, development can proceed. In these circumstances social capital has a role as a mediating variable that is shaped by public and private institutions. This shaping is an inherently contentious and political process, in which the role of the state is crucial. Moreover, the fundamental social transformation of economic development - from traditional kinship-based community life to societies organized through formal institutions-alters the calculus of costs and benefits associated with different dimensions of social capital and the desirable combinations of these dimensions (ibid.). The synergy view, with its emphasis on the different levels and dimensions of social capital and recognition of positive and negative outcomes that social capital can generate, is perhaps the most useful in developing comprehensive and coherent policy prescriptions.

Box 5.1 Use of social capital: sustainable food supply chains

The following information is based on the SUS-CHAIN programme that studied fourteen food network initiatives in seven European countries, focusing on sustainability, embeddedness, marketing and governance (Wiskerke and Roep 2006). The outcomes of the programme illustrate how social capital is used 'to get things done collectively'. The initiatives show that success critically depends on mobilizing and using social capital. Initiatives such as Tegut-Rhöngut (a regional supermarket chain in Germany) and Upländer Bauernmolkerei (a regional dairy in Germany) illustrated that cooperation between a wide range of actors – producers, processors, retailers, consumers and regional public authorities – is crucial in order to differentiate products and to build relations of trust with consumers (Kirwan, Tisenkopfs and Rossi 2007).

Two regional initiatives (for Raw Milk Sheep Cheese in the Pistoia Mountain Province in Italy and Valais Rye Bread in Switzerland) illustrate how the regional identity, authenticity and uniqueness of products can be preserved and marketed in external circuits of consumption by linking the local production system to external support networks. Social capital in these cases was used to align producers' groups, regional authorities and development agencies and also generated synergies between locally grounded artisanal food chains and rural tourism activities.

Two UK cases, the Coop Local Sourcing Initiative (started by a retailer) and the Cornwall Food Programme (initiated by a hospital catering organisation), show how re-embedded food chains are constructed through engaging the interest of a wide range of regional stakeholders – consumers, the public health service, local producers, retailers, etc. The social capital aspect in both initiatives is vested in collective action based on shared values such as regional identity, trust between producers and consumers and local patriotism (Kirwan, Tisenkopfs and Rossi 2007).

Two Dutch food chains – CONO BeemsterKaas (a regional cheese producer) and De Hoeve Pork chain illustrate a more economic approach to social capital. CONO is a medium-sized cheese factory (producers' cooperative) producing a specialist, niche marketed cheese, BeemsterKaas cheese. Social capital is vested in relations with farmers from the north of Holland. De Hoeve Pork chain sells environmentally certified pork and links pig farmers with butchers and supermarkets. In this case social capital is used for marketing purposes.

The SUS-CHAIN research shows that social capital aspects are best used in food supply chains (FSCs) when there is:

- Democratic governance of FSCs;
- Cooperation with external public support institutions;

Stakeholder collaboration, collective action and an ongoing construction of relations between chain partners, local communities and societal organizations through internal and external communication processes.

Box 5.2 Social capital in territorial development

Supported by the British government, the Latgale Rural Partnerships Project (2000 – 2003) was a rural development initiative in the three districts of Rezekne, Balvi and Daugavpils in the eastern part of Latvia. It aimed to create rural partnerships involving local governments, business support organizations, state institutions, NGOs and community action groups. The purpose of the partnerships was to develop local area-based development strategies and to implement them strategies through allocating small grants to community action groups. The project was intended as a test site for implementing the LEADER+ Programme in the new EU member states. The action research programme developed the following insights about the accumulation and use of social capital by rural partnerships (Tisenkopfs and Sumane 2004).

Community Centre in Kantinieki Village The village of Kantenieki is a long way from the district centre. Its infrastructure is poor, and the unemployment rate is high. The Rezekne partnership board appointed an energetic facilitator for the village. She encouraged local people to be more active, talked about their needs and raised ideas for projects. Several groups were created which prepared and submitted a proposal to establish a community centre. This project received support from the local municipality and the Rural Partnership Project. The case illustrates synergy between the local action group, the facilitator, local municipality and the partnership board. Further analysis of the relevance and workings of social capital in this case suggested that the major positive outcomes were community empowerment and animation.

Farmers' Education and Information Centre in Nautreni Village A farmers' group was set up in the village of Nautreni. They wanted to establish a community education centre also open to people from other surrounding villages where people could get together, acquire information, and realize common ideas. The farmers' group prepared and submitted a proposal to the Rezekne Partnership Board, which was approved. With this funding the group was also able to purchase accounting software that can be used by the village farmers. This story highlighted the importance of institutional cooperation and support at local level in starting

community initiatives and projects. Bonding social capital played a role at the micro through ties shared by farmers because of their common interests and values such as solidarity, mutual support and engagement. When the group started to cooperate with the district partnership and local municipality, this created linking social capital at the meso level and gave the group access to more resources and public support that helped to implement an economic project.

Women's Group in Ozolaine Village This was established in 1998 to encourage women, to offer entrepreneurial training and to provide mutual support and has involved 25 women. Initially lecturers in psychology, entrepreneurship, and economics were invited to give talks. As well as learning, group members gained in self-confidence, helping many of them find a job: 'When we started out, we were all unemployed but now all of us have a job.' The group has several partners, including the municipality, the Rezekne District Partnership, a municipality in Germany, a community from the neighbouring village of Kantinieki, the local Employment Agency, the local Society of Biological Agriculture, the Society of Rural Women of Latvia and foreign funds. The women were interested in the Rural Partnership Project as they met with sympathetic response among women who already had established a centre, largely from overseas funding. The groups future plans include growing plants, establishing greenhouses, breeding sheep and processing wool. A sewing circle has already been established, and a community centre is being set up in the old workshops. Over time several leaders have emerged in the group and several new initiatives have mushroomed, including a youth club, which publishes its own newspaper. This case epitomizes the importance of learning and external cooperation in development and the use of social capital. Here the results of drawing on social capital include empowering rural women and strengthening their knowledge and self esteem. These were achieved by creating the opportunity for women to discuss and share their visions of their personal future and that of the community.

Applying the social capital approach to rural development policies

The World Bank has taken on board the social capital approach in its development policies since 1990s as earlier theories (Modernization Theory, the World System Theory, Dependency Theory) failed to explain why countries with similar endowments of natural, physical and human resources demonstrate different socio-economic performance. The World Bank has postulated that social capital is a central component in the relations between the state, market and civil society. Social capital explains how people interact and cooperate with, each other in tackling common problems and build mutual trust. The LEADER Programme of the European Union is another key example of the social capital approach being incorporated in rural development policies through activities and support to rural and territorial partnerships, LEADER groups and associations.

As such it is possibly the most important factor in social development (Grootaert *et al.* 2004). Christiaan Grootaert (1998) defines social capital as the internal social and cultural coherence of society, the norms and values that govern interactions among people and the institutions in which they are embedded. He calls social capital the glue that holds societies together, without which economic growth and human well-being become difficult. The World Bank has incorporated social capital theory in its rural development programmes and projects in many developing, as well as Central and Eastern European countries, through schemes supporting local action groups, micro-credits, modernization of small enterprises, education and training. The World Bank approach assumes that social capital can substitute for public goods and government provision by stimulating individuals to engage in clubs, associations and collective action groups. Harriss (2001)has criticized this approach for ignoring power asymmetries and exclusion effects.

Limitations of social capital and need for critical approach

It is important to point out the possible limitations and adverse effects of social capital - for instance, its potential to act as a source of social control and exclusion, especially in the case of strong bonding social capital ties. The differential access of social groups to social capital on the basis of race, class, gender, etc. is another key question. Such asymmetrical distribution may mean that social capital plays a distorting role in public debates and decision-making processes. Uncritical assessments of the benefits of social capital are to be avoided. Not only the effects of social capital need a critical assessment, the political implications of the concept are also to be taken into account. Some varieties of the concept may be susceptible to critiques similar to those levelled against the notions of embeddedness and localization. An uncritical celebration of trust. cooperation, civic engagement, etc. may have (intentional or unintended) consequences of legitimising existing social relations and neglecting or downplaying social divisions and inequities. A key theoretical limitation of the concept seems to be that social capital, when applied in a functionalist, Durkheimian approach, seems to have an inherently conservative bias. For this reason, the development and wide circulation of the concept in recent years, especially among international institutions (such as the World Bank) has been regarded with much suspicion by some authors, who question it having been co-opted by neoliberals (see e.g. Bezanson and Carter 2006; Fine and Lapavitsas 2004; Law and Mooney 2006). In other words, much like the concept of sustainability, the concept of social capital is implicated in a variety of sometimes conflicting interests and political ends.

Social capital in Eastern Europe

The question of the role of social capital in the transition countries of Eastern Europe has been subject to quite extensive research (see for example: Rose 1999, Ledeneva 1998, Lonkila 1999, Salmi 2006). Several conclusions can be drawn from these studies:

- These countries have comparatively low levels of social capital although there are difference between (and within) them. For instance it has been argued that in Central European countries social capital in rural areas has not experienced such a decline during post socialist transformation as for example in Baltic countries)...
- Individualistic strategies are prevalent responses to the difficulties of the transition period.
- There are low levels of trust in governments and official institutions.
- Informal mutual support networks are widespread.
- The Soviet blat system (in which people access goods and services through personal contacts) continues to thrive within the new market economies.
- Micro-level and civic norms of cooperation are difficult to establish.

The specific situation of Eastern Europe is particularly relevant to the debate on rural development since it stresses the importance of informal networks and communities of trust that are needed to make official rural support institutions and policies more effective. It also introduces the question how social capital might be regenerated.

Social capital and the rural web

As argued above social capital is considered to contribute to problem solving and to the achievement of both individual and collective goals. Outcomes and externalities are important aspect of analysis. Social capital can generate both direct and indirect outcomes (externalities) in terms of economic and social benefits. Economic benefits such as profit, access to markets, innovation, reputation of a firm, etc might all be improved. Social benefits can take the form of increased trust in institutions, reduced uncertainty, and so on.

Social capital and the governance of markets: It is a myth that individualism dominates all other considerations, even in business. Success is dependent on relations. Many SMEs have 'markets' that more or less completely consist of social capital (Cooke 2007). Without social networks most SMEs cannot function. Birger Vennesland's research (2004) on the success of small rural enterprises concludes that:

'If a firm was able to interact horizontally in a local arena while at the same time interacting vertically in a regional/national network, the probability of the firm being successful was 94%'.

On the other hand, social capital itself cannot create a market, if there is none or if there are considerable obstacles to it functioning properly (for example due to remote location, low purchasing power or other circumstances).

The process of globalization gives local producers more access to new markets but, at the same time, they have become increasingly vulnerable to increased external competition. Multinational corporations have a number of significant advantages over small, local producers. They have lower production costs (enabled by production chains, more effective technologies and a greater technological capacity) and more effective marketing (through global communication channels). The markets for agricultural products in rural areas are relatively small but the market requirements and competition in cities are more complex. Growing demands for quality and growing expenditure on advertisements imply a considerable increase in investments. Supermarkets play a large and still growing role in distributing products in and impose additional demands on producers. Local producers often are not well positioned to develop their own markets, to negotiate for contracts to enter these markets, nor do they have the technical capacity necessary to meet market demands. Such a situation forces local producers and firms to cooperate. Many local firms and small producers have joined forces to gain access to resources, new markets, new technologies, experience and opportunities to better promote their produce. Such cooperation can be very beneficial economically. It can be profitable to cooperate in transporting their products to distant markets, in collectively buying and sharing more expensive technologies, paving for market research or advertisement or to gain more bargaining power when negotiating with distributors.

Social capital and the endogenity of rural economies: Some of the SUS-CHAIN case studies (Brunori, Cerruti, Medeot and Rossi 2006, Reviron 2006) explain how cooperation between producers' groups, regional public authorities and market organizations can help to preserve a centuries-old tradition of production and develop new regional products and services. In these cases (Pecorino di Pistoia and Rye Bread of Valais), social capital has been combined with symbolic capital provided by 'external' organizations, (e.g. Slow Food Italy).

Social capital and the creation of new institutional frameworks: Social capital can contribute to developing new institutional arrangements in rural areas, such as partnerships, rural innovation networks, collective marketing organizations, active municipalities and regions, territorial

development alliances and citizen platforms. Social capital, in terms of cooperation between firms, educational institutions governments contributes to polycentric regional development.

Social and economic processes are becoming increasingly complex. Many community-oriented projects require high investments, different aspects of professional knowledge and affect the lives and interests of many social groups. Such decisions are hard to make without consulting the professionals, people who know the regional or local specificities, the historical and social backgrounds and the groups that will be affected by the decision. Therefore, there is a growing need to involve different social groups in political dialogue. Successful policies are based on involving different social groups in the process of discussion.

For civic engagement to have an effect there must be supporting laws and 'open ears' at the institutional level. Therefore it is important for government agencies to encourage or be open to two-way vertical connections with local groups. For rural development processes this implies paying attention to open communication, trust and cooperation between local communities and government agencies at different levels.

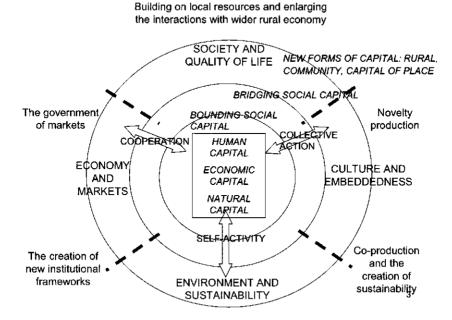
Social capital and novelty production: Economic surveys show (Cooke 2007) that innovative firms are more likely to develop strategic contacts, use external information and have higher trust in collaborators compared to less innovative firms. The SUS-CHAIN research also showed that companies that build strategic relations with external research organizations and experts are continuously innovating their products and marketing (Tisenkopfs and Sumane 2006). Knowledge intensive businesses are usually more involved in social capital relations and innovative firms make more use of social capital.

A number of studies indicate that collective action actually provides the means to adopt and benefit from agricultural innovations. For example Narayan and Pitchett (1996) show that rural communities with higher levels of associational life and participation, stronger social networks and well functioning local organizations are more likely to, and more successful at, using new knowledge and technology to increase productivity.

Social capital and the creation of sustainability: The challenge of sustainability often requires collective answers; many challenges to sustainability (be it environmental, economic, social cohesion or quality of life) cannot be solved by actors individually. The attractiveness and competitiveness of rural areas increasingly depend on the ability of social actors and institutions to build collective action networks based on common values and norms, mutual trust, cooperation between entrepreneurs, local municipalities, civic groups, a sense of identity and local 'patriotism'. For example the rural municipality of Smiltene in Latvia has made great progress in strengthening and diversifying its economic life, increasing entrepreneurial activity and employment; promoting cultural and sporting life; improving the living environment and quality of life. These achievements have been greatly facilitated by social capital processes, such as cooperation, trust between different social groups and participation in community life. One further positive effect of social capital in the long run is the town's increasing ability to attract talented people, especially young people and educated professionals who appreciate the development potential of the place and see it as good place to further their careers.

Yet, there are limits to the potential of social capital. It can not be effectively used for problem solving if there is shortage of other forms of capitals – economic, human, financial and natural. Social capital best unfolds its potential if there are synergies between different capitals and if these are translated into new, more effective, forms of capitals.

Figure 5.3 Synergies of capitals and their relation to theoretical web



Social capital is sometimes equated to 'community capital', thus emphasizing the totality of all community assets, including elements of

infrastructure. Hancock (2001) for instance, refers to 'social, ecological, human and economic capital, the combination of which may be thought of as community capita'. Castle (1998) proposes another interpretation of social capital, called 'rural capital', which consists of three elements:

'Natural capital is that part of the natural environment capable of contributing directly or indirectly to human satisfaction. Manmade capital consists of those items produced by humans capable of use over time. Human capital reflects investments in people that enhance their potential social contribution.'

Thus the notion of social capital in rural areas can be extended to concepts of community, rural, or regional capital and the capital of place.

Factors that affect social capital

Rural society is currently going through many changes. These changes can have both negative and positive effects on the formation and use of social capital:

Negative factors:

- Changes in nature and character of work, shifting away from long term employment to short-term contracts and project based working patterns.
- Expectations that social capital should be replaced by institutions, for example law enforcement and effective governance.
- Spatial changes in society, increased mobility, growing distance between living and working environments.
- Out-migration in particular can have negative effect on social capital.

Positive factors:

- Public demand for effective, transparent, accountable institutions and governance.
- Increased need for civic participation to govern complex societies.
- Available funds, informative support and consultations for collective activities and partnerships.
- Immigration of well-off former urban dwellers and associated new demands.

A delineation of social capital

In conclusion this section examines the boundaries and potentials of social capital, highlighting the main constraints upon its effective use, such as distances, social legacies, the absence of markets, fragmented societies and other factors.

New technologies have increased opportunities to communicate more easily and effectively but often there is insufficient communications infrastructure in rural areas. Decentralized networks for information can help in the sharing and exchange of new ideas and empower amongst rural people. Distance can become a problem for direct communication.

Much of the power of social capital is embodied in networks. Yet, if these networks have no resources, no ability to generate capital and no access to the power necessary to shift the rules, these groups will remain economically excluded. For rural development programmes this means that emphasis needs to be given to supporting and promoting vertical linkages, the diversity of networks, and on building bridges with excluded groups.

Engagement in collective action takes time and resources. For farmers to invest in it, they must be convinced that the benefits derived from collective approaches will be greater than those from individual ones. A number of surveys show that people are more likely to cooperate if they see that this will improve their living standards. Equally people in higher social or economical positions might not want to cooperate and be connected in broader networks as they wish to protect their affluence.

Nevertheless, there are collective actions which offer no obvious economic benefits, such as voluntary work and joining forces for the common good. This shows that there are other motives to participate in collective action other than the purely economic. The willingness of people to invest in the public good is positively related to their attachment to their communities.

Another limitation of social capital stems from the relations between bonding and bridging social capital. There can be large numbers of different groups and institutions (high density) but with little cross-membership and high exclusivity, and by contrast – fewer institutions but with multiple, overlapping membership of many individuals.

It has to be noted that the relevance of social capital is less if it is pushed from 'above'. The willingness to cooperate must be genuine, not just formal. Willingness to cooperate must come from rural actors themselves. The relationship between social capital and governance is also important.

Understanding and promoting rural development requires taking a broad perspective that allows for an analysis of the dynamic relations and networks amongst individuals, groups and institutions. Within such a perspective, social capital is a strategic resource mobilized not only for the benefit of those individuals who have access to it; but also required for common purposes and collective well-being (in this case that of Europe's rural communities). The concept of social capital allows for reflexive approach since it also takes into account questions of power and structural inequalities. In short: social capital, its development and its impact are indispensable ingredients in elaborating a new and more adequate theory on rural development

6 New Institutional Frameworks in Rural Development

Karlheinz Knickel, Simone Schiller, Susanne von Münchhausen, Hilkka Vihinen and Anja Weber

A broad and holistic model is needed to explain and understand rural development. The conceptual model on which this book is built assumes that strong interrelations and interactions between different parties within rural society affect rural economies and rural life in a positive way. The conceptual model describes these underlying connections, identifying six key dimensions of rural development, with the creation of new institutional frameworks being one of these. This chapter summarizes the results of a literature review on the influence of new institutional frameworks in rural development. The first part provides an overview of the relevant theoretical frameworks and this is followed by some more concrete questions that are raised about the relevance of new institutional arrangements to rural development programmes and processes.

Institution: A commonly used term with rather different meanings

'Institution' is a term that is commonly used by different disciplines and in very different discourses. Since different meanings are attached to the term it is useful to clarify the most important differences and explore the commonalities.

From a generic perspective, institutions can be understood as structures and mechanisms of social order and cooperation that govern individual behaviour. Institutions are most commonly understood as sets of regulations, laws, norms or traditions which are shaped through human interactions and which are often manifested in an organizational structure (North 1990). Institutional frameworks provide the supporting structure for regulating institutions. In the social sciences, institutions are regarded as constructions that are specific to a particular time, culture and society, produced by collective human choice, though not directly by individual intention.

Institutional economics focuses on understanding the role of institutions in shaping economic behaviour. Economic activity is regarded as using a system of formal or informal contracts to gain individual advantages. The

possibilities for contracting depend highly on the distribution of underlying property rights and the occurrence and level of transaction costs under different institutional arrangements, which provide restrictions or incentives for economic actors (Clapham 1993).² Institutional economics has proved useful in the analysis and development of rural and agricultural economies due to its ability to cope with common property situations (Ostrom 1990, Bromley 1991). Nonetheless, it might be asked how far the methodological tools used in institutional economics can also be applied to regional development.

Besides being applied to customs and behaviour patterns within a society, the term institution also refers to particular forms of formal organization of government and public service. Institutions are identified as having a social purpose and permanence, that of making and enforcing the rules that govern human behaviour. Institutions emerge, develop and function in a pattern of social self-organization which may lead beyond the intentions of the individuals involved.³

Gatzweiler (2003) and Bowles (1998) provide us with a categorization of institutions and argue that the setting and enforcing of rules is achieved through the social, economic, political and legal systems. It is important to distinguish between formal and informal institutions⁴ and also possible to establish a hierarchical classification of different institutional regimes, based on the degree of restriction that is defined by the distribution of property rights. It is also possible to distinguish between institutions that are protection-oriented and those that are needs-oriented. Stolze and King (1997) and Diaz-Bone (2006) distinguish between functional and political (strategic) institutional arrangements.

Table 6.1 provides a summary of the different ways of conceptualizing the terms 'institution' and 'institutional frameworks'.

How do institutions and institutional arrangements relate to rural development?

In this paper we advocate a wider understanding of institutions as the 'rules of the game', consisting of both formal legal rules and informal social norms that structure social interactions. In rural development processes institutions can reduce coordination problems and support cooperation (reducing transaction costs in economic terms). Institutions thus include legal frameworks, which define the bundle of property rights given to a certain actor or organization (i.e. formal institutions), and informal norms and values that affect the actions of actors and organizations (i.e. informal institutions).

Table 6.1 Different ways of conceptualizing the terms 'institution' and 'institutional frameworks'

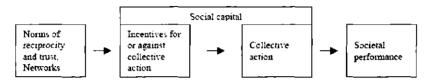
	(Institutional) Economics	Social sciences	Political sciences
Predominant orientation and discourses	Integrating 'institutionalism' into mainstream neoclassical economics. Understanding the role of institutions in shaping economic behaviour.	Values that, to a certain extent, regulate the actions of actors and organizations (i.e. informal institutions). Customs and behaviour patterns important to a society. Rules governing human behaviour.	Institutions are not only arenas for contending social forces, but also collections of operating procedures and structures that define and defend interests. Institutions are also political actors in their own right (March and Olsen 1984).
Main definition(s)	Institutions are seen as generating a certain (economic) outcome attributable to efficiency criteria.	Institutions structure social life and interactions. Systems of established and prevalent social rules. Social constructions, artefacts of a particular time, culture and society. Structures and mechanisms of social order and cooperation governing the behaviour of two or more individuals.	Ideas about how something should be done, look or be constituted in order to be viewed as legitimate. Formal institutions refer to laws or rights (legal frameworks which define the bundle of property rights given to a certain actor or organization).
Expressed in	Property rights and their distribution. Formal or informal contracts. Transaction costs attributable to different institutional arrangements.	A way to achieve coordination and foster cooperation. Building trust and facilitating collective action. Examples are language, money, organizations (e.g. firms) and conventions.	A set of regulations, laws, norms or traditions. Often manifested in an organizational structure.
Institutional frameworks	Functional and strategic. Providing the supporting structure for the (intended) economic outcome.	New institutionalism focuses on developing a sociological view of institutions, the way they interact and the effects they have on society.	Functional and political (strategic). Providing the supporting structure for regulating institutions.

Source: Own compilation

Institutional conditions for rural development also include the way support is provided and how efficient outcomes are achieved through state frameworks. In this respect Fürst (2001) and Berg (2002) distinguish between a welfare state and an enabling state as well as between governance and government.

Gatzweiler (2003) asks which institutional arrangements provide effective incentives for building trust and facilitating collective action. His analysis shows that trust and norms of civic cooperation are stronger in countries with formal institutions that effectively protect property and contract rights. At the same time he argues that it is formal institutions constraining governments from acting arbitrarily that is associated with the development of cooperative norms and trust (Figure 6.1 and 6.2).

Figure 6.1 The institutionalist perspective (Source: Krishna 2002)

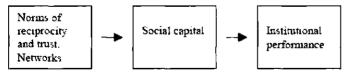


Gatzweiler (2003) relates the evolutionary processes of institutional change to the 'social capital thesis' which states that social capital is necessary and sufficient for explaining societal outcomes. Social capital helps to better understand trust, shared understanding, reciprocal relationships, social network structures, common norms and cooperation as well as, more generally, differential achievements in civil society, governance, and economic development processes.

Against this background we hypothesize that low institutional performance often corresponds with low social capital. The thesis is relevant for the study of rural development as it implies that regions with a high level of social capital will be able to adapt to new organizational forms more readily than those with less social capital. The same regions will also be able to innovate organizationally since a high degree of sociability allows a wider variety of social relationships to emerge. The thesis also stipulates that:

'Democratic institutions (such as good governance) cannot be built from [the] top down. They must be built up in the everyday traditions of trust and civic virtue among their citizens. This view assumes levels of trust as given and not subject to change. Social capital is regarded as exogenous to the institutional building process.' 5

Figure 6.2 The social capital thesis



Source: Krishna 2002

What are new institutional frameworks?

The core function of new institutional frameworks in a (rural) development context is usually seen as facilitating beneficial linkages and producing efficient connections between different activities and actors in (rural) regions and between the different levels in a multilevel governance system. In the study of rural development processes we ought to widen this view by emphasising the role of new institutions. Institutions can play the role of agent between different actors on the same level as well as a communicator between higher and lower levels.

In order to achieve improved integration, the institutional frameworks should contribute to:

- > a strengthening of participation in planning and decision making ('linking up the local') to enlarge congruency between beneficiaries and decision makers:
- > a facilitating of networking and knowledge sharing within and between regions:
- > the provision of public and private services and access to information.

More practically, and as far as the implementation of the EU Rural Development Policy is concerned, the meso-level operational programmes seem to be the most important. They constitute the institutional frameworks provided by the relevant ministries (agriculture, rural development, regional development, environment, etc.), which, in themselves, are an interpretation of European level regulations and directives. European institutional frameworks are adjusted and interpreted in relation to specific national regulations and structures. With respect to other national, regional and communal level policies, other levels of action (and analysis) might be more important.

The basic idea in contemporary rural development policy is that mesolevel institutional frameworks provide incentives for experimentation with new ideas or concepts and for an exchange of relevant micro-level experiences (see Box 6.1 for an example). Implementation is often supported by meso-level agencies like the national level LEADER6 Network Units, which link the macro and the micro levels through facilitating information exchange.

Institutional frameworks must be transparent, open and accessible and the instruments used must stimulate real actions. The importance of transparency at all levels can be seen in the democracy deficits sometimes observed in the way Local Action Groups are composed and decisions made (Peter and Knickel 2006).

Box 6.1 An example of a new institutional framework in rural development

The Regional Action-Rural Areas Shaping the Future pilot programme in Germany, initiated by the Federal Ministry of Consumer Protection, Food and Agriculture (BMVEL) in 2001 adapts an integrated approach to regional development, acknowledging the need for rural areas to harmonize their various functions in order to be strengthened and to create new sources of income. Regional actors, organizations and stakeholders were encouraged to develop visions for the future of their region and to devise integrated development concepts geared to their particular regional situation.

In the model regions new forms of decision-making and organization are being tested in an ongoing learning process in which almost all the regions have a predominantly bottom-up orientation. In each of the model regions a representative of the active participants is responsible for organizing the programme's implementation. The main idea behind this is to keep decision-making power within the regional partnerships themselves. A public regional body — often the district authority or the agricultural office – is in charge of financial management and budget administration. Regional management teams play a key role in promoting regional networking, supporting the development and interlinking of projects as well as preparing decisions in relevant bodies of the regional partnerships (Knickel *et al.* 2004).

The regional management team, which is located within a regional institution, is responsible for landscape care and functions as an interface between regional actors and groups. Its main tasks are project monitoring, ensuring the transparency of processes and outcomes, networking and external communication. It gathers competences from seminars, direct exchange of knowledge and experiences and 'learning by doing'. The partnership has an internal as well as an external communication strategy. The objectives of the former include creating transparency of project decisions, integrating single projects into the overall regional development strategy, initiating co-operation, and linking the partnership's working levels. The Federal Ministry is in charge of framework steering as a promoter, while detail steering, according to the principle of subsidiarity, is conferred to the regional level. Horizontal partnerships within (and partly between) the model regions go along with vertical partnerships between the model regions and the state, whose overall interests are recognized, while the regions receive more scope to realize their own objectives (Peter and Knickel 2006).

Policy-makers expect the pilot programme to provide best-practice models for sustainable rural development and to connect rural and urban economies. Instead of supporting individual sectors, the programme focuses on the region as a whole, aiming to make it a catalyst for innovation.

Combining economic and social development goals with nature and environmental protection is a central concern in all the model regions participating in the programme. The objective is to explore and develop fields of action that might demonstrate the ideal of sustainable development in a clear and comprehensible manner. Interrelationships between different fields of activity are considered important and projects are conceived in mutually supportive ways. The aim is to create synergies between different developments at the farm household, communal/local, and regional levels (Peter and Knickel 2006).

The micro-level can be regarded as the one where the creation of new institutional frameworks has been particularly important in recent decade(s). Here the regional actors and partnerships implement real projects and actions for the development of their region. It is particularly at this level that institutional frameworks should guarantee access for all possible actors: actions and initiatives need to be non-exclusive. Institutional frameworks should support information flows between actors, facilitate cooperation and, in the terms of institutional economics, reduce transaction costs.

The contribution to the web model

The empowerment of local citizens and institutions

What does the analysis of new institutional frameworks contribute to the web model? First, we can relate this question to the example given in the previous section. At least two theoretical frameworks are relevant: endogenous and integrated rural development theories and new institutional economics, with governance theory as a key component. The positive feedback aspect of the approach used in the Regional Action programme emphasizes the importance of different activities and linkages across sectors being mutually reinforcing, as well as the production of new technologies and human capital. The initial start-up support given to the model regions is intended to increase the incentives and potential to innovate.

The major goals of the model regions are to empower local citizens and organizations and enhance their capacity to manage rural development. Both these goals correspond to the key ideas of endogenous and integrated rural development theories. The second theoretical framework that helps us to understand the importance of the programme design is new institutional economics and specifically its concept of the embeddedness of economic activity in social and legal institutions. This describes a key idea of the pilot programme: promoting institutional or organizational solutions that are more effective than the traditional ones (Peter and Knickel 2006).

A critically important question then is how these new institutional frameworks interlock with existing structures at the regional level. The existing organizations for regional management and development need to align their activities with those of these new organizations and the new institutional frameworks. In this sense, agencies need to be reflexive organizations (Box 6.2). The key long term question is how to develop a rural development regime that is flexible enough to be adjusted for the day-to-day challenges within (micro-)

regions while being committed to the overarching societal values expressed in the objectives of rural development policy.

Box 6.2 New institutional frameworks need to interlock with existing structures

The rural service contracting project in Kyrönmaa, Finland is a two-year project where new institutional settings are emerging to coordinate previously fragmented local services in a way that offers rural people new livelihood potential. The project connects municipalities and service providers (local associations, small enterprises, farms, individuals, etc.) and particularly focuses on those services that are not in sufficient supply but which are amenable to contract delivery. Such arrangements are new, especially in their capacity to effect cross-sectoral cooperation over administrative borders. The project's outcomes suggest that rural service contracting can support cooperative planning and implementation of rural development policies at the local level.

The case of rural women's groups in Latvia provides another example, one that shows the importance of social capital and how coherence between new institutional arrangements and social capital can support the emergence of grassroots rural development initiatives. Latvian rural women's groups initially emerged as informal groups for primarily social, activities but have rapidly grown into a new social movement whose role goes far beyond providing psychological support for women. The meetings and discussions organized by the groups often provide the first opportunity and encouragement for women to develop their self-confidence and entrepreneurship skills and often leads to new community/business projects. These groups rely on dense social networks and they continue to develop these both horizontally and vertically, building stronger links with local governments, local entrepreneurs, regional associations and umbrella organizations.

Source: Own compilation based on quick-scan reports prepared in ETUDE

Taking multilevel governance into account

It is important to distinguish between different institutional levels: the superordinate level (e.g. international, EU, national) where laws and regulations and policy programmes are set, and the regional level where organizations implement policies that originate from this higher level as well as strategies that emerge from regional and local levels.

Multilevel governance refers to the interplay between these various levels of arrangements which become increasingly difficult to analyse indepently as they become increasingly complex, and intertwined (Benz and Meincke 2005). The emergent discourse closely resembles the one related to the shift of decision-making authority, competence and resources to the international and supranational levels, as well as to global policy networks, and the far-reaching repercussions this has for national and local autonomy. The complexity is further increased by the multilevel forms of negotiation and regulation that this necessitates. Hierarchical

top-down strategies of inter- and intra- governmental governance and regulatory policies are becoming complemented by trans-national multilevel processes and softer forms of governance. As a result, power relations and legitimization processes appear to be undergoing a restructuring.

As a result non-governmental, private, and civil sector agents such as NGOs or lobby groups are gaining influence. However it is not clear whether this plurality of actors means a growth in democracy or should be interpreted as an expression of de-democratization. Interpreting these changes is a new challenge for theory and practice. Participatory decision processes can be interpreted as a sign of growing local democracy and the basis for dynamic partnerships (Champetier and Janot 1997). Equally under such arrangements, single interests can, perhaps more easily, claim priority, and a concentration of power might pose an obstacle to broad participation in the development process. The disadvantages of issueoriented constellations lie in likely interest conflicts and greater effort required to manage the decision-making processes. Participatory decisions take more time and consensus is difficult to achieve when many interests are involved. These are some of the limits of 'participation' which have to be taken into consideration. Peter and Knickel (2006) argue that these are counterbalanced by the greater legitimacy and transparency of outcomes. Short communication channels and identification with the regional development strategy both help the acceptance of local-level participatory decision-making processes. Experience with these new institutional frameworks indicates that the ideal of absolutely 'symmetrical' relations between actors t and a model of task division that can be efficiently worked with are often at odds with one another (Knickel et al. 2004). Many of these aspects and developments need to be addressed and made explicit when theorising about multilevel governance.

Mainstreaming the rural aspect in sectoral policies

Following on from the above, one key question in the study of rural development is how to deal with the 'broad rural policy' issues when mainstreaming the rural aspect in different sectoral policies at the national level. Examples of this might include the new institutional frameworks that seek to strengthen regional marketing or establish quality-based value added chains (see Box 6.3).

Box 6.3 New institutional arrangements in marketing: four examples from the Sus-Chain project

Natura-Beef is a farmers' collective marketing initiative in Switzerland created in 1980 by a suckler cow producers' association to promote their product. The initiative has effectively linked their beef with eco-quality and animal friendly husbandry and consequently secured the producers' position in the regional, and, later, national beef markets. Their success is due largely to the organization's ability to establish partnerships with all the institutional actors along the supply chain, supported by the members' commitment and loyalty.

The Biomelk Vlaanderen cooperative in Flanders, Belgium, was established to collect organic milk from its members and collectively sell it to processors. However, the cooperative is currently in a state of stagnation largely due to its inability to forge strategic alliances with supply chain partners. Although it has tried several new products and environmental/health claims to market its milk as a novel quality product, it has lacked the capacity to valorise the regional identity of the product on the market, either through an effective marketing strategy or through negotiation with processors. Consequently, the small scale and the limited success of the cooperative have resulted in few market governance or sustainability outcomes.

The Chianina beef production case study illustrates the critical role played by specialized organizations in developing synergistic interrelations that have major market governance outcomes. The study shows that the relationship between Chianina producers and the market was historically mediated by consortia. The Consortium for Italian Beef, in particular, has successfully enabled the Chianina to re-enter the market with a new brand image by adopting two strategies: a) to guarantee product quality, it successfully applied for Protected Geographical Indication (PGI) certification; and b) to guarantee its provenance, it developed its own brand for the meat from Chianina cattle that do not conform to the PGI requirements. The provenance of the meat was further protected by a highly sophisticated traceability system. These strategies proved highly effective, with the Chianina today commanding 25-30% premium above that of conventional meat.

Equally telling is the case of Groene Woud in Brabant, The Netherlands, which represents about 80 farmers who have joined together to cooperate in promoting regional branding. Since 2004, they have organized an annual festival, introduced a regional quality label for their food and other products, are developing collective business plans and are actively seeking partnerships with the public sector. Notably, it was growing concerns over the unsustainable aspects of conventional agriculture that prompted this collective attempt to reconnect agriculture with the broader rural/regional economy and to meet changing societal demands. The group is still formalizing its constitution and, while its economic impact is yet to become clear, it has created an expanding network of cooperation, re-constructed the region's bridging social capital, and created new rural markets for local food and green/tourism services.

Source: Own compilation based on Roep and Wiskerke (2006)

Similarly, regional policies based on the trickle down effect of centres and innovation policies favouring clusters and critical mass all work against rural development objectives. Vihinen (2006) argues that the influence of these institutional frameworks ought to be identified to ensure that rural interests are taken into account when such profound choices are being made. The multi-arena model for rural policy of Vihinen (2006) is one way of trying to approach these challenges. Equally, it is widely acknowledged (e.g. in recent OECD reports on rural policy 2006, 2007) that local empowerment does not help much if rural residents do not have the same rights or entitlements (education, health, access to infrastructure) as citizens living in the centres.

Economic institutions influence the evolution of social capital

Bowles (1998) emphasizes that markets and other economic institutions do more than allocate goods and services: they also influence the evolution of values, tastes, and personalities, and thereby of 'social capital' at large. They do so in several ways:

- Having framing effects: people make choices and market-like processes frame the range of choices that they have available to them.
- Controlling reward structures: paying people to perform a task which they might have done willingly without payment can damage motivation. This kind of extrinsic market reward undermines fundamental desires for feelings of self-determination (intrinsic rewards) which are associated with positive motivational effects.
- Affecting the evolution of norms (social capital): economic institutions influence the structure of social interactions and thus affect the evolution of norms by altering the returns to relationship-specific investments, such as reputation building. This may affect the types of sanctions that are applied in interactions and may change the likelihood of interactions between different kinds of people.
- Structuring the tasks of people and, consequently, affecting their capacities, values and psychological functioning.
- Altering cultural learning processes: the ways in which people acquire values and desires, rearing and schooling children as well as informal learning rules, markets can for example make people more or less conformist.

The point raised by Bowles (1998) is meaningful because it undermines the explanatory power, policy relevance and ethical coherence of (economic) analyses: if preferences are affected by policies or institutional arrangements, we can neither accurately predict nor coherently evaluate the likely consequences of new policies or institutions without taking

preference endogeneity into account. Bowles concludes that a broader concept of market failure is required,

'one encompassing the effects of economic policies and institutions on preferences and for this reason more adequate for the consideration of an appropriate mix of markets, communities, families, and states in economic governance.'

Interrelations between new institutional frameworks and rural policies

Rural policies are part of the fourth dimension of the rural web: the creation of new institutional frameworks raises questions that ought to be pursued: What are the most adequate institutional frameworks for activating and sustaining rural development processes? More specifically what might the role of increased levels of local self regulation be? And, under what conditions will it function well? How does rural development relate to a reshuffling of the relevant balances of autonomy and dependency and how can vulnerability to external shocks be reduced? Policies and institutions also need to be examined in terms of their positive and negative effects on current policy measures and regulations, as well as interrelations with policy formulation and implementation. The effective targeting of support strategies and measures to the most appropriate institutional levels is a key issue.

In studying rural development processes we ought to examine how the bodies formed for local self-regulation (e.g. Local Action Groups) are composed. If they repeat the old local power structures based primarily on professional interest representation, they will not be able to channel a wider rural (territory or space-based) perspective. Thus, rural policy is both about policy measures but also about power structures.

Taking up the question of good governance

The term governance, as used in this chapter, stands for the continuous process that relates to the negotiation, coordination and implementation of joint multilevel and cross-sectoral initiatives. Cross-sectoral in this respect refers to both the formal policy sectors and other kinds of societal actors (the public, market and voluntary sector) (Benz 2001; Benz, Fürst 2002; Diller 2002 2004; Peter and Knickel 2006). The term derives from Latin origins that suggest the notion of steering, which can be contrasted with the traditional top-down approach of governments driving society. The role of governance is to 'craft order, thereby to mitigate conflict and realize mutual gains' (Williamson 2000).

Conceived in this way, the concept of governance can be applied to a nation state, corporations, non-profit organizations, partnerships and other associations, project teams, and indeed any group of people engaged in some purposeful activity. The terms governance and good governance are increasingly being used in development literature (see Box 6.4).

Box 6.4 Good governance as defined by the World Bank

Good governance is understood by the World Bank as having eight major characteristics. These characteristics assure that corruption is minimized, the views of minorities are taken into account and that the voices of the most vulnerable in society are heard in decision-making.⁷ The eight characteristics are:

Participation: by both men and women. Participation can be either direct or through legitimate intermediate institutions or representatives. It also means freedom of association and expression and an organized civil society.

Rule of law: Good governance requires fair legal frameworks that are enforced impartially, together with full protection of human rights, particularly those of minorities. It also means an independent judiciary and an impartial and uncorrupt police force.

Transparency: Decisions are taken and enforced in a manner that follows rules and regulations. Information is freely available and directly accessible to those who will be affected by such decisions and their enforcement.

Responsiveness: Institutions and processes try to serve all stakeholders within a reasonable timeframe.

Consensus orientation: Mediation of the different interests in society to reach a broad consensus on what is in the best interest of the whole community and how this can be achieved. This requires a long-term perspective for achieving goals related to sustainable human development.

Equity and inclusiveness: Ensuring that all members of society feel that they have a stake in it and do not feel excluded from the mainstream. This requires that all groups, and especially the most vulnerable, have opportunities to maintain or improve their well being.

Effectiveness and efficiency: Processes and institutions produce results that meet the needs of society while making the best use of resources at their disposal. It also means sustainable use of natural resources and protection of the environment.

Accountability: Governmental institutions as well as the private sector and civil society organizations must be accountable to the public and to their institutional stakeholders. In general organizations and institutions are accountable to those who will be affected by decisions or actions.

Source: Own compilation based on World Bank (1992, 2007)

Interrelations with the other five dimensions of the rural development web

There are important interrelations between the aspect of new institutional arrangements and the other 5 dimensions of the rural development web.

➤ The endogeneity of rural economies (building on local resources and enlarging interactions with the wider rural economy): A key question is how institutions enable (or constrain) the integrative and holistic realization of the endogenous potential of rural areas. As natural resources are often governed by common property regimes, institutional economics may well be of relevance. Recent work on the interrelations between agricultural policies and endogenous rural development (that uses the neo-institutional approach to analyse the economic and social role of agriculture and connected activities in the development of rural economies) will be highly relevant in this respect (see for example Ventura and Milone 2004).

- Novelty production and innovation. Institutional arrangements need to safeguard capacities for human resource development (and, more specifically, knowledge sharing), access to finance and effective locally based innovation processes. Greater flexibility and openness are needed in organizations and institutions dealing with innovation. Recognizing innovations as 'challenging', 'promising', or capable of deviating from established routines and thereby adding value requires open-mindedness. The capacity to recognize the potential of emerging innovations is not always embedded in formal institutional cultures and hybrid networks or multi-actor platforms tend to be more efficient catalysts of change than formalized institutions, as they have the flexibility to go with the flow of an innovation.
- ➤ Governance of markets. Interrelations with the kind of support required to develop regional market structures, to define and provide assurance of quality and production standards, to develop the institutional capacity to control and strengthen marketing and to construct new markets. A key issue is the adequate embedding of marketing in properly functioning and locally controlled institutions.8
- ➤ Creation of sustainability. A key issue is how sustainability criteria become firmly established in the relevant institutions; including criteria for ecological sustainability (such as decentralized energy supply) and social sustainability (e.g. support to marginal areas). The work carried out by Hagedorn et al. (2002) on patterns of institutional change for sustainability and 'Institutions of Sustainability' appears highly relevant in this context.
- ➤ Social capital: The strengthening of participation in decision-making and planning and, more generally, civil society engagement, is closely linked with the capacity to develop new 'induced' forms of governance (thus manifesting the principle of subsidiarity). In this context, Marsden (2003) refers to adapted institutional structures (especially those that open spaces for local self-regulation). The interrelations are meaningful because regions with a high level of social capital might be able to adapt to new organizational forms more readily than those with less social capital.

How institutional frameworks are being re-shaped by new social tendencies

Towards a changing division of responsibilities

A major trend supporting the re-shaping of institutional frameworks is the shift in the division of responsibilities between governments, citizens. civil society organizations and business that can currently be observed in many European countries. The two main driving forces behind this trend are the aim for more cost-efficient institutional frameworks, and, maybe more importantly, the search for new governance models, which aim to reduce the democratic deficits experienced by some stakeholder groups and sections of the population.

Knickel (2005) has emphasized how the search for more (cost) efficient institutional frameworks contributes to a changing division of responsibilities.

- From a multilevel governance perspective, rural development policy is formulated and implemented at several distinct institutional levels: While the EU and the nation states have a broad influence on the general direction of rural policy, the regions and micro-regions are responsible for the more detailed design of policy schemes and measures. The lower government levels of counties, districts and communes play an important role in the actual implementation of policies. They are responsible for implementing region-specific measures and projects within given frameworks and they occasionally design and run their own schemes, drawing on their own funds. Overall, multilevel governance systems of policy formulation, interpretation and implementation are perceived as very complex, and make many demands in terms of administration and coordination. This is linked with a perception of inefficiency. Equally, in practice, regions are sometimes poor at inventing anything original or 'different' in their development schemes. These two aspects each need considering when analysing rural development processes.
- ▶ Public budgets are under increasing pressures and there is a need to reduce spending. At the same time, social processes and demands are more and more challenging. The diversity in situations and demands further complicates tasks. Diversity in natural resource endowments and patterns of resource use is a further important aspect, as is differences in the quality of the natural environment and pressures on natural resources. One result is that government intervention often exceeds what is sustainable and cost-efficient. At least in larger countries, there is a tendency that centrally designed and administered programmes are not able to deal with the enormous diversity (although this is influenced by the way that national and regional

administrations are organized) A federal political system (EU level or at the national level, as is the case in Germany) can better deal with the diversity in situations and demands, but does not always achieve its goals in cost-efficient ways.

Governance is not just about increasing efficiency, 'new governance' models also aim to increase democracy, a fact widely discussed in political science and administrative studies on governance.

In many respects, the national state and higher levels of the governmental hierarchy can be too distant from the diverse realities at the local level. Representatives of governments can appear distant from everyday problems (or solutions). Citizens are less willing to accept policies and interventions (particular those of the 'steering' type) from high-level governmental institutions and there is an increasing divide between citizens and these institutions. Controversies and difficulties in many EU member states over the national level implementation of Natura 2000, spatial planning or EU legislation over renewable energies are indicative of how the citizenry fails to comprehend, recognize or support higher-level governmental interventions.

Closely related to this point there is evidence of an increasing awareness among policy makers and governmental institutions that many questions can no longer be dealt with satisfactorily in a top down manner and more effort needs to be made to reduce this gap. More and more initiatives aim to encourage civil society engagement and to involve NGOs and private-public partnerships in policy implementation. It is useful to examine the co-existing structures of representative democracy at different levels more closely.

The subsidiarity principle

Increasing awareness about the inadequacy of dealing with certain questions in a top-down way resonates with the subsidiarity principle. The central tenet of this is that central authority should only have a subsidiary function, performing only those tasks which cannot be performed in adequate ways at a more immediate or local level. Adequate can be interpreted in both a democratic sense and in terms of economic efficiency. To put it more simply, subsidiarity presumes that matters ought to be handled by the lowest competent authority.

A closer look at the field of rural development policy and planning shows that more and more public policy interventions and support programmes do aim to encourage civil society engagement, including the work of NGOs and private-public partnerships. The example in Box 6.1 is an illustration of a strategy to supplement state intervention with differently institutionalized mechanisms of coordination, which can be referred to as

governance mechanisms. Framework steering complements, and in some sectors, such as integrated rural development initiatives, even replaces traditional interventionist policies. Territorially and functionally oriented measures increasingly replace sectoral ones and more emphasis is placed on regional markets. The mobilization of endogenous regional development potential allows a counterbalancing of the negative effects of globalization and is a more effective way to realize environmental and social objectives (Benz 2001; Diller 2002, 2004; Fürst 2001a, 2001b; Peter and Knickel 2006).

Institutional arrangements: Under what conditions are they relevant?

The following aspects of the institutional dimension of regional rural development appear particularly promising for further analysis and exploration:

- ▶ How well do *new* institutional frameworks function? Deeper understanding is required of their advantages (and drawbacks) compared to classical arrangements and how they complement (and clash with) existing frameworks A key task is to identify those institutional arrangements that provide effective incentives for building trust and facilitating collective action.
- ▶ How do macro and meso level institutional frameworks provide incentives for experimentation with new ideas or concepts and for an exchange of relevant micro-level experiences?
- > The interplay between the institutional dimension and the social capital dimension is meaningful because regions with a high level of social capital might be able to adapt to new organizational forms more readily than those with less. Might the same regions also be able to innovate more easily in organizational terms?
- Institutional frameworks should guarantee access for all relevant actors; actions and initiatives need to be non-exclusive. Which institutional arrangements are more effective in this respect?
- Non-governmental, private, and civil sector agents such as NGOs or lobby associations are gaining influence and new decision-making structures are being established. Are these new structures sometimes inconsistent with basic democratic principles? The question raises challenges for the theory and practice of democracy and 'new governance'.
- > Aspects of communication and networking are important for all dimensions and linkages to 'the web' of social interrelations. How can these be facilitated by (rural) institutions and how can connections and inter-linkages with urban centres and networks be strengthened?

Some criteria of value in evaluating institutional arrangements might include: institutional congruence; the good governance criteria listed in Box 6.4 and the democratic aspect of new institutional frameworks. Other useful criteria will include those that are indicative of the interrelations between institutional arrangements and economies of scale and scope and of the transaction costs and incentive structures related to different institutional models (see for example Monsees 2002). When addressing these gaps it must be kept in mind that the meaning of 'efficiency' may have different notions in relation to different dimensions of the web.

Notes

- 1 Aspects of institutional economics are part of mainstream economics in particular *new* institutional economics, which tries to integrate institutionalism into mainstream neoclassical economics
- 2 Property rights are usually defined as rights of ownership of physical or intellectual goods. They include the right to use goods (usus), to use their benefits (usus fructus), to change their form or substance (abusus) and to discard them. As these rights are tradable, transaction costs can occur, such as search and information costs, bargaining and decision costs, and supervising and decision costs (Furubotn and Richter 1998).
- 3 The term institution is sometimes used interchangeably with the term organization, for example when referring to a formal organization such as a LEADER agency. In new institutionalism (also new institutional economics in economics and historical institutionalism in political sciences), 'organization' and 'institution' refer to two different phenomena. Institutions are ideas about how something should be done, look or be constituted in order to be viewed as legitimate. Organizations are social entities that have members, resources, structures, authority, boundaries, etc. Organizations can be seen as institutions including the people taking advantage of them (North 1990). The issue is complicated by the fact that one may talk of institutions that govern organizations and the organization as an institution.
- 4 While formal institutions refers to laws or rights and can therefore be enforced, informal institutions (or rules) occur spontaneously to cover the gaps in the formal mechanisms (see Furubotn and Richter 1998).
- 5 Ostrom (1990) describes a more mutual relationship, arguing that it is also possible that efficient institutional structures provide social capital through stable, long-lasting means of organization and culture (see also Hagedorn *et al.* 2002).
- 6 LEADER is one of four initiatives financed by EU structural funds and is designed to help rural actors consider the long-term potential of their local region. Encouraging the implementation of integrated, high-quality and original strategies for sustainable development, it has a strong focus on partnership and networks of exchange of experience (for more information see: http://ec.europa.eu/agriculture/rur/leaderplus/index_en.htm). LEADER Network Units have been established in each EU Member State in order to foster national level cooperation and the exchange of information and experiences.
- 7 The World Bank has developed a set of cross-country governance indicators that can be used in order to assess the quality of governance structures and processes. See: http://www.worldbank.org/wbi/governance/data/
- 8 It may be important to stress that market governance is an institution itself. So market outcomes may be strongly influenced by the underlying market governance. Governance can favour individual actions or regulated transactions, which has a substantial influence on how exchange relations operate in reality.

7 The Governance of Markets

Hilkka Vihinen and Laura Kröger

The governance of markets is an essential feature of rural development, not only because it indirectly translates into employment, income and rural well-being but also because the proper governance of markets is related to the creation of (relative) autonomy vis-á-vis large, global players. Thus, it can reduce vulnerability to external shocks. In conceptual terms, the governance of markets is linked with endogenous rural development and novelty production, both of which influence the competitiveness of rural economies. The governance of markets also relates to the creation of new institutional frameworks (which often are carriers for the governance of markets), sustainable development and social capital.

This chapter discusses how market governance has been approached in the literature and the ways in which it interrelates with the 'rural web' (discussed in Chapter 1 of this book). The discussion starts with a general introduction to the concept of the 'governance of markets'. This is followed by a rough typology of alternative models of market governance. We discuss convention theory in some detail and then introduce the territorial aspect of market governance. Since it is widely accepted that rural development is a territorial issue, we start the discussion on market governance in the rural context and then turn to discuss the governance of space with a particular focus on the different forms that governance takes in differentiated rural areas.

By way of introduction we propose the following working definition: Market governance is the institutional capacity to control and strengthen markets and to construct new markets. It is related to the way in which a certain supply chain is organized, how the share and levels of income are derived from it (for producers and rural consumers, and for rural areas as a whole), and how the potential benefits of collective action are delivered.

Markets and their governance

To start with the term 'the market' is a figure of speech, and a basis of economic discourse. It is a common place – a *locus communis* (Lat.)/ *topos* (Greek) where economists work (McGloskey 1994:42). Topics (or topoi) are basic categories of relationships among ideas, each of which can serve as a template or heuristic for discovering things to say about a subject. They give direction about where to look for an argument. Topics are usually constellations of images or arguments commonly found within the texts of a specific discourse. The rhetorician's metaphor for the economist's 'market' is locational.

As Wittgenstein says, 'uttering a word is like striking a note on the keyboard of the imagination' (1945 [1958], 4). Thus, the market plays a core role in framing specific lines of argumentation. We find it important to start with this notion, since it has implications for the way in which the issue of markets and their governance interrelates with the web. This is particularly relevant for rural areas where the (local) market layer is thin or non-existent, or where there is little economic activity besides residence. This aspect should probably also to be related to the domains of novelties and sustainability, since they both imply that some production takes place in the countryside.

In mainstream neoclassical economics, markets are considered as the primary arena of market societies, i.e. as the organized and institutionalized arena for commodity exchanges. The main actors and elements in markets are buyers and sellers, of both goods and services. Besides competition, which is the major mechanism for ordering markets, markets are governed through formal and informal institutions. The market frames the actions of producer and sellers more than it does those of consumers and buyers, since the former are more constant in their roles. This concept of the market therefore draws our attention more towards the supply side. When discussing the role of market governance in rural areas with little production, the role of consumers or of citizens using (public) services, needs to be more accentuated.

The governance of markets is closely connected to new institutional frameworks, discussed widely in institutional economics and institutional political sciences (e.g. North 1990; Ostrom 1990; Williamson 1996; Scott 2001). These approaches see institutions as central to economic development and governance since they provide a framework for facilitating social cooperation and for controlling access to scarce resources.

Governments' responsibilities in market governance lie at the macro level. Governments set legal foundations for markets and enforce any violations

of these. They define, enforce and redefine the property rights and rules that determine the conditions of ownership and the control of the means of production (corporate governance) as well as providing and allocating information and resources for the market and market actors (Lindberg and Campbell 1991). Corporate governance is concerned with the institutions that influence how business corporations allocate resources and their returns (O'Sullivan 2000). The tasks of the state are largely those of ensuring the smooth functioning of markets. While traditional methods of governing centre around regulation, modern methods emphasize actions that contribute to generating ideas, choices, motives and actions and fostering general trust in markets.

Deregulation is an expression of a new form of governance which gives more responsibility to the market and to social actors. While it can potentially improve the effectiveness of markets and democratize them, it is also connected to the withdrawing state, which leaves structural questions of regulation to the market mechanism. In such situations the state is reluctant to intervene and set goals, for example to manage demand, which can be crucial for many aspects of rural development, such as promoting public use of local products and services. Warner (2006:625) points out how NAFTA (the North American Free Trade Agreement) influences market governance arrangements by reducing the scope for government intervention, in for example setting laws about local purchasing, as it sees this as a barrier to the realising the benefits of free trade.

Public procurement in Europe is an excellent example of a multi level governance system, with regulations ranging from the supranational, through national, to regional and local level. Morgan and Sonnino (2007) explored the divergences in national approaches to public food procurement within the EU. These differences reflect the inherent tensions between the ideals of social and environmental sustainability on one hand and criteria of competitiveness and free trade on the other.

Traditionally, national rural policy has been justified by an equity-based redistributive strategy which accepts the nation's role of balancing inequalities created by market based economic development (see e.g. Brown and Warner 1991, Warner 2006). Many countries made have substantial investments in extending basic infrastructure, such as electricity, telephones, roads and highways and water systems to rural areas. Under new deregulated patterns of market governance, governments became less focused on redistribution and more focused on promoting growth (Brenner 2004).

In the 1990s major changes in market governance occurred in Europe. The European Union was extended and regional market integration occurred in parallel with the collapse of socialist economies. At the same time globalization continued to advance, with the support of international institutions such as the WTO. Advances in information and telecommunications technology continue to drive the rapid economic integration of markets all around the world. The adaptation of telecommunications by businesses, the softening of national borders and the deregulation of markets have produced a new kind of global economy (Castells 2000). The use of these new technologies has changed the transformation processes for products (Mattiacci and Vignali 2004) and Ecommerce has opened up new marketing channels for businesses and reduced transaction costs (Moss *et al.* 2003).

Globalization has increased international competition between companies, forcing states to develop market governance strategies that are based on their national advantages. One result of this is a growing harmonization of market governance models between countries. Fucao (1995) argues that multinational companies have been the source of many of these changes. They increasingly rely upon intra-firm trade and global sourcing and, particularly in food markets, they are increasingly adopting supply chain management. Watts *et al.* (2005) argue that globalization is likely to further increase the influence of multinational companies over food and reduce the influence of national and supranational governments. Globalization 'squeezes' rural economies through increased competition and they are obliged to respond to the new situations.

One response to this has been a move towards redefining the boundaries between international and local dimensions, so as to rediscover and promote local economic vitality (Ohmae 2000). This phenomenon is sometimes called glocalization, and refers to the twin process through which institutional arrangements a) shift upwards from the national scale to supra-national or global scales and downwards to regional or local scales and b) where economic activities and inter-firm networks are becoming more trans-national and regionalized (Swyngedouw 2004). This entails a shift in the international system, from a framework based on a balance of power between nation states to one that seeks to balance cultural interests and local needs with global opportunities and recognizes the importance of local actors as agents of change. Localization forces must be regarded from the point of view of common local interests and local organizational capacity (Cabus 2001). Local interests are connected to, and reflect, the relationships of power within the region and with the world beyond it.

Typology of market governance

As discussed above, market governance is influenced by a number of current economic, social and political trajectories. For analytical purposes it is possible to boil these phenomena down to the relations between government, civil society and market (or industry). Following Midttun (1999, 2004, cited in Verdonk et al. 2007:3909-3911), it is possible to discern three generic governance models for markets, those of neo-liberalism, the welfare state and corporate social responsibility (CSR). The differences between these models lie in the relations between government, civil society and the market (or industries) and are summarized in Table 7.1.

Table 7.1 Three models of market governance by Midttun (1999, 2004, in Verdonk et al. 2007)

	Neo-liberal	Welfare State	CSR
Regulation	Self-balancing economy, laissez-faire	Governmental intervention	Soft governmental and internal market regulation
Role of market	Suppliers of goods and services	Industrial partner and employer	Social partner and supplier of goods and services
Role of government	Minimalist regulator of market imperfections	Interventionist and public service provider	Partner and facilitator
Role of civil society	Individualistic workforce and consumers	Workers and taxpayers	Concerned and organized citizens/consumers
Meta interaction	Decoupled	Integration through political intermediation	Integration through informal intermediation

The neo-liberal model is mainly a decoupled style of governance, in which market forces dominate societal dynamics. In this model, governments play a minimal role and civil society is mainly a 'source' of individual workers and consumers. The Keynesian welfare model sought to address the shortcomings of this approach and provided justification for substantial government intervention in the market to achieve social objectives, such as full employment. The CSR model seeks to combine the best of both of these models, emphasizing the self-regulatory capacities of the market and civil society and seeing governments as having a facilitating rather than interventionist role (Verdonk et al. 2007:3911). As

examples of the different models the world market for coffee and sugar follows the neo-liberal model, the European sugar market exemplifies the welfare state model and the Fair Trade model is an example of the CSR model. These basic models can be used as a starting point for assessing market governance in the context of the rural web.

The performance of these different market governance systems can be compared by different criteria. Verdonk et al. (ibid. 3912-3913) suggest a number of 'areas of concern'. First, the organization of regulation in the chain (e.g. an anonymous exchange market allows for setting private standards; a governance system that governs the whole system). Second, the dependency of the governance system on certain (pre)conditions may limit (or strengthen) its impact on the market: (i.e. is the market dependent on conscious consumers willing to pay a higher price, is the market paradigm propagated by a powerful institution, is it distorted by major barriers to entry or protectionism or possibly dependent on a supranational institution?) Third, how are benefits and costs of market transactions distributed between market actors (i.e. the strength of upstream/downstream actors, high profit margins for those parts of the chain which are protected from price risk, the way that the market improves/deteriorates the control and terms of trade in favour of up/downstream actors, how different levels of bureaucracy affect entrepreneurship etc.). Fourth, flexibility: Verdonk et al. discuss the level (supra-regional, regional and local) at which decision making, for example over market standards, takes place. Fifth, the costs of the market governance system and how these are distributed between market actors. (This may include the fees, levies and taxes imposed by governing institutions, the burden of implementing and enforcing rules and regulations, how the governance system in financed, the existence of price interventions that potentially lead to overproduction etc.). Sixth, the legitimacy of the market governance system, reflected in support for the system from politicians and market actors. (Issues here will include the involvement - or not - of up and downstream chain actors in decision making and whether the governing institution are democratic or representative). Finally, the way in which monitoring is organized tells us about the transparency of the market governance system (monitoring exists/does not exist, is performed along the complete production chain, and/or by public or independent and transparent actors).

Convention theory

Convention theory, which has its roots in French institutional economics, attempts to introduce sociological considerations into economic analysis. It deals with the non-price means of coordination that complement the

price system and tries to explain how market and non-market organizations interpenetrate each other. Faced with the impossibility of having full and complete information for decisions (as assumed by neoclassical economists) , economic actors seek 'models of common behaviour' which they themselves have defined, but which repetition, habit and tradition have made 'external' to individual decision making. These external models may be rules or conventions. They permit actors to economise on the knowledge they need and to deal with incomplete information. Quality is a good example of a sphere in which economic activity is regulated by considerations other than price.

Four types of coordination via conventions have been identified (see e.g. Boltansky and Thévenot 1991, Renard 2003):

- 1 Market coordination (Coordination Marchand): the enterprise is immersed in external markets. Coordination is by 'market laws', i.e. basically through the price mechanism. Enterprises focus on responding to changes in effective demand, since products are identical to the consumer.
- 2 Industrial coordination, in which market plays a limited role. Coordination rests on standards, norms, objectified rules and testing procedures, which are stable over time. The enterprise plays a critical role in defining the product and the client has very little influence over this. Prices play a very limited role in coordination. Efficiency and effectiveness are central within this type of convention.
- 3 Domestic coordination. Much emphasis is given to the personal knowledge of the actors, to face-to-face relations and trust in people, places and brands (e.g. wine appellations). Each product is attached to a 'house' (Maison), which is constrained by the rules of tradition. Products vary only gradually, under the effect of maturation or through the muted effects of changes in the market or in technology. Products linked to a specific region belong to this category and personal knowledge and connections are crucial.
- 4 Civic coordination. Relations among actors are made through commitment, debate and delegation. Coordination is achieved through unity built around mutually recognized common interests or objectives that transcend individual interests. Here the adherence of the group of actors to a set of collective principles is essential as this structures their economic relations. Organic production is an example of a market that rests on civic coordination and is a convention based on a shared idea of the common good.

Each of these conventions draws on different capitals when setting and enforcing standards. These different types of capital function as the 'glue' that unites the actors. They include natural, built, financial, political, social, human and cultural capitals. Convention theory suggests that in a perfect world where a healthy ecosystem, vital economy and social well-being are given equal priority these different capitals would be given an equal place in setting and enforcing standards, i.e. as a source of convention. In reality, each convention has a dominant method of coordination that primarily draws on a specific type of capital. As a case in point, Renard (2003) sees Fair Trade as being primarily regulated through the convention of 'civic coordination' and shows that the main challenge in this convention is strengthening social and symbolic capital. Likewise, the key capital for maintaining the domestic convention is cultural capital, whereas political capital is obviously a key asset in the market convention.

In the light of convention theory, political capital can be seen as the ability of a group (of e.g. enterprises, or citizens) to influence the standards, regulations (and enforcement thereof) which determine the distribution of resources and the ways in which they are used. This kind of 'political capital' seems to gain importance in rural webs because of its significance for the functioning of the market. As stated above, market governance can play a role in increasing autonomy vis-à-vis large players and reducing vulnerability to external shocks. In seeking to apply the typology of convention theory to the rural web model without diluting the strengths of the theory, we need to consider all four types of coordination via convention in rural economies.

Market governance, territory and space

Storper and Scott (1992) used regulation theory as a basis for introducing the concept of governance into spatial analysis as a form of inter-firm organization, that lay beyond market relations. Regulation theory is a set of research approaches that uses two central concepts: 'Regimes of Accumulation' and 'Modes of Regulation'. Modes of regulation are constructs of law, customs, forms of the state, policy paradigms and other institutional practices that provide the context for capital accumulation. Four fundamental social relations were identified as the object of the modes of regulation. These include modes of competition within the capitalist sector, and between it and other non-capitalist spheres, as well as the character and role of the state (Dunford 1990). Building on the work of Storper and Scott (1992), Benko and Lipietz (1998) explained regional changes as a result of inter-firm dynamics. They defined networks as the spatial dimension of regulation of relations between productive units, and governance as the mode of regulation of these relations. According to regulation theory, hierarchical organizations can be transformed into a network organization, built around notions of partnership, contractual

relations, flexibility and inter-firm co-operation. This is another example of a line of thought that focuses on methods of coordination other than the price mechanism.

The new regulatory context has also been influenced by the demand within Europe for more participatory decision making. Rural studies has recently started to pay more attention to the institutional shift from government to governance (Goodwin 1998; Marsden and Murdoch 1998). Marsden (1998) stresses the economic aspects of the move towards governance and links the diverse structures of rural governance to the complex integration of local and external processes that are emerging in an increasingly 'differentiated' countryside. Woods (1997) explores the local cultural contexts within which changes in rural governance have taken place, and shows that the political power of agricultural elites has increasingly been challenged by a competing set of discourses based around diverse issues, such as rural development, conservation and lifestyle.

Rural development can be seen as one of the responses to the crisis in the post-war model of agricultural regulation and its techno-economic paradigm (van der Ploeg et al. 2000). Centralized state intervention, agricultural co-operatives and national farmers' organizations have lost their capacity to regulate agro-food system and respond to the emerging problems of farmers, consumers and citizens. New practices, based on alternative principles and embodying a reshaped pattern of local-global relations have begun to develop. At the local level, the institutional map of rural local government is being transformed into a system of governance that involves a range of agencies and institutions drawn from the public, private and voluntary sectors. According to Goodwin (1998) formal local government in rural areas has also been reformed, partly through the introduction of quasi-markets in service delivery and partly through structural changes which include the introduction of single-tier rural authorities.

There has also been a notable transition in the nature, content and administration of rural polices in the EU. Woods and Goodwin (2003) summarize the effects of these changes and argue that one of the main features of them has been a scaling-back of state involvement in rural government. At the same time local level partnerships have supported a renewed emphasis on community engagement and bottom-up initiatives. These phenomena are taking place in the context of rural development governance, which is closely intertwined with market governance in the same areas. Goodwin et al. (2002) argue that regions are the appropriate level for economic development, because clustering and networking occur most effectively at this scale and development can be effectively promoted through 'regional innovation networks' which produce networked power coalitions that include both private and public sector institutions. Cabus (2001) points out that, since 'space' is integrated in the corporate strategies that result from the creation of network enterprises, networked territories can co-exist with the existing socio-political entities. Storper (1997) calls this the new era of 'reflexive capitalism' where information sharing and institutional networking are replacing market-based competition. Rhodes (1996) notes that in this context partnership is a core feature of the processes of governance, which have displaced some processes of government.

New forms of agricultural markets have also emerged in recent years and this is related to the shift from a productivist to a post-productivist food regime (Shucksmith 1993; Wilson and Rigg 2003). This shift implies a redefinition of the relationship between agriculture, environment and society. According to the post-productivist model, agriculture is increasingly responding to the mounting demands of consumers, taxpayers and citizens over environmental quality, animal rights, food security and the viability of rural areas, Marsden et al. (2002) have noted that post-productivist thought does no consider the farm as the central locus for generating sustainable rurality. Evans et al. (2002) have examined the discussion on post-productivism and argued that the term is not helpful for understanding agricultural changes since it been so widely used, covering, for instance, political culture, policy, the market and farmers themselves. In empirical terms Evans et al. (2002) claimed to find very little evidence of the rural changes described by postproductivism. They conclude that changes in agricultural policy have not led to any new or less productivist, forms of agriculture.

It is increasingly accepted that rural development is a territorial rather than sectoral issue. Therefore, issues about agriculture as a sector must not be conflated with those about rural territories, economies, societies and people. However, the contribution that agriculture makes to specific rural areas, in terms of the local economy, the environment, heritage, culture, and society, is central for building an informed view about territorial rural development Bryden and Hart 2001). Agriculture, changing land use and rural property rights are some of the key elements of change in rural areas which are being increasingly differentiated and regionally contextualized by these changes. This process of differentiation is influenced by varying levels of regulation and their interactions with different social formations in rural areas. The ongoing and profound changes in agriculture makes it central to questions of for rural development, even in areas where agriculture is not the main land use and/or where agriculture is not decisive in economic terms.

Market governance in differentiated rural areas

As discussed above, market governance is to do with the relations between government, civil society and market (or industries). In both policy and research on regional development, there is currently an emphasis on economic growth, its nature, and geographical dispersion. Policy seeks to promote regional development, based on the classical notion of growth poles that are supported by inter-sectoral linkages and externalities, massive investment in human capital and the explicit inclusion of the local people in those activities. This 'new' regional policy contains elements of both the neo-liberal and the corporate social responsibility (CSR) model of market governance, and is less attuned with the Welfare State model, which was previously pursued, using a subsidybased approach to regional development. The search for economic growth appears to be leading regional development to be driven by different regulatory frameworks.

and Marsden (2006)suggest using the concept 'embeddedness' as a theoretical devise for investigating the relationship between food and territory. The concept has widely been used to emphasize the social component of economic¹ action. Studies of this nature have investigated the interrelationships between nature, provenance and quality that are used to differentiate local food products from globalized commodities (Murdoch et al. 2000). These studies concerned alternative 'good food' networks in south-west Ireland (Sage 2003), food purchases in five rural localities in England and Wales (Winter 2003b), the 'alterity' (or distinctiveness) of farmers' markets in the UK (Kirwan 2004) and the emergence of the local saffron network in southern Tuscany (Sonnino 2007). However, the usefulness of the concept of social embeddedness has been questioned by new economic geographers who take what they call 'two types of nature' as their starting point, claiming that these are major determinants of production structures, trade and income. They see 'first-nature' as consisting of the physical geography of coasts, mountains and endowments of natural resources, and 'secondnature' as the geography of distance between economic agents (Krugman 1991). This new relational geography (e.g. Boggs and Rantisi 2003) emphasizes agency and the micro-level of analysis, but does not view the local as necessarily the most effective site for coordinating socioeconomic activity.

Differentiated regions require diverse regulatory instruments, processes, practices and demands organized at different spatial scales. The different roles that agriculture plays in rural development are connected to the types of production which, in turn, are connected to different forms of food markets. Murdoch (2000) differentiated food markets in terms of

whether they have vertical or horizontal food networks. The former are sectorally organized and are incorporated into large-scale production and consumption networks, while the latter link small-scale producers in subregional learning and innovation networks that can foster endogenous growth.

Building on the classification of land use differentiation made by Marsden (1998), we propose the following categories for extending the analysis beyond food production and illustrate how different types of (agricultural) production are connected to the differentiation of rural areas. The first two categories refer to bifurcating production, the third refers to a situation where agricultural production is combined with other production, and the fourth refers to non-farm rural enterprises in different industries, for example services. The service sector category also includes those rural areas where there are few enterprises – e.g. the countryside for residence.

- 1 Conventional agricultural production and the global mass food market.
- 2 Production of quality food and alternative agro-food networks.
- 3 On-farm business diversification.
- 4 Non-farm rural enterprises.

Conventional agricultural production and global mass food market

The majority of farmers are engaged with vertically organized food chains which are dominated by trading companies, retail chains and manufacturers operating at the national and global levels (Marsden 1998), where the food supply chains have become increasingly globalized (Watts and Goodman 1997). Market governance is focused on supply chain management (industrial mode of food supply), which corresponds with the industrial coordination model in convention theory. Most research on this type of market governance takes place in agricultural economics and focuses on the supply chain governance of the agro-food sector. Concepts such as transaction cost economics and principal-agent model are used to conceptualize the phenomenon. Rural development is approached from the perspective of agricultural production; although rural development is evidently not the prime aim of vertically organized food chains. It has been repeatedly shown (e.g. in Shucksmith et al. 2005; Bollman 2006) that the relationship of this kind of agriculture to rural viability is weak or even negative.

Production of quality food and alternative agro-food networks

Much of the literature on the growth of alternative agro-food networks, which is often connected to quality foods, links this with the rise of a new rural development paradigm in the EU (Goodman 2004). These

alternative networks have been widely analysed for their potential in fostering rural development and offering a new feature of the rural economy (Knickel and Renting 2000; Ventura and Milone 2000; Sonnino and Marsden 2006). According to Harvey et al. (2004), the term 'quality' is often used to describe foods or processes of production and distribution of foods, which operate beyond or alongside the industrialized system of large-scale production, processing and distribution. Quality involves a process of qualification and is socially constructed and negotiated. Renting et al. (2003) note that definitions of quality reflect differences in farming systems, cultural traditions, organizational structures, consumer perceptions and institutional and policy support. Sassatelli (2004) shows that quality is multi-dimensional; it is ascribed through a process described by conventions theory, where quality is established and attributed in the course of justifications, often contested. Murdoch and Miele (2004) have used conventions theory to identify different notions of quality.

In addition to quality, re-localization is another basic element of alternative food networks (Winter 2003a). Re-localization of food has been promoted as a means of stimulating endogenous development in economically marginal rural regions where, it has been argued, it is a viable way to revalorize local resources, overcome structural barriers to economic development and soften the impacts of CAP reforms (Ray 1998). Evans et al. (2002) discuss the required changes in governance structures and the social relations of production involved in re-localization and suggest that the changes need to be linked to policy developments if they are occur at a variety of spatial scales.

The production of speciality or niche market foods can generate economic growth (Watts et al. 2005). However, it is only viable in some places and under specific conditions (Lovering 1999). Speciality food production is predicated on uniqueness, rather than flexible specialization. Speciality food products typically have a specific identity, which provide them with innate, identifiable and differentiating features. These give the products a unique character making them incomparable to others. This identity can be derived in different ways: e.g. geographical origin, method of consumption, historical and technical origin, physical shape, etc. (Mattiacci and Vignali 2004). The relationship between typical products and tourism has been at the core of many rural development policy initiatives in Italy. Doria et al. (2003) have shown that the development of rural tourism has been accompanied by a dramatic growth of consumers' interest for typical products. Santagata (2000) points out the importance of a nationally recognised wine accreditation scheme in boosting a wide

range of initiatives that aim at territorial promotion in the cultural district of *Langhe* a major wine producing area.

The degree to which different forms of quality supply chain regulation are developed varies between countries as well as between regions. There is a huge variation in the development of alternative food networks between EU countries. Greece, Italy, France, Portugal and Spain provide more than 75% of European registered regionally designated products (Sonnino and Marsden 2006). In these southern European countries, the national and EU legislation on the legal protection of quality production has provided an institutional stimulus for consolidating these alternative networks, while northern European countries remained more focused on a legal system of protecting privately owned brand trademarks.

In terms of convention theory this type of agricultural production falls mainly under the domestic or civic coordination types of market governance. Policy interventions that reflect these conventions include the EU regulations on the Designation of Protected Origin and Protected Geographical Indication (PDO and PGI), similar national or local regulations and schemes, as well as product labelling, such as Organic, Fair Trade and local brands.

On-farm business diversification

Diversified farms practice agriculture alongside non-agricultural entrepreneurial activities. Starting another business activity is often connected to changes in the operating environment of farms, either as a result of recognising a new demand for rural products and services, or because the increasing challenges to agriculture encourage the farmer to seek new livelihood sources. Diversified farms can be engaged in more than one business activity besides agriculture. These activities may lead these farms to have tighter connections with a broader range of markets (both local and further afield) and to different public and civil society actors and may lead these farms to be affected by different models of market governance. In addition, depending on their location in the horizontal or vertical chain of production, they may be able increase their autonomy vis-á-vis large economic players.

Rural (non-farm) enterprises

This category includes non-agricultural rural businesses, such as trade, services, manufacturing, fishing and forestry. The development of these businesses in rural areas is influenced by institutional and regulatory structures. Regional geographic economic approaches deal with clustering, innovation diffusions, location of activities, which are discussed more in detail in the chapter on endogeneity. Entrepreneurship

is a crucial asset in these forms of rural development. These rural enterprises also face different models of market governance, depending on the sector in which they work. However in terms of state intervention, local governments play an important role in creating a favourable environment for entrepreneurial development. The role of civil society and the local community in local economic development is recognized by policy measures such as the LEADER approach. However, there is still a shortage of empirical evidence about the contribution that such approaches make to encouraging rural non-farm enterprises (Voutilainen and Tapio-Biström 2007).

While there are many types of rural enterprise, we suggest concentrating on three specific types, which are important for the development of all kinds of rural area, including those not dominated by agriculture. These are bio-energy, ICT and services. Bio-energy is an interesting case, since the market governance system is only just emerging, the activity is closely connected to the rural resource base and because it is strongly driven by concerns about sustainability -although there is some controversy about this at the moment (see Verdonk et al. 2007). ICT is significant for rural development since it is a means of transcending distances and has great potential for diversifying rural economies. However, this infrastructure has increasingly been left to other market governance solutions than those that were previously used to build electricity or telephone communication infrastructure. Finally, in the rural service sector we have witnessed privatization and applications of quasi-markets (market-driven provision of publicly-financed services) in recent years.

The relevance of market governance

Much of the literature describing market governance in connection to endogenous rural development has focused on analysing the emergence of alternative food chains. This literature suggests that there are some areas where alternative food chains make a positive contribution to rural development. However there is hardly any evidence about how alternative food chains might function in areas where agriculture does not play an important role in the local economy. This creates an interesting borderline case study on rural development, worthy of future exploration.

Another challenge would be to introduce the perspective of rural consumers (and service users) into the debate on market governance and enquire how different models of market governance affect rural dwellers. This question would broaden the scope of analysis to include rural areas with little or no agriculture and areas which are rural and have a prevalence of decentralized (public and/or civil society) solutions.

Another future task is to analyse the extent to which alternative food networks contribute to a new rural development paradigm. Sonnino and Marsden (2006) suggest that this should be analysed at two different, but interrelated, levels: the political, institutional and regulatory context in which alternative food networks operate and; the local/regional context in which they take shape.

Alternative food networks redistribute value through the food chain. rebuild 'trust' between producers and consumers and articulate new forms of political association and market governance (Whatmore et al. 2003). One means of strengthening alternative systems of food provision is to revalorize short food supply chains (Watts et al. 2005). There is a growing interest in the apparent resurgence of what Morris and Buller (2003) call the local food sector, which may present a spatial alternative to conventional food chains (Renting et al. 2003). Thus there are already studies on farmers' markets (Holloway and Kneafsey 2000; La Trobe 2001; Hinrichs 2000; Kirwan 2004), box schemes (Dürrschmidt 1999), farm shops (Youngs 2003), farm-based butchers' shops (Ventura and Milone 2000) and good food networks (Sage 2003). A short food chain can operate through direct sales or by producers bringing food to places that are poorly served by conventional food chains. Local food initiatives can provide work for local people in food distribution and sales and can also provide an alternative outlet for local farms' produce. Moreover, Morris and Buller (2003) claim that the benefits of becoming involved with the local food sector can help to re-establish trust between consumers and producers and help integrate communities. From an economic perspective, the higher prices generally received by producers is an important incentive for them to become involved in the local food sector.

Despite the relative abundance of literature about alternative food systems, there are still some gaps in our understanding of the phenomenon and its importance. The emergence of alternative food networks is a recognisable, but contested, feature of the new rural economy. The empirical analysis, of Sonnino and Marsden (2006) leads them to argue that there are no clear boundaries between conventional and alternative food systems. The conventional dichotomy between standardized and localized food is not a true reflection of current realities in the food sector. For example use of the term 'quality' in alternative food chains has different meanings in different parts of the EU. In southern member states, alternative food networks build on regional quality production and direct selling that draws on well established traditions. In these countries agriculture is predominantly in small, diversified and labour-intensive family farms employing traditional methods and food processing sector is highly fragmented. By contrast, in

northern member states (i.e. the UK, the Netherlands Germany and the Nordic states), alternative food networks are based on more quality definitions that stress environmental sustainability or animal welfare and involve innovative, often retailer-led forms of marketing. In these countries the agricultural sector has larger, more capital-intensive, economically efficient and specialized farms. Local or ecological conventions are embedded in a context of more centralized and standardized processing sector dominated by medium-sized and large food manufacturers and retailers.

From the global to the local

Globalization is further increasing the influence that multinational companies have over food and reducing that of national and supranational governments. One characteristic of this development is the progressive harmonization of market governance models between countries. At the same time globalization is 'squeezing' rural economies through increasing competition and forcing them to respond to a changing situation. This squeeze is also illustrated in the outlines of the web and is leading to a move to redefine the boundaries between the international and local dimensions, so as to reassert the vitality of local economies. This entails a shift from a framework based on a balance of power between states to a balance of cultural interests and local needs that takes into account the importance of local actors as agents of change.

In this context the emphasis of market governance is turning from global regulatory supply chains to local participatory processes. This turn includes a shift from the macro to the micro level, from sectoral to spatial regulation and from vertical to horizontal cooperation. The privateinterest model of governance led by corporate retailers is being challenged by the interests of local networks. The renewed emphasis that market governance places upon local participatory processes, horizontal co-operation and partnerships is supporting territorial development and bottom-up initiatives. This in turn supports decentralization and reregulation as well as re-localization i.e. endogenous development.

Markets do more than just allocate goods and services; they also influence the structure of social interactions and therefore affect the evolution of norms and preferences (Bowles 1998). Preferences are also affected by policies and institutions, therefore the consequences of new policies or institutional structures cannot be evaluated without taking into account different preferences. Markets also structure the tasks of actors and thus affect their resources and capacities. This can change the likelihood of different actors interacting. In this respect the governance of

markets also has a direct effect on the forms and intensity of cooperation between different actors (social capital) and an indirect effect on their resources and preferences.

In summary, an analysis of the market governance model can contribute directly to the understanding of new institutional frameworks, endogeneity, social capital, sustainability, especially to economic and social sustainability, and novelty production.

How does the governance of markets translate to other dimensions?

There are important interrelations between the governance of markets and the other dimensions of the rural development model (see Chapter 1).

New institutional frameworks

Institutional structures (i.e. the combination of formal and informal institutions) can be considered as a central aspect of market governance. Although the governance of markets involves more than institutional structures, institutions have a direct effect on policy outputs and outcomes by enabling and constraining actors and organizations. Institutions are intervening variables between the inputs and outputs of markets, acting as vehicles that structure the choices and preferences of actors. A key issue in rural market governance is to adequately embed those markets in properly functioning and locally controlled institutional frameworks. To develop the governance of markets there needs to be sufficient institutional capacity to control and strengthen existing markets and to construct new institutional frameworks for new markets. Interrelations with the support required to develop regional market structures and to define and provide quality assurance and production standards are further factors that need to be taken into account.

Endogeneity

The governance of markets and endogeneity mostly inter-relate in terms of questions of the degree of local or external control. Food markets have been increasingly replaced by supply chains, with increasing emphasis on supply chain management, which imply a decline in local control over food markets. The emergence of new non-food markets, growing rural tourism, demand for rural living spaces and public goods, such as nature and landscape management, etc. provide new opportunities for regions to reassert control over rural markets. The struggle over food markets and supply chain management goes together and interacts with the one over regulation and re-regulation.

The degree of endogeneity partly depends on the capacity of a region to co-ordinate, control and strengthen its own development. The question then is the level of control that local actors and institutions have over their territorial assets. From the regional economic perspective the question is the degree to which the obtained benefits are used or invested within the territory, thus contributing to a self-sustaining development process.

Sustainability

Sustainability poses collective challenges and requires collective action; none of the many sustainability problems can be solved by markets alone. The ability of institutions to enable and promote practices, such as guiding market transactions as to generate sustainability is a key issue. The emerging governance of bio-energy markets is a case in point.

Rural territories are increasingly differentiated; in some rural regions agriculture is a major economic sector, while in others it is economically insignificant. The different roles of agriculture in rural development imply connections with different markets which, in turn, are connected to the types of production. Large-scale production is linked with vertical food chains, while small-scale 'niche' producers and pluriactive farms develop more horizontally organized food networks. In some regions, differentiation has led to a broadening of the interactions between agriculture and environment, through activities such as agritourism, nature and landscape management, new on-farm activities and diversification. These activities combine agricultural and non-agricultural products and services in regional markets. The challenge in these cases is to balance ecological, economical and social sustainability. The variety of forms of market governance is of central importance in differentiated rural areas, especially from the viewpoint of sustainable development.

Novelty production

Novelties can contribute significantly to the competitiveness of rural economies as well as to individual farm economies. Adequate policy instruments and governance structures to support novelty production, processing and distribution are of central importance. Prevailing institutional barriers and other problems of short supply chains need to be resolved. New institutional structures based on local/regional cooperation and local supply chains need to be constructed to enable the production of novelties and of markets for them. The construction of new market governance structures and the design of policy instruments and institutions for novelty production should be carried out in a joint process. Local and contextual knowledge is needed to understand the interrelations between novelty production and institutional structures.

The understanding of the historical and cultural context and interrelationships between different elements is a prerequisite for constructing successful markets.

Social capital

The shift towards more integrated rural policy has been accompanied by a broadening of participation of the public, private and voluntary sectors in rural policy making and implementation. Integrated policy also requires cooperation between actors at all levels of governance. This shift highlights the importance of social capital in (rural) governance. Social capital cannot create markets, but without social networks most companies cannot function. Through globalization producers have gained access to new (food) markets but, at the same time, these have become increasingly volatile because of increased competition. Multinational corporations have many advantages over local producers; such as lower production costs and more effective marketing. While local food markets are relatively small, their market requirements and the level of competition is less demanding than in the bigger markets. Growing demand for quality and increasing expenditures on marketing necessitate ever-higher investments. Local producers often are not capable of developing markets or even of entering many markets since they do not have the technical capacity to meet market demands. This compels local producers and firms to cooperate. Networks and partnerships are an essential part of market governance.

Note

1 This is a concept launched that can be traced back to Whatmore and Thorne (1998) who used it to refer to the 'otherness' of alternative strategies in the UK Agro-Food system. 'Alterity in this context can be understood as delineating what is alternative and distinctive about a particular strategy, in relation to the conventional or mainstream.' (Kirwan 2004, 395).

8 The Rural Web: A Synthesis

Flaminia Ventura, Gianluca Brunori, Pierluigi Milone and Giaime Berti

As highlighted in several research programmes on rural development¹, the complexity of the rural is related to the heterogeneity of available resources and the highly diversified ways in which they are used. The specificity of these resources and the particularities of their use define the identity of rural territories. The significance of this heterogeneity is generally recognized – and is one of the main pillars of the currently emerging rural development model. In this respect Europe truely is a place of 'a thousand agricultures'.

The same research programmes also highlight the return to a new, comprehensive and integrated approach to rural development in which the interrelationships between actors and processes are considered to be far more important than single activities. This approach views the modalities through which the rural systems are developing as a central issue, with the overall capacity to adapt to changing circumstances being decisive. Consequently, it sees rural systems as continually evolving. Rural systems contain both social and biological (or natural) subsystems, the evolution of which differs, in at least three aspects (Ardrizzo 2002):

- the evolution of social subsystems usually occurs more quickly than that of biological subsystems;
- the evolution of social subsystems is to a degree a result of the agency of involved actors;
- biological evolution is characterized by an ongoing differentiation whilst the differentiated lines of evolution hardly re-unite. By contrast in social evolution the transmission of one 'genealogical line' to, or its fusion with, another line often the most important source of change (Goulde 1999).

Both subsystems are characterized by their specific historical co-evolution, which is increasingly, influenced by the concept of sustainability. This concept has evolved into a multidimensional and multi-level notion, especially since it seeks to integrate different social and natural dimensions (specifically: the socio-cultural, environmental and politico-

economic dimensions). Thus, sustainability is the outcome of the coproduction and co-evolution of man and nature. These processes and their outcomes cannot be but local. This contributes to the complexity of rural worlds: the diversity of contexts and the resultant heterogeneity of trajectories create a rich and complex mosaic, which characterizes the rural.

According to Gell-Mann (2002) the complexity of a (sub) system is equal to the 'length of the concise description of its regularities'. It is important to note this refers to *perceived* regularities. AS such (the perception of) complexity depends upon those who are observing it, on their interests and views. Hence, the recognition of complexity depends a lot on the cognitive scheme through which it is viewed and thus, albeit indirectly, on the (implicit) objectives of the actors.

Over the last ten or fifteen years have witnessed an important shift in rural studies. Previously these studies mainly involved *simplifying* the overall complexity of rural systems. Such simplification was needed to focus on the overarching objective of maximizing profits within a productivist model. This approach is increasingly seen as inadequate, due to two main factors. Firstly, there is an increased perception of the shortcomings of the modernization paradigm. Secondly, the emergence of the concept of sustainability requires the introduction of a more complex set of interrelated objectives that take into account not only economic, but also social, cultural, environmental and political aspects.

The latter factor has two important consequences. It increasingly shows the futility of to continuing to attempt to reduce complexity realities into simple algorithms. Equally it has also became evident that the concept of profit maximizing at individual level necessarily needs replacing by the long-run goal of obtaining the highest utility at the level of the system as a whole, thus securing the intergenerational transfer of development potential within each specific context.

The rediscovery of complexity also strongly influences the social construction of knowledge and decision making processes. New forms of professional knowledge are needed that adequately explore the complexity of situations and problems. This knowledge needs to take into account the variety, variability and unpredictability of both the social and the natural worlds and their many combinations, interactions and mutual transformations. Given this *a priori* planning is no longer an adequate approach to decision making, and increasingly runs counter to current problems and situations. This is even truer if decisions are taken and/or implemented by professionals without a thorough knowledge of, and direct experience with, the situations and problems that are to be

governed (Rullani 2002a). Therefore, endogeneity becomes a crucial feature of both decision making processes and the creation of innovations - especially those that aim to strengthen the sustainability of rural systems.

The ineffectiveness of external planning and forecasting implies the end of the hierarchical systems that lead to a technical and political interventionism that crossed, especially in agriculture and the rural areas, all the limits implied by the notion of sustainability.

These complex systems not only embody uncertainty, but also behave in, and need to be governed in, a decisively different way (Rullani 2002a). Their competitiveness depends on organizational and behavioural solutions that allow for flexibility and have the capacity to learn from mistakes and unintended consequences. Thus, complexity implies a process in and through which objectives, choices and lessons are shared. This creates interdependence between the various human and natural components of the system. This means that it is no longer feasible to use pre-established 'recipes' or 'blueprints'. Nor is it possible to design in a priori trajectories (whether unidirectional or multidirectional) as by their very nature such 'ways forward' are hierarchic and imply predefined sequential steps. Hence, in both theory and in practice it becomes strategically important to focus on the dimensions combine to create this complexity and how they interact with each other.

The complexity of individual rural areas is generated by and through their differences, which stem from the processes of restructuration that unfolds over time and space. This restructuration is partly the result of rural areas changing from being places of production to being places of consumption (Marsden et al. 1993). At the same time, the various functions of the rural are differentiated and segmented; and for example contain very different flows and stocks of capital, information, people and goods. These are mutually linked through a constellation of networks (Murdoch 2006) which tie together different socio-technological, political and economic governance structures. Each network seeks to coherently link the past, present and future according to its own judgements and priorities, which can often vary significantly (van der Ploeg 2003).

Thus, our analysis focuses on these collective networks, defined here as 'webs' in order to comply with the new concept of sustainability. This 'web' can be defined as the hybrid network through which the complexity of rural spaces is made coherent in order to underpin their sustainable governance. This implies building inter-relationships that can lead to the creation of site-specific and promising solutions for maintaining and developing rural identities and economies. These interrelationships also result in the creation of conditions that strengthen the quality of life and the attractiveness and liveability of rural areas.

The concept of the 'rural web' builds on three interrelated blocks of literature that centre on networks, coherence and territorial capital. We briefly discuss these bodies of literature below.

Networks

A review of the literature over the last years shows the burgeoning use of the term 'network' as a metaphor for analyzing and interpreting processes and activities occurring in rural spaces. Among most studied examples are:

- agri-environmental networks, studied especially in relation to agrienvironmental policies (Lockie 2006, Kaljonen 2006, Donaldson et al. 2002)
- alternative agro-food networks, networks that mobilize producers, consumers, local institutions, media, experts and NGOs to market food by conveying it with distinctive meanings (Marsden and Renting 2003, Goodman 2003).
- Rural recreational networks, as webs of rural services, 'rural signifiers'
 (i.e. elements of the landscape that give the place distinctiveness,
 Phillips et al. 2001), and 'production markers' (elements of the
 landscape and of production processes that give products a
 distinctiveness and identity (Perkins 2006);
- rural innovation networks, communities of interest and practice, which respond to specific problems through structured learning processes (Wiskerke and van der Ploeg 2003);
- transnational rural networks (Ray 2001), relational patterns between rural areas that aim to redirect flows of resources and to provide rural economies with opportunities for gaining more autonomy.

The network is a good explanatory tool for studying changes in rural areas as it shifts theoretical and empirical attention, from essences to relations (Fuchs 2001). In other words it shifts attention from the socio-economic structure of rural areas to the complexity of interrelationships, synergies, interactions and reciprocity that drive the processes of change. Many 'structuralist' (or essentialist) studies have been of limited value, and sometimes even harmful in their policy recommendations, since they search for common features rather than context specific ones. When turning from the theoretical to the empirical level, it becomes evident that such essentialist categories can not be applied to different contexts. As Cloke and Goodwin (1992) argue: 'Spatial variations are usually regarded as not being due to autonomous spatial factors be these physical, environmental, or cultural. Rather, they represent elements of the

differentiation of functions and activities at the national and even international levels'.

By contrast a 'relational' approach describes complexity as by looking at a rural space as a different in a space of differences; studying each rural space in terms of its diversity within a sea of diversities.

In order to better understand this point, we can consider the postulate that social entities do not exist per sé, but only in relation to whom observes them. Observers apply their own mental schemes when observing 'reality'. According to Bourdieu (1987) and Fucks (2001) in order to be perceived and to 'exist' as an entity, an entity needs to be different from other entities. Diversity is a relational concept. It can be defined as the outcome of a comparison that takes into account the presence and/or absence of characteristics, positions (proximity and distance) and orders (above, below, between). If observers don't have the appropriate mental schemes to appreciate the differences, they will not recognize entities as such.

According to theorists of social networks (such as Cook and Whitmeyer 2003) networks are by definition entities, within which resources (either material or immaterial) are exchanged. Joining a network gives potential access to a flow of resources. Thus, being part of a network is a first step towards survival. Not being recognized as part of a network implies exclusion. Once within a network, one can strive to improve one's own position in it in order to gain autonomy or reduce dependence on others. The key to this is power, the capacity to make others act according to one's will. The larger the flow of resources one can control in the network, the more power one can exert on others.

The concept of networks also explains why people can control other people and resources from a distance. In fact, networks do not necessarily require face-to-face relationships, since they primarily consist of shared cognitive maps that allow members to agree on representations of the external world. Networks are communication structures that allow information to be transmitted through long chains of relations. These social interactions can be mediated by non-human elements: media can transmit messages at a distance, symbols identify belonging to specific groups, archives allow transmission of information over time, maps disclose the spatial links between communities and things. A uniform confers, in the eyes of those belonging to a network, the power of those who legitimately wear it to act on behalf of the authority that has delegated it.

From an economic point of view, networks are spaces where exchanges of tangible and intangible flows take place. Networks imply the sharing of

risks, investments and technologies. In the Fordist paradigm, risk was also considered as an object of exchange. Suppliers, customers, employees and institutions would trade power and knowledge to the technostructure of the big firm (the 'hierarchy') in exchange for security, protection and risk reduction. This is no longer possible today. Not so much for ideological reasons, but rather because large corporations are no longer capable of metabolizing and neutralizing the huge risks inherent in the global economy (Rullani 2002b). Risk therefore falls on to the shoulders of network members, as in the case of a filiera (or food chain). The members have to re-discover locally-originated tools such as reputation, mutualism, mutual recognition and help in order to deal with these risks. As a consequence, all network members have to handle knowledge, skills and their own autonomy in risk assessment and management. Risk sharing leads to knowledge sharing and, therefore, power sharing. This helps build the coherence of the organization of the network. Autonomy and risk sharing on one side, and knowledge and information sharing, as well as coherence in rule setting on the other, shape the network as hybrid form, lying between a hierarchy and the market (Saccomandi 1998).

The key strength of a network (and its competitive advantage) is in maintaining a high degree of flexibility within each of the individual units that together compose the network. This ensures the capability to adapt to changes in the context within which the network operates. In other words, the network allows for each and every single member to behave strategically, while also allowing them to design a *common* strategy to sustain the network as a whole and to realize its *common* projects. In short: the network allows for a unique mix of individual and joint actions. This particular feature explains the existence of different socio-technological networks, each with their own internal coherence and joint projects. Evidently, this does not imply that individual and joint projects automatically flow into one coherent and synergic whole. Networks can be very different. They can also compete for the use of resources.

Another feature of networks is that they facilitate the understanding of the motivations for individual and collective action. Actors are part of a plurality of networks. As each network is built around specific principles, visions, norms, cognitive schemes and rules for distribution, individuals build their identity through actively (re-)combining elements that belong to different networks. Van der Ploeg (1994) uses this approach to conceptualize the relational dimension of farming as the ongoing coordination and active processing of four domains: those of production, reproduction, markets and family. He states that farmers transfer meanings from one domain to another and simultaneously manage different value systems. This approach shows how the environment interacts with farmers, but also how farmers actively

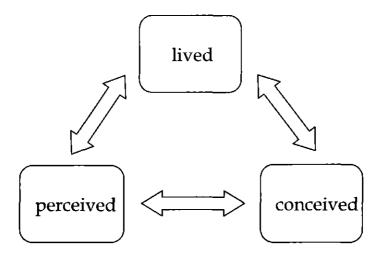
create 'room for manoeuvre', thus contributing to a change in their own environment. In synthesis: the network approach can be extremely useful studying socio-economic changes and their associated development trajectories. However, there is an additional and highly important reason to use the network concept especially in rural studies: 'The network approach is useful because it allows us to link together the development issues that are internal to rural areas with problems and opportunities that are external. In this sense the term 'network' allows us to hold 'inside' and 'outside' together within one frame of reference' (Murdoch 2000:417).

Coherence

According to Cloke and Goodwin, coherence is 'the spatial expression of particular modes of regulation and strategies of societalization being pursued by recognizable historic and hegemonic blocs which dominate specific areas'. (1992: 326). Power relationships become hegemonic blocs that translate their rules, regulations and lifestyles into specific trajectories that have a precise time/space dimension.

Since a network can be defined as a structure that operates as a 'mode of ordering', with its own specific set of values, rules for distribution and cognitive categories (Bourdieu 1984), coherence emerges from the many practices that occur within the network. Halfacree (1993), following Lefebvre and Harvey, explains coherence as the result of an inter-relation between lived, perceived and conceived spaces. Lived space is the realm of practices, perceived space is the realm of knowledge, and conceived space describes the system of values, or ideology, which orients 'visions and divisions'. These three dimensions are strongly inter-related. Practices connect social representations with the material components of space and are affected by the cognitive frameworks of the actors. A plant can be thought of as a weed or as a useful plant, not only because of its characteristics, but also because of the knowledge of its users. In turn, knowledge is strongly affected, and more often than not distorted, by ideology. At the same time, reflecting on practices may cause adjustments of cognitive schemes and systems of values.

Figure 8.1 The three dimensions of rurality



According to this model, different forms of rurality are the outcome of the coherent and site-specific inter-relations between lived, perceived and conceived spaces. While the model might be used to study coherence at meso and macro levels; it is can also be useful for studying micro processes that yield coherence, for example at farm level. Farmers' practices produce effects in both the material and the social environments. These environments may either be enabling and constraining to farmers' actions, as Giddens postulated in general terms. Practices can be constrained by the physical context, available knowledge or existing norms and rules and actors must negotiate their practices with the environment.

For example, in many hilly areas farmers have built terraces to retain water and cultivate land on a flat surface. Thus they have progressively changed the rural environment. Although initially unintended, these landscapes with terraces may become a distinctive feature of this rural space to external observers. Similarly, van der Ploeg (2003) documents how the 'vision of the future' pursued by the Ministry of Agriculture led to irreversible changes in the Dutch countryside.

Changes in rural space can be driven by exogenous processes (climate change, policies, etc) as well as by endogenous processes. The latter occur when novel ways of doing things create new knowledge, new institutional arrangements within the network or even lead to a transition of the dominant socio-technological regime (Scettri 2001; Milone and Ventura 2002).

From an economic point of view, coherence is a key element in defining, and contributing to, the organizational efficiency. This is because a high level of coherence greatly reduces transaction costs within the network. The creation of economies of proximity is strategic in this respect. Proximity arises when relationships become coherent in terms of space, culture and psychology. As Ventura (2001) points out, the key features of relationships within networks are frequency, informality and the presence of common definitions, languages and rules.

In the past proximity, was a purely geographical concept. Today ICT can support the construction of new networks in and beyond rural areas, building relations of proximity that may be completely independent from any geographical limitation. This has multiplied the number of observers and potential participants, who can now be both external or internal to a region². At the same time it sustains the creation of a global vision of development. In rural areas, today attractiveness and sustainable development play key roles in this.

Agricultural practices and policies, land use and its planning, cultural policies, etc., all influence the way rural areas are lived, perceived and conceived. At the same time they are the result of prevailing debates and the social construction of values. The time/space diversity of these elements is reflected in the highly diversified modes of perception and elaboration embedded within local communities. Together contribute to the existence of multiple patterns of coherence within rural areas.

The new element in rural studies, which becomes decisive in the search for coherence, is the concept of sustainable development of rural areas. Sustainability is a multidimensional and multilevel concept that aims to provide an integrated set of responses to the current needs of society, without compromising the capacity of future generations to have their own needs satisfied (WCED 1987). Sustainability can also be defined in operative terms as the relationship between dynamic socio-economic systems and dynamic (although slower) ecological systems. According to Costanza (1992 - quoted in Abrahamson 1997;31), these systems have to ensure that:

- human life can develop indefinitely;
- individual humans can realize themselves in a satisfactory way;
- human culture can develop further, and;
- · that the effects of human activities remain within boundaries that avoid destruction of the diversity, complexity and functioning of the ecological systems that support life.

This means, in other words, that 'the objectives of biological systems (genetic diversity, resistance, biological productivity), those of economic systems (satisfaction of basic needs, strengthening of equity, increase of useful goods and services), as well as those of the social system (cultural diversity, institutional sustainability, social justice, participation) are to be maximized simultaneously' (Barbier 1987, discussed in Abrahamson 1997:31).

The underlying idea is to obtain a balance between these three interrelated systems, and to maintain, all the multiple stocks of capital available in the area. Thus, sustainable development becomes a new paradigm that,, according to Lütteken and Hagedorn (2006), has the following two features:

- 1 It is people-centred in that it aims to improve the quality of human life and it is conservation-based in that it is conditioned by the need to respect nature's ability to provide resources and life-supporting services. From this perspective, sustainable development means improving the quality of human life while living within the carrying capacity of supporting ecosystems;
- 2 It is a *normative concept* that embodies standards of judgment and behaviour to be respected as the human community (or 'society') seeks to satisfy its needs of survival and well-being.

Through this new paradigm, that links inside and outside and practices and ideologies, it is easy to understand that sustainable rural development is the result of coherence, at the micro, meso and macro levels, of the three dimensions of lived, perceived and conceived spaces. Bourdieu (1985; 1986) draws a distinction between simple coherence (when an internal coherence exists as result of the hegemony of a specific coalition) and double coherence (when internal coherence is perceived as such also by external observers). Building on Bourdieu, the 'rural web' is a specific network that acts as a driving force for rural development processes that are characterized by this double coherence.

At the farm level, sustainability, as described above, translates into multifunctionality. The presence, development and prevalence of different functions within a farm depends on the natural and social needs that it is able to meet and to satisfy. In other words, multifunctionality at the farm level is an integral part of the specificity of a particular territory. Through multifunctionality, farms become the result, and at the same time the agent, of the development trajectory of the area. If this trajectory is firmly embedded in a network that shows double coherence, the network might be identified as a 'rural web'.

Territorial capital

Castells (1998) distinguishes between 'spaces of flows' and 'spaces of places'. Highlighting the distinctive feature of the present historical

phase, i.e. mobility, Castells refers to 'spaces of places' as those spaces where continuity prevails (albeit temporarily) over change. Following Castells, we argue that rural change results in new combinations of these 'spaces of flows' and 'spaces of places'. Rural development strategies should be aware of the trade-offs between the two. Giving priority to the spaces of flows means opening the territory to the influence of global change (world market prices, financial flows, migrations etc). This has been happening to the countryside in many parts of the 'new world', where the opening of the system to markets has intensified rural change and adaptation to global markets. On the other hand, giving priority to 'spaces of places' means working on the permanence of place and maintaining and possibly strengthening this.

New approaches to rural development have benefited from the debate on development that started in the '70, which criticized economic growth as the key indicator for development (Morse 1971; Seers 1969). This resulted in the integration of 'basic needs' (Streeten 1977; 1979) and 'sustainable development' within official development discourses. More recently, rural areas have been seen as an experimental field for 'alternative' models of development, based on a rejection of the concept of development itself (Sachs 1992).

In the '80s, efforts were concentrated on studying the potential drivers of alternative patterns of rural development. Particular attention was given to the concept of 'endogenous resources' (based on local knowledge, social networks nature driven processes as opposed to scientific knowledge, market networks and science driven processes). Within developing countries this approach has been mainstreamed in rural development discourse under the 'sustainable livelihoods' approach (Elliss 1998; 2000). The basic assumption of this approach is that specificities of place, and therefore of rural areas, give rural communities resources which, if adequately mobilized, provide a comparative advantage to those who live and work there. Innovation, in this regard, is not necessarily linked to the knowledge or technologies generated by specialized bodies, but is inherent to social learning activities, to repositioning vis-à-vis markets and technology (van der Ploeg 1994) and to embedding local knowledge and cultural repertoires within production processes (Ray 1999; 2002).

The endogenous approach to rural development casts new light onto the debate over the role of capital in the processes of growth and development. From Schultz (1961) onwards, the meaning of 'capital' has progressively been broadened to explain growth differentials among regions with the same endowment of capital measured in the conventional way. Capital can assume several forms: human, social,

economic, cultural and symbolic (Bourdieu 1985). In rural economies, some of these resources are mostly only available to those who belong to a local community, and as such community membership grants them an advantage. In the economic literature, such resources are classified as 'club goods' (Cornes and Sandler 1996), as they can be accessed only by a restricted group (those who belong to a place) and relations within this group are non-competitive. Ray (1998) focuses on cultural capital, showing how rural communities are depositaries of 'cultural repertoires' (skills, folk art, stories, recipes, etc.). Theories of social capital (Putnam et al. 1993, Woolcock 1998, Portes 1998) added new insights to development theories. They explain how different levels of links activate new resource flows and make new initiatives possible. These links may exist between peers within the same community (bonding ties), between actors belonging to outside groups but at the same level, for example other rural communities (bridging) or with actors at to different levels, for example to higher administration or political levels (linking).

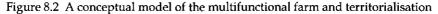
Local assets, in other words, can be turned into 'territorial capital', which can be defined as a stock of resources specific to the place and available to those who live and work in the territory. These resources (material and immaterial) are common goods for a local community, available to people belonging to a rural community and which are available to be mobilized into projects.

Empirical work in recent years has shown a multiplicity of successful initiatives that embody these endogenous or neo-endogenous approaches (van der Ploeg *et al.* 2000). Their results show that the creation and mobilization of endogenous resources depends largely on collective action, through which local diversity is recognized in terms of endogenous resources, mobilized in order to be part of development repertoires (Ray 1999) and coordinated through social interaction around common objectives.

Agro-tourism activities, for example, benefit from the landscape (one of the more important resources for constructing territorial capital) but also from local actors' cultural attitudes to hospitality and appropriate institutional infrastructures. In turn, the landscape is produced and reproduced through practices that are enabled by other forms of capital. Rural innovation occurs as a result of information and knowledge exchange with peers and the adaptation of their respective cognitive frameworks through interaction. The denser the networks of reciprocity and trust, the greater the potential for innovation.

Territorial capital is a public good within a rural community, since those belonging to the community can benefit from it. However, in order to be valorised, territorial capital needs a set of appropriate practices, perceptions and conceptions. In other words, local actors need the right 'codes' to mobilize it. For example, landscape is hardly considered as a resource it is only exploited to produce standardized commodities.

Farming has a key role in the process of creating territorial capital, as farms are generally the most important land management units within the countryside. The externalities of farming are therefore relevant sources for producing and reproducing territorial capital.



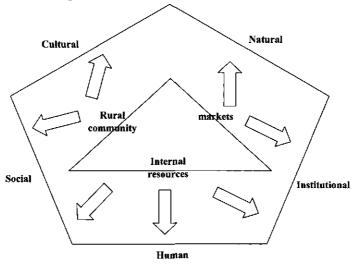


Figure 8.2 links the farming model developed by van der Ploeg and Renting (2001) with the framework of territorial capital, and shows how farming strategies based on multifunctionality are highly productive in terms of public goods.

Conceptualized as a node of multiple networks (markets, rural territory, internal social and natural resources), multifunctional farms reposition themselves within relevant networks, activating selective links with the inside and the outside. In general, multifunctional farms rebalance their links in favour of other local actors and resources, by re-internalizing farming processes that were once externalized to the market, and looking for synergies with other local actors (Brunori and Rossi 2000). Trust among actors and sharing common cognitive frameworks facilitate the emergence of synergies, and in turn, further products of multifunctional farming.

Choosing a strategy that is more linked to the 'spaces of place' does not necessarily imply closure from the outside world. On the contrary, successful rural strategies of differentiation depend on the capacity to mobilize local networks in order to play global games. When such networks - or 'structured structures' - are embodied as 'structuring structures' in internal actors' practices, perceptions and conceptions, and a certain degree of consensus has been reached among different internal networks, they can be effectively and efficiently communicated to outside observers as distinctive features of the place. The outcome of this process is recognition of the specific rural features of the territory by outside observers - or, at least, those of them who know the right 'codes'. These outside observers can be tourists, nearby city dwellers, consumers or investors: all of them choose rural goods and services on the basis of the value that they attribute to them, which is correlated to the value they attribute to the place as a whole. The inverse is also true: when they appreciate rural goods and products they tend to view their place of origin in a positive way.

The latter is particularly true when we talk about strategies based on tourist activities. Brunori and Rossi (2000) have studied how coherence can be constructed in rural areas through network building, and how this coherence is directly linked to the economic performance of a region. Wine routes are based on rules that link farms together within a common project, and communicate a coherent image of the area and of the tourist offer.

After two decades of experience in rural development initiatives, some of which have been encouraged by LEADER programmes, we are now aware that the most successful initiatives are the outcome of a selective opening, rather than of local closure. Building upon the insights of endogenous development, new approaches have applied the metaphor of the network to the processes of spatial restructuring that are affecting rural areas (Murdoch 2000). In particular, 'neo-endogenous approaches' (Ray 2003) start from the premise that global networks play a fundamental role in the rural economy, that rural communities need to deal with them and grasp the advantages they can offer.

The concept of symbolic capital is useful in understanding the relevance of the 'space of place' within network societies and the internal/external relationships. Bourdieu (1985) defines symbolic capital as 'nothing other than capital, in whatever form, when perceived by an agent endowed with categories of perception arising from the internalization (embodiment) of the structure of its distribution, i.e. when it is known and recognized as self-evident'. In other words, components of territorial capital are turned into symbolic capital when appreciated by outsiders.

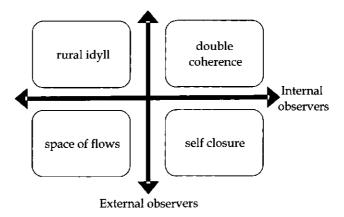
The name of a local product, its brand and logo, and material signifiers (such as trees, buildings, landscape patterns) turn into symbolic capital when they generate recognition (that is, the capacity to be distinguished), reputation (recognition associated with a positive judgment), and trust (the observer's willingness to accept something unknown).

Symbolic capital is strongly linked to what we earlier called the 'double coherence' of rural areas. When this exists, reputation and trust are strengthened. By contrast, when multiple coherences give way to multiple simple coherence communications, when is not adequately communicated to the outside world or when it starts to weaken, the symbolic capital deteriorates.

Figure 8.3 shows a classification of rural areas,* according to how observers perceive them:

- · when neither simple nor double coherence exist, rural areas are just 'spaces of flows' and show very little distinctiveness;
- when he coherence is internal but not perceived as such by external observers ('self closure'), rural areas are vulnerable to external shocks;
- when external observers attribute a high value to the area but other forms of capital are being degraded (e.g. a depletion of renewable resources, overcapacity, concentration of economic power) we may call this situation a 'false rural idyll'.
- Finally, when internal and external observers have a similar view of the place, double coherence is achieved, providing the conditions for increasing symbolic and other forms of territorial capital.

Figure 8.3 Classification of rural coherence according types of observers



^{*} This classification coincides in an interesting way with the typology of rural areas discussed in Chapter 2 of this book.

Rural development and the relevance of theoretical progress

After the disillusion over evident difficulties of 'getting out' of capitalism, an increasing number of critics to conventional approaches to growth and development have turned to approaches that look to alternative patterns of economic behaviour as 'seeds for social change' (Allen *et al.* 2003). This approach has been supported theoretically by the work of Williams (1977) Harvey (1996), Castells (2004) who, drawing on the seminal work of Gramsci, investigate the link between everyday life struggles and broader structural change, giving much more emphasis to culture and cultural change than orthodox Marxism does.

The growth of organic farming and other alternative agrifood initiatives (Allen 2004) have given empirical weight to these theoretical approaches, and encouraged scholars to address technical and policy aspects, such as marketing strategies, farm organization, food governance (Roep and Wiskerke 2005). Van der Ploeg (1994) applied this approach to farming, showing that farmers have resisted the dominant (and dominating) model and created original paths of farm development by repositioning themselves in relation to markets and technologies.

One of the most important consequences of this approach is that these alternative movements necessarily take seriously the rules of the game they are playing: they recognise the importance of markets, efficiency and competitiveness as necessary conditions for survival. Yet, at the same time they work to shape them in different ways.

This is also reflected in academic and policy discourses, where we can observe, for example, a change in the meaning of competitiveness: quality, ethics, small farming or ecology are not considered as constraints to economic success of disadvantaged rural actors but, on the contrary, as opportunities (Brunori 1999).

Theoretical advances and empirical evidence have given scholars new motivation to reconceptualize rural development and link rural development strategies to issues such as equity, sustainability and social justice. Some of the changes affecting rural areas are of particular relevance to theories about rurality:

- Industrial decentralization (Bagnasco 1977; Becattini 1987) alters the social and economic structure of the countryside, placing increased pressure on land, eroding the territorial basis.
- Inward and outward migration flows (Champion 1989; Stockdale 2004; Hoggart and Panigua 2001; Kasimis et al. 2003) lead to depopulation and ageing within the most remote areas, but allow new paths of intensification in others (horticulture in southern Spain, permanent crops in Sicilia and Puglia). These flows simultaneously create new

- rural poverty and revitalize industries once abandoned for lack of labour (e.g. forestry in Tuscany, sheep breeding).
- The globalization of the agri-food system (McMichael 2004) is changing the international division of labour, redistributing the patterns of crops and food processing and changing the distribution of power within food chains.
- Understanding agricultural crises as crises of productivism and modernization (van der Ploeg 2003) stimulates the search for new production paradigms and new farming models.
- Changing employment patterns and the growth of the 'service economy' (Cloke and Goodwin 1992) changes the outputs of agriculture and the identity of farmers themselves.
- Changes in consumers' attitudes and behaviour (Roex and Miele 2005; Goodman 2003; Goodman and DuPuis 2002), in a context of the detraditionalisation of diets and eating styles, brings about a struggle to conquer the 'hearts and minds' of consumers over issues such as health, safety, taste, ethics. It is in this context that the 'quality turn' (Goodman 2003; Murdoch et al. 2000) occurs, with a growth of initiatives aimed at re-localising food chains (Allen et al. 2003; Winter 2003);

Conventional theories of rural development, coherent with Fordist approaches to regulating the economy (Marsden 1992) have been largely inspired by the principles of modernization. These principles advocate a) adoption of science-based industrial techniques in the agricultural sector; b) regional specialization of rural areas on primary production, and therefore a clear-cut rural/urban divide; c) out-migration from rural areas as a way to reduce the pressure on land and on rural resources.

The restructuring of the countryside has caused a significant crisis in the interpretative ability of mainstream economics, whose current view of the 'agricultural sector' is inadequate and ineffective. Cloke (1997) identifies four theoretical domains which are currently undergoing a process of transformation, as least partly because of the restructuring of the countryside. These are: structure/agency, society/space, nature/culture, self/other.

Structure/agency

In the past twenty years or so rural studies have increasingly come incorporate actor-oriented approaches. Drawing on Giddens (1984), Bourdieu (1984), Foucault (1972), Latour (1987) and Habermas (1984) rural studies has developed theoretical frameworks that aim to explain how actors structure their world. Knowledgeability and the capability of actors have become theoretical and methodological points of departure, and the structures of social life are increasingly interpreted as outcomes (often unintended) of actors' interactions. According to this approach, actors adapt to or anticipate external forces through carrying out projects and making alliances with other actors to accomplish them. Within these studies, the term network is used a key metaphor for describing these processes. Castells (1998) envisages 'the network society', explaining how the network principle of organization, in a time of great uncertainty, can adapt in flexible ways to a turbulent environment. Granovetter (1985) explains economic behaviour (and its diversity) as a product of economic action being embedded in social networks. Actor-network approaches (Latour 1987, Callon 1986) have conceptualized the relationship between the social and the non-human spheres and explained how socio-technical systems emerge out of network interaction.

Society and space

Within rural studies the conceptualization of space is evolving. Conceptions of rurality are moving from 'essentialism' (Fuchs 2001) (which looks at the essence of the rural) to 'relationality'. 'Places are the meeting point, the intersections, of a whole range of networks of social relations and communications and movements... each place is the focus of a mixture of wider and more local relations' (Massey 1991, quoted in Cloke and Goodwin 1992).

Rurality is progressively understood as a historically given socio-spatial pattern, as a difference within a space of differences (Murdoch and Pratt 1993; Marsden 1998)

Territorialisation (Magnaghi 2000) is the process of social constructing these spatial differences, of 'structured coherences' between the natural, built and social environments that aim at capturing flows of resources (Harvey 1982; 1990). The network metaphor is increasingly used to explain these territorialisation processes. The literature on 'new entrepreneurialism' (Harvey 1989) has alerted us to the way in which local communities increasingly compete to capture flows of resources, such as public funding, wealthy inhabitants, tourists and capital. The 'new regionalism' spearheaded by Storper (1995; 1997) has shown territories that enjoy localised socio-institutional infrastructures such as networks, shared norms and conventions, trust-based (often face to face) interactions and horizontal relations of reciprocity (which facilitate learning processes and innovation) have a clear competitive advantage in the space of flows.

Nature / culture

The restructuring of the countryside is changing the classical conceptual dichotomy between nature and culture. Culture affects the way the environment is shaped. Environmental problems are increasingly seen as 'social constructions', and there is increased recognition that they cannot be defined solely through science and expert systems. Rurality is being conceived of as the outcome of the interplay between practices, perceptions, conceptions (Harvey (1990) drawing on Lefebre (1974), and more recently Halfacree, 2003). Cultural economies mobilize local cultures into development repertoires (Ray 1999). Whatmore's (2002) pioneering work on hybrid geographies deconstructed nature-culture dichotomies with its account of how human agency combines non-human beings, materials, discourses, and knowledge into hybrid collectives (Cloke 2006).

Self/ other

The way rurality is lived, perceived and conceived depends on the observers. The outside view of rurality can affect the way it is seen from the inside, and vice-versa (Brunori 2006). As tradition is replaced by modernization, the mass media is playing a growing role in shaping contemporary rurality (Phillips et al. 2001). 'Rural idyll' discourses (Cloke 1997) can affect the way the countryside is perceived. As an object of consumption (Marsden 1999), the countryside affects the paths of development, provoking a selective (and sometimes distorted) perception of rural change. The new interest in the countryside fosters flows of newcomers who in turn instigate social change within rural communities and generate new conflicts (Willis and Campbell 2004). Equally the role of consumers is increasingly coming to affecting the development paths of rural areas. Changes in food habits, perceptions of risk, trust/distrust in the food system, and their views of rural idylls are increasingly influencing food choices, and consequently the way producers and retailers communicate about food (Goodman and DuPuis 2002; Lang and Heasman 2004).

All these changes suggest radical new approaches to rural areas, which in theoretical work has been developed along the following lines:

- The meaning of 'resource' has been broadened to encompass immaterial entities such as knowledge (especially local knowledge), reputation, trust, culture. This broadened interpretation of resources raises interest in how resources are produced and reproduced and brings new light on what is innovation and how it occurs;
- Actor-oriented approaches have stimulated a debate on the potentials
 of 'alternative' strategies of development. Relational approaches open
 the way to look at strategies in terms of (re-)positioning rural actors

and rural areas within the broader contexts in which they operate (van der Ploeg 1994, Marsden 1998, Brunori 2006). These alternative approaches aim at 'reconnecting nature, farming and society' after the rupture generated by agricultural modernization (van der Ploeg and Renting 2001, van der Ploeg 2003);

 Rural change is increasingly conceived in terms of 'politics' played around such issues as knowledge, information, technology, food quality, and environmental quality (Goodman 1999; 2003, Goodman and DuPuis 2002).

After two decades of theoretical and empirical studies on the new traits of rurality, there is a need to consolidate and synthesise this accumulated knowledge into concepts and tools of analysis that are useful for further studies, development practices and policies. The 'rural web' concept aims to fulfil this objective. It is an approach to rural development, a tool of comparative analysis, as well as a diagnostic tool for assessing the potential of different rural areas to pursue strategies of sustainable rural development.

Multifunctional agriculture and rural territory

The four theoretical domains, outlined above, reposition farming as central to processes of rural development. Farming activities become both structured and structuring elements in each of the four domains; and also often act as driving forces in creating coherence. Farming practices take different forms – they are moulded according to different farming styles (van der Ploeg 1994; 2003). Each style is part of a specific sociotechnological network, with its own physical, informational and symbolic flows.

Several of the empirical studies mentioned above highlight the coexistence, within one and the same territory, of differently structured farming practices. These always produce externalities, whether positive or negative, which make a significant contribution to differences in sustainability. The perception of these externalities differentiates the networks through which the results of farming practices are delivered.

Agriculture is, as the main user of rural land, responsible for the different ways through which landscapes are made and maintained. As a consequence the diversity of rural areas is largely a result of farming practices (Delors 1992). Farming can contribute to the deterioration of the landscape or, can reproduce and improve the landscape in a manner that complies with the changing needs of civil society.

The extent to which agricultural practices comply with social expectations largely depends on how the latter are identified and defined over time. It has already been mentioned that sustainability gives a new regulatory meaning to rural development. Farming practices are only coherent when they produce not only goods and services, but also positive externalities, or common goods, thereby contributing to the balanced development of all the different forms of capital within rural areas.

In a broader sense, the 'rural web' can be understood as the relational system through which the human and non-human components of a rural territory interact.. In economic terms the implied relations are those that link the production of goods and services to the use of territorial resources. As agriculture is the main user of environmental resources in rural areas, the 'rural web' can be considered as a network of relations that creates the conditions that support sustainable rural activities (of which farming is a part). Evidently, such networks might take many forms. They might contain real local 'nodes' (localized points that interconnect activities, resources, people, flows, etc). Equally, such nodes might also be located elsewhere, i.e. outside of the area. In the former case there will be more coherence between the involved actors, which will be manifested in and through common interests and shared cultural and symbolic categories (Milone 2004).

The introduction of sustainability as a guiding concept is crucial in developing a more comprehensive paradigm that implies and induces a potentially far-reaching restructuring of the relational systems. As far as agriculture is concerned, this has led to the re-discovery of its potentially multifunctional nature.

Rural areas do not restructure themselves and move towards sustainability in the same way or at the same speed. These rhythms and directions are strongly influenced by the presence of multifunctional farming activities and of networks through which multifunctionality is perceived, expressed and sustained.

A number of recurrent elements shape these processes These can be grouped along the six dimensions discussed at length within this book, which together provide the main features of the 'rural web'. The dynamic interaction between these dimensions creates the space required to sustain farms and to start up the innovative processes that can help rural areas adopt a new paradigm of development.

The six dimensions and their coherence revisited

'The web' can be considered as both a tool for analysis and an approach to sustainable rural development strategies. As a tool of analysis, it helps us to understand the drivers of change and, also, the resistance to change. It also enables a proper understanding of the integration between the social and the non-human spheres and the influence that power relationships have upon the processes of territorial formation. As an approach to rural development, it helps us to understand rural development strategies in terms of 'reflexive territorialisation' that produces differentiation and positions rural regions within global networks. Finally, the web is a 'second order' analytical structure that helps to identify the synergies between the six domains or dimensions of rural development.

Endogeneity

The web is simultaneously the source and the outcome of endogenous development, which is a 'structuring principle' of practices in rural areas that gives value to territorial capital and mobilizes it for economic activities. As explained above, endogenous practices produce and reproduce territorial capital as externalities of economic activity. The web is strengthened whenever a hybridization of different fields of activity occurs, as happens when e.g. food production embodies landscape or cultural distinctiveness into the product, or when farm based agri-tourism becomes part of a collective supply that is coherent with the identity of the area.

Novelty

The web is also a 'communication structure' (Brunori 2004) facilitating information flows and social interaction. It is, therefore, a 'milieu innovateur' (Camagni 1995) fostering innovation based on a distinct sociotechnical paradigm that provides the frame of reference for rural actors. Novelties can be produced at each point of the web. The web provides a protected space in which novelties can be brought to light, developed and circulated, thus contributing to the complexity and diversity of the web itself (Milone 2004).

Social capital

Social capital is a key component of territorial capital. Its importance to the web is related to its role as a public good within a given network. Social capital allows alignment around values and cognitive frameworks, and is therefore a resource that can make a specific rural discourse hegemonic within a rural area. The web, as a mode of ordering, provides

the common cognitive frameworks to build new social capital and to connect localized social capitals. An example of this can be found in the case of 'Pecorino della montagna pistoiese' (raw sheep's milk of the Pistoia mountains) in Italy, the success of which is related to the capacity to link the localized product system, based on a strong network of producers, local administrators, technical bodies and food activists, with the national Slow Food network. This was done through what we earlier referred to as 'double coherence' between external observers (Slow Food Italy, tourists, external consumers) and actors within the area.

Sustainability

As Sonnino et al. argue in this volume, rural development can be defined as '...territorially-based development that redefines nature by reemphasizing food production and agro-ecology and that re-asserts the socio-environmental role of agriculture as a major agent in sustaining rural economies and cultures'. As a mode of ordering, the rural web provides the values, knowledge base, innovation paths, and examples of good practices to carry out activities whose economic value is linked to their ecological performance. Agricultural processes based on biodiversity and agroecology, can be turned into appropriately marketed products, and rewarded by consumers paying premium prices. This both restores and improves the existing stock of natural capital and enlarges the symbolic capital of the area.

New institutional arrangements

Rural webs can result in new institutional arrangement, since they allow for new, often experimental modes of coordination between actors of different kinds. New institutional arrangements can codify existing unwritten rules and relationships into formal rules and thereby give stability to rural webs. An example of this can be found in the wine routes in Tuscany, born as an initiative of a few entrepreneurs and only later consolidated into institutional arrangements. Environmental cooperatives in The Netherlands also represent and induce new institutional arrangements, as they are forms of self-organization that, from a certain point in time onwards, became institutionalized. Thus, new institutional arrangements may facilitate a further extension of rural webs, providing rules and resources that encourage building social capital, enhancing the sustainability of economic activities and alternative food networks. LEADER-like approaches (that foster public-private partnerships, participatory planning and the funding of innovative actions) have played a key role in this. They introduced a context-related view of territorial development and made places visible, thereby giving the opportunity to acquire symbolic capital. They also gave a voice to rural territories in

broader policy networks, fostered integration of policies (agricultural, environment, land planning, social services etc.) at the grassroots level, (i.e. where the problems are located and stimulated coordination between local actors and design capacity.

Governance of markets

The rural web is a generator of distinctiveness. This distinctiveness is embedded in rural products and services, which benefit from it as this feeds strategies of differentiation on local and global markets. In order to differentiate their products, rural producers need to be in control of operations, and, above all, the flow of communication towards consumers. To this end, they need either to rearrange food chains or to build alternative ones (Milone 2004; Milone and Ventura 2005). The rural web facilitates the construction of alternative supply chains for food, fibres and rural services, as it provides already existing infrastructures on which new relations, based on embeddedness and hybridity, can be built. For example, experience in marketing quality wines—codes of practices, consortia, sensorial tests, specialized sellers—has facilitated building food chains for other products of rural areas in Tuscany (olive oil, cheese), in some cases with a partial overlapping and mutual synergy (Brunori and Rossi 2007).

Coherence among dimensions

The establishment of coherent hybrid networks gives rural areas a resilience, as redundancy of linkages fosters synergies, innovation through recombination and hybridisation and easier communication between different forms of capital. More coherence leads to more fluid flows within a rural web. For example, rural districts (Iacoponi 1998, 2001; Becattini, 2001; Basile and Romano 2002; Pacciani 2003; Belletti *et al.* 2002, 2004) are rural webs with the highest level of coherence. However, there may be cases where coherence is obtained at the expense of diversity. Though specialization fosters innovative processes, an excess of specialization may cause districts to become vulnerable to external shocks.

Concluding remarks

The concept of the rural web helps consolidate the large body of theoretical work on rural matters within a comprehensive framework. As a result of this effort, the rural web concept may provide a) an approach to sustainable rural development; b) a tool for comparative analysis of different development paths in rural areas; c) a diagnostic tool for exploring the potentials and limits of rural development patterns.

The concept of the rural web can help scholars to conceive of rural development as 'reflexive territorialisation', a strategy through which rural regions differentiate and position themselves within global networks. It can also help to identify the drivers of change and of resistance to change, the integration between the social and the nonhuman spheres and the influence of power relationships on territorialisation. Focusing on the dialectics between internal and external relationships, the rural web avoids the adoption of an idvllic approach to rural development, and allows the selection of the most appropriate strategies, from resistance to extinction to scaling up alternatives.

By drawing on a small set of strongly theory-laden concepts (networks, coherence, territorial capital) and linking them to specific dimensions (sustainability, endogeneity, novelty, social capital, new institutional arrangements, governance of the markets) the rural web can improve comparative tools of analysis between initiatives and territories. It can also stimulate grounded theory, as it allows for testing these concepts against empirical data.

As a diagnostic tool, the rural web may provide a methodology for examining the strengths and weaknesses of a territory to identify potential rural development strategies. Moreover, the rural web may also provide appropriate monitoring and evaluation methodologies for public and private initiatives, combining quantitative and qualitative data into a common framework.

One of the most distinguishing features of 'the rural web' is its ability to view rural practices and policies with the awareness that there are no onesize-fits-all strategies, and to assume an actor's perspective. By looking at rural areas as hybrid networks, the approach links development goals with their physical basis and provides a framework for understanding coproduction as a process that is negotiated among actors. By focusing on coherence, the 'rural web' centres on cognitive processes and their central role on material processes, thus avoiding the trap of falling into new topdown planning approaches based on 'essentialist' definitions of rurality, or into the superficiality of a 'territorial marketing' approach, that builds images of places that are detached from actual processes, or into a 'backto-origins' approaches which fail to take into account the plurality of practices, perceptions and conceptions within rural areas. By focusing on territorial capital, the 'rural web' provides a tool for understanding processes of endogenous growth and for advocating collective action and the need for taking the externalities of rural activities more into consideration.

Notes

- 1 We especially refer to studies conducted by European universities within the project 'The Socio-Economic Impact of Rural Development Policies: Realities and Potentials' (FAIR CT 4288). A good summary of these studies can be found in van der Ploeg *et al.* 2000 and 2002]. Italian research on 'The dynamics of innovation within farms and the re-positioning of agriculture within the rural economies of Objective 1 Regions' yielded similar insights (see Scettri 2001 and Milone and Ventura 2004 and 2005).
- 2 It might be observed that the definition of us vis-á-vis them is a key element in conceptualizing rural development. This aspect can be described as a circular process with two main steps. In the first step, the process is characterized by the consolidation of the 'us'. This has direct implications for the representation of rurality, but also for policies related to food production, land use and territorial planning, etc.. Departing from the 'sense of place', an internal coherence is created that is developed through repeated actions and the accumulation of the unintended consequences of these actions, into a coherence that 'per se' implies a certain degree of reflexivity of the actors involved. In the second step, the consolidated identity is (re-)negotiated with outside observers. In this second 'step', rural actors play the 'game of the network' to position themselves within global spaces.

9 Testing the Web: A Comparative Analyis

Yoko Kanemasu, Roberta Sonnino, Terry Marsden and Sergio Schneider

Based on an analysis of 63 empirical case studies¹, this chapter attempts to make sense of the large variety of rural development webs emerging from these cases in the light of the conceptual model entailed in Figure 9.1. More specifically, our aim in this chapter is to fulfil the following:

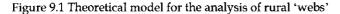
- To refine, build, elaborate and underpin (both theoretically and empirically) the conceptual framework; and
- To assist in developing a comparative typology of rural development approaches. This is to be characterised by different configurations of the web of interrelations, interactions, exchanges and positive mutual externalities in rural areas of Europe.

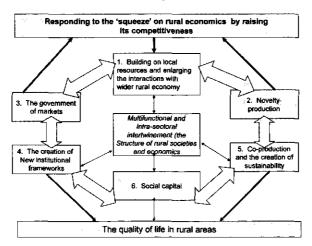
To achieve these objectives, we conducted an interpretive analysis of the individual cases in the following manner:

- In each case, the primary domain was identified, followed by an
 analysis of the key domain interrelations summarised in the form of a
 diagram. This procedure may be understood as a form of coding,
 whereby the cases were systematically coded and grouped on the basis
 of the interaction between the six conceptual domains: governance of
 markets, sustainability, endogeneity, social capital, novelty, and new
 institutional arrangements.
- When the systematic coding of the cases was complete, this was then
 followed by an analysis of the identified domain interrelations in order
 to outline the salient patterns and to develop a comparative typology.
 This procedure aims at loading the conceptual model in other words,
 exploring the implications of empirical evidence for the purpose of
 refining and elaborating the model.

While it is not possible to delve into a detailed methodological discussion here, a few clarifications need to be made at the outset. First, given the nature of the data analysed, most of which are secondary and not collected for the purpose of the verification of specific causal relationships between the domains, it is not possible to suggest more than basic, salient correlations. While more ambitious generalisations would be possible in

carefully designed primary research, the nature of the data here does not warrant such treatment. Our aim, however, is to pay attention to the coherence that persistently surfaces from a mass of seemingly unrelated peculiarities in order to suggest its tentative implications for the conceptual model.





Second, the limited representativeness of the cases and the data suggests limited generalisability of our findings. Again, our aim is not to claim that the findings on the domain interrelations are uniformly applicable but to illuminate their possible range and subtleties, as part of the ongoing exercise of conceptual model building. Thus, rather than identifying generalisable causal relations, we intend to answer some specific questions, such as:

- How does the rich empirical evidence from each of the case studies relate or not relate to the domains?
- How can answers to this question aid the further development of the conceptual model?
- What do the case studies tell us about each domain, and how do they add value?
- Also, more collectively, what do they tell us about the operation of the conceptual model (i.e. both the domains and their interrelations)?
- How do we shape and refine a consistent set of concepts from the diversity entailed in the wide range of cases?

In this regard, our analysis is tentative and exploratory, yet intended to play a major role in scaling and securing the conceptual building blocks for the theoretical model, that is, to contribute to this early stage of double fitting of theory to facts and facts to theory (Emerson 1983:94).

The following discussion is divided into six sections corresponding to the six domains. Each of the six sections purports to: 1) operationalise the particular domain by illustrating how it plays out in empirical contexts: and 2) outline the prevailing pattern(s) of its interaction with the other domains. Each section starts with a brief summary of some case study examples that are particularly illustrative of the significance of the key domain before it analyses the domain interactions that emerge from the cases, paying attention to consistencies and coherence but also recognising exceptions and differences. Often we describe domain interrelations by loosely using expressions such as initiator, outcome and lubricant. This is not intended to assert exact chronological sequence or a one-way, stimulus-response type of relations. Initiator is intended to express the primary significance of the domain(s) or domain interrelation(s) that triggers other positive interrelations in a specific RD initiative - that is, the core of the web around which intricate interactions of the domains unfold. Hence it may be noted that an initiator is identified not necessarily in terms of actors' motives/intentions but more in terms of the relative weight that the domain carries in the success/failure of the RD initiative. Outcome refers to the notable benefits or positive developments in the domain(s) that are entailed by such intricate interrelations. Hence not simply a direct result of the initiating domain. By lubricant we refer to the significant, yet not primary, domain(s) that enhances or cements such positive interrelations.

Governance of markets

Governance of markets is the most important domain in seven case studies analysed (see Annex 1). These case studies represent an attempt on behalf of producers to distance themselves from the conventional agrifood market through initiatives that aim to create alternative markets for their products. In all cases, this goal has, to a certain extent at least, been achieved. These cases hence provide empirical illustrations of market governance or 'the institutional capacity to control and strengthen markets and to construct new markets' (Chapter 6 of this book).

For instance, in Spain, Alpujarran Dairy (case no. 1)2 began utilising EU funding in the late 1980s to open up a new market for goat milk-based cheese, a traditional product from the region that had never been commercialised before. After many adjustments to the ever-changing requirements of the market, the dairy today exports its cheese to Italy, Japan and Switzerland and is considering widening the range of cheeses produced.

Graig Farm Producers Group (case no. 2) is one of the largest organic producer networks in the UK. Created in the 1980s by a couple who returned to Wales after years of involvement with tropical agriculture, the network has experienced constant expansion over the years, growing from an initial number of just two members to ca. 200 organic producers, who supply the national market through a variety of marketing channels (including an on-farm shop, mail orders, independent retailers and supermarket chains).

In Italy, the production of saffron in southern Tuscany (case no. 3) was introduced by a hobby farmer in 2002. Supported by local institutions, within a couple of years the farmer managed to create a network of ca. 35 producers, who are today barely managing to deal with an ever-expanding market for their product.

In Germany, Upländer organic dairy (case no. 4) is a public limited company formed by a cooperative of dairy farmers and a few shareholders from the local community, which took over a local dairy that was closing down to create a new market for regional dairy products. The company, which has grown over the years from 18 farmers (in 1996) to 80 farmers, today supplies regional supermarket chains and schools (all located within a range of 80 km).

Even though all these rural development (henceforth RD) initiatives have managed to achieve a significant degree of control over the food market (typically at the local level and through the creation of a niche), they display guite different forms of interaction amongst the six domains. In all cases, the novelty domain plays a crucial role in triggering the process through which the network achieves control over the market. In the Spanish and the Italian examples described above, the novelty takes the form of an invented tradition - i.e. the creation of a discourse that historically embeds the product in a specific territorial context, while at the same time guaranteeing its compliance with modern forms of health regulations (particularly in the case of the Spanish cheese). In the case of the UK's clotted cream (case no. 5), novelty has to do with changes introduced in the production process - i.e. the replacement of the traditional 'baine marie' system with patented, fairly sophisticated ovens that have improved both the quality and the productivity of the production system. In Germany's Rhöngut and NAWARO cases (cases no. 6 and 7), the key novelty lies in the production of dry-cured meat and sausages (Rhöngut) and the cultivation of rapeseed as a biofuel (NAWARO), both previously unknown in the area. In Graig Farm and Upländer organic dairy, the

novelty coincides with the creation of social capital (i.e. the ability to do things collectively) within a prevailing (conventional farming) context that seems to discourage cooperation amongst producers. Social capital in the form of cooperation is also present in the saffron case (where, however, the domain does not coincide with the novelty dimension but seems to be a by-product of the interaction between novelty and endogeneity), whereas in the Alpujarran Dairy case social capital, which is an outcome of the governance of markets, takes a different form: it has to do with a renewed sense of pride amongst farmers (particularly the youngest ones) and with a decreased sense of isolation amongst herdsmen. The clotted cream and the Rhöngut cases are the only cases in which social capital seems to be lacking.

In all seven cases, the interaction between novelty and governance of markets has positive impacts in terms of endogenous development. In Spain, endogeneity means mostly the development of a local food market based on territorial identity. In the Graig Farm and the NAWARO cases, endogeneity has to do with a constantly increasing number of regional producers involved in the initiatives. In the clotted cream case, the local market for the PDO product has a total return of about £ 10 million/year. which most farmers have been reinvesting either to scale up or to further diversify their productive strategies. Rhöngut has contributed significantly to the income and employment generation in the region. In the saffron and the Upländer cases, in turn, endogenous development is based not just on a significant involvement of local producers (35-40 farmers for saffron; 80 organic producers for the German dairy), but also on the strengthening of pre-existing businesses and markets - i.e. local shops and the Pecorino cheese market in Tuscany and tourism in Germany, where the dairy has opened an information centre that attracts tourists to the area

Most case studies also share important features in terms of sustainability. While the creation of social capital and the promotion of endogenous development provide the social and economic benefits of sustainable development, in all but one case (i.e. NAWARO whose implications are rather mixed) the emerging web of interactions seems to produce also important environmental outcomes. The production of goat cheese in Spain seems to ensure benefits in terms of sustainable land use and landscape conservation; Graig Farm promotes organic production (often in combination with farmers' participation in agri-environmental schemes); encourages organic farming, animal-friendly Rhöngut similarly husbandry and traditional grazing practices; the saffron case contributes to agricultural diversification. In the case of clotted cream, the traditional production process utilised ensures benefits in terms of local resource management; however, the fact that 80% of the market for this product is controlled by an individual actor raises questions about the extent to which this RD initiative is delivering benefits in terms of local economic development and social justice.

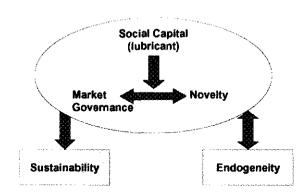
In this set of case studies, the creation of new institutional frameworks is the weakest and less interactive domain. There are no institutional arrangements providing coordination in the case of goat cheese in Spain; in the case of Graig Farm, institutional arrangements are also absent (with the exception of pre-existing agri-environmental schemes that support farmers willing to convert to organic agriculture); in Italy, institutional frameworks (i.e. the municipality and the province) support the network at the early stage but do not seem to have the capacity to solve problems of coordination that arise as the network begins to expand. In the clotted cream case, the PDO designation can be considered as a potentially important institutional arrangement; however, in practice it is effectively utilised as a marketing strategy only by Rodda's creamery, which applied for the designation. In the case of Rhöngut, there is an increasing need for new and more effective institutional arrangements for producer coordination, yet such a framework has not fully emerged.

In conclusion, in all case studies where the governance of market is the prevailing domain, there are strong and two-way interactions with the novelty and the endogeneity dimensions. In particular, novelty (invented tradition, new production systems, etc.) seems to often function as a major initiator, or trigger, of a chain of interrelations that ultimately results in the creation of alternative markets, that is, strategic market governance as a RD outcome, along with (social, economic and particularly environmental) sustainability. Social capital, on the other hand, tends to function as a lubricant in this process. These interrelations may be expressed in Figure 9.2.

Sustainability

The creation of sustainability is the primary dimension in eight case studies (see again Annex 1). These cases represent RD initiatives with central relevance to the domain of sustainability or 'territorially-based development that redefines nature by re-emphasizing food production and agro-ecology and that re-asserts the socioenvironmental role of agriculture as a major agent in sustaining rural economies and cultures' (Chapter 2 of this book). Although all cases are based on attempts to promote territorial capital, they significantly differ from one another in terms of domain interactions and synergies.

Figure 9.2 A pathway of rural development: domain interrelations unfolding around market governance



The Lunigiana development model (case no. 8), based on the reconfiguration of local resources to create territorial capital, provides one of the best examples of the kind of reciprocal and mostly positive interactions that create the rural web. Indeed, most domains are linked through strong forms of reciprocal interactions, which produce a number of positive economic, environmental and social outcomes. In this marginal area of Tuscany, sustainability starts with the construction of a number of informal, hybrid and locally-controlled networks that comprise a wide range of regional and local institutions. This process of network-building, which started in the 1990s as a response to changing consumer demands. was triggered by the availability of social capital (a strong sense of place). Over time, this domain has also had some negative impacts on Lunigiana's territorial development trajectory, since it has resulted in an excessive localism that has created tensions amongst local institutions. However, social capital has at the same time been strengthened by the unfolding of sustainability (particularly through the establishment of new relationships amongst farmers and between farmers and institutions, producers and consumers, farms and local communities). Crucial in the process of consolidation of the networks (and of social capital) has been the role played by a wide range of institutional frameworks, such as Local Rural Development Plan, the national legislation on 'rural districts' as partnerships amongst private and public stakeholders, the establishment of consortia in charge of strengthening coordination across the food chain, the creation of wine and bread routes as territorial integration tools, and the initiatives of the local LEADER agency. The interrelationship amongst these institutional frameworks, which is the main novelty in this case study, has fostered the governance of new, locally-controlled markets for typical food products and rural tourism. This type of governance has promoted endogenous development in Lunigiana that delivers sustainability by contributing to the preservation of the local biodiversity, of the historically built environment and of social capital (the domain that has the highest degree of interactions with the creation of sustainability).

The other case studies also show an emerging web around the sustainability domain; however, the positive interaction is typically limited to five (rather than all six) domains. For instance, the organic network in Järna, Sweden (case no. 9) shares many of the dynamics at work in Lunigiana's initiative. Like in Lunigiana, the creation and consolidation of this network of local organic producers are facilitated by the presence of social capital (i.e. widely shared environmental values that create high levels of trust amongst producers and between producers and consumers). This type of social capital creates new institutional frameworks (i.e. a partnership between producers and consumers) and promotes endogeneity (in the form of relocalisation of production and diversification of the local production), while also allowing the network to govern the local market. However, there is no evidence of novelty in this case study, nor are there the types of mutual interactions between different domains identified in Lunigiana.

Germany's Landschaftspflegeverbände (landcare associations) (case no. 10) have grown since 1986 especially in the eastern federal states, today totalling 140. Grounded in communities' sustainability aspirations, endogenous potential and social capital, they aim to: a) facilitate economic development oriented to ecological principles and sustainable land use; b) establish an extensive network of natural habitats; and c) provide farmers engaged in conservation work with a reliable source of additional income by helping them market regional products. Here, the convergence of existing social capital and an innovative solution to habitat care has resulted in the emergence of landcare associations as a new institutional framework that coordinates the actions of communities, private land owners and local conservation groups on the principle of parity. This has brought about notable sustainability and endogenous development outcomes as well as renewed the communities' stock of social capital. Another case from Germany, the Rhön Biosphere reserve (case no. 11), is also illustrative of the nexus between sustainability and social capital in that it was originally a top-down administrative initiative, which, through the establishment of the 'framework concept' for mobilising and enhancing existing social capital of the area, successfully secured grassroots ownership and ultimately the success of the initiative.

In contrast, the municipality of De Wolden in the Netherlands (case no. 12) could not rely upon social capital; in fact, local cultural differences have hindered the unfolding of sustainability by preventing the development of a shared vision over the role of agriculture. As a result, there is a weak interaction between sustainability and the other domains: social capital and appropriate institutional arrangements are developing very slowly. De Wolden's development model promotes some degree of endogeneity (particularly in terms of the valorisation of local resources such as farm buildings and local labour) and some degree of governance of markets (through the interrelations between traditional agricultural activities and new urban-based markets). However, the absence of novelty creation and of new institutional arrangements seems to weaken all main interactions, thereby negatively affecting sustainability.

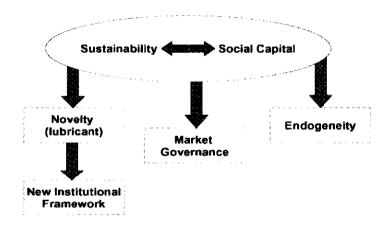
The Finnish examples of creation of sustainability (cases no. 13 and 14) mostly fail to create the type of synergies, interactions, exchanges and mutual externalities that we have uncovered in the other cases. In the case of local food systems in the municipality of Juva, social capital (interpreted as cooperation and knowledge exchange) is, again, a building block for the sustainable development initiative. Like in the other examples, endogeneity (and the associated creation of new opportunities for local economic development and employment) and the emergence of locally-controlled governance of markets are, to some extent, a by-product of the policies analysed. However, there are no new institutional frameworks in place nor are there novelties in this case, and this seems to limit the synergy amongst the different domains - hence, the integration between the different objectives of sustainability.

Finally, the Norwegian case study of the potential of multifunctional land use in the municipality of Tynset (case no.15) is an example of negative interactions amongst domains that block the unfolding of sustainability. Again, social capital plays a crucial role in the process, but in a negative sense: people's satisfaction with their lifestyle seems to be an obstacle to the development of the kind of novelties that would help promoting multifunctionality and relocalising the rural economy (i.e. to eliminate farmers' dependence on agricultural subsidies and on centralised and distant processing facilities).

In conclusion, the creation of sustainability always needs to have significant interactions with social capital, a domain that appears crucial to creating the type of shared vision and commitment that allows the formation of a rural web, as demonstrated by the Italian and other cases discussed above. At the very least, the interaction between social capital and sustainability promotes endogeneity and/or governance of markets; when influenced by the presence of novelty (as in Lunigiana and other cases), the interaction between sustainability and social capital also facilitates the creation of new institutional frameworks. When a shared vision fails to emerge, as it has happened in the Dutch example, or when social capital somewhat hinders the development of novelties, as it is the case in Norway, the interactions amongst domains remain very weak or absent.

Here, social capital seems to play the role of a key initiator, while its positive interaction with sustainability entails endogeneity and market governance as RD outcomes. When the interrelation between social capital and sustainability is mediated by novelty as a lubricant, this tends to result in the creation of new institutional frameworks as another key outcome. These interrelations may be expressed as indicated in Figure 9.3.

Figure 9.3 A pathway to enhanced theoretical understanding of rural development: domain interrelations unfolding around sustainability



Endogeneity

Endogeneity is the prevailing domain in 13 case studies widely spread across Europe. All cases represent more or less successful attempts to mobilise or valorise natural, historic, cultural and human resources at the local or regional level. As such, they illustrate how RD initiatives contribute to endogeneity or 'the degree to which local and regional rural economies are a) built on local resources, b) organised according to local models of resource combination ... [and] c) strengthened through the distribution and reinvestment of the produced wealth within the local or regional constellation' (Chapter 3 of this book).

In Spain, the case study analysed (case no. 16) concerns the localisation of curing activities associated with Jamón de Trévelz, a traditional ham product. Under the threat of competition from similar but lower-quality products, during the 1980s a group of 11 family-run businesses decided to create an association to protect and develop their product. After being awarded a PGI designation in 1997, they started selling their cured hams online while also developing the export market. Their efforts have been quite successful: between 1997 and 2006, the total production increased from 500,000 to 800,000 hams, whereas the number of employees grew from 61 to 170.

In Switzerland, the production of rye bread in Valais (case no.17) was revitalised by regional authorities in 1997 as part of a multifunctional development strategy. The association of producers and bakers that was established in 2001 managed to gain a PDO certification for their product, which is sold regionally. It has boosted the production of rye in the area to ca. 500 tons/year.

In Slovakia, Ozveny (case no. 18) is a bottom-up social initiative in the village of Hrachovo for the local provision of food services (particularly meals for elderly people). In addition to providing food for ca. 110 local residents, Ozveny employs a total of nine women.

In the UK, Steve Turton (case no. 19), a former butcher, created a network of 154 producers supplying high-quality regional meat and sausages to retailers across southwest England. This business grew by 500% between 2000 and 2004, when 2.75 million pounds of meat were sold and the business employed 35 people.

In this set of case studies, there is generally a strong interaction amongst endogeneity, novelty and social capital. This is especially evident in the Spanish and the Swiss examples described above and in the Hungarian example of Arany Sarfeher Grape and Wine Producers' Cooperative (case no. 20), which share a very similar web. In the Spanish case, the successful relocalisation of a traditional product such as Jamón de Trévelz owes much to the development of cooperative relationships amongst key actors as it does to the introduction of a novelty in the marketing system (the creation of the first virtual selling point for the product) that significantly expands the market for the ham. As the network continues to strengthen its governance of the market, the relationship between endogeneity, novelty and social capital becomes more and more two-directional; the network's sense of pride increases and further novelties unfold (such as, for example, the changes introduced in the packaging system to meet the demands of the Japanese market). In the process, new institutional arrangements also continue to develop, as demonstrated by the recent creation of two new

associations to improve the export of the product and to manage the logistics and packaging of the product. Sustainability (particularly in economic and sociocultural terms) here can be seen as an outcome of this virtuous cycle. In the Swiss case of rye bread production, the interaction amongst social capital (expressed as shared values), novelty (the reinvention of a traditional product) and new institutional frameworks (the regional authorities' vision of multifunctionality) is responsible for the emergence of an endogenous development model that helps producers to govern the local market while also delivering sustainability benefits: the initiative strengthens the economic viability of the area, revitalises local traditions and contributes to biodiversity through the valorisation of ancient varieties. As in Spain, the synergy amongst social capital, novelty, endogeneity and market governance facilitates the emergence of further institutional frameworks (such as the producers' association and the PDO designation), which promote coordination amongst the members of this network. Similarly, in the case of Hungary's Arany Sarfeher Grape and Wine Producers' Cooperative, the development of relationships of trust amongst producers (i.e. social capital), combined with the creation of a new image for the product based on a mix of traditional and modern qualities (i.e. novelty), was crucial for the formation of the local cooperative, which has managed to compete with a foreign firm in the wine sector by emphasising the endogenous character of its wine. In addition to guaranteeing an important role of the cooperative in the governance of the wine market, the synergy amongst novelty, endogeneity and social capital has facilitated the development of a new institutional framework (in the form of a wider policy network that is vertically embedding the cooperative). As in Spain, there are clear sustainability benefits produced by the emerging web: the local cooperative obtains significant revenues from its activities, while also contributing to the conservation of local farming traditions. Similar pictures emerge from the cases of direct selling of beef in Umbria, Italy (case no. 21) and Latgale ceramics in Latvia (case no. 22).

Slovakia's Ozveny food provision services described above and the Czech Republic's Tradition of White Carpathians (TBK) association (case no. 23) reiterate the crucial role played by the mutual positive exchanges amongst endogeneity, novelty and social capital in creating new institutional frameworks and in delivering (at least potentially) sustainability benefits. These cases differ from the previous three in the sense that here the endogeneity and novelty domains overlap. In Slovakia, for instance, the introduction of an endogenous development model, based on female entrepreneurship, is a novelty in itself, which creates (and is at the same time fostered by) new forms of social capital – intended as capacity to involve and to promote trust and a shared commitment. These, in turn, facilitate the emergence of

new institutional arrangements (such as the NGO founded by 40 women and unemployed people). By providing employment for local people and by promoting new projects in the rural tourism and educational sectors, the synergy amongst these dimensions strengthens the local governance of markets while also creating sustainable development potential. Similarly, in the Czech Republic, the common aspiration and worldview of the fruit growers and environmentalists (i.e. an intricate mix of endogenous aspirations, re-invention of old traditions and farming styles, and bonding/bridging social capital that revolves around the valorisation of life in harmony with nature) developed into the creation of the Tradition of White Carpathians as a non-profit organisation and as a company.

Endogeneity, novelty and social capital are the main interactive domains also in the example of local organic food in Finland (case no. 24) and in Turton's Meats in the UK described above. In the first case, the novelty coincides with a new institutional arrangement: the establishment of a regional cooperative that allows organic producers to achieve the capacity necessary to supply public canteens in the area. Endogeneity can be seen as an outcome of this interaction - one that promotes local governance of markets and that increases social capital by strengthening the interaction between producers and consumers. In the case of Turton's Meats, novelty, which identifies with the creation of a bioregionalist discourse, cements a network of suppliers (i.e. a new institutional arrangement) by promoting cooperation, which in turn strengthens social capital. As in the Finnish example, endogeneity, which is an outcome of this synergy, ultimately facilitates local control over the meat market (governance) and promotes sustainability (i.e. conservation of local breeds and extensive rearing practices and economic development amongst regional farmers).

Endogeneity and social capital also have strong interactions in the Latvian case study of rural tourism (case no. 25). Here the formation of the tourism association is made possible by the presence of relationships of trust and a shared vision (i.e. social capital) amongst the members of the community. This shared vision is in itself fostered by the endogeneity of the development initiative, which continues to enhance networking amongst the community's members. This is more than just social capital: in this case study, networking also promotes coordination amongst different governance levels (i.e. a new type of institutional arrangement) as well as governance of a new market sector (rural tourism). The Latvian example differs from the other cases for the relatively insignificant role played by the novelty dimension. However, as in the other cases, there are still important sustainability benefits produced by the synergies amongst the dominant domains: the initiative promotes multifunctionality,

environmental responsibility, economic development and social embeddedness. The Italian example of biomass energy production (case no. 26), on the other hand, differs from the others in that social capital, through a very strong domain, is an outcome of the RD initiative rather than an initial success factor.

The case of mountain bike trails in Wales (case no. 27) differs from the others for the insignificant role played by social capital and new institutional frameworks in the creation of the rural web. Novelty (a multifunctional view of forestry) here plays a major role in promoting endogeneity, which is also supported through the intervention by an existing institutional framework (the Forestry Commission). The initiative facilitates governance of markets (the trail has a multiplier effect of £ 5 million in the area) and also delivers some sustainability outcomes, but it does not contribute to enhancing local social capital (which is probably the reason why new institutional arrangements do not develop here). The case of endogenous development patterns in Tras-os-Montes, Portugal (case no. 28), is conspicuous in terms of the absence of novelty, which in the rest of the cases constitutes a critical interrelation with endogeneity. Here endogeneity relies more on the combination of social capital and new institutional arrangements for support.

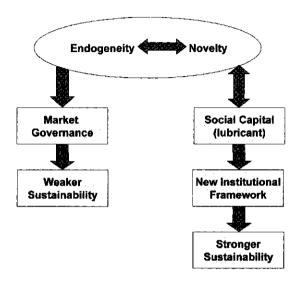
In conclusion, endogeneity seems to have strong interactions with the novelty domain. When this interaction involves social capital, new institutional frameworks develop and the objectives of sustainability are more thoroughly met. In the absence of social capital, the positive interaction between endogeneity and novelty still fortifies local market governance, but it does not generally lead to the creation of new institutional arrangements, without which the outcomes of the web in terms of sustainable development seem to be weaker.

Here, the strong interrelation between endogeneity and novelty clearly is the initiator of an expanding rural web, which has a positive impact on market governance (outcome). When this key interrelation is consolidated by social capital (lubricant), it leads to the creation of new institutional arrangements, and in turn, to stronger sustainability outcome. This may be expressed in Figure 9.4.

Social Capital

Social capital is the principal domain in seven case studies. Social capital, understood as an 'ability to get things done collectively',or more specifically, an 'ability of individuals, groups, organisations and institutions to engage in networks, to cooperate, employ and use social relations for common purpose and benefit' (Chapter 5 of this book), plays a key role in these RD initiatives.

Figure 9.4 A pathway of rural development: domain interrelations unfolding around endogeneity



The Bro Dyfi Wind Turbine project in Wales, the UK (case no. 29), illustrates social capital as a key initiator of a chain of synergistic domain interrelations. The wind turbine is the first in the UK to be established and owned by a community wind energy cooperative. From the beginning, the project has operated with a clear double objective of creating an income stream for the local community and of contributing to the fight against climate change. Building on a strong sense of collective purpose and cooperation among community members, NGOs, an energy agency and government authorities, the cooperative has successfully established the wind turbine, secured a purchase agreement and enabled the community to gain some control over the energy market in the area.

Latvia's Rural Partnerships Programme (case no. 30) is notable for its primary emphasis on the reduction of poverty and social exclusion. It is a UK government sponsored RD initiative that aims at building interinstitutional and cross-sectoral cooperation in designing strategies. programme allows The public-private partnerships to activate community groups to implement projects that are focused on local needs, especially those of socially disadvantaged groups in rural areas. With its participatory approach, the programme has mobilised local social capital and further strengthened it in search of community-led solutions to social problems.

The cases of Bue Rosso Consortium in Montiferru, Sardinia, Italy (case no. 31) and Nature Value Trade in Satakunta, Finland (case no. 32) also

indicate similar domain dynamics despite vastly different empirical manifestations.

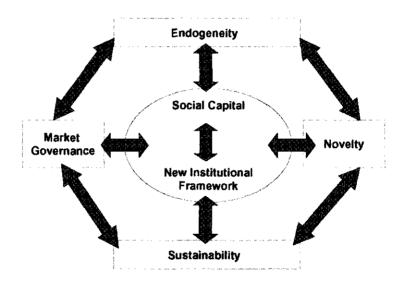
From this set of case studies emerges a common pattern of domain interrelations: in all these cases, social capital, combined with effective new institutional arrangements, constitutes the core initiator that triggers positive developments in endogeneity, market governance, sustainability and/or novelty as key outcomes except in the case of Bue Rosso, where novelty (i.e. innovations in the productive method and a new code of practice) also functions as a lubricant that enhances the interrelations between the initiator and the outcomes. This endorses the correlation between social capital and new institutional arrangements suggested earlier in the endogeneity section.

Pre-existing social capital, expressed as cooperation/collaboration or a sense of common purpose among farmers, forestry owners or community members, facilitates the establishment and/or successful operation of new institutional arrangements (i.e. the wind energy cooperative in the Welsh case, the cross-sectoral partnership in the Latvian case and the farmers' association in the Bue Rosso case, whereas the key institution in the Nature Value Trade case is a pre-existing institution taking on a new role and purpose). Often social capital and new institutional arrangements are so closely intertwined that it is not possible to clearly distinguish between the two. This then becomes the propelling force for a collective action to initiate and sustain wind energy generation (in the UK case), communityled development strategies (in the Latvian case), indigenous breed promotion (in the Italian case) or forestry conservation (in the Finnish case) with significant market governance, sustainability and endogenous development benefits. Notably, existing social capital is often reinforced by the same process. Clearly in the wind turbine case and potentially in the others, there are also positive two-way interactions between the outcomes, creating an intricate web of mutually reinforcing interrelations. This is synthesized in Figure 9.5.

The two EU Interreg II C cultural projects in Germany (case no. 33) – i.e. a cultural agency and a landscape art conference in Waldeck-Frakenberg – were intended to promote cultural activities and cooperation in and beyond the region. The agency operates, among other things, a database and an internet site relating to cultural activities and education, whereas the conference was aimed at enhancing the exchange and network-building among international landscape art artists, scientists, tourism professionals and journalists. Estonia's School Goes to the Farm project (case no. 34), currently in the pilot phase targeting the Karula National Park area, aims to promote sociocultural sustainability and sustainable development education by improving pupils' knowledge about the

relationship between nature and culture and about the role of rural areas in society. The project has had some notable educational benefits for pupils, indirect environmental benefits for the area and potential economic benefits for farmers through additional income generation. In Germany, a similar (yet relatively less successful) initiative can be found in the FrankFOOD project (case no. 35).

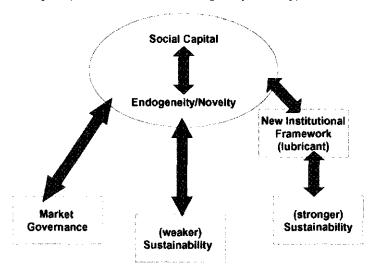
Figure 9.5 A pathway of rural development: domain interrelations unfolding around social capital (in combination with new institutional arrangements)



These case studies also share a similar pattern of domain interrelations. The common initiator here is the positive interrelation between social capital, the central dimension, and novelty, endogeneity, or both, which results in mainly (but not exclusively) sustainability outcomes. In the case of School Goes to the Farm, the interaction among local actors and the endogenous development ambitions of the project constitute the initiating positive interrelation that facilitates the educational process whose benefits encompass greater cohesion of the community, potential income generation for local farmers and a greater understanding of sustainable development for all. Similarly, in the Interreg III C cultural projects, social capital, in the form of regional/supra-regional actors' networking and collaboration, enables (and is in turn enabled by) the novel approaches to cultural resource mobilisation with direct sociocultural sustainability (i.e. valorisation of local cultural assets and activities) and potential market governance and economic sustainability (e.g. tourism promotion) benefits. In the case of FrankFOOD, it is the concerted effort by a highly motivated project team and the novelty inherent in the recent educational policy to

establish more all-day schools that delivered some economic, social and environmental sustainability benefits of public food procurement. Curiously, the Interreg III C cultural project case suggests that the key synergy between social capital and endogeneity/novelty results in greater sustainability outcomes when mediated by effective new institutional arrangements (i.e. the creation of a new cultural agency). This is supported by the FrankFOOD case, where the establishment of new institutional arrangements (i.e. school catering guidelines that require 10% organic and 25% regional food in new Frankfurt school canteens) is likely to function as a lubricant to enhance the market governance and economic sustainability implications of school food procurement initiatives. These interrelations are summarized in Figure 9.6.

Figure 9. 6 A pathway of rural development: domain interrelations unfolding around social capital (in combination with endogeneity/novelty)



In conclusion, all seven case studies suggest that social capital tends to be a significant initiator of RD processes with more or less direct bearing on sustainability outcomes such as social cohesion and social justice. These sociocultural sustainability benefits tend to be strengthened when mediated by institutional arrangements that effectively channel existing social capital into coordinated and strategic collective action. Social capital as an initiator also often functions in tandem with endogeneity and/or novelty – perhaps a logical consequence of the fact that effective local resource mobilisation and the unfolding of context-dependent novelty are both grounded in the local community's stock of knowledge, capacity, and most importantly, will to act collectively for the purpose. In all these cases, social capital produces and is in turn reproduced by the chain of

domain interrelations: it is both an initiator and an outcome of RD practices. Social capital allows individual agents to undertake organised collective actions that enable positive developments in other domains, and in turn, through their actions these agents reproduce and further enhance their stock of social capital. Notably, in four of the seven cases, the domain of market governance is absent or not immediately relevant, suggesting that RD practices revolving around social capital tend to prioritise the goals of social justice and equity over those of market/employment creation, hence resulting in more social than economic sustainability outcomes.

Novelty

Novelty is the central dimension in eight case studies (see Annex 2). Some typical examples of novelty, defined in Chapter 4 of this book as 'a new configuration that promises to work', can be seen in these cases.

The Northern Frisian Woodlands (case no. 36) is the largest and oldest territorially-based cooperative in the Netherlands. Covering five municipalities, 850 members and 40,000 hectares of land, the cooperative aims at well-cared-for forms of nature and landscape conservation and more sustainable farming and has made significant contributions to the regional economy. It has developed, in association with Wageningen University, several novel practices of N-loss reduction in dairy farming (most prominently through the creation of 'good manure') and is currently exploring new possibilities of direct marketing of regional products. Its success rests on a dense network and a shared vision among farmers and between farmers and institutional partners, crystallised in a Territorial Contract that binds them together in a common effort.

A city farm (case no. 37) is an economically independent and fullyfunctioning farm located in/near a city and whose activities are oriented towards the needs and demands of the city. It is a relatively new phenomenon in the Netherlands, with less than 10 city farms currently operating in this way. The largest city farm is the Ridammerhoeve in the Amsterdam Forest, a goat farm that receives about 200,000 visitors a year and draws 50% of its income from educational and recreational activities. While the number of city farms is small, the potential market is large and rapidly attracting attention. City farming presents a novel solution for 'green environment' management by offering care, education, recreation, identity, quality of life, etc. At present it is largely a result of the initiatives of individual farmers and/or municipalities, and most city farmers are socalled 'new farmers'.

Another typical example of novelty production can be found in West Country Farmhouse Cheddar in the UK (case no. 38). Following the abolition of the Milk Marketing Board which had formerly monopolised the cheddar market, 24 producers established a new regionally-based cooperative to compete with other quality branded cheeses. In 2000, the cooperative was awarded a PDO status at the same time as introducing its own local/regional brand, West Country Farmhouse Cheddar. The certification and branding have served as successful marketing tools to protect the artisanal cheddar from the competition of conventional and industrialised cheeses as well as to solidify the producer networks and the formal rules of production, engagement and marketing. This is an ongoing and dynamic process of novelty production that involves continuous development of strategies for network sustenance and expansion.

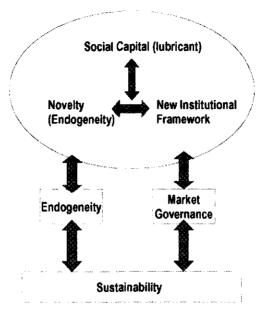
In the case of sheep farmers' initiative in Abruzzo Mountain, Italy (case no. 39), it is the new model of livestock farming that constitutes the key novelty. In the face of a continuing decrease in the number of farms and animals in the cattle/sheep sectors in the area, the farmers have collectively sustained sheep farming and further diversified into on-farm cheese production. In doing so, they have utilised a collective butchering service and mobilised endogenous resources such as local knowledge and existing social capital. The networking and the creation of a quasiorganisation among the farmers are the key success factors in this initiative.

Despite the myriad of complex interrelations that these cases represent, there again emerges a more or less consistent pattern that is worthy of attention. Beyond their many surface differences, all but one case study (i.e. agritourism in the Maremma, Italy, in case no. 40) coalesce into a dominant interrelation between novelty, the primary dimension, and new institutional arrangements, which translate this novelty into concrete actions, initiatives and strategies, thereby setting a RD process in motion. In many cases, this process is enhanced by the lubricant of social capital, while in some, novelty as an initiator overlaps with elements of endogeneity. The outcomes of this complex synergy are positive developments in economic, environmental and social sustainability, market governance and endogeneity. These interrelations may be simplified as shown in Figure 9.7.

The novelty here is often in the form of territorially-based quality product that commands greater value added (such as cheddar cheese and other agricultural/tourism products) or a creative strategy/practice that challenges the conventional principles and pressures of the agroindustrial system (such as city farming, 'good manure' and other farming

practices promoted by the Northern Frisian Woodlands cooperative, the new model of livestock farming in Abruzzo Mountain, and the sustainable public food procurement strategy in Scotland, the UK, in case no. 41). But often, novelty is also the combination of both (such as the combination of artisanal cheese production and a multiple branding strategy in the case of West Country Farmhouse Cheddar).

Figure 9.7 A pathway of rural development: domain interrelations unfolding around novelty.



These would remain untapped novelties if not for institutional arrangements that effectively turn them into concrete plans/actions and ensure that regional/local stakeholders act in a coordinated manner to undertake them. In the case of the Northern Frisian Woodlands cooperative, the conceptual novelty of sustainable farming has been translated into solid farming practices by institutional collaboration that is ensured and specified by a Territorial Contract. Much the same picture emerges from the case of local school meals in Scotland, where the new sustainable public procurement policy was allowed to fulfil its potential through a creative tendering system and an institutional mechanism of dialogue among stakeholders. The success of West Country Farmhouse Cheddar also rests on a series of institutional developments, such as the establishment of the new regional cooperative, its dynamic branding strategy, and the integration of artisanal traditions and new production regulations (i.e. retro-innovation) enshrined in the PDO status that codifies and protects the novelty inherent in the product. In short, novelty alone is a mere RD possibility; the *unfolding* of novelty requires institutional support.

This is underscored by the only case study in this group in which the domain of new institutional arrangements is conspicuously absent. While agritourism implies potential novelty as a strategy for transcending the conventional confines of agriculture, the Maremma example lacks an institutional framework to facilitate networking and knowledge-sharing across the farming community. This has 'stunted' the unfolding of the novelty inherent in agritourism and prevented it from developing into an effective RD strategy for the majority of small- and medium-holder farmers.

In many cases, social capital mediates this dominant interrelation as a lubricant – a tendency perhaps expected from the close linkage between social capital and new institutional arrangements outlined earlier. Again, social capital tends to be further developed by the same interrelation it facilitates: it is both a prerequisite and an outcome of domain interrelations. The successful regional branding by the Northern Frisian Woodlands cooperative, for instance, relies internally on the dense network of various study groups, theme groups and social gatherings, and externally on the collaboration between government authorities, regional/local NGOs and other institutions. In other words, the cooperative relies on both bonding/bridging capital at the grassroots level and linking social capital that consolidates vertical collaboration. The same process, by virtue of mobilising existing social capital, also enriches it. Social capital here is not an initiator but rather consolidates and cements the positive inter-linkage between the primary domains.

In some cases, endogeneity is both part of the initiating interrelation and its outcome. Novelty often overlaps with (or rather presupposes) endogeneity in regional quality production, in which the novelty of the product is directly connected to its territorial specificity, that is, its embeddedness in the locale (locally available resources, knowledge, skills, traditions, identity, sense of place, etc.), as evidenced by the cases of West Country Farmhouse Cheddar, the Netherlands' Waddengroup Foundation (case no. 42) and Hungarian paprika (case no. 43). Such a close connection again supports our earlier proposition of the fit between the two domains.

In all but one case study (i.e. the Maremma's agritourism), increased endogeneity is also a major outcome of the domain interrelations, its manifestations often two-fold; valorisation of local assets and territorial identity, and multiple use of local resources accruing benefits to the wider, local/regional economy. Closely related to the former are social sustainability outcomes such as greater social cohesion and improved quality of life (as in regional quality production and in the Scottish school meals), while the latter has direct implications for economic sustainability and market governance benefits, such as the creation of a new market (as in the Scottish school meals case) or varying degrees of success in entering a monopolised market (as in the Northern Frisian Woodlands case). Notably, in the case of West Country Farmhouse Cheddar, market governance also figures prominently as part of the initiating interrelation. The abolition of the Milk Marketing Board and the end of its monopoly of the cheddar market triggered quality competition, which motivated the regional/local specialist producers to organise themselves. Environmental sustainability is often enhanced through the promotion of multifunctional agriculture and sustainable farming that many of these cases entail (e.g. Northern Frisian Woodlands, Waddengroup Foundation), although such benefits are not central to the West Country Farmhouse Cheddar case. Finally, many of these benefits are yet to become apparent in RD initiatives in their early stages such as city farming in the Netherlands.

New Institutional Framework

New institutional framework constitutes the dominant dimension in 20 case studies (see Annex 1. The principal function of new institutional arrangements, as defined in Chapter 6 of this book, is to 'solve coordination problems and to support cooperation' among RD actors. This is well illustrated by these case studies.

A primary example can be found in the case of De Westhoek Hoeveproducten (WHH) in Belgium (case no. 44). WHH, now registered as a non-profit organisation, was first started as an EU Objective 5b project proposal by a rural women's organisation in collaboration with local farmers at a time when there was no marketing or branding of farm products and there was only marginal involvement of the government and other organisations in the region. Building institutional and personal ties from the ground up, the group obtained EU funding to design and implement a regional marketing strategy that encompasses direct selling, a website, a common label, rural tourism, education events, etc. Today the group is more or less independent financially and continues to promote regional farm products in close collaboration with the provincial council, the regional agro-marketing board and other partners.

A similar picture emerges from Rankas Piens (case no. 45), a regional dairy cooperative in Latvia, which was founded in 1993 and has since engaged in active restructuring and expansion initiatives. The two main goals of the organisation are: a) to improve its commercial performance through modernisation and market expansion; and b) to specialise production and develop new sustainable products. The growth of the organisation, from the 30th to the 7th largest dairy in the country, has been achieved through investment in production facilities and technology, innovative product development, hygiene and quality control, and improved marketing and public relations. These have been secured by a visionary leader on the one hand and the availability of public and private support on the other – representing a notable case where social capital is not an immediately significant variable.

Italy's wine routes (case no. 46) are another good example of a RD initiative that is facilitated by effective institutional arrangements. Here the development of wine routes in itself may be seen as an emerging institutional framework, within which farmers and individual/institutional partners have collectively mobilised territorial assets in pursuit of coherence between wine production, local culture, local landscape and natural resources. Such collaboration takes place at multiple levels encompassing farms, farmers' networks, sub-regions and regions. Thriving on the long tradition of collective action in typical food and tourism promotion, local/regional actors have successfully maximised the endogeneity, market governance and sustainability potentials of wine routes and associated activities.

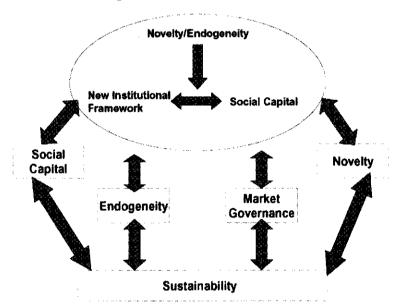
Latvia's Preili organic farmers' network (case no. 47) offers a convincing case that demonstrates the crucial importance of the synergy between social capital and new institutional arrangements. The two organic cooperatives here have failed to function effectively or to achieve the goals of collective marketing/lobbing and knowledge-sharing, due largely to the lack of commitment and trust among farmers as well as to the inadequacy of financial and other resources and state support. The cooperatives have no codes of practice or clearly defined rules/rights/obligations of the executives and members. Although they have managed to create some new markets, this has not resulted in any long-term contract. Consequently, the leader of one of the cooperatives is currently considering resignation and even the liquidation of the organisation.

The recent growth of care farms in the Netherlands (case no. 48) implies strong linkage between new institutional arrangements and market governance. The latest generation of Dutch care farms are grounded in an awareness of the health-restoring capacity of agricultural activities and green environment. Related to this is the introduction of personal care budgets in the national health system, which has given patients greater decision-making power in contracting care services. In addition, regional

and national level collaboration among care farms has decreased transaction costs and increased their individual and collective capacity to respond to the requirements of official health institutions. These newly emerging institutional arrangements have enabled care farms to enter the public health market and contributed to building a degree of bridging social capital, which in turn has a number of positive sustainability implications.

This set of case studies again implies significant synergy between new institutional arrangements and social capital, a combination that is often further enhanced by an additional element of endogeneity and/or novelty. This central synergy functions as the initiator of RD initiatives that effects positive developments mainly in the realms of market governance, endogeneity and social capital (and potentially novelty), which in turn collectively and ultimately deliver sustainability benefits. These interrelations may be described in Figure 9.8.

Figure 9.8 A pathway of rural development: domain interrelations unfolding around new institutional arrangements



It is worthy of note that the initiating synergy described above is virtually identical to one of the two patterns discussed earlier in the social capital section. Here, the correlation between new institutional arrangements and social capital is salient in all but three case studies (i.e. care farms, Rankas Piens and Chianina beef production in case no. 49). In some cases such as Latvia's rural women's groups (case no. 50), the two dimensions are so intricately connected that it is impossible – or rather meaningless – to try

to separate them or to identify the primary one. Where new institutional arrangements successfully mesh with social capital to initiate positive synergies, the process often results in further development of existing social capital, again a tendency discussed in the previous section.

The case studies also suggest that new institutional arrangements do not necessarily involve the creation of new institutions as such. In Finland's on-farm business diversification initiative (case no. 51), the key institutional actors are municipalities that take on new policies and functions. In the case of Italy's wine routes described above, especially before the promulgation of a specific regional law, the development of wine routes relied heavily on the integration of pre-existing socioeconomic networks. It follows then that this domain is about new institutional arrangements/frameworks – that is, institutional constellations that emerge to fulfil specific needs of RD initiatives – rather than the creation of new institutions per se. It is the function, not the origin in itself, that is new

RD processes seem to be set in motion when these new institutional often drawing on the strength bonding/bridging social capital, give shape and direction to certain novelties or endogenous resources and aspirations. Italy's wine routes provide an illustrative example. An institutional framework developed by multiple actors at multiple levels, such as individual farmers, consortia, wine route promoting and management committees and local/regional administrations, facilitated local and institutional collaboration to reconfigure endogenous resources (wine production, rural tourism, local identity and image, landscape, cultural heritage etc.) into a specific and coherent novelty formation - i.e. wine routes (consisting of open days, brochures, maps, guided walks, promotional events, wine museums, direct selling, etc.). Here the institutional arrangements bolstered by a long tradition of cooperation functioned as a catalyst for the unfolding of novelty and endogenous development. By the same token, we may say that such positive synergies are less likely to take place in the absence of strong social capital. This is suggested by the case of Latvia's Preili organic farmers' network described above. Despite the potential novelty inherent in organic products and in the farmers' innovative strategy for sustainable farming promotion, the cooperatives lack a shared vision and trust among their members, along with adequate financial/human resources and state support, which has eventually prevented them from fulfilling such potential. Similarly, Belgium's organic milk producer cooperative Biomelk Vlaanderen (case no. 52) has failed to capitalise on the possible scope for novelty production in organic milk, due largely to its institutional inability to sustain effective communication and

coordination among processors, research organisations, retailers and consumers (i.e. lack of bridging social capital). In the case of Latvia's beef cattle breeders' association (case no. 53), despite its well-developed vertical integration, the limited input of bonding/bridging social capital (especially in terms of the members' participation and the level of trust between producers and processors) seems to correspond to the limited levels of success the association has achieved in creating a new market and in securing long-term sustainability. In Germany, the 'Ostfriesland' regional branding initiative (case no. 54), in contrast to the success enjoyed by another regional brand, 'Regionalmarke Eifel' (case no. 55), has so far delivered only limited or undocumented success in promoting the regional identity of East Frisia's agriculture, tourism, business and culture because of a number of institutional flaws and the inability of the initiative to mobilise social capital, which has resulted in low local acceptance.

While their key role is to turn potential novelties and endogenous aspirations into realities, in some cases, by virtue of being new, these institutional arrangements themselves may constitute a novelty. Hence there is a degree of overlapping between new institutional frameworks and novelty. This reiterates the point made earlier in the novelty section: novelty is a quality that manifests itself in networks, initiatives and practices, as much as in products as such. Care farms described above and rural estates in the Netherlands (case no. 56), for instance, may be considered as novelties not necessarily in terms of the services they provide (i.e. health care and farming), but in terms of the institutional setup that redefines such services in the context of multifunctional agriculture and reconstructs rural-urban relationships.

Novelty and endogeneity, like social capital, are often both part of the initiating interrelation and its outcome - contributing to the unfolding of a web yet also reinforced by the same process. As noted above, novelty in some cases can be found in the institutions themselves and is hence an element of the initiator, while potential novelties are also implied in the products and services developed/promoted by those institutions. The same may be said of endogeneity. The aspirations of local actors for endogenous development and the availability of territorial assets amenable to RD initiatives are often prerequisites for the emergence and successful operation of new institutional arrangements. At the same time, the RD processes facilitated by these institutional arrangements tend to enhance the autonomy of these local actors and communities and thereby foster endogenous development. This is most evidently illustrated by the cases of wine routes and Chianina beef production (case no. 49) in Italy as well as wood fuel heating systems (case no. 57) and rural service contracting (case no. 58) in Finland.

That said, it appears that novelty is not necessarily an indispensable variable when effective institutional arrangements are in place to renew or reconfigure more or less conventional practices and products (as in Rankas Piens cooperative and to a less extent in the Netherlands' Groene Woud regional branding in case no. 59). In Latvia's Latraps cooperative in case no. 60, rapeseed production is not a territorially grounded novelty but a market/technological innovation oriented towards global supply chains). Endogeneity is also relatively absent in Finland's on-farm business diversification case; the study suggests that endogeneity is not a primary concern amongst the farmers seeking diversification in Lipari, and indeed, in Mäntyharju, although many initiatives are based on local touristic resources, some entrepreneurs complain that concentrating on the perceived local assets is a hindrance for those who see opportunities in less obvious sources. Hence uncritical and rigid focus on endogeneity may lock RD opportunities in the perceived strengths and traditions of the locale and function as something of a straitjacket - a reminder of the negative consequences of the 'local trap' (Born and Purcell, 2006; see also Allen 1999; Guthman 1998; Hinrichs 2003; Goodman 2004: DuPuis and Goodman 2005).

Social capital, though of critical importance in the other cases, does not appear to be a key variable in three case studies. While two of these (i.e. Chianina beef production and Rankas Piens) suggest at least some degree of relevance of the domain, one case (i.e. care farms) shows that social capital is more an outcome than an initiator of a RD process. In the Chianina beef and the care farm cases, it is the combination/overlapping of novelty and endogeneity that provides the key interrelation with new institutional arrangements. Rankas Piens, on the other hand, is a dairy in the conventional sector with less scope for novelty production and therefore relies more specifically on the endogenous potential of the region's long history of dairy production. An additional insight may be drawn from the case of Regionalmarke EIFEL, which suggests that while RD actors' willingness to learn and cooperate is crucial, consensus-building and inclusive dialogue may slow down decision-making processes.

Some cases indicate that (especially environmental) sustainability is not only an ultimate outcome but also a strong initiator (or motivator), that prompts local/regional actors to mobilise their institutional networks and social capital for RD purposes. This can be seen in the Groene Woud case, in which striking a balance between environmental sustainability and economic activity is the main aim of the organisation.

When new institutional arrangements emerge as part of producers' strategy to (re-)gain control of the market, market governance and economic sustainability tend to be the major outcomes. This is evident in such cases as Chianina beef production, wine routes, De Westhoek Hoeveproducten, Rankas Piens, Groene Woud, rural service contracting and Natura-Beef (case no. 61). These outcomes are often combined with positive developments in other domains such as social capital, endogeneity, novelty, and environmental/sociocultural sustainability. It seems that when there is a dense and strong web of interrelations among all or most of the initiating domains, it results in greater overall sustainability outcomes. In the Netherlands' Masterplan Veluwe 2010 (case no. 62), which suggests the absence of novelty and the relative absence of endogeneity and social capital, the intended outcomes in market governance and endogeneity are unclear, while the sustainability benefits are yet to demonstrate their compatibility with socioeconomic practices at the local level. By contrast, cases such as Finland's local wood fuel heating systems demonstrate mutually-reinforcing linkages between all initiating domains (i.e. new institutional arrangements, endogeneity, novelty and social capital), which generate major outcomes in market governance, endogeneity and social capital as well as well-rounded sustainability benefits.

Conclusions: summary and implications

The foregoing discussion has aimed to enhance our understanding of the six domains by examining their manifestations in empirical contexts and to outline some consistent patterns of domain interrelations that emerge from a diversity of RD case studies. We have noted that each domain, when it is the central element in a RD initiative, tends to entail certain interactions with the other domains. Below is a short summary of our findings:

1 Governance of markets:

In the cases where governance of market is the prevailing domain, there are strong and two-way interactions with novelty and endogeneity. In particular, novelty often functions as an initiator of a chain of interrelations that ultimately results in strategic market governance as a major RD outcome, along with sustainability and endogeneity. Social capital tends to function here as a lubricant that enhances this process.

2 Sustainability:

The sustainability domain has strong interaction with social capital to form a key initiator of a web that entails endogeneity and market governance as outcomes. When the interrelation between sustainability and social capital is mediated by the lubricant of novelty, this tends to result in the creation of new institutional arrangements as another key outcome.

3 Endogeneity:

Endogeneity often positively interacts with novelty, with market governance as a major outcome. When this initiating interrelation is consolidated by the lubricant of social capital, it leads to the creation of new institutional arrangements, and in turn, to stronger sustainability outcomes.

4 Social capital:

Social capital tends to be a key initiator when it is positively combined with new institutional arrangements, resulting in positive outcomes in endogeneity, market governance, sustainability and novelty. Social capital as an initiator also often functions in tandem with endogeneity and/or novelty and has more or less direct bearing on (especially sociocultural) sustainability, which is strengthened when mediated by the lubricant of new institutional arrangements. In both cases, social capital is often reinforced or renewed by the same process it facilitates.

5 Novelty:

Positive interrelation between novelty and new institutional arrangements tends to set a RD process in motion. Often this process is enhanced by the lubricant of social capital, while novelty as an initiator may also overlap with elements of endogeneity. The process entails positive outcomes in sustainability, market governance and endogeneity.

6 New institutional arrangements:

New institutional arrangements tend to interact positively with social capital, a combination often further enhanced by an additional element of endogeneity and/or novelty. This initiating interrelation effects positive developments mainly in the realms of market governance, endogeneity and social capital (and possibly novelty), which in turn collectively and ultimately deliver sustainability outcomes.

Our intention is not to overstate the consistencies in these findings. The six sections have shown a great diversity of domain interrelations discernible in empirical cases of RD initiatives. They also point to some gaps between key domain interrelations. For instance, our discussion of market governance has suggested that the domain has only weak linkage with new institutional arrangements, whereas in the section on new institutional arrangements, we find a much stronger presence of market governance. This may be partly because the case studies grouped under market governance are primarily about food products that do not necessarily require elaborate institutional settings, while the latter cases largely (but not exclusively) concern land-based goods and services (such

as regional marketing) that presuppose institutional involvement. Thus the consistencies are far from straightforward or unambiguous.

Nevertheless, it is possible to extract from these findings some tendencies that repeatedly come to the fore and present notable implications for the conceptual model. These include the following:

- Social capital tends to function as an initiator and also as a lubricant that mediates and consolidates positive domain interrelations (suggested by 1, 2, 3, 4, 5 and 6 above);
- Market governance, sustainability and endogeneity often constitute key outcomes of positive domain interrelations (suggested by 1, 2, 3, 4, 5 and 6 above);
- Significant simultaneity and synergy tend to exist between novelty and endogeneity (suggested by 1, 3, 4, 5 and 6 above);
- Significant simultaneity and synergy tend to exist between novelty and new institutional arrangements (suggested by 2, 5 and 6 above);
- · Significant simultaneity and synergy tend to exist between social capital and new institutional arrangements (suggested by 3, 4, 5 and 6
- Significant simultaneity and synergy tend to exist between social capital and (especially social) sustainability (suggested by 1, 2 and 4
- In successful RD initiatives, the initiating domains (most evidently social capital) as well as the outcomes are often reproduced and further strengthened; and
- The denser the web of domain interrelations, the greater the sustainability outcomes/potential.

The first point concerning social capital testifies to the crucial importance of local (and especially collective) agency in social change. The analysis suggests that RD as an instance of social transformation is not brought about by a mechanical unfolding of material forces but involves purposive collective will. A shared vision, common purpose and collective action at times directly trigger a chain of developments and at other times help to sustain such processes which may otherwise not be sustained, as demonstrated by some examples discussed earlier. This is perhaps a warning against a deterministic conceptualisation of RD. We therefore stress the importance of actor-oriented analysis, without which the theoretical understanding of rural development may well be lacking in relevance and use to the RD actors central to the very phenomenon we purport to understand. At the same time, the case studies suggest that it is equally important to eschew an uncritical notion of local actors and social capital. The case of the Maremma's agritourism, in particular, demonstrates that an indication of a degree of endogeneity is not an

automatic reflection of social capital and indeed that local is not a monolithic category.

The second point suggests that the key outcomes of RD are wide-ranged, extending from the most tangible and immediate benefits (e.g. new markets and additional income) to long-term development benefits (e.g. enhanced competitiveness and endogeneity of rural economies), and ultimately to a broader paradigm shift (i.e. sustainable rural development). However, the positive outcomes of RD initiatives extend beyond these. As discussed below, successful RD initiatives often result in the strengthening of initiating domains. The rural web therefore cannot be understood in a linear causal model.

The third to the six points correspond to the conceptual fit between some domains. Context-dependent novelty coincides with (or presupposes) endogeneity especially in regional quality production, in which the novelty of a product is directly connected to its territorial specificity and embeddedness. On the other hand, novelty as a possibility (or a 'seed', as described in Chapter 4 of this book) of RD requires effective institutional support (suitable soil, water, etc.) to come to fruition. The coherence between new institutional arrangements and social capital has been noted earlier: RD actors' ability to cooperate and employ social relations for common purpose both enables and is enabled by an effective institutional framework for collective RD initiatives. Furthermore, social capital, understood as a resource mobilised not only for the benefit of particular individuals/groups but in the interest of common well-being of collectivities, is likely to translate into greater social justice, equity and empowerment - i.e. the core principles of social sustainability. While these (especially the first three) synergies tend to form key initiating interrelations, many empirical cases discussed above have shown that the first-order effects of such key interrelations are often enhanced by the second-order effects of other domains that have the potential capacity to become initiators themselves. Hence the synergies discussed here are by no means fixed or stable: on the contrary, they are essentially fluid and constantly in the process of renewal. Initiating domains and domain interrelations are the shifting core of a growing web of interrelations. Additionally, from a methodological point of view, what these synergies also suggest is that some of the domains may not be clearly separated in empirical contexts and that empirical phenomena cannot be neatly classified into separate categories.

The last two points relate to the nature of the web woven by such initiators, outcomes, lubricants and their interrelations. The empirical analysis indicates that a successful RD initiative is an *unfolding* web, whereby a novelty fosters more novelties, sustainability outcomes prompt

further sustainability initiatives, endogenous development achievements encourage further endogenous aspirations of the community/region and so on, as well as further interrelations between/across such new domain developments. A highly intricate web of interrelations thus emerges. A few examples whereby initiating domains and outcomes are further enhanced through a RD process may be drawn from the case studies. Central to the West Country Farmhouse Cheddar case in the UK is what may be described as a Russian doll of novelties. The novelty of the product is not in a static, fixed quality but rests on a continual process of innovation and product differentiation. Similar developments are found in Italy's Abruzzo Mountain sheep farmers' initiative. While the farmers' move towards on-farm cheese production constitutes an initial novelty, when the production of pecorino was found no longer economically viable, they proceeded to create second-order novelties (i.e. new products such as Gregoriano and smoked ricotta) to expand this economy of scope. The same case also shows that the endogenous development benefits delivered by this initiative have spawned a new consciousness among not only the farmers but also the local community of the value of their endogenous resources and their sustainable use. In Belgium, the rural women and farmers who came together to form De Westhoek Hoeveproducten are encouraged by the level of success they have achieved and consequently have expanded their originally marketingoriented objectives to include the promotion of sustainable farming. The Welsh community that started the wind turbine project is similarly encouraged by its success to expand the operation in pursuit of further economic, social and environmental benefits of wind energy generation (see also the biomass energy production initiative in Valtellina, Italy). Thus continues the unfolding of the web.

The analysis suggests that the density of this web tends to correspond to the success and overall sustainability achievements of a RD initiative. The cases that indicate a particularly high level of benefits in various domains and especially in sustainability display positive interactions and mutual externalities developing in multiple directions, creating a dense and complex web. In short, then, a rural web is dynamic in nature. The domains cannot be simply slotted into fixed roles or qualities: each domain, as well as its interrelation with the others, constantly evolves, expands, and unfolds.

In sum, this chapter has attempted to operationalise the domains by outlining their empirical subtleties and further suggested the coherence between certain domains and the prevailing interactions. Importantly, it also signals a warning against a mechanistic theorisation of RD based on a deterministic and reductionistic understanding of social action and a static or linear notion of social change. The empirical evidence suggests that a better theoretical understanding of RD requires dynamic, actororiented, context-specific analysis that pays due attention to its ever-expanding, ever-evolving configuration of actions and interactions.

Notes

1 In this chapter only brief summaries are presented of some of the original and extensive case study documents. The elaboration of all case studies followed a detailed guide-line. Several case-studies and the guideline will be accessible on the ETUDE website.

2 The numbering here follows Annex 1.

Annex 1 List of Case Studies

Market governance:

- 1. Goat milk cheese production in Alpujarra (Spain)
- 2. Graig Farm organic producers group in Wales (UK)
- 3. Saffron production in southern Tuscany (Italy)
- 4. Upländer organic dairy in the Upland region, northern Hesse (Germany)
- 5. Clotted cream production in Cornwall (UK)
- 6. Rhöngut initiative for the production of dry-cured products in the Rhön region (Germany)
- 7. NAWARO Wetterau initiative in the Wetterau region (Germany)

Sustainability:

- 8. Endogenous rural development in Lunigiana, northern Tuscany (Italy)
- 9. Organic network in Järna (Sweden)
- 10. Landschaftspflegeverbände (landcare associations) (Germany)
- 11. Rhön Biosphere reserve in Hesse-Bavaria-Thuringia (Germany)
- 12. Endogenous rural development in De Wolden in Drenthe (The Netherlands)
- 13. Local food systems in Juva (Finland)
- 14. Environmental management strategies in Parikkala (Finland)
- 15. Multifunctional land-use in Tynset, Nord-Österdal (Norway)

Endogeneity:

- 16. Jamón de Trévelz curing activities in the Alpujarra, Andalusia (Spain)
- 17. Production of Rye Bread in Valais (Switzerland)
- 18. Ozveny food provision services in Hrachovo (Slovakia)
- 19. Steve Turton Meats in southwest England (UK)
- 20. Arany Sàrfehèr Grape and Wine Producers' Cooperative in Izsák (Hungary)
- 21. Direct selling of beef in Umbria (Italy)
- 22. Ceramics in Latgale (Latvia)
- 23. Tradition of White Carpathians (TBK) association in Bílé Karpaty (Czech Republic)
- 24. Provision of local organic food to municipal kitchens in Juva (Finland)
- 25. Rural Tourism Association in Rauna (Latvia)
- 26. Biomass energy production in Valtellina, Lombardia (Italy)
- 27. Coed y Brenin Mountain Bike Trails in Wales (UK)

28. Endogenous development patterns in Trás-os-Montes (Portugal)

Social capital:

- 29. Bro Dyfi Wind Turbine project in Wales (UK)
- 30. Rural Partnerships Programme in Latgale (Latvia)
- 31. Bue Rosso Consortium in Montiferru, Sardinia (Italy)
- 32. Nature Value Trade in Satakunta (Finland)
- 33. Cultural projects in Interreg III C-project SiTaR in Waldeck-Frankenberg and Lichtenfels (Germany)
- 34. School Goes to the Farm project (Estonia)
- 35. FrankFOOD project in Frankfurt (Germany)

Novelty:

- 36. Northern Frisian Woodlands cooperative in northern Frisia (The Netherlands)
- 37. City farms (The Netherlands)
- 38. West Country Farmhouse Cheddar Cheese in southwest England (UK)
- 39. Sheep farmers' initiative in Abruzzo Mountain (Italy)
- 40. Agritourism in the Maremma, Southern Tuscany (Italy)
- 41. Local school meals in East Ayrshire, Scotland (UK)
- 42. Waddengroup Foundation in the Wadden Islands (The Netherlands)
- 43. PGI certified paprika (Hungary)

New institutional framework:

- 44. De Westhoek Hoeveproducten initiative in Westhoek (Belgium)
- 45. Rankas Piens cooperative in Ranka (Latvia)
- 46. Wine routes in Tuscany (Italy)
- 47. Preili organic farmers' network in Latgale (Latvia)
- 48. Care farms (Netherlands)
- 49. Chianina beef production in Tuscany (Italy)
- 50. Rural women's groups (Latvia)
- 51. On-farm business diversification in Mäntyharju and Liperi (Finland)
- 52. Biomelk Vlaanderen cooperative in Flanders (Belgium)
- 53. Latvia Beef Cattle Breeders Association (Latvia)
- 54. Ostfriesland regional brand in East Frisia (Germany)
- 55. Regionalmarke EIFEL brand in Eifel (Germany)
- 56. Rural estates (The Netherlands)
- 57. Local wood fuel heating systems in Alavus, Kankaanpää, Kangasala and Tuupovaara (Finland)
- 58. Rural service contracting project in Kyrönmaa (Finland)
- 59. Groene Woud initiative in Noord-Brabant (The Netherlands)
- 60. Latraps marketing cooperative (Latvia)
- 61. Natura-Beef (Switzerland)
- 62. Masterplan Veluwe 2010 in the Veluwe (The Netherlands)
- Regionen Aktiv pilot rural development scheme (Germany)

10 The Impact of Policy Arrangements

Yoko Kanemasu

The preceding chapter has attempted to outline the empirical manifestations and subtleties of the six RD domains as well as the dynamics of their interrelations in empirical contexts. This provides an adequate setting for probing the role of policy arrangements in these interactions. The following discussion briefly examines the relevant implications emerging from the 63 case studies. The key question that guides this analysis is: If the six RD domains interact in a more or less consistent manner as suggested in the previous chapter, how do various policy arrangements relate to such dynamics in empirical contexts?

The analysis, as in the previous chapter, is interpretive and based on the information available from the case studies. It needs to be noted that the cases do not necessarily provide sufficient data for the purpose and therefore that the analysis is exploratory in nature. Further empirical research is essential to the verification of the validity and generalisability of the findings. Nevertheless, they allow a glimpse of the complex relationship between policy and RD domain interrelations and between policy structures and agency in the context of a diversity of empirical RD processes.

The following discussion is divided into two sections. The first section consists of six parts corresponding to the six RD domains and assesses the significance of policy arrangements in the domain interrelations identified in the case studies grouped under each domain. The second section attempts to outline the basic patterns and tendencies emerging from this exercise and to explore what these might mean in furthering our understanding of RD processes.

Policy arrangements and RD domain interrelations

Market governance

The analysis in the previous chapter has found that in this group of case studies RD initiatives revolve around the key synergy between market governance and novelty, which is often mediated by social capital to deliver endogeneity and sustainability outcomes. The role of policy arrangements here appears rather weak. Out of the seven case studies, only two indicate strong evidence of policy incentives: in the goat cheese case in Alpujarra, Spain, the dairy was assisted by LEADER I funding in its attempt to commercialise the traditional product under a new trademark. Germany's NAWARO initiative was also enabled by state subsidies to make necessary investments in technical equipment whilst a partly policy-induced demand shift towards bioenergy facilitated the creation of a new market for the initiative.

In Germany's Upländer dairy case, public sector support in the form of several regional policy programmes played a crucial supportive role in the initial stage, along with other external market- and community-related factors. However, the company has since grown increasingly independent of such external influences, and policy arrangements today influence its operation only in a most general manner (see also the UK's Graig Farm for a similar case). In the clotted cream case in the UK, the saffron production case in Italy and the Rhöngut case in Germany, policy arrangements are of peripheral significance. In the Italian case, the saffron producers have received little support from the provincial administration, and similarly, in the German case, the initiative has successfully embedded its product in regionality despite the absence of supportive policy arrangements. In the British case, 'bureaucrats and mediators' are seen by local actors as a hindrance rather than a help, and the PDO certification of the product has generated little enthusiasm. In all three cases, the initiatives are clearly led by local actors.

In these case studies, then, the unfolding of novelty (in the form of retroinnovation, changes in production processes, etc.) that triggers positive developments in market governance is primarily in the hands of local/regional actors or private enterprises themselves, with limited involvement of the public sector (see below for a more detailed discussion of the link between policy and novelty). This also seems to correspond to the relative absence of new institutional arrangements in these cases. These are mostly initiatives aimed at market creation/expansion for a specific commercial product (i.e. goat cheese, organic meat, organic milk, saffron, clotted cream, dry-cured meat, energy crop) by a specific commercial enterprise/public limited company (Spain's goat cheese dairy, the UK's Graig Farm and Rodda's Creamery, Germany's Upländer dairy, etc.) and do not involve extensive public-private partnerships or wider institutional collaboration that attract policy attention or public funding. Social capital in this context typically takes the form of producer cooperation, which is not mediated or induced by state actors.

Sustainability

As discussed in the previous chapter, in this group of case studies the central domain of sustainability is crucially linked to social capital. Supportive policy arrangements can enhance this process, as is evident in the case of rural transition in Lunigiana, Italy. Sustainability in this case is delivered by informal, hybrid and local networking bolstered by emerging social capital and institutional arrangements. Policy here provides a political environment and institutional mechanisms conducive to the fostering of such dense networks. Favourable policy arrangements range from the EU RD policy to the national/regional governance structures such as devolution that has allowed the Comunità Montana to design its own Local Rural Development Plan and to influence the implementation of the EU RD policy to suit its specific needs (e.g. not activating Measure 8.1 funding due to the negative impact of forest expansion in the area). Added to these is the national/regional legislation that defines rural districts as partnerships between private and public These arrangements clearly promote institutional stakeholders. collaboration whilst prioritising local needs and ownership, which culminates in the creation of new markets for typical products and tourism as well as notable benefits in terms of sustainability and endogenous development. In the other case studies, the match between the policy environment and domain interrelations may not be as clear. Nevertheless, they also suggest that the synergy between local initiatives/collaboration (i.e. social capital) and sustainability goals/outcomes is supported to varying degrees by existing policy structures. Germany's landcare associations are noteworthy in that they are voluntary associations involving conservation groups, farmers and municipalities and operate strictly on the principle of parity, where the public sector has no more influence than the other partners. The strength of the initiative, that is, the shared territorial identity and the ability to collaborate for a common goal, is here built up collectively and equitably by all actors of the public and private voluntary sectors.

In two of the eight cases, the policy context appears ambiguous or contradictory to the goals of RD initiatives. Curiously, both cases have achieved limited success, which again points to the significance of policy in successful domain interactions that involve sustainability as the core. The Finnish case study of the local food system in Juva notes the EU legislation on competition rules as a key obstacle to the relocalisation of food chains, although the municipality's official policy recognises public procurement as a means of supporting local food systems. In the Dutch case of De Wolden, the contradiction is more conspicuous. The municipality's spatial planning has historically rested on the segregation of rural functions, which categorises two thirds of the area as agricultureoriented where other activities are permitted only if they don't interfere with the conventional development opportunities for agricultural enterprises. This has excluded a significant part of the area from the development potential of multifunctional rural enterprises, offering little room for alternative RD strategies. Without strong social capital to make up for this void, the case indicates limited and slow sustainability outcomes.

Endogeneity

The domain of endogeneity is often intertwined with novelty to form a strong initiator of RD practices. In contrast especially to the cases grouped under market governance, many in this group suggest a substantial or vital role of policy arrangements in facilitating such synergies. This may be in part because these cases often concern a regional or collective RD initiative directly funded by or originating from local/regional/national/EU policies rather than a corporate initiative of a single private enterprise. Furthermore, territorially-based policy interventions that explicitly promote the valorisation of endogenous resources and active community participation, such as LEADER programmes, are likely to have greater relevance to RD initiatives in which endogeneity plays the central part.

For instance, the Finnish case of local food procurement in municipal kitchens in Juva shows that many community initiatives to promote local and organic food production/consumption in the area have been previously supported by EU funding (such as LEADER), the municipal government's focused efforts to build community well-being on farming and food processing, and the local community's strong identification with organic farming. With this as a favourable background, the local actors (i.e. municipal kitchens and suppliers) have established a successful local food procurement system through the innovative formation of a purchasing cooperative to curtail the constraints associated with EU public procurement regulations. Here, although EU policy seems to play an ambiguous role, the endogenous development aspirations of the community have successfully meshed with the municipal government's territorially-based policy interventions to facilitate a successful RD action.

Policy arrangements play an even stronger role in some cases. The sustainable forestry policy of the Welsh government and the Forestry Commission has direct bearing on the success of the mountain bike trail case. Indeed, the project owes its existence entirely to the Commission, who promotes initiatives of this type in pursuit of multifunctional forestry. The positive domain interrelations here rely heavily on this favourable policy environment: the political support and the accompanying budgetary allocation are directly responsible for the

mobilisation of forest resources (i.e. endogeneity) as a response to the societal needs for environmental goods and recreation (i.e. novelty production), which has delivered indirect economic benefits and some sustainability outcomes. Lacking in this policy framework is a mechanism to enhance local ownership, which would significantly enhance the project's social sustainability potential.

Policy arrangements are thus sometimes wholly responsible for the initiation and sustenance of endogenous development initiatives. Another example can be found in the Valais Rye Bread initiative in Switzerland, which was developed from the beginning as a response to a regional RD strategy to establish multifunctional agro-food supply chains with an emphasis on typical food products eligible for PDO certification. The rve bread fitted well with such regional policy priorities and consequently received considerable political and financial support, including strong backing of the Federal Ministry of Agriculture, which, during the legal process of the PDO registration, defended the product against the objections from industrial producers.

Some cases suggest that policy interventions may also play an important role in generating and/or mobilising social capital, a key lubricant that enables new institutional arrangements to strengthen the outcomes of endogenous development initiatives. In the case of Jamón de Trévelz in Spain, the LEADER programmes (I, II, +) not only provided financial support for R&D and marketing of the product, but prompted the producers, who were otherwise known for their individualism, to collaborate for a common cause. This eventually resulted in the establishment of a robust sector represented by a number of producer associations and entities that collectively market the product and its territorial identity. A similar contribution by LEADER programmes in a rural area with a declining population is found in the case of Trás-os-Montes, Portugal.

Rauna tourism association in Latvia illustrates the importance of public sector support as a negative example. The association's limited capacity to obtain state support, despite a favourable local and national policy environment, has restricted its performance in fulfilling the endogenous development potential of the tourism sector in the area. Hungary's Arany Sárfehér Grape and Wine Producers' Cooperative, by contrast, demonstrates how the organisational and marketing strategies of producers' groups may be shaped by policy arrangements. The producers have secured state acknowledgement and financial support by strategically tailoring their organisational structure and activities to suit the prevailing agricultural policy.

Social capital

In this group of case studies, social capital as the driving force of RD initiatives is often generated and/or mobilised with the support of policy measures. In the majority of the cases, EU, national, regional or local level policies and subsidies create opportunities for local/regional actors to come together for RD purposes with an emphasis on (especially sociocultural) sustainability. Finland's Nature Value Trade, for instance, is a direct product of the EU and national forestry/environmental policy. The initiative is part of the Finnish government's METSO programme (Forest Diversity Programme for Southern Finland 2003-2007) that promotes voluntary forestry conservation, which in turn constitutes part of the broader reconfiguration of Finnish forestry/conservation policy and legislation following the EU accession and the ratification of the Convention of Biological Diversity. This is however not a case of policy imposition, since its success has heavily relied on stakeholder participation and support. The case thus represents a successful convergence of policy-induced new institutional arrangements and social capital. In Latvia's Rural Partnership Programme, the EU accession similarly prompted the national government, which had previously indicated little interest in community initiatives, to introduce new support measures. The programme was indeed intended to serve as a policy laboratory with implications for similar partnerships elsewhere in the country. Again, despite this rather 'exogenous' origin, community groups have played a vital role in the formulation and implementation of the partnership projects. The local experiences and outcomes of this programme have contributed to the preparation of a proposal for the Ministry of Agriculture to implement LEADER-type local development measures, implying that there is a degree of reciprocal interaction between policy and RD actors; policy inducing social capital and social capital shaping policy. The case of FrankFOOD also demonstrates how policy-driven, eternallyintroduced/financed initiatives may trigger the mobilisation of trust and networking among local actors.

Novelty

Many cases in this group rely on an effective coupling of novelty and new institutional frameworks as a RD initiator. Yet by virtue of being new, novelties at times struggle to secure coherent policy support, illustrating their inherent insecurity noted in Chapter 4 of this book. The Netherlands' city farm is a typical example. As the concept of city farming is only just emerging, there is currently no policy framework at the national or provincial level to support such practices. Consequently the development of city farming remains arbitrary, dependent on the policy of individual municipalities. The case study suggests that this derives from a broader

policy vacuum: there is a lack of policy mechanisms to translate the public benefits of the quality of an area into economic remuneration for the private actors who provide such qualities. Thus local/regional actors pursuing novelty production may have to 'go it alone', precisely because of the propensity of novelties to defy conventional principles and arrangements and thereby to fall outside of the realm of conventional policy attention (see also the Northern Frisian Woodlands cooperative case). Similarly, Waddengroup Foundation case shows that novelty production in The Netherlands struggles against the slow growth of institutional interest in regional typical food production in part because the valorisation of territorial specificity of food is still a relatively new RD strategy. This is translated into, among other things, the absence of mechanisms for legal protection of PDO/PGI certified products. These regional actors are however not deterred from actively working in partnerships with various institutional bodies and combining different sources of public funding (such as provincial administrations and LEADER programmes) to drive their initiative forward. If novelty is often creatively 'ahead of its time' and policy arrangements tend to lag behind, it is also the creativity of novelty producers that successfully negotiates inhibitive situations and secures institutional networks that can turn conceptual novelties into realities.

The agency of novelty producers in the face of policy disjuncture is equally evident in the case of West Country Farmhouse Cheddar in the UK. The abolition of the Milk Marketing Board that had previously monopolised the market initially offered an impetus for the artisanal cheese producers to start something new. The willingness of the state to secure PDO certification for the product also played to their advantage. However, the producers were faced with the standardised food hygiene and quality regulations handed down by the Department of Environment, Food and Rural Affairs and the Food Standards Agency, along with the extra regulatory cost of these measures and the general devaluation of dairy farming. Crucial to these producers' success is their ability to turn the tables on such regulatory demands by actively appropriating them to create a competitive advantage for their product. Seen from a point of view of EU agricultural policy, the case also illustrates the producers' ability to intervene in their existing (not so favourable) circumstances and successfully create coherence outside of the prevailing CAP (either Pillar I or II) framework.

The case of agritourism in the Maremma, Italy, demonstrates that favourable policy does not guarantee successful novelty production. Here, the national and regional governments endorse agritourism as a key cross-sectoral link in promoting sustainable RD and have contributed to its growth by removing legal obstacles. Yet, in contrast to those farmers

who have the necessary resources to adopt agritourism as a viable development strategy, for small- and medium-holder farmers who valorise the values of traditional farm life, agritourism is an ineffective strategy and even a threat to their cherished lifestyle. By failing to prioritise the needs and aspirations of smallholder farmers or to provide institutional support for their collaboration, the existing policy structures have failed to encourage positive mutual interaction between the novelty of agritourism, institutional arrangements and social capital.

It is important to note, however, that policy does not always fall behind the emerging RD trajectory; in some cases, policy arrangements themselves may constitute a novelty. In the case of the local school meals in Scotland, the UK, the central novelty is located in the innovative school meals procurement policy at the Scottish Executive and local authority levels. The devolution allowed the Scottish government to redesign its policy in one of the UK's first attempts to address the crisis in the school meals system, which in itself constitutes a novelty. Within this framework, the local authority further overcame the weaknesses of the Scottish policy and undertook a highly innovative transformation of its school meals system with a creative procurement strategy. Here, then, both initiating domains (i.e. novelty and new institutional arrangements) are directly mediated by consistent political interventions.

New institutional arrangements

The case studies in this group are marked by positive mutual interaction between new institutional arrangements and social capital, which, often bolstered by elements of novelty and/or endogeneity, leads to a range of RD outcomes. RD actors here rely on the strength of personal and institutional networking, which involves creating useful links with the public sector and public-private partnerships. In other words, these cases are very much about the power of networking, in which policy arrangements have varying degrees of significance. The Dutch farmers who are organised under Groene Woud regional branding have creatively cultivated connections with other multi-stakeholder development schemes and processes (such as the National Landscape, so-called 'reconstruction processes' and Innovation Platform Meijerij) in order to access relevant knowledge/information, networks and public funding. Latvia's Rankas Piens cooperative, riding on the rise of dairy farming as a priority sector in national agriculture since the EU accession, has also mobilised support from a range of national RD agencies and EU Structural Funds.

Some cases may be more explicitly policy-led. Finland's local wood fuel heating systems, for instance, are growing on the basis of the national forestry legislation and policy, the national energy and climate change

policy, the availability of EU Structural Funds, and a host of other political, regulatory, financial and institutional configurations that enable the key synergy between personal and institutional cooperation, market creation, sustainable energy generation and endogenous development. Some initiatives, such as The Netherlands' Veluwe 2010, may be seen as a policy arrangement in itself, an intersection of multiple policy structures at the municipal, provincial, national and EU levels (although the RD outcomes of this policy-induced scheme are yet to become clear and depend largely on whether it is able to incorporate and build on local/regional social capital).

Other cases suggest that policy impetuses contribute critically to the formative stages of RD initiatives that develop subsequently on the basis of local/regional actors' enthusiasm and commitment. A primary example is provided by Germany's Regionen Aktiv, an innovative support scheme that allows 'model regions' to design and implement their own sustainable regional development plans. This scheme was developed as a response to the LEADER experiences and the reformed German agricultural policy. Importantly, whilst it was initiated by a federal ministry and fully financed by national funds, the actual preparation and implementation of the relevant projects were entrusted to cross-sectoral regional actors: the initiative was prompted by policy yet driven by RD actors themselves who seek to shape their own sustainable RD path based on their collective needs and vision. This case is thus illustrative of a positive interaction between strong endogeneity (i.e. a territorially-based RD model), novelty (i.e. an innovative support scheme) and social capital (i.e. local/regional ownership). Here, the EU RD policy (indirectly) and the national agricultural policy (directly) played a crucial role by laying the groundwork for these interrelations to take place in the initial stage. At the same time, the case suggests that the policy arrangements are also implicated in the question of equity, by virtue of playing a part in determining which regional actors/projects are allowed or denied access to the partnership and funding. A successful initiative by one such 'model region' created under the scheme can be found in the regional brand Regionalmarke EIFEL. The dense and active network established in the course of the scheme, composed of heterogeneous stakeholders from tourism, agriculture, forestry, crafts, business, transfer/innovation, etc. as well as the municipal administration, is preparing to continue the initiative after the termination of the financial support (see also Belgium's De Westhoek Hoeveproducten and Switzerland's Natura-Beef for similar cases). This again implies a degree of reciprocity between policy and local/regional action.

Policy arrangements in RD processes: Some preliminary implications

While the data analysed here are not sufficient to make any conclusive remarks, the 63 case studies suggest some tentative patterns by which policy arrangements are implicated in RD domain interrelations. These patterns are located variously on a policy-action continuum ranging from strongly policy-led to strongly actor-led RD initiatives as discussed below.

Policy as enabling/constraining structures

Policy arrangements may be understood as structures that encourage or constrain positive domain interrelations in RD initiatives. Favourable policy arrangements, through political interventions and public funding, often play a crucial role in stimulating domain interactions and thereby triggering the unfolding of a web, especially in the early stages of RD initiatives (e.g. Germany's Upländer dairy, Regionalmarke EIFEL, Belgium's De Westhoek Hoeveproducten, Switzerland's Natura-Beef). The significance of this role may be even greater in areas/regions where the public sector customarily functions as the primary institutional RD actor (e.g. Finland's on-farm business diversification). At times, the entire existence of RD initiatives hinges on such public sector support (e.g. UK's mountain-bike trails, Germany's Regionen Aktiv, Finland's Nature Value Trade, Latvia's Rural Partnership Programme, The Netherlands' Veluwe 2010). In addition to political and financial support, favourable policy arrangements are found in the form of legislative provisions and regulatory mechanisms at supra-national/national/sub-national levels that promote positive developments within/between RD domains such as endogeneity and novelty (e.g. PDO/PGI certification), environmental sustainability (e.g. green/white energy certificates in Italy's biomass production case), social capital and new institutional arrangements (e.g. Italian law defining rural districts as public-private partnership in the Lunigiana case) and endogeneity, sustainability and market governance (e.g. Italian law on direct selling of farm products in the Umbria case). Overall, these case studies suggest that territorially-based RD policy interventions, especially those with locally-led approaches (most evidently LEADER programmes and LEADER-type schemes such as Germany's Regionen Aktiv), have the potential to function as a catalyst for the initial synergies within/between especially (but not exclusively) the domains of endogeneity, sustainability and social capital. RD initiatives that are primarily aimed at novelty production and market governance, on the other hand, seem to rely relatively less on such supra-state/state support.

Policy arrangements may trigger domain interactions not only through direct interventions but also by creating new situations and circumstances to which rural actors respond by mobilising their territorial resources,

social networks, market governance aspirations, etc. and spurring synergies between them - such as the establishment of more all-day creates market governance schools. which and opportunities in Germany's FrankFOOD case, and the abolition of the UK milk market monopoly, which prompted the cheddar cheese producers to capitalise on the novelty of their product. In relatively new EU member states, the EU accession has led to agricultural, forestry and/or RD policy reformulation, which has had ramifications on the political, regulatory and financial contexts of domain interrelations (e.g. Finland's Nature Value Trade, Latvia's Rural Partnership Programme and Rankas Piens).

Restrictive policy arrangements and regulatory environments, on the other hand, may undermine or limit the potential of RD domain interrelations. Some examples have been discussed above, such as the UK regulation of energy generation and distribution that impedes small-scale sustainable energy generation schemes, and the Dutch municipality's sectoral spatial planning that restricts the development of rural multifunctionality. A number of cases also indicate vertical and horizontal policy disjuncture - between municipal, regional, national and/or sectoral policies (e.g. Rhön Biosphere in Germany, city farms in The Netherlands, TBK regional fruit marketing in the Czech Republic, Trás-os-Montes in Portugal).

RD actors as creative agents: 'duality' of policy structures

A careful analysis however precludes any simplistic or mechanistic understanding of the policy process. RD actors are far from passive recipients or pawns of policy structures: when policy arrangements fail to keep abreast of the emerging RD paradigm, rural actors may seek avenues for intervention elsewhere. This is especially evident in the cases of novelty production and market governance as discussed above but also found in other examples. Rural actors may actively resist or counter the constraints of unfavourable policy arrangements by maximising the strength of their social capital and thereby minimising their reliance on public sector support (e.g. the UK's clotted cream, Steve Turton and West Country Farmhouse Cheddar, Italy's saffron, Slovakia's Ozveny). They may turn to other institutional partners such as academic institutions or personal contacts within the public sector (e.g. The Netherlands' Northern Frisian Woodlands). Thus, when faced with a policy vacuum/constraint, RD actors may 'fill the gap' by combining a range of existing (public sector and other) support avenues and the resources under their control. In some cases, actors may also turn the tables and actively appropriate the prevailing policy structures by strategically designing their RD actions to use such structures to their advantage (e.g. Hungary's Arany Sárfehér Grape and Wine Producers' Cooperative, the UK's West Country Farmhouse Cheddar,

The Netherlands' rural estates, and to a less extent The Netherlands' Waddengroup Foundation). Furthermore, Germany's landcare associations and Latvia's Rural Partnership Programme present the prospect that RD actors, through their collective action, may exert some influence over the shaping of relevant policy arrangements.

In sum, policy structures, made up of an array of multi-dimensional political, legislative, financial, and institutional arrangements/ mechanisms with varying degrees of coherence between them, directly or indirectly mediate the context within which RD domain interrelations take place. At the same time, within these structures rural actors creatively negotiate their circumstances and formulate RD actions to effect positive domain interrelations, adapting to, countering, or appropriating such structural conditions. RD domain interrelations are an outcome of this dynamic interplay between policy and action (or the 'duality of structures' to use Giddens' (1984) words).

Policy arrangements: double implication in equity

Notably, many successful RD initiatives discussed above are induced or supported by policy structures, which RD actors actively incorporate and reorient around localised objectives and needs (e.g. Germany's Regionalmarke EIFEL, Italy's forestry biomass energy generation, Belgium's De Westhoek Hoeveproducten, Switzerland's Natura-Beef). Conversely, even when explicitly supportive policy mechanisms exist, positive RD domain interactions may not take place if such mechanisms are removed from local participation, aspirations and needs (e.g. agritourism in the Maremma, Italy, OostFriesland regional brand in Germany). What these suggest is that policy interventions may play an important role in horizontal as well as vertical integration of RD actions. The linkage between policy and vertical coordination is apparent especially when supra-state/state policy measures shape the political, regulatory or financial environment for RD actions in a more or less direct and top-down manner. Yet policy arrangements may also facilitate horizontal partnership and collaboration between RD actors from across the public, private and voluntary sectors - drawing together heterogeneous, cross-sectoral actors and institutions, (re)generating social capital that was previously absent or not mobilised in pursuit of the collective benefits of sustainable RD. That is, policy has a significant potential to create a dialogic public space in which heterogeneous RD actors creatively and collectively negotiate and explore development strategies in the interests of common well-being. A glimpse of such potential can be found in the cases where policy-induced social capital has been crucial to the success of RD initiatives (e.g. Jamón de Trévelz in Spain, Regionalmarke EIFEL in Germany). Policy interventions, then, may make crucial

contributions to the creation of a public sphere that constitutes, in a Habermasian manner, a realm of dialogue, consensus and collective action.

At the same time, it must be noted that policy may be equally implicated in the relations of power. Policy as a mechanism of distribution of state/supra-state power and resources is necessarily implicated in the inequity of access to such power and resources. This is illustrated by some case studies discussed above, especially Germany's Regionen Aktiv and Italy's agritourism cases. Policy bodies and mechanisms are directly or indirectly responsible for determining who has access to the political and financial support of the public sector and who doesn't. In the Maremma, Italy, the public sector support for agritourism has benefited almost exclusively the wealthy and large farmers who have the means to take up agritourism businesses. By reflecting and addressing the values and needs of just one segment of the farming population, such intervention tends to replicate the existing local socioeconomic hierarchies, resulting in uneven RD outcomes especially in the domains of endogeneity and social sustainability. Indeed, similar points have been made by previous researchers in relation to the LEADER programmes. Bruckmeier (2000) and Shucksmith (2000) pointed out that the LEADER initiatives in Germany and the UK were unable to provide local groups with equal chances to succeed with a project proposal and were prone to being captured by local elite groups or those groups and individuals who already possessed knowledge, influence and power (see also Ray 2000; McAreavey 2006). Hence privileging of the 'local' (or regional), if based on an uncritical assumption of a homogenous category, neglects and possibly reproduces existing inequities within the locality (Ray 2000): the 'local' is 'far from homogenous and include many' communities of interest, 'with highly unequal capacities to act' (Shucksmith 2000:208).

Policy, then, has double implication in the question of equity - as a potential instrument for carving a collective RD actor-space, and as a site of struggle between competing RD interests and agendas. From both perspectives, the empowerment of marginalised individuals and groups is of critical importance. In the context of RD domain interrelations, these issues are directly connected to the role of policy in endogeneity and social sustainability. While the relevance of social sustainability is evident here, it is important to recognise the centrality of equity to endogenous development. As stressed by Chapter 3 of this book, endogenous development represents not just territorial resource mobilisation but, crucially, 'the distribution and reinvestment of the produced wealth within the local or regional constellation.' This definition compels us to adopt a critical notion of territory and its internal dynamics. We therefore

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argue that an adequate analysis of the role of policy arrangements in RD domain interrelations must include a critical examination of the issues of equity, justice and power – i.e. the complexities of the domains of endogeneity and sustainability.

11 Some Final Reflections on Rural Social and Spatial Theory

Terry Marsden and Jan Douwe van der Ploeg

Rural transitions and the web

When compared to the overall situation in the countryside during the previous decades, the current rural development processes undoubtedly represent a *transition*. They thoroughly change the morphology and dynamics of Europe's rural regions, and especially, though not exclusively, its agricultural sectors. Indeed, as we have seen in this analysis, agriculture begins to re-invent itself as a transcending power-house for and of rural and regional development. This is changing the patterns that shape and reshape these regions as well as the wider relations in which rural regions and their agricultures are embedded. To be precise: rural development processes create and reproduce the specific patterns in which they are embedded, as much as they stem from (and are in their turn reproduced by) these patterns. Perceived in this way, rural development is a specific mode of (re-)patterning the countryside and the many activities entailed in it.

Throughout this book, we have referred to these patterns as *rural webs*. A rural web is the more or less coherent whole of rural resources, actors, activities, linkages, transactions, networks and positive externalities that results from, and in its turn, supports and strengthens the rural development process. On a more abstract level, the rural web, whatever its specific architecture, might be understood as a more or less integrated whole of different forms of 'capital': ecological, economic, social, cultural and human capital. If, within this specific whole, ecological capital (and the associated forms of co-production, landscapes, bio-diversity, etc) plays a prominent, region-specific and integrating role, we might collectively summarize these different forms as territorial capital (see especially Chapters 1 and 8 of this Volume).

Of course, rural webs are only a *part* of what more generally are denoted as 'multiple structures'. The rural web is one out of several, often mutually contrasting structures that operate simultaneously within rural

and urban regions. It is the part (the particular 'substructure') that follows from and results in rural development processes. The impact, scope and dynamics of this particular 'substructure' are highly dependent on the contingencies of time and place. Indeed, its contours and magnitude can only be assessed through careful empirical research, as expressed in earlier chapters.

The characteristics of the rural web are closely linked to the transitional nature of rural development processes. Alongside the latter, rural regions are also characterized by contrasting processes, such as (at least in some regions) a spurred scale-enlargement and specialization (in agriculture and/or other economic sectors), and/or a process of overall marginalization and/or depopulation. Other regions witness a conversion into new 'spaces of consumption', in which leisure, nature and second homes become dominant. Processes such as spurred specialization and scale-enlargement, 'post-productionist' conversion and rural development (characterized in Marsden 2003:3, with the 'agro-industrial model; the post-productionist model and the sustainable rural development model'); and, alongside these, processes of marginalization and suburbanization, are all present in Europe's green regions. Their relative weight and specific combination, however, change from region to region, thus contributing unevenly to the specificity of the web in each rural region.

The rural web as counter-structure

These broader differential development processes are all grounded in specific patterns (or 'substructures') that together compose the complex 'multiple structures' we have referred to. The crucial point is that these multiple structures are far from being 'seamless' constellations. On the contrary: they are characterized by multiple frictions, contradictions, delicate interfaces and, sometimes overt, sometimes covert, social struggles. For instance, whilst we have witnessed in the preceding analyses attempts by rural webs to create coherence and platforms of action which produce new synergies and mutually reinforcing interactions (see Chapter 9), it also needs to be recognized that, taken as a whole, these coherences are in many ways counter-movements against prevailing (and often failing) macro-structures. Let us explore what, at least at first sight, might seem to be this contradiction.

Within each and every complex and contradictory constellation, the rural web might be considered as a 'counter-structure', in as much as it relies for its energies upon creating a *rupture with prevailing structures*. A 'counter-structure is the recognition of the fact that ... reality is not

absolutely predetermined ... but proceeds open-endedly, dialectically' (Crosbie 1982:82). As a 'counter-structure it is radically opposed to the dominant structure' (op.cit.: 74). It 'manages to surface' at those points where 'the faults of the dominant structure occur' (ibid.). Thus, 'the hegemony of the dominant structure is denied by the counter-structure' (ibid.). The counter-structure thus represents, to borrow the metaphor developed by Deleuze and Guattari (1997), a set of 'subterranean interrelations'. The latter explain the unexpected, that is, what initially emerges as a deviation. These deviations, if they are able to grow, can start to give birth to new realities, and a new rural web is formed.

A rural web can thus be seen as a counter-structure in as far as it links that which initially was separated1, and in as far as it gives momentum to phenomena that initially seemed to be nothing but deviations². We especially refer to the rural web as a counter-structure because rural development processes (that are grounded upon and resulting from this web) are essentially transitional: they represent a major shift that takes many years to occur and which proceeds through changing conditions of invisibility and confusion. Visibility, coherence and comprehension only occur during, and as an effect of, this transition. We also refer to the rural web as a counter-structure because it increasingly helps to deal with complexity (especially Chapter 8 of this Volume), creating simultaneously new patterns of coherence. All this relates to the contested nature of rural development: what might be highly meaningful in terms of the rural web, might be insignificant or even ludicrous at the level of the dominant structure. What we are beginning to conceptually explain here, therefore, are the particular dynamic qualities (both new coherences and contestations) of web formation. These are, indeed, built out of the seeming contradiction between creating counter-structures to prevailing conditions, at the same time as re-creating new coherences out of these very deviations and ruptures. In parts of South-west England, for example the BSE crisis in 1996, followed by the Foot and Mouth outbreak and it's government response in 2002 (both symptoms of the agroindustrial food system), created the conditions for some areas to begin to create a rupture with this conventional system; indeed to create a deviation which then led to new web developments as counter structures.

This raises questions about what exactly are the dominant structures currently at work in rural Europe? And, then how and by what means do rural webs begin to deviate from these? The strong, persistent and often somewhat camouflaged focus of the State on the agro-industrial model, the desire to maintain a tight regulatory control over the countryside, and the unwillingness (or incapacity) to redress processes of marginalization clearly compose, together, what we might call the dominant structures in

most rural regions of Europe. Combinations of these structures explain ongoing processes of scale-enlargement and specialization, marginalization and the limited creation of particular 'hot spots' for postproductionist consumption. Almost by definition such hot-spots also recreate 'cold spots' as well. These are places which increasingly lose their people and resources, and their abilities to generate collectivities of territorial capital. To these dominant structures, the rural web relates as a counter-structure, a deviation which begins to build a new social and spatial capacity for rural development. It follows here that rural webs can just as frequently arise out of severe and recognized conditions of adversity, as they might out of recognizing their often hidden assets and known advantages.

Clearly these web developments are far from static phenomena. Currently, rural webs are *unfolding* (and sometimes being unfolded actively) in many places. Activities, networks, resources and actors are being linked, at different levels and along different dimensions that, as this book shows, increasingly translate into each other. These same webs increasingly spur rural development as an essentially *endogenous* process that coincides with the well-understood self and collective interests of the many actors that are actively engaged in it. All this implies that, in some places and at some moments, the unfolding of webs is even challenging the dominant structure. We see this clearly in the results of Chapter 9 and Chapter 10.

The more the rural web reflects and expresses endogeneity, results in novelty production, creates and builds on social capital, ensures sustainability, and starts to govern particular markets and to create adequate institutional arrangements (i.e. the more it occupies all of the six dimensions), the more rural development will become a self-propelling process that reshapes the rural, enlarges its competitiveness, and augments the quality of life. This ongoing process tells us, therefore, that it is far more appropriate to induce extensions of, and improvements in the underlying rural webs, than in trying to intervene directly in rural development activities as such. Rural development is not to be equated with 'injecting money into the countryside'. It is not a linear process, but a widening, deepening and mutually engaging process of the domains outlined in the preceding chapters of this volume. As indicated, it can very well be a self-propelling process, provided that the required conditions and points of departure are present (or actively created).3 A key consideration thus becomes, how can these mutually-reinforcing web processes become activated and sustained in ways which allow overall rural development to flourish in the face of the prevailing (and often

devalorising) dominant structures? Why do these web processes occur in some places and not others?

The web as reconstituting space/time.

It is clear from our foregoing analysis that particular regions can be highly conducive to the creation and unfolding of rural webs, whilst others might run counter to this. This might be due to the reigning politics, class formations and associated constellation of land-based property rights. The comparison, for example, between England on the one hand, Wales and Scotland on the other is, in this respect very telling. Marsden and Sonnino (2008), for instance, demonstrate how the politics and differential governance of the devolved regions of Wales, and to a lesser extent Southwest England, are providing a more fertile basis for endogenous rural development based upon more multi-functional principles, than in the more agricultural productivist English lowlands. Similarly we see significant differences in the political and economic 'framing' of rural development in The Netherlands and Italy, with the latter adopting a far more endogenous rural development approach based upon fostering local regional production and marketing. agriculturally Strong productivist property rights with their attendant monopolistic/ oligopolistic market support and state structures, bolstered by a continued faith in agri-industrial technologies, often leave little room or power for the creation of deviations from prevailing structures. As we have seen in our analysis of over sixty cases, however, spaces are opening up all over Europe to reduce, or at least ameliorate, these productivist and welfarist monopolies and their particular class and property- right constellations. Many key players begin to work within the interstices of these prevailing structures; they literally create spaces of deviation and resistance in which web developments and their different but interlinked domains can occur. As Marsden and Smith (2005: 442) argue, the local and the regional in this sense can be seen as a form of spatial and social contingency: 'that is a space for rearranging possibilities which attempt to counter the prevailing forces in the agrarian landscape.'Local' then becomes potentially a social space (a place to share some form of disconnection) for the re- assembling of resources and of value: a place for evolving new commodity frameworks: a place of defence from the devalorisation of conventional production systems'.

Moreover, it might also be the redefinition of regional ecologies, the demographic structures and/or the nature of regional institutions, that make particular regions supportive (or otherwise) to an unfolding of the web and its associated strengthening of rural development processes. The presence of, for example, peat soils, high water levels and meadow birds

that are highly appreciated by rural dwellers and society at large, might imply that a central role is to be attributed to ecological capital and those forms of co-production that are in line with the particular environment and simultaneously 'feed' and 'protect' birdlife (or, more generally, biodiversity)⁴.

Thus, the spatial dimension enters into theory and analysis. Not as a 'secondary' or consequential type of variable, but as a causal category that is central to the understanding and redefinition of rural development processes. Space, or more specifically, the rural region, enters the analysis as a set of malleable endowments, complex and embedded geographical and ecological conditions, and demographic processes that can then be more prohibitive or more conducive to web formation. This is why any movement towards a new social theory of rural development must also engage a spatial theory. A theory that is sensitive to the spatialities within and between regions and between rural web developments themselves. The self-propelling unfolding of the web - that engages the domains of endogeneity, novelty, sustainability, social capital, new institutional arrangements and the re-governance of markets - involves the ability to reshape spaces, both locally, and possibly regionally and ecologically. The social ability to reconfigure these spatial elements away from the dominant structures is a key feature of the rural web.

This applies even more when space-time is taken into consideration. Rural development processes and web formations are also flows through time. These result, as demonstrated in Chapter 9, in specific spatial constellations, i.e. in regionally specific rural webs. Through the different pathways, specific space-time constellations are created. In this sense the dominant 'laws' of comparative advantage between rural regions can be significantly rearranged and circumvented. For instance, former marginal rural regions - for instance in much of upland Britain - can now become more central places for sustainable rural development, displaying redefined combinations of territorial capital.

Managing social cleavages

Understandably, the significance of co-operation is stressed in many academic and policy papers on rural development. Nonetheless, the practice of rural development is characterized as much by conflicts as by co-operation. And alongside coalitions there are as many cleavages and divisions (between e.g. 'locals' and 'newcomers') – several of them not simply prior to but indeed stemming from the processes of rural development themselves. This is also a constant process in the complex unfolding of rural web development. It involves the skills and capacities

of how to minimize and redirect conflicts into meaningful resolutions such that they do not forestall the web development itself. It requires careful management (around territorial capitals) and new forms of innovative governance, not only of markets but of internal network arrangements associated with new institutional structures (like alternative food initiatives, agri-tourism projects and other consortia arrangements). It requires actors to develop new negotiating skills as well as technical capabilities, and it relies upon the building of trust relationships which are bound up with new and often highly risky ventures involving the innovative pooling of expertise and capital. It involves the management of individualism in ways which create new collective gains at the same time as fostering entrepreneurship and the abilities to operate outside as well as inside prevailing regulatory structures. The abilities of actors to operate both inside and outside of the web (say between the urban and the rural) are also critical, and this is part of the relationships between social capital and the governance of markets.

We believe that understanding the rural web as an essentially dynamic counter-structure allows for slotting in both sides of the conflict/collective equation. Between the emerging rural web and the contrasting substructures there will be, as argued above, many points where frictions emerge, as well as many interfaces where complex processes of translation and negotiation are needed. The different associated perspectives and prospects will frequently enter into competition, be it materially and/or symbolically; (what are, for instance, the practices that bring forward and promote the area?). Cleavages and divisions might weaken the rural web, and thus paralyze or even abort rural development activities; just as coalitions and alliances might strengthen (and further unfold) the web. In short, theorizing about rural development (or practicing it) does not imply naivety about the presence and significance of social cleavages and conflicts. Web development is about both coping with co-operation and struggle, divisions and coalitions. And it is especially about the need to forge those alliances and coalitions (through new networks) that help to unfold the rural web further. A key question for further research is, therefore, about web resilience: how far does the web have to unfold in order for it to be self-sustaining, both internally and externally? We can further hypothesise that the web is only as sustainable as its capacity to be resilient. How is this resilience constructed and maintained both within the web itself and beyond?

The social and spatial bases of territorial capitals and their markets.

Finally we would like to posit what the main conceptual added value is of our approach here. What we have attempted to do is to reconceptualise

rural development as a contingent but patterned social and spatial process and, consequently, as a process that might best be understood (and represented) within the framework of interdisciplinary social sciences. It goes far beyond (applied) political or economic sciences and the questions of how certain schemes and policy initiatives are functioning; or how the most efficient private or public interventions can be designed. It also goes beyond the lethargy of neo-classical economics in recasting both new competitive and market constructions as social and spatial phenomenon; indeed as a part of territorial capital in its widest sense.

Our social science approach acknowledges the relevance of markets, but asks at the same time how new markets can be constructed and reconfigured, and how existing ones can be governed in more adequate and sustainable ways. Equally, our approach recognizes existing cleavages between, for example, different economic sectors; but simultaneously asks how social mobilization around particular key domains might result into new combinations and alliances. It understands and explains the often existing and uneven nature of social and economic deprivation, but refers at the same time to the inherent social capability of actors to become both competitive and sustainable. Equally, it does not set the 'natural' (and the 'material') apart, but recognizes that through coproduction - i.e. the active combination and mutual transformation of the natural and the social - new constellations might be forged that are both materially and socially different from previous ones, while they contain higher levels of competitiveness simultaneously sustainability.

Finally, the approach, once and for all, begins to tackle the real social and spatial bases of the rural economy, (i.e sets of constructed production and exchange relations), as a real ecological and territorial economy. Economic exchange and production are based upon the social, spatial and ecological reconfigurations explored here. In this sense the emphasis needs to be placed upon a re-interpretation, not only of the role of the State in rural development, but also the very social and spatial constitution of competitive and market relations. What we begin to witness in Europe's green regions are the beginnings of a more embracing set of production and consumption factors; ones which begin to productively internalize what has long been externalized in narrowly defined cost-based markets and their associated metrics. The rural regions of Europe are becoming new heartlands for this revised social and spatial reconstitution; and it is up to social scientists to provide both further and more refined theoretical and empirical *etudes* for this new and rich 'music' to be heard.

Notes

- 1 Rural development processes link, for instance, different economic sectors as well as the link initially 'footloose' activities to specific territories.
- 2 Here we refer to the many expressions of multifunctionality that two decades ago were exceptions, but which today are omnipresent (see e.g. van der Ploeg, Long and Banks 2002).
- 3 The creation of particular 'food hubs' (nodes in local or regional food infrastructure) and/or the definition of schemes for public procurement (Morgan and Sonnino, 2008) that favour local supply might be far more effective than e.g. schemes to finance particular conversions at farm level. This in turn raises some important questions regarding the future direction of CAP reform either pre or post 2013. We could envisage a more rural development oriented, as opposed to agri-environmental, direction for CAP funds that aims to support further unfolding of rural webs.
- 4 This even applies in a literal sense. Farming is to produce a specific kind of manure that, after breeding, contains the insects, worms and other (micro-) organisms that feed birds and especially the chickens. It is to entail as well particular mowing techniques, i.e. those that do not cause massive slaughter of birds and chickens (see Swagemakers 2008).

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