3 The Endogeneity of Rural Economies

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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 so-called 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 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).

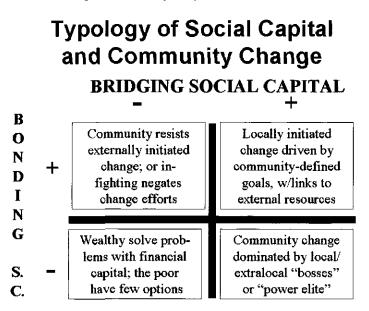
Strengthening novelty production

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.