This article discusses and compares the rural development processes and practices currently occurring in China, Brazil and the European Union. Although these are strongly rooted in the specificities of time and space, they also share important commonalities. We argue that rural development can be viewed as an evolving set of responses to market failures. A key element of these responses is that they are unfolding through the construction of new markets: a seemingly contradictory phenomenon that has, as yet, hardly been scrutinized or theoretically elaborated. We describe these newly emerging markets as ‘nested markets’ and support our argument with a careful reconsideration of the dynamics of long-established nested markets. We then extend this analysis, firstly, by arguing that the construction of such new markets occurs through a process of social struggle and, secondly, by exploring the strength of these newly emerging constellations in relation to the hegemony exerted by food empires. Our analysis puts common-pool resources, which underlie these new, nested markets, centre stage.

Keywords: rural development; nested markets; everyday politics; common-pool resources

A conceptual introduction

In the early 1980s, John Harriss (1982, 15) claimed that ‘rural development has emerged as a distinctive field of policy and practice’. Since then the concept of rural development has been redefined several times (Ellis and Biggs 2001), whilst the rural development practices have evolved in different and sometimes clearly contrasting ways. In this article we focus on what is currently understood, and practised, as rural development. The analysis centres on Europe, Brazil and China. While this is nowhere close to a global comparative study, it is unique in that it draws on a range of different situations with highly diverse economic, political and social contexts. As such it allows us to identify commonalities that might inspire the exploration of other empirical constellations.

The analysis of contemporary rural development needs to distinguish between practices, processes and policies. To start with, rural development practices are...
grass-root level activities (that might very well have ramifications for other levels) that significantly alter the routines and the outcomes of farming. Although one can find a complex and rich morphology of such activities, they share the feature of materially shifting the boundaries of farming (Ventura and Milone 2004). This can be discussed with reference to Figure 1. The inner triangle shows the boundaries of the specialized farm enterprise which emerged from the modernization process that reshaped agriculture in the 1950-1990 epoch. The right side of this triangle refers to the production of agricultural commodities that are delivered to agro-industries for processing and subsequent distribution through retail chains. The left side shows the farm enterprise as being part of the wider rural environment. The bottom side represents the resources, which, in modernized farming are increasingly sourced from off the farm: they are acquired from ‘upstream’ agricultural industries and the banking circuit.

Rural development practices literally shift these boundaries. On the right hand side this occurs through deepening (see e.g. Darnhofer 2005, Kizos 2010), i.e. the introduction of new practices that (re-)internalize processing and distribution within the farm. Deepening often involves the adding of specific characteristics and values to the end-products (e.g. high quality products, regional specialties and organic food). Deepening is driven by, and results in, the creation of more value added per unit of end product produced within the farm.

On the left hand side the boundary can be shifted through the inclusion of productive, non-agricultural, activities into the farm. These may include energy production, water retention, agro-tourism, the provision of care, landscape management, nature conservation and a range of traditional forms of diversification (as e.g. the widespread introduction of fruit trees in China). These activities can be grouped together as broadening activities. This broadens the range of productive activities

![Figure 1. Boundary shifts (derived from Ploeg, et al. 2002a).](image)
beyond merely farming (although there might be considerable intertwining and synergy) and enlarges the total farm family income.

On the bottom side we find the process that is often described as re-grounding. Re-grounding involves reconstituting the resource base of the farm – reducing dependence on external resources and increasing the emphasis on internally available resources. Self-provisioning becomes a major feature and can be reinforced by local networking (Altieri 1987, Ploeg 2000, Kinsella et al. 2002, Domínguez García 2007, Paredes 2010). In more general terms re-grounding implies a de-commoditization (Ploeg 2010). It can take many forms: engaging in non-agricultural jobs outside the farm [pluriactivity, transnational migration and/or multiple job holding (Ploeg and Ye 2010)] in order to create savings that allow for investments in the farm (instead of entering in dependency on the banking circuit); adopting low-external input agriculture (that replaces external inputs by internally produced inputs) and different forms of local and regional co-operation. All these re-grounding strategies can result in considerable cost reductions.

Together, deepening, broadening and re-grounding, and the interactions between these three boundary shifts, form the core of current rural development practices. At farm enterprise level, these shifts, and their interactions, increase multifunctionality (Renting et al. 2009).

Rural development processes are the overall outcome of the creation, unfolding, intertwining and mutual strengthening of rural development practices. This outcome is not a matter of simple and straightforward addition. Rather, it involves, highly complex, and often contradictory, micro-macro inter-linkages (Knickel and Renting 2000). Rural development processes are transitional processes: they are multi-level, multi-dimensional and multi-actor and they imply an extended time horizon (Wilson 2007). In the current situation, rural development is far from the only transitional process. In China, Brazil and Europe, there are two other major transitional processes at play. These are the continued, if not accelerated, industrialization of agriculture (which is nearly always combined with further specialization and ongoing scale increases) and, secondly, an ongoing de-activation (including farm closures). Together these transitional processes (rural development, industrialization and de-activation) delineate the arena in which different socio-political interests and projects are fighting for hegemony – sometimes converging, at other times clashing. The relative weight, presence and relevance of each transitional process and the balance between them are critically affected not only by the strategies operated at the grass roots level, but also by the state, social movements and other institutions. Equally they are conditioned and affected by the overall politico-economic context. At present the general economic and financial crisis is having a highly differentiated impact on the three transitional processes and the overall balance between them.

Rural development (RD) policies represent efforts from the state to come to grips with, to stimulate and strengthen and/or to restrain and control individual rural development practices and the overall rural development process. These policies are usually heavily contested, especially when RD policies channel large amounts of financial resources and/or regulate access to promising market opportunities. There are often struggles to link the ‘logo’ of rural development to contrasting and sometimes contradictory projects, interests and prospects.

In the 1970s and 1980s the debates on rural development were strongly framed by the World Bank (Harriss 1982, 15). In the current decade it is the OECD discourse (OECD 2006) that strongly conditions the debate on rural development. Within this
discourse rural development is basically narrowed to the provision of public goods (understood as the positive externalities that result from agricultural production). From this perspective rural development necessarily emerges as a state driven process – as the state is the only possible actor that can finance the production of public goods. Consequently, the view has emerged that there are two types of markets: one for private goods, the other for public goods. In contrast to this view, we argue, firstly, that rural development is definitely not just a state-driven project. The state might play an important role, but in the end it is farmers, peasants, citizens and/or social movements that trigger rural development processes and drive them forward. To understand the role of the state in the wider process of rural development it is necessary to analyze the complex and often contradictory dynamics of the interrelations between the state and the rural population. Secondly, we can say that rural development is not only about the provision of public goods. Indeed, the production of several public goods is, de facto, grounded on private activities that are, directly or indirectly, supported or driven by specific markets: ‘citizens can play an active role in producing public goods and services of consequence to them’ (Ostrom 1996, 1073). Thirdly, we are convinced (and here we differ again from the OECD’s position) that rural development is not located at the margins of farming. It is not primarily about non-agricultural actors, nor about collateral effects (‘externalities’). Nor is it about elderly farmers who are looking to retire from agriculture; or small farmers trying to escape from being swallowed by the logic of modernization. Instead it is about young and often well-educated farmers (wherever they may be located), about farms of all sizes and about new networks that link the rural and the urban. It is also about robust social movements that, especially in the case of Brazil, have been able to change rural society in many respects. In China it is about daring initiatives and protests that have been subsequently translated into new state policies. Fourthly, rural development policies cannot be equated to social welfare policies for the rural poor. Instead, they focus on building the conditions that enable people in vulnerable situations to get access to assets that help them to improve and strengthen their livelihoods. In this sense they contribute to reducing social inequality in general. Finally, we think that the juxtaposition of public and private markets (which is central to the OECD approach) is far too simplistic. We need a far more nuanced perception and understanding of markets – especially when it comes to the analysis of rural development processes.

The specificity of current rural development policies, processes and practices

The current generation of rural development policies, processes and practices sharply differs from earlier ones. Previous editions were mainly limited to developing countries and to supporting agricultural modernization. Such policies were referred to as promoting ‘integrated rural development’ and focused on creating the conditions (for example, by providing credit, seeds and infrastructure) under which farmers could increase production and the surpluses be effectively delivered to the urban economy (Wilkinson 1986, Ellis and Biggs 2001). The aim was – as the title of a well-known textbook of the time said – to ‘get agriculture moving’.

Current rural development policies are distinctively different. They have emerged in countries that are characterized by abundantly productive and rapidly growing agricultural sectors. They do not only aim to strengthen agricultural growth. Instead they aim at redefining the role of agriculture in society. This is generally accompanied
by more or less explicit choices for particular forms of agricultural development (as reflected in e.g. the European Agricultural Model and the Chinese policy goal of constructing a ‘New Socialist Countryside’). Preference is given to those forms of agricultural development that embrace and support a wide array of societal goals that range from the maintenance of beautiful landscapes and biodiversity to increasing employment opportunities in rural areas.

The objectives of rural development policies

Rural development policies have very different backgrounds, which often reflect contrasting objectives, dynamics and impacts. Nonetheless, comparative research shows that there are some important commonalities underlying these different objectives. Rural development might have a strong focus on safeguarding the positive externalities that were once almost automatically associated with agriculture but which are now often under great pressure. This set of objectives features prominently in European RD policies (and associated practices). They include the maintenance of attractive landscapes, the protection of biodiversity, the improvement of access to the countryside, environmental quality (especially of natural resources) and animal welfare, an increase in food quality and a general increase in the quality of life in rural areas (Oostindie et al. 2010). While such goals also inform RD policy and processes in China and Brazil (particularly in terms of the improvement of village life and increasing the supply of agro-ecological food), they are especially important in Europe. The need for such ‘remedial’ policies reflects a very real concern: that the logic of the main agricultural and food markets often runs counter to the continued maintenance of such positive externalities.

In Brazil the gravitational centre of RD policies lies in the long lasting struggle against poverty and inequalities (Navarro 2001, Kageyama 2008, Schneider et al. 2010). Although similar features can be found in China and the European Union\(^1\), these objectives are especially important in Brazil, where poverty is widespread and where there are extreme contrasts and tensions between large-scale export-oriented farming and family farming. The nature of these objectives in Brazilian RD policies and practices reflects the long-standing engagement of social movements in these struggles and their influence in shaping RD policy. Their centrality also is an implicit recognition that, left uncorrected, the major agricultural and food markets (soybeans, meat, bio-energy) do little to reduce poverty and inequality and tend to strengthen and reinforce them (Schneider 2007).

RD in China aims to defend and to develop peasant farming (Ye 2006, Ye et al. 2010). China’s RD policy aims to sustain and strengthen a very large and heterogeneous agricultural sector that is embedded in a market context that is increasingly threatening the continuity of farming. Urban labour markets are attracting millions from the rural areas and could, ultimately, very well drain the rural economy and provoke a demise of farming (as has occurred in many other developing countries). China’s accession to the WTO could imply a similar danger: Chinese agriculture could be undermined by imports of cheap commodities from elsewhere. The government seems keen to avoid this: at the end of 2005, the Fifth Plenary Session of the 16th Congress of the Communist Party of China officially set the goal of building

\(^1\)In the Salzburg Conference (the Second European Conference on Rural Development) the issue of poverty alleviation received considerable attention. See Bryden (2003).
a ‘new socialist countryside’ in which agriculture will provide the food needed by the
Chinese population, whilst simultaneously contributing to the welfare of the peasantry
and the quality of life in the countryside (Ahlers and Schubert 2009). Equally
important in policy planning is the notion of ‘harmony’: of developing harmonious
relations between town and countryside and between agriculture and industry. This
implies correcting the frictions and inequalities both within and between these
sectors.

A common feature, then, of RD policies and practices is that they are emerging
as responses to the difficulties caused by the functioning of the main agricultural and
food markets (i.e. they are responses to what economists refer to as major ‘market
failures’). It is evident that the main agricultural and food markets have a tendency
to destroy positive externalities, are unable to address poverty and major inequalities
and/or are not capable of reproducing farming as an activity that provides employ-
ment opportunities and reasonable incomes to large parts of the population. As such
RD is emerging as a way of correcting the frictions between the economy, on the one
hand, and society and ecology, on the other. RD policies seek to go beyond, or to
correct, the logic of the main agricultural and food markets.

Another commonly shared feature regards the ‘fluidity’ of RD objectives. RD
policy objectives seem to be, at first sight, somewhat slippery. RD processes and
policies usually start out with relatively focused objectives, but these often shift or
seek ways of moving between, and incorporating, new and broader goals. For
example in Europe the goal of maintaining positive externalities is increasingly being
translated into policies and processes that seek to maintain, if not strengthen, the
family farming sector. This is also helping to counteract rising poverty in some
specific (‘less-favoured’) areas. In Brazil the struggle against poverty and inequality
has led to attempts to strengthen sustainable forms of family farming that produce
not only for the domestic food market but which also contribute significantly to
exports (for example chicken meat, pork, fresh fruit, milk and, even, grain). The
strengthening of sustainable family farming translates, in turn, into considerable
benefits in terms of reduced deforestation, avoiding further global warming and
sustaining food security. In China the actively constructed defence of family farming
is beginning to translate into phenomena such as agro-tourism, which provides new
income and employment opportunities and incentives to maintain and enhance
environmental attributes. At the global level the increasingly comprehensive
character of RD objectives is clearly reflected in the recent ‘New Delhi Declaration’
(2010) signed by Brazil, China, India and South Africa.

This fluidity of objectives does not imply, of course, that RD processes and
policies are fragile phenomena. Admittedly, there are many problems to be
addressed and large gaps between rhetoric and practice. The essential point, though,
is that the objectives (especially the implicit ones) of RD policies and practices are
increasingly expanding to embrace larger domains related to agriculture, food
production and the countryside. They are becoming many-sided and multi-level
responses to market-failures.

The modus operandi of rural development processes: the creation of new
nested markets
The current generation of rural development policies has emerged at a particular
conjunctur in time. It is a time when it has become increasingly clear that the
uncorrected (‘undisturbed’ as economists say) performance of agricultural, food and factor markets tends to result in a wide, though variable, range of consequences that many societies are unwilling to accept. Yet at the same time, it is equally clear that the processes of globalization and liberalization that are driving these changes exclude interventions in these markets and make such interventions materially impossible.

This basic contradiction, which can be noted in different specific forms in the European Union, China and Brazil, explains the more or less simultaneous emergence of rural development processes and policies in these territories. It also explains the particular modus operandi of both RD policies and practices: they basically try to redefine and to reorient the development of the countryside (agriculture being understood as part of it) through the development of new markets. Analytically speaking this comes down to a mix of the following elements: (a) demonopolization of existing markets, (b) the construction of new connections between existing markets, (c) the creation of new markets, (d) the development of new governance structures for both existing and new markets. In Brazil and the EU there is less emphasis on interventions in existing markets, largely due to the dominance of neo-liberal frameworks and associated international agreements. It should be noted that the creation of new connections between already existing market circuits has historically been associated with the creation of new wealth and the acceleration of development (Barth 1967, Long 1977). The same applies to the creation of new markets.

The emergence of new markets is not an outcome of voluntarism. It is made possible by the development of the main markets for agricultural commodities, which are increasingly governed by large food empires (Ploeg 2008). The increasing gap between the prices received by agrarian producers and the prices paid by consumers materially creates the space to do so. This space literally allows for the construction of ‘by-passes’. The concrete possibilities to counter distance with proximity, artifice with freshness, anonymity with identity and genuineness, standardization with diversity and inequality with fairness, offer the levers to do so – especially because such oppositional notions may be extended from the symbolic dimension into the material one. And the decreasing, and often sharply fluctuating, prices received by primary producers, the shortage of outlets and the demanding prescriptions (delivery schedules etc.) create a material need to engage in the search for new and more remunerating outlets, i.e. the construction of new markets.

It is important to note that these newly emerging markets have several specific, and relatively new, features. Firstly they are embedded (or ‘nested’) in normative frameworks (and associated forms of governance) which are rooted in the social movements, institutional frameworks and/or policy programmes out of which they emerge. In other words they are not anonymous markets. Rather, they are markets with a particular focus (sometimes underpinned by a specific brand, or a specific quality definition, or by relations of solidarity, or specific policy objectives, etc). Secondly, these markets are often related to, if not grounded upon, local and regional resources and the regional market mostly is an important, though far from exclusive, outlet. This is reflected in the particular infrastructure of these markets. Thirdly, the newly created markets are often supported by state agencies (albeit in highly different ways) and involve the redistribution of resources in order to achieve specific objectives. Finally, multifunctionality (at both the enterprise and regional levels) frequently emerges as important feature. That is to say, the different markets
are interlinked through the multifunctional nature of the participating rural enterprises, but they may also interlink at the territorial level.

We refer to such markets as **newly emerging, nested markets**. They are nested in the main markets in so far as they are a specific segment of these wider markets and are susceptible to the same influences. At the same time these segments are distinguishable in that they show one or more of the following features:

- a clear price differential (ISMEA 2007, Arfini et al. 2010);
- a different distribution of value added, resulting in a higher price for farmers (Roep 2002, Ploeg and Renting 2004);
- a different infrastructure (Watts et al. 2005);
- a different location of transactions in time and space (Brunori et al. 2009);
- a different governance pattern (Roep and Wiskerke 2008, Damiani 2010).  

The adjective ‘nested’ might provoke misunderstandings. In a way all markets are nested or embedded – just as all markets are governed in one way or another by a particular set of institutions (Sonnino and Marsden 2006a). The main food markets are materially embedded in patterns that are increasingly dominated by different food empires: capital groups that control the connections between the production, processing, distribution and consumption of food and which, by doing so, are able to shape and reshape the domains of production and consumption. At the same time the main food markets are symbolically embedded in normative frameworks that are sustained by huge investments in advertising and lobbying to legitimate their position and the standards of quality, safety and sustainability to which they adhere.

The point, though, is that this material and symbolic embedding is denied as much as it exists. The vested interests depict the food market as being governed by the hallowed invisible hand. The ‘market’ provides them with a powerful metaphor here, allowing them to represent (and also legitimize) the food supply chain as basically driven by consumer demand and the overall structure of the food industry as an expression of consumer preferences.

The nested markets that emerge out of rural development processes are also embedded, but they are embedded in patterns that are distinctively different from those of the main markets (Winter 2003, Watts et al. 2005, Sonnino 2006). While mainstream markets tend to obfuscate the structures in which they are embedded, the newly emerging nested markets are grounded on the explicit recognition of their embedding. Being nested (in e.g. social definitions of food quality that are commonly shared by producers and consumers) is their *raison d’être* as much as it is their strength. This is partly due to the fact that many new nested markets have emerged as actively constructed responses to the control that food empires exert over the main markets (Arfini et al. 2010).

In introducing and elaborating the many-sided differences between the main markets and new, nested markets we build on the work of Shanin (1973) who noted that ‘the term market may mean two different things’. On the one hand the market is ‘the place where people meet off-and-on at predefined times to exchange goods by bargaining’ (p. 73). These *market places* were, and are, loosely (and sometimes strongly) embedded in villages, rural communities and cities. Together they form an

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2'Market governance is the institutional capacity to control and strengthen markets and to construct new markets’ (Vihinen and Kröger 2008, 129).
archipelago of dispersed but interconnected markets that are sometimes hierarchically ordered through middlemen and large traders. On the other hand, there are market relations, i.e. the ‘institutionalized system of organising the economy by a more or less free interplay of supply, demand and prices of goods’ (p. 74). Shanin observed that ‘these two [market places and market relations] represent not just two distinctive concepts but also two social realities which more or less contradict each other’ (p. 74, italics added).

Here we follow Shanin by focusing on the newly emerging nested markets as specific places where specific transactions take place between specific suppliers and specific consumers. These producers and consumers are linked through specific networks and commonly shared frames of reference. The social relations between the actors and the adopted governance structures are not merely of economic value (see Furubotn and Richter 2005); nested markets often emerge out of (as much as they are an expression of) a critique on the relations that dominate the general food markets. All this implies that the transactions that take place in these nested markets are embedded in specific, albeit many-sided, frameworks. They also offer specific advantages to the participating groups of producers and consumers; providing a level of reciprocity. Together the specificities of place, product and network compose (especially when knit together into a coherent whole) a nested market.

During the last decade an extensive body of literature about alternative food circuits and food ethics has been developed. This partly reflects the growth of new, nested, markets. However, the same literature, some exceptions apart, shows specific shortcomings. Firstly, it is very much about morality and voluntarism. As argued by Goodman et al. (2010, 1783), ‘morality is a key and growing currency in the provisioning of food in much of the post-industrial North’. Secondly, it is basically about the morality of consumers (or more precisely: a specific category of consumers), whilst the worlds of the agricultural producers and their struggles are mostly neglected. This applies, in the third place, also to the patterns that interlink production and consumption; that is, the ‘powerful processors and retailers [that are] the modern gatekeepers of access to the consuming public’ (Lang 2010, 1815). Fourthly, as a consequence of the previous points, the analytical focus is very much on the characteristics of the products (see e.g. Korthals 2004): the characteristics figure, in the analysis, as intrinsic to these products. As a consequence, the analysis tends to result in dichotomies: ethnically ‘good’ versus ‘bad’ products which I turn translates into ‘niche markets’ versus ‘bulk markets’. Finally, the analysis is nearly exclusively focussed on the rich parts of the north and west of the globe (assumed to be the parts that can afford to adopt ethical positions towards food).

We think that a more critical approach might very well go beyond these weaknesses and pitfalls. It is especially important that the right kind of questions are asked; questions that critically probe into the processes of production and circulation and the social relations in which they are embedded. Following Bernstein

\[ ^3 \] Guthman (2003, 45) argues that this type of analysis lacks a class and gender perspective.

\[ ^4 \] Rooij et al. (2010) show that ethical considerations play an equally important role among producers.

\[ ^5 \] There is now also a considerable literature on short food chains and special products in developing countries. See e.g. Toledo (2000), Halweil (2002), Bonnal et al. (2003), Pelegrini and Gazolla (2008) and Vandecandelaere et al. (2009). Bowen’s account (2010) of tequila in Mexico provides critical insights although the same subject has been analyzed in completely contrasting terms by Gerritsen and Martinez-Rivera (2010).
we have tried to schematically illustrate this in Table 1. Of course real life situations are far fuzzier than suggested in this table. Nonetheless, the four leading questions that aim to explore the politico-economic organization of markets (and the associated contrasts) do, we think, prove to be a powerful analytical tool.

Taken together, the globalization of food markets and the construction of new nested markets provide yet another expression of what Polanyi (1957, 132) defined as ‘double movement’:

‘the action of two organizing principles in society, each of them setting itself specific institutional aims, having the support of definite social forces and using its own distinctive methods. The one was the principle of economic liberalism, aiming at the establishment of a self-regulating market, relying on the support of the trading classes and using largely laissez-faire and free trade as its methods; the other was the principle of social protection aiming at the conservation of man and nature as well as productive organization, relying on the varying support of those immediately affected by the deleterious action of the market […] and using protective legislation, restrictive associations, and other instruments of intervention as its methods’.

The outcomes of rural development processes

Although it is difficult to assess the exact reach and impact of RD processes, partly because data are sparse and object of intense dispute, it is increasingly becoming evident that RD processes are materially changing the contours, dynamics and nature of both agriculture and the interrelations in which it is embedded. This applies as much to the European Union as to China and Brazil.

In the beginning of the first decade of the twenty-first century it was estimated that in seven of the major EU countries (Ireland, United Kingdom, the Netherlands, Germany, France, Spain and Italy, which together accounted for 76% of all farm enterprises of the European Union at that time) some 50% of all professional

Table 1. A schematic comparison of the general agricultural and food markets and the newly emerging markets.

<table>
<thead>
<tr>
<th>General agricultural and food markets</th>
<th>Newly emerging markets</th>
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<tbody>
<tr>
<td>Who owns what?</td>
<td>Short circuits that interlink the production and consumption of food. These short circuits are owned or co-owned by farmers</td>
</tr>
<tr>
<td>Who does what?</td>
<td>The role of farmers is extended to embrace on-farm processing, direct selling and the redesign of production processes that better meet consumers’ expectations</td>
</tr>
<tr>
<td>Who gets what?</td>
<td>Farmers get a higher share of the total value added</td>
</tr>
<tr>
<td>What is done with the surpluses?</td>
<td>Accumulated wealth is used to finance the ongoing imperial conquest (take-over of other enterprises, etc)</td>
</tr>
<tr>
<td></td>
<td>Extra income is used to increase the resilience of food production, to strengthen multifunctional farming and to improve livelihoods</td>
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farmers were actively involved in deepening and broadening activities (Oostindie et al. 2002, 218). Together these activities, which all imply involvement in nested markets, generated an additional net value added of a little over 10 billion Euros per year (Ploeg et al. 2002, 188-91).

Many of these farmers were also engaged in non-agrarian wage earning (pluriactivity). This provided the involved farm families with an additional income of 24 billion Euros per year. Finally, the distantiation of farming from the main ‘upstream’ markets (i.e. the markets for credit, inputs and capital goods) contributed another eight billion Euros per year.

Table 2 summarizes these data and compares them to the net value added that was generated through engagement in the production of agricultural commodities (that are channelled through the main markets). It shows that the additional net value added generated through newly emerging markets, engagement in non-agricultural labour markets and partial distantiation from main upstream markets totals 42 billion Euros per year.

French research allows us to locate this data in a trend analysis. This research focuses on ‘activity systems’. This notion is based on the view that the majority of French farm households do not conform to the canonical model of the specialized farm household that emerged in the 1960s, i.e. a household linked with a full time farm which provides its sole source of income. Instead, most farm households operate at the interface of different markets: they combine different activities. The analysis of time series (that run from the late 1970s to 2000) shows that full time farms where the household had no ‘other gainful activities’ (OGA) and no pension, decreased from 31.4% of the total number of farms in 1979 to 20.8% in 2000. On the other hand, the share of farms with households benefiting from other gainful activities (this is the same as row 2 and 3 of table 2 grouped together) grew from 39.1% in 1979, to 41.1% in 1989 and to 49.0% in 2000. Most of this increase occurred on full time farms not in receipt of pensions. Today full time farms in France with OGA outnumber those without OGA. The former occupy 34.8% of the total agricultural area, the latter 31.6% (Laurent and Remy 1998, Laurent 2005, Ploeg et al 2009). This implies that the impact of non-traditional activities (OGA or RD activities) is considerable and growing. This is also the case in Brazil (Graziano da Silva and Del Grossi 2001, França et al. 2009 and Schneider 2010) and China (Zhang et al. 2001, Lin et al. 2004). To put it differently: without RD activities many farms would not be economically viable and total employment and income levels in the countryside would be far lower. That is: many farms are sustained and reproduced precisely because they are involved in rural development activities.

In the overall panorama synthesized in Table 2, the engagement in newly emerging, nested markets is significant although still tiny. It is significant in as far as it equals 156% of the total net value added of Dutch agriculture – which is considered to be an agricultural giant. It even three times as much as the total

<table>
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<th>Table 2. Flows of net value added that contribute to the overall agrarian income (2000).</th>
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<td>Engagement in classical production of agricultural commodities</td>
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<tr>
<td>Engagement in newly emerging, nested markets</td>
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<tr>
<td>Engagement in non-agricultural labour markets</td>
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<td>Partial distantiation from main upstream markets</td>
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agrarian income of the Netherlands. It is also significant (and substantial) when translated to the level of the farms involved. It is tiny, however, when related to the value added generated through the main commodity markets. It is also tiny in as far as it is less than the contribution obtained through engagement in non-agricultural labour markets.

However, there are several reasons to assume that the contribution resulting from the engagement in newly emerging, nested markets has grown considerably, both in absolute and in relative terms, since 2000. In Europe the most important of these new, nested markets are the ones for (1) high quality products, (2) organic products, (3) regional specialties, (4) direct selling, (5) agro-tourism services, (6) care facilities, (7) decentralized energy production, (8) maintenance of landscape and nature, and (9) traditional diversification activities.

The Italian market for high quality food products contained, at the beginning of the current decade, 133 officially recognized products. By 2007 this had risen to 174. The total supply represents, after processing, but before distribution, a total value of 5.7 billion Euros/year (Arfini et al. 2010). Alongside this there is an important market for high quality wines (see ISMEA 2007) and a wide range of mainly local markets for Slow Food products (estimated to be currently around 1,000). Other European countries have also shown a growth in high quality products – although from a lower starting point than Italy. Throughout Europe, organic products continue to be a quickly expanding sub-sector: in 2005 total sales of organic foods in Europe reached 14.2 billion Euros (Richter and Padel 2007). But probably even more important than the quantitative growth, is the growing recognition that ‘the specificity (of high quality and organic products) is seen as the main instrument to respond to the negative effects of globalization’ (Arfini et al. 2010, 11).

Another, more or less continuously expanding sector, is represented by agro-tourism. According to data provided by INEA, over 1.7 million people chose a holiday at an Italian agro-tourism enterprise in 2007, which nearly tripled the number of customers that used agro-tourism facilities in 2000. In 2006, there were 16,765 authorized agro-tourism enterprises in Italy, a considerable increase on the 6,816 establishments that existed in 2000 (INEA 2009).

Similar data can be found for other nested markets: although these data are often highly scattered, they undoubtedly show ongoing growth which is in strong contrast with the overall tendency in the main commodity markets. In short: rural development practices are expanding considerably throughout Europe (albeit in an uneven way). This occurs mainly through the construction of, and engagement in, new nested markets, which are growing both in absolute and relative terms (Roest and Schoorlemmer, 2010).

When applying the same analytical framework to China we need to refer, in the first place, to the main markets for agricultural commodities. These have been evolving from the beginning of the 1980s onwards and are increasingly embedded in rural development policies (see Ye et al. 2010 for a comprehensive description) that

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6To varying degrees organic (and other high quality) products, etc. are commercialized through big retail chains and traditional shops, another part is commercialized through direct selling. This may take different forms: on-farm shops, farmers’ markets, delivery systems, box systems, acquisition groups, etc. We consider these forms as a specific market that has a specific structure (e.g. short distances between producers and consumers) and which renders specific advantages to both producers and consumers.
aim for ‘san nong’. San nong implies simultaneous and well-coordinated contributions to (1) food security at the level of Chinese society as a whole, (2) the income levels of the peasantry, and (3) an attractive and vibrant countryside. Hence, the main agrarian markets are governed by schemes (including subsidies) that stimulate production (especially of grains), support more sustainable forms of farming and which explicitly aim to reduce poverty and improve living conditions. These RD policies have been accompanied by an overall elimination of taxes on agricultural production and the introduction of new insurance schemes for the peasant population.

Secondly, there is the massive involvement of the Chinese peasantry in the industrial labour force. Such involvement is not part of one way flow (that goes from the countryside towards the cities); it rather represents a circular process that has differential spatial and temporal patterns. Young people often migrate for several, if not many, years (periodically returning for the Spring Festival) to faraway places. When they definitely return, they might partly engage in farming, whilst also being in one of the local or regional industries or completely dedicate themselves to farming (see Ploeg and Ye 2010, for an extensive description of these circular patterns and the associated phenomenon of multiple job holding). These patterns imply an ongoing flow of remittances and savings towards the countryside – which are partly used as a component of rural incomes and partly for investments in agriculture. Alongside these material flows there is also an ongoing flow of new insights, experiences and artefacts that enriches the countryside. Overall, these circular patterns greatly resemble the European phenomenon of pluriactivity (or engagement in non-agricultural labour markets) discussed above.

Thirdly, China is also witnessing an emergence of nested markets. Ye, Rao and Wu (2010) identify the following ones:

- the market for organic produce (that currently includes more than 500 different products many of which are exported; in 2006 the export value reached 320 million Euros whilst domestic sales totalled 400 million Euros);
- the Green Food market that channels certified food within China (total market sales currently equal 19 billion Euros/year);
- the market for eco-agriculture that strongly builds on ancient agricultural traditions;
- the markets associated with ‘One Village, One Product’ (these markets centre mostly on typical regional or local products, as e.g. high quality tofu or handpicked organic apples; local processing and local restaurants often are important cornerstones of these markets);
- the markets for agro-tourism (there are different types of agro-tourism in China; together they attracted 335 million tourists in 2007 and generate an income of some five billion Euros/year).

In their analysis Ye, Rao and Wu refer to some common characteristics of these new, nested markets. Firstly, these new markets have been developed in a step-by-step way. They start as experiments, often triggered by peasants, and end up being

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7‘San nong’ refers to the three basic aspects of rural development. These are agriculture (nong ye), countryside (nong cun) and peasants (nong min). San means three and nong means agro.

8Also in order to expand the internal market (see Kay 2009, for a general discussion of the role of the internal market in development processes).
integrated into policy frameworks. Eco-agriculture and organic products have been strongly promoted by the Chinese government as part of the drive for sustainable agricultural development. Eco-agriculture was explored and demonstrated through experimentation at the county level. As it was initially difficult to meet internationally accepted standards for organic products, the government issued standards and certification systems for ‘Green Food’. While these are less strict than the international standards for organic produce, they allowed the development of near-organic production and markets while increasing peasants’ incomes. In short, the new markets emerged out of multi-layered and complex processes of experimentation, learning, adjustment and, then, institutionalization. Secondly, once established these products (and the associated markets) clearly function as ‘protective dikes’ vis-à-vis cheap imports. The development of agro-tourism and ‘One Village, One Product’ are both based on local advantages: they draw on local cultural and agricultural resources. Thirdly, the required additional resources are allocated through government support. This is an important difference with Europe. Finally, time and again, multi-functionality is central to these new markets. In synthesis: these new markets are nested in a framework in which local resources, step-by-step development, culturally determined needs and expectations, additional assistance from the state and multifunctionality all play a strategic role.

China’s overall record in terms of poverty alleviation, sustained agricultural growth and quality of life in the countryside is impressive (Gulati and Fan 2007) – it represents a considerable contrast with neighbouring India (Ravallion 2009) and with Africa (Li et al. 2008). And although it is very difficult to attribute parts of the overall outcomes to specific causes and their interactions, it is clear that RD policies and the creation of several new, nested markets have considerably contributed to the overall outcome.

In contrast to the EU, where rural development is basically driven by the relentless activities of farmers who are trying to find new ways forward and to China where it is, above all, the state that spurs RD (although it often builds on initiatives or protests from the side of the peasantry; see Ye 2002, Long and Liu 2009 and Thorgersen 2009) – RD processes in Brazil have, primarily, been driven forward by rural movements (Wolford 2003 and 2010, Deere and Medeiros 2007, Schneider and Niederle 2010). Here the logics of the main, often global, markets for agricultural commodities (soy being a telling pars pro toto) and the associated markets for land, labour and capital, have for a long time been exerting strong downward pressure on rural employment (and also indirectly contributing to the misery in the favelas), marginalizing family farming and driving rapid deforestation. These pressures have led, to the development of strong social movements that among others things, claim access to land (Movimento dos Sem Terra), aim to strengthen family farming (through CONTAG, the National Confederation of Farm Workers and FETRAF, the National Federation of Family Farmers, all of which are strongly supported by the Catholic Church) and/or aim to defend ecology and sustainability (e.g. the AS-PTA peasants’ union (Houtzager and Kurtz 2000, Martins 2002, Hall 2008)). During the last 15 years the pressures exerted by these groups have shaped the emergence of policies for rural

\[9\] Through partly compulsory migration processes more than 30 million people moved from the countryside towards the favelas in the 1970-1990 period. This is in stark contrast with the patterns of circularity that characterize China.
development (see Schneider et al. 2010). Major aspects of RD policy in Brazil include land reform (which is seen as a way of removing monopolies in the land market), the introduction of agro-ecology (which provides new connections between farming and input markets, as is the case with low external input farming in Europe) and massive food programmes to alleviate both urban and rural poverty. Whilst these food programmes (all part of the Zero Hunger campaign) could easily be supplied through big retail chains and/or imports, in Brazil they are increasingly being structured in a way that creates new markets for peasants and family farmers. The Government Food Procurement Programme (PAA- Programa de Aquisição de Alimentos) and the National School Meal Programme (PNAE) are the best examples here of the active construction of new, nested markets – showing how goal-oriented co-operation between rural movements, farmers and state apparatuses can produce considerable synergy. The PNAE specifies that at least 30% of the food distributed in schools, hospitals, charity institutions, etc., is acquired locally from peasants and family farmers that are registered with the National Supply Company (CONAB) (Schneider and Triches 2010, Guareschi 2010). To avoid distortions and privileges that benefit only small groups, there is a threshold value for each supplier (4,500 Reais which equals more or less 2,600 US$ if the sales are directed to CONAB or 9,000 Reais if the sales are for school meals within the local area itself). To reduce transaction costs, PAA only buys food from associations of farmers. In 2009 PAA had a budget of 340 million US$. In 2010 this was doubled. Compared to the total trade in agricultural and food products this might (again) appear as a tiny contribution. However, the PAA has created a nested market that sustains school meals (an essential element in the fight against hunger), whilst simultaneously constructing a market outlet for more than 300,000 poor and small-scale farmers. Sometimes it is the details that are important.

As in Europe and in China, the rural development process in Brazil has triggered and strengthened some important trends that contrast strongly with the tendencies rooted in the main agricultural and food markets. Notably, there has been a strong increase in the rural population that is economically active in agriculture. A comparison of the data of the Agricultural Census of 2006 with those of the 1996 Census, shows that the total number of farms has risen from 4.1 to 4.6 million (MDA 2009). This increase\(^\text{10}\) represents a major rupture vis-à-vis the overall decline that is observed in other developing countries – it is also a major rupture as compared to the previous trends in Brazil. This rupture illustrates that rural development has the capacity to counterbalance significantly the logic of the big commodity markets. And although it is again impossible to relate, in a mathematical way, the overall changes to specific causes, it is evident that the combination (and mutual strengthening) of (1) the demonopolization (especially of the markets for land, credit and technical assistance), (2) the construction of new markets (through the PAA mechanism and the widespread dissemination of deepening and broadening activities, especially in the south of the country), and (3) the distantiation of farming from the main ‘upstream markets’ (as driven by the agro-ecological movement) have contributed enormously to the remarkable change in the trend of the numbers of

\(^{10}\)This increase is possibly an underestimation. França et al. (2009, 9-10) indicate that the number of family farmers was overestimated in 1996 (due to conceptual flaws) and underestimated in 2006.
family farms (Nunes 2009, Schneider and Niederle 2010). Associated with this turn there has been a considerable democratization of property (Abramovay and Morello 2010, Delgado 2010), an important increase in total agricultural production\(^{11}\), a consolidation of food security\(^{12}\) and an increase in rural employment\(^{13}\) that has had positive knock-on effects on wage levels in the urban labour market (Norder 2004, Helfand and Del Grossi 2009).

**Long-established nested markets**

Nested markets are not a new phenomenon. Throughout history there have been nested markets – just as there are many current examples (in e.g. housing)\(^{14}\). What is new is the interest that is now given to such nested markets, which provide an increasingly important contrast to global markets, which are mostly governed by large industrial and/or commercial empires. Within this context, nested markets make a difference – they show that markets can be run in a different way than anonymous global markets. Nested markets are also remarkable in that they are often able to resist being taken over by large capital groups. And they are especially remarkable since their construction is often a response to the negative social and ecological effects created by global markets. We will discuss here one of these long-established nested markets, in order to calibrate our analysis of the newly emerging ones.

**Chianina** meat is a well-documented example of a longstanding nested market. **Chianina** cattle were once mainly used for traction in central Italy. Since the 1950s production has been re-oriented to the provision of meat. Due to its organoleptic characteristics and the low levels of intramuscular fat it is considered a high quality product. Raising **Chianina** cattle requires specific resources and well-developed skills and the preparation and consumption of **Chianina** meat is strongly intertwined with regional culinary traditions. The production and consumption of **Chianina** meat are mainly concentrated in the Italian regions of **Toscane** and **Umbria**\(^{15}\), although consumption extends beyond this zone, especially through restaurants and specialized butcheries. Hielke van der Meulen (2000) made a detailed and convincing baseline study of the **Chianina** market; based on three surveys among farmers, butchers and consumers. Specificity, connectedness and rootedness are keywords in this study

\(^{11}\) The average Gross Value of Production per hectare of the family farming sector is 677 Reais, whilst the GVP/ha of the entrepreneurial and capitalist sector is, on average, only 358 Reais. Family farming produces 38% of total agricultural GVP on only 24% of the land (MDA 2009). Hence, the increase of family farming translates into an overall agricultural growth (Grossi and Azevedo 2009). França et al. (2009, 28) indicate that between 1996 and 2006 the total GVP of the family farming sector grew 61%, whilst the GVP of corporate and entrepreneurial farming only grew by 47%.

\(^{12}\) The most important staple food products are primarily provided by the family farm sector which supplies 87% of the country’s cassava needs; 70% of beans; 46% of millet; 58% of milk; 50% of chicken; and 59% of pork (MDA 2009).

\(^{13}\) Family farming generates 12.3 million jobs (FTE); corporate and entrepreneurial agriculture just 4.2 million. On a hectare based comparison, 100 ha of family farms provide employment for 15.3 persons, compared to 1.7 on entrepreneurial and corporate farms.

\(^{14}\) Emergent Urbanism (2008), Costanigro et al. (2009), Gracia Pozo (2009).

\(^{15}\) This is a general feature: nested food markets strongly, though far from exclusively, coincide with the area of production. This is even the case with Parmesan cheese, a product that is marketed worldwide: “most Parmigiano-Reggiano cheese is consumed within the production area itself” (Roest 2000, 107).
(further work on the production and marketing of Chianina meat can be found in Ventura and Meulen 1994 and Ventura 2001). We will look at these attributes in more detail.

**Specificity**

Van der Meulen shows that Chianina production represents a specific style of farming. It is a style built upon a specific cultural repertoire, specifically shaped resources and skills and specific market relations. Together these elements constitute a process of production that is clearly different from the patterns that dominate the styles of other meat producers. On the whole Chianina farms maintain a closed-cycle (all fattened animals are born and bred on the farms themselves) and are relatively small-scale (in the 1990s they mostly kept 10 to 30 breeding cows). Self-provisioning of feed and fodder is central and the animal’s growth rhythm is slow (hormones, beta-blockers, clenbuterol and the like cannot be used). Farms that breed Chianina are mostly mixed farms. Similar traits apply to the butchers. Their specificity resides in the accent given to authenticity, quality (partly associated with reducing stress during slaughtering) and to the long hanging period of the meat (regionally known as frollatura). And finally the consumers of Chianina meat are more often elderly, rural and knowledgeable. Van der Meulen refers to these consumers as intenditori (the equivalent of connoisseurs in the French language).

The market segment in which Chianina meat circulates represents specificity. Van der Meulen gives a synthetic overview of price trends between 1980 and 1996, comparing those for Chianina beef with the general beef market (which in Italy is governed by the Modena Annotation). The price of Chianina meat is related to, but at the same time remarkably different from, the main market price. In this period, Chianina producers were paid a price that, on average, was around 10% higher than conventional producers received (p. 4). The historic trends also reveal that during periods when the main market suffered from major food scares (e.g. during the hormone scandals of the 1980s) the price differential tended to increase considerably. This shows that quality is a social definition that is shared by producers, butchers and consumers and solidly grounded upon knowledge about how production is organized. On the whole, the fluctuations in the general meat market are far more accentuated than in the Chianina market: in the latter the direct relations between butchers and producers tend to dampen any sudden price decreases that occur in the general market. Van der Meulen (p. 218) refers, in this context, to the ‘relative autonomy’ of the Chianina market vis-à-vis the main market. Equally remarkable is the stability of relationships in this nested market. Whilst in other circuits butchers and/or traders relatively quickly change from one provider to another (for instance when the latter are unable to deliver the required meat at a specific moment), the Chianina market shows an unusual combination of stability and flexibility. Most animals are traded through stable relations in which trust predominates, and when there are misbalances between supply and demand, temporary relationships are created. The consequent construction of ‘diagonal relations’ (Meulen 2000, 198) helps to strengthen the exchange of information and to sustain high quality levels. Overall the transaction costs are low, largely because transactions are nested in local social relations – another major difference with the main meat market.
Together these features make an important difference for the farmers involved. Their income levels are far higher than those of larger feedlots (18 *Chianinas* can generate the same income as a conventional lot with 300 fattening bulls), reasonable and, above all, far more stable. In bad years a fattened *Chianina* bull rendered a Net Value Added (NVA) of some +260 Euros. In good years this rose to +570 Euros. In industrialized feedlots these figures ranged from -57 to +51 Euros/animal. This same pattern repeats itself at the level of the farm enterprise as a whole: on the average *Chianina* producing farm the NVA/farm/year ranged from some 3,900 Euros (in bad years) to 8,600 Euros in good years (data from the 1990s). In the average feedlot (fattening 300 *Charolais* bulls) this ranged from –22,600 Euros to +10,600 Euros.

Over longer periods (that is, taking good and bad years together) income levels might be equal – however the breeding of *Chianinas* for the nested market provides far more security and stability. These differences also translate to the level of the regional economy as a whole. If the regional meat deficit (i.e. the amount of meat imported into the region of Umbria) would be filled by *Chianina* farms this would render an additional 4.4 million Euros (1994 prices) to the regional Net Value Added. If this deficit were filled by conventional feedlots it would render just 0.59 million Euro (p. 231). At the level of the regional economy this is far from negligible – it shows how nested markets and associated production systems can contribute significantly to the enlargement of social wealth, whereas anonymous markets and the farming styles tuned to them often contribute to a reduction of it. An associated difference that is currently becoming strategic regards the efficiency of energy-use.

The closed-cycle *Chianina* breeding uses less energy (measured in Kcal) than the open-cycle feedlots that produce for the anonymous market (8,817 Kcal per kg. meat versus 10,086 Kcal). This difference in total energy use is partly based on non-renewable energy: 54% in the *Chianina* case as compared to 63% in the feedlot system. Finally, the overall efficiency of energy-use is higher in the *Chianina* case than in the feed-lot type of breeding (Ventura 1995, 225-31).

At present, the price differential of *Chianana* meat vis-à-vis ‘anonymous’ meat is some 25% (for slaughtered weight). This increase (from the initial 10% to the current 25%) is partially due to the BSE drama. This dramatic event further valorized *Chianina* meat (as no industrial concentrates containing bone meal are used). This shows that nested markets for high quality produce are not simply a remnant of the past; they are also shaped and reshaped by modernity – negatively as well as positively. Since the BSE drama, the increased price differential has been sustained through an enlarged consumer base, a renewed focus on distinctive quality and, is increasingly protected through certification.

**Connectedness**

Alongside the specificity of *Chianina* producers, butchers and consumers the connections between them are equally important. Producers, butchers and consumers are tied together through connections that create a complex network and creates the nested market that is clearly distinguishable from the main market.

As a whole, the network that structures the nested market for *Chianina* meat is non-hierarchal. There is not one single centre of control; nor are there a few large owners who can exert disproportionate influence. The ‘concentration ratio’ is low (Saccomandi 1998, 49-50). Every one of the many local butcheries is, according to van der Meulen, a ‘small centre of command’, linked to some 10 providers and
with a more or less stable group of 250 clients. Although the network allows for considerable flexibility, most farmers have a stable relation with one to three butchers. This combination of flexibility and stability make for considerable resilience. Particular nodes (i.e. butcheries) might disappear, but then other nodes can take over. The network is both dispersed and dense. Like many other nested markets, the one for Chianina meat is very much tied to space. Space is often central to nested markets – a key contrast to the global markets governed by food empires which are ‘aspatial’. Origin is important, just as freshness and the willingness to reduce transportation and transaction costs. In this respect there is a remarkable resemblance with the situation described by Chayanov in the last chapter of his book ‘Peasant Farm Organization’ (1925). Figure 2 (derived from Chayanov) shows the local market (or ‘bazaar site’) as ‘a concentration of all local trading, cooperative, business, and even spiritual life […] since the personal links of the area’s inhabitants are united by the bazaar, where they invariably meet one another’ (1925, 258).

Thus, the market (understood as a specific place) is the centre of a specific catchment area that concentrates and then redistributes the different, specific products. In spatial terms this translates into an archipelago of interlinked local markets that adapt (in varying degrees) to the specificities of local ecology, local history, local town-countryside relations, etc. The logic underlying the archipelago type of organization was expressed by one of van der Meulen’s respondents, a local butcher, ‘there is no need to look for animals beyond our basin [of the Gubbio valley]. Here I can find everything I need; here I know the people who produce good quality meat’ (2000, 198).

**Rootedness**

Finally it is important to emphasize that the network is not merely a social network. It is not only grounded upon shared quality definitions and trust – it is as much rooted in the nature of things. It is, in short, a socio-material network. In this respect the Chianina animal is the first element to discuss. It needs to be cared for and fed in a special way, preferably with a diversified diet of products grown on the farm. It is a ‘slow’ animal: it takes far longer to fatten and the time between calvings is far longer than it is with other breeds. It is an animal that does not fit in with modern intensive husbandry. It cannot be fed industrial concentrates, fattening cannot be speeded up with hormones and the calf cannot be separated from the dam. All these features explain why several agro-economic studies from the 1960s and 1970s predicted the demise of the Chianina. It was thought to be unable to compete with other, more ‘malleable’ animal breeds (Taglione et al. 1991, 11-12, Marchine and Santucci 1991, 30). Another important material aspect of the network (an aspect that explains the nature and the persistence of the network) is the frollatura: the meat is left to hang for seven to fifteen days (depending on the parts). Hence, a small butchery with a skilled butcher is required. The type of urbanization also lays an influential role. Central Italy (and Umbria especially) is characterized by many borghi: small to medium sized market towns that are materially and culturally integrated with the

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16This strongly resembles the pattern encountered in the nested market for Parmigiano-Reggiano cheese: ‘Indeed, each small retailer has a contract with an average of 1.04 supplier cheese diaries, 1.36 ripeners, 1.5 specialist wholesalers and 1.3 non-specialized wholesalers’ (Roest 2000, 111).
surrounding rural areas and within which the Chianina is often referred to as nostrale: ours.

These social and material elements explain the nature of this particular nested market. They are elements that together constitute its persistence. They also help the network as a whole to ‘resist’ any potential take-over by food empires. This resistance partly resides in the material elements of the network. Unlike Limousin or Charolais cattle breeds, the Chianina cannot be fattened in large scale feedlots. It requires skills and this reduces the volume of production. The same occurs with the frollatura. In modern retailing, with a high turnover, this represents a loss of time. And the typical borghi are too small to attract hypermarkets.

The materiality of things also appears as an important factor of resistance in comparable studies of other nested food markets. In his analysis of Parmigiano-Reggiano cheese (which carries a telling subtitle, ‘the force of an artisanal system in an industrialized world’) Kees de Roest (2000, 109) explicitly refers to the ‘resistance’ of this cheese ‘to mass sale through the large-scale commercial distribution networks’. By the end of the 1990s ‘traditional ways of selling […] including street
vendors and small retailers are [...] the most important sales outlets (51%) for end consumers’. Fresh cuts (as opposed to pre-packed cheese) play a major role. This ‘allows the consumer to ascertain where the Parmigiano-Reggiano has come from’ (p. 110). In more general terms de Roest argues that the ‘complex networking of contracting relationships [between farmers, small cheese factories, ripeners, wholesalers, retailers and supermarkets] indicates that the small retailer [...] represents a privileged point of contact between a varied supply and demand that is equally attentive to differences of price and quality’ (p. 111). When supermarkets dominate, quality becomes standardized (implying that the best cheeses have no outlet anymore) and payments to farmers go down. This is exactly what happened in the 1995-2005 period and both consumers and producers of Parmigiano-Reggiano lost out. After this period the nested market for Parmesan cheese recovered its strength, benefiting both consumers and producers.

The features of newly emerging nested markets

Specificity, connectedness and rootedness are features that are also, albeit in variable degrees, encountered in the nested markets that have been constructed over the last two decades in Brazil, China and the European Union. They are articulated in new ways, along a range of 16 variables, summarized in table 3. Together, these variables describe common and strongly interrelated features that underlie the newly emerging, nested markets. Not all of these features are always present, nor are they always strongly developed. However, the more of these features that are present and the more they are developed, the stronger the specific nested market – and the higher the price differential.

In these new, nested markets, specificity is articulated through variables 1, 2, 3, 4, 12 and 13. Rootedness appears through variables 3, 4, 6, 9, 12, 14 and 15. And, connectedness is constructed along variables 2, 5, 7, 8, 9, 10, 11, 14, 15 and 16. Some variables contribute to combinations of specificity, rootedness and connectedness, others mainly contribute to one of the three. The key point is that, taken together, these three characteristics create boundaries – often fluid ones, moving backwards and forwards, but boundaries nonetheless. They are the boundaries that delineate the nested market and sustain its particular dynamics.

In this respect, the newly emerging, nested markets are undoubtedly a response to the main food and agricultural markets that are increasingly governed by food empires. Whereas the latter tend to eliminate specificity, rootedness and connectedness, these newly constructed nested markets make them central features.

Resistance and the construction of nested markets

The social construction of new nested markets is to be regarded, we think, as a central and strategic theme within the realm of contemporary peasant studies. Firstly, because it is an expression of the often contradictory, and frequently

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17Table 3 is based on the comparative research undertaken in China, Brazil and the EU under the supervision of the three authors of this article. Several of these variables can also be found in the extended literature on ‘alternative food networks’ or ‘short agro-food chains’. For solid overviews see Watts et al. (2005), Vihinen and Kröger (2008, 144), Brunori et al. (2009) and Arfini et al. (2010).
misunderstood, forms of everyday struggles that currently characterize the countryside. Secondly, because we believe that a critical analysis of these newly emerging markets allows for a much needed extension of radical theory. The rich tradition of peasant studies has mostly focused on the general markets, their governance patterns (i.e. the control exerted by agro-industrial groups over the main agricultural and food markets) and the global structures underlying them (the ‘urban bias’, global commodity chains and international food regimes etc.). Alongside this, peasant studies has also excelled in the anthropological exploration of exchange patterns in traditional societies. The analysis of newly emerging nested markets moves the frontier towards a new field of interest: to explore how the relations and processes of circulation (i.e. the markets) are being actively reorganized [through what Holloway (2010) terms negation-and-creation] in order to improve the livelihoods of those who are dependent on them. Markets have always been, of course, important arenas for

Table 3. Key features of newly emerging nested markets.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
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<tbody>
<tr>
<td>1) The special quality of the product is widely recognized by consumers and translates into a premium price and a durable reputation.</td>
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<td>2) The definition of quality is commonly shared by producers, processors, distributors and consumers and based upon flows of communication that go backwards and forwards.</td>
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<td>3) Production and processing are based on artisanal techniques and a highly skilled labour force.</td>
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<td>4) Production is characterized by low levels of external inputs.</td>
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<td>5) Production, processing and consumption are linked through short and decentralized circuits (while short in terms of the number of links they can be long in the geographical sense).</td>
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<td>6) The value added per unit of product is high (especially at the level of primary production) (this strongly links with points 1, 4 and 5).</td>
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<td>7) The links between producers, processors, distributors and consumers are patterned in a horizontal, web-like way that contrasts strongly with hierarchical patterns.</td>
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<td>8) The pattern as a whole allows for flexibility and further internal differentiation.</td>
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<td>9) From a socio-economic point of view the patterns as a whole represent a coalition of interests and opportunities; from a cultural point of view both product and pattern strongly contribute to individual and regional identities.</td>
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<td>10) Product and pattern are institutionally defended (through consortiums, joint service units, protocols that specify the production and processing techniques and labels, etc).</td>
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<td>11) It is difficult for outside interest groups to ‘take over’ these products and patterns (especially due to points 3 and 7).</td>
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<td>12) Both product and pattern are grounded on a common pool resource, i.e. the capacity to elaborate and distribute a distinctive product.</td>
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<td>13) The different elements that make up a nested market cannot be industrialized; the artisanal techniques and the specific nature of the resources involved resist scale-enlargement and standardization.</td>
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<tr>
<td>14) The processes of production and processing (see 3, 8 and 13) are built on open source technologies that allow for collective learning processes.</td>
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<td>15) Concentration ratios are low.</td>
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<td>16) Nested markets tend to interact and intertwine with other nested markets, thus creating synergies and contributing to their robustness; this occurs at the farm enterprise level as well as at the level of the territory.</td>
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Note: ¹Producers and processors ‘are struggling for the further development of use value as opposed to the asphyxiating dominance of exchange value. […] From the point of view of capital, the focus on use value is a form of insubordination that is identical to absenteeism or sabotage.’ (Holloway 2002, 263; our translation).
rural struggles, but until recently such struggles have only focussed on renegotiating the terms of trade and/or the ‘bargaining position’ of different actors (Bharadwaj 1982). The market as such (i.e. the social organization of circulation) was taken for granted. What is currently occurring goes far beyond mere bargaining - even though it may very well result in an improvement of the terms of trade. New roles and positions are being created, just as new relations and new circuits are being developed and new and commonly shared definitions are being elaborated. In short: the market (or at least some parts of it) is being repatterned. New spaces, that allow for distinguishably different transactions (re. Shanin 1973) are being actively constructed, and new common-pool resources are being created that sustain the strength and resilience of the new, nested markets vis-à-vis the main markets in which they are located.

In Europe, China or in Brazil, rural development processes basically stem from, and are continuously nurtured by, everyday politics. These processes involve millions of people reconsidering the dominant norms and rules that structure the production, and allocation, of resources. They are doing so ‘in quiet, mundane, and subtle expressions and acts that are rarely organized or direct’ (Kerkvliet 2009, 232). All over the world, farmers and peasants are facing a tightened squeeze on agriculture, a politico-administrative script that defines them as ‘losers’ who should make way for more ‘efficient’ forms of farming (notably corporate agriculture) and a socio-technical regime that materially blocks a further unfolding of their productive activities (Borras 2008). Many of them try to respond: through direct marketing, on-farm processing, integrating new, non-agricultural activities in their farms and through agro-ecological adaptations that lessen their dependence on the dominant regime. Initially such activities are merely infractions that question well-established routines and promise new trajectories that are at odds with vested interests (this is further developed in Ploeg 2008, 154). It is important to note that such responses are ‘usually low profile and private behaviour [that are developed and sustained by] people who probably do not regard their actions as political’ (Kerkvliet 2009). They are unorganized forms of everyday politics that ‘occur where people live and work [and which are] often entwined with individuals and small groups’ activities while making a living, raising families, wrestling with daily problems, and interacting with others like themselves and with superiors and subordinates’ (Kerkvliet 2009). And, just as forms of everyday politics ultimately changed the political horizons and the rural landscapes in countries such as Vietnam, the Philippines and China, rural development (understood as the outcome of many acts of everyday politics) is now changing the morphology of large rural sectors – not only in China but in Europe and Brazil as well.

Whenever and wherever (more or less) consistent rural development policies are developed, these everyday politics may well evolve into rightful resistance. Following O’Brien (1996) this might be defined as ‘a form of popular contention that (1) operates near the boundary of an authorized channel, (2) employs the rhetoric and commitments of the powerful to curb political or economic power, and (3) hinges on locating and exploiting divisions among the powerful. In particular, rightful resistance entails the innovative use of laws, policies and other officially promoted...
values [ . . . ]; it is a kind of partially sanctioned resistance that uses influential advocates’ (O’Brien 1996, 33). Wherever policy frameworks for rural development are institutionalized and engaged intellectuals (Lowe 2010) align with farmers and peasants involved in new, alternative practices, this feature of rightful resistance can become very important.

We think there is another strategic dimension of resistance that needs elaboration in order to properly understand the significance of current RD processes. That is that they are very much of the *modification* type (Kerkvliet 2009, 238). Following the beautiful metaphor proposed by Ben Kerkvliet, we argue that the creation of initially ‘unauthorized paths’ is a strategic aspect of rural development. Rural development processes are grounded on, and stem from, ‘resource production and distribution practices within households and families and within small communities [and consequently, between these units and larger entities as e.g. state apparatuses, agribusiness groups and retail chains] in ways that rely primarily on local people’s own resources with little involvement from formal organizations’ (Kerkvliet 2009, 232). In short, rural development practices *modify* the existing patterns for resource allocation just as they *modify* the existing distribution of social wealth produced in the countryside. They also materially modify marketing patterns. In synthesis: rural development practices go beyond merely making claims. They create interstices from which alternatives are materializing19. Negation is being transformed here in ‘negation-and-creation’ (Holloway 2010, 18). At the same time these practices are *confrontational*: they challenge vested interests and highly institutionalized perspectives. In doing so, these RD practices escape from domination and oppose the logic of capital accumulation articulated by the state and food empires20. In short, such practices create new pathways and do so through reconstituting existing patterns for the production, allocation and use of resources. This is done in ways that dominant interests find it difficult to capture21, the more so when the new patterns take the form of rightful resistance.

In short: rural development practices are materially reorganizing considerable parts of both the natural and the social world,22 and when combined in overarching rural development processes, the many, dispersed but widely ramified and cleverly connected practices begin to constitute new rural realities that are materially different from, and increasingly challenging, ‘a political system in which inequalities

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19This phenomenon has been well described in the literature on transition processes, which places much emphasis on novelty production, strategic niches and the many sided frictions with the reigning socio-technical regimes (see Wiskerke et al. 2004). However, it pays little analytical attention to the emergence of new, nested markets.

20These RD practices show that struggles against capitalism are not only ‘negative’, but can also be ‘positive’ (Holloway 2002, 263). They create new and distinctively different socio-material realities. Food empires in Brazil tend to depopulate the countryside and establish farming practices that depend on ever increasing transfusions of agro-chemicals. By contrast social movements as MST and AS-PTA create settlements and an agro-ecological way of farming that are ‘not directly subordinate to capital’ (Holloway 2010, 18). The same can be argued for RD practices in China and Europe.

21‘The art of not being governed’ is continuously being reinvented and re-institutionalized here (re. Scott 2009).

22The work of both Kerkvliet and O’Brien contains many empirical illustrations of how the social and material worlds are *de facto* modified. However, there is no *theoretical* elaboration of this specific feature; and as a result the differences with previous struggles (of a different kind) are not sufficiently elaborated.
and dependencies are endemic’ (Kerkvliet 2009, 236). This illustrates the claim that ‘the only way to think of changing the world radically is as a multiplicity of interstitial movements running from the particular’ (Holloway 2010, 11, see also Morris and Buller 2003, 564).

Creating markets, constructing infrastructures

The creation of connections between interstitial movements often occurs through the construction of new, socio-material infrastructures that both structure and sustain new markets and which allow for their further development. We understand an infrastructure as the set of specific artefacts (that are used to channel flows of goods and services between places and people) and the specific way in which these artefacts are tied together into a coherent and smoothly functioning whole. Infrastructures underlie patterns of connectedness. We stress the materiality of infrastructure to make clear that (1) it is not created overnight – it needs to be constructed and reproduced. We equally stress this materiality to emphasize that (2) such an infrastructure can neither be changed in the short run (as it contains sunk costs, is associated with the interests of the involved actors and, often, represents symbolic power) and to specify, above all, that (3) different infrastructures might very well co-exist and co-evolve within one and the same time and location (thus explaining the co-existence of nested markets and generalized commodity markets).

Over the last 30 years, there have been considerable changes in socio-material infrastructures in China. In the aftermath of the peasant revolt in Anhui (Du Runsheng 2006), which triggered the introduction of the Household Responsibility System, a complex structure of new markets was created (Ye et al. 2010) that differed materially from the previous, state-organized distribution systems. It is also very different from the large empire-controlled markets that dominate in the western world.

In Europe and Brazil the creation of materially different infrastructures (that follow from, and sustain, the construction of new markets) is far less clear, especially since markets, as concrete places for concrete transactions, are mostly perceived through the lens of ‘the market as an abstract system of organizing the economy by a more or less free interplay of supply, demand and prices’ (Shanin 1973, 74). This leads us to discuss here three cases that clearly show infrastructures that differ from those of large commodity markets. We do so for two reasons. First, they show how everyday politics translates into the building of new infrastructures. Second, they clearly show how these new infrastructures allow for materially different trading patterns, price differentials, income improvements and new socio-political opportunities. Echoing Kerkvliet, they allow for the construction of unauthorized and hitherto non-existent paths.

The first case concerns Ecovida, a rural movement from Brazil that is engaged in building new markets for agro-ecological products. The infrastructure created is synthesized in Figure 3.

The radial patterns in Figure 3 refer to local markets (which might be existing markets or newly created ones for agro-ecological or organic products). Each market (or feira) is embedded in a specific eco-system. This implies that only a specific range of products can be delivered and that delivery is limited to specific seasons. The novelty developed by Ecovida is that these essentially local markets are now connected through self-organized transport lines. The trade that occurs along these
lines is not profit-oriented but follows quite different principles (Ecovida 2007). First, the surplus from one specific market (say number 2) is transported to places (say 3 and 5) where it is in shortage. Second, the expansion of the pattern as a whole is driven by the search for contrasting (and thus complementary) eco-systems (1, 2 and 3 might be located in the same eco-system although the seasonal cycles do not overlap completely; 4 and 5 might be embedded in completely different eco-systems, thus enlarging considerably the supply in 1, 2 and 3 and benefiting from products arriving from there). The more this is achieved, the larger the supply in each participating local market. Thirdly, the transport is done by farmer-members of the Ecovida circuit, who own small trucks. Trucks, storehouses, the internet, telephone and a thorough knowledge of different markets and eco-systems are the main building blocks of the infrastructure. The infrastructure has several nodal points, thus reducing transport time and the costs for individual farmers/drivers. These nodal points have a solely logistical function – they do not function as centres that exert a hierarchical control. Nor do they accumulate the value realized at the different

\[\text{Figure 3. Newly connected local markets (Ecovida, Brazil).}\]

\[\text{The transporters also carry the surpluses of other farmers. The prices at each market are calculated to cover the transport costs (including time spent). The main benefit for individual farmers/transporters is that they can considerably expand the total outlet for their products. Another consequence of this approach is that locally produced food is always cheaper.}\]

\[\text{On the institutional side this infrastructure is made up of groups that meet every month (participation in the meeting is obligatory). Each group has a coordinator, responsible for supplying local production to the route and requesting supplies from the route. The group meeting defines price levels.}\]
markets. This value is, instead, channelled back to the places of origin (Radomsky 2010).

In 2009 there were some 270 groups of farmers (each group with between 10 and 15 farmers) linked to 145 feiras agro-ecologicas (and an additional 10 consumer cooperatives). The groups transported some 1,500 tons of merchandise from one place to another. This represented a total value of two million Reais, which added an average of 2,500 Reais to the income of every participating family (this equals more or less 1,500 US$). In several of the local feiras the groups effectively interact with, and make use of, the Food Procurement Programme (PAA) and the School Meal Programme (PNAE) discussed above.

There are remarkable similarities, as well as some major contrasts, with the classical constellation of local markets, described by Chayanov. In the classical situation local markets were only loosely connected (mainly through traditional traders). In the case of Ecovida, the strength of the local markets resides in their extended and permanent connectedness. This same connectedness also represents a major difference with imperial constellations. In the latter, the connections are not horizontal, but vertical: local markets are subjected to hierarchical control exerted by food empires that monopolize trading relations (through a materially different infrastructure, in which central terminals for intake, processing, packaging and, especially, for redistribution are the main elements) and which appropriate the created value in one central point.

A keyword used within the Ecovida movement is ‘route’ (rota in Portuguese language). A first main route is e.g. the one going (in Figure 3) from 3, via 1 to 4 and then back again. Another could be the one going from 2 via 1 to 5 and vice versa. Along each route there are groups that provide the merchandise for the different feiras and nodal points. A city like Curitiba, for instance, has 9 feiras, and one of the routes which it is connected to goes from Lages, via Curitiba to Rio de Janeiro. In line with this keyword the activities of Ecovida could be characterized as routing: as the active creation of ‘unauthorized paths’ (Kerkvliet 2009, 238) that interlink specific places of production and consumption. Through such routing25 previously existing patterns of dependency are partly, sometimes completely, eliminated26, whilst new advantages are created: higher prices are obtained and more security for sales is created, whilst consumers now have access to a wider range of cheap, high quality and safe food products. A specific advantage of the route is that the trucks are always full. It is never a one way delivery: products flow both ways (since the routing links different agro-ecological systems). In short: the Ecovida experience creates new forms of connectedness (entailed in the routing), rootedness (in the contrasting ecosystems, mutual confidence, etc.) and specificity (using their own lorries and recreating the feira). The forms differ from those entailed in the Chianina case (discussed here before), but together these features delineate and sustain a nested market.

From a theoretical perspective it is interesting to note that the constructed whole of local markets and interconnecting routes (in short: this specific nested market)

25Thus, this newly emerging nested market is not limited to face-to-face encounters or to spatial proximity. It can very well extend over long distances. See in this respect Marsden et al. (2000), Renting et al. (2003) and especially Sonnino and Marsden (2006b).

26This is expressed in a beautiful and telling way by the phrase ‘não podemos produzir limpo e vender sujo’ which roughly translates as ‘it is not possible to produce cleanly (i.e. in an agro-ecological way) and then sell in a filthy way’.
functions as a *social relation of production*. Poulantzas (1974) saw a social relation of production as having two features: (a) it (re-) constitutes specific processes of labour and production, and (b) it (re-) defines the distribution of the wealth produced. Both conditions are met here: the nested market allows for changes to, and the further development of agro-ecological production, whilst assuring that the benefits are shared by producers and consumers (whilst traders and retailers are excluded). So far, this is all part of well-known orthodoxies. What is *new*, however, is that this specific relation of production is not located in the sphere of production but in the sphere of distribution. The newly constructed nested market is operating here as social relation of production. What is also new is that this specific relation of production has been actively constructed by producers and consumers: it is the outcome of social struggles that aim to create autonomy and improve livelihoods. *Routing* represents an ongoing, complex, decentralized and increasingly expanding social struggle. The further extension of a route, the creation of a new *feira*, the inclusion of more consumers and/or the enlargement of the range of products – are all episodes of social struggle, of an increasingly *coordinated* struggle (in which coordination is no longer the privilege of ‘leaders’ or a ‘central committee’ but the expression of the established infrastructure and the groups that are linked to it), just as the functioning of the existing markets and routes highlights the *persistence* and longevity of this struggle.

The kind of struggle we are analyzing here can be seen as ‘resistance of the third kind’ (Ploeg 2008, 265-71, Schneider and Niederle 2010, 400): direct interventions in, and alterations of, the processes of production and circulation that differ from overt struggles that occur *alongside* these processes (i.e. the first kind) and from covert opposition that does not aim at any alteration whatsoever (i.e. the second kind). Resistance of the third kind reshapes both the social and the *material* dimensions of production and circulation. Resistance in cases like Ecovida basically comes down to a multitude of actively created alterations and the interlinking of these alterations. Thus, socio-material realities are re-patterned [or in Kerkvliet’s terminology being ‘modified’ (2009, 238)] and robust alternatives are being created, carefully nested within (rather than outside) the dominant patterns. As Negri (2006, 54) argues: ‘resistance is no longer a form of reaction but a form of production and action [. . .]. Resistance is no longer one of factory workers; it is a completely new resistance based on innovativeness [. . .] and on autonomous co-operation between producing [and consuming] subjects. It is the capacity to develop new, constitutive potentialities that go beyond reigning forms of domination’. This is, we believe, very close to experiences such as Ecovida’s. In this case, as in many others, resistance of the third kind is difficult to capture. It is everywhere, takes multiple forms and is often inspiring, in that it re-links people, activities and opportunities. It provides a constant flux of, often unexpected, expressions that time and again flow over the limitations imposed by the dominant modes of ordering. Each and every form is an expression of critique and rebellion, a deviation that articulates agency and strength. Individually these expressions are innocent and harmless: considered together they become powerful and change the panorama.

Figure 4 synthesizes a particular Dutch experience. Just as in the Brazilian Ecovida case, this Dutch example (modelled on the national *Landwinkel* experience and the *BPA* experience in the Achterhoek) represents rootedness, connectedness and specificity, whilst in more theoretical terms it might be considered as an important social relation of production. In the Netherlands (as in many other
European countries) direct selling (from producer to consumer) represents a major, and quickly growing, nested market. Within this field (that embraces, within the Netherlands, at least 2,300 participating farms that together achieve sales that total at least 75 million Euros) there is a subgroup of 85 certified ‘farm shops’ (landwinkels). These are attractive shops constructed within the farm building. Together they realized, in 2009, total sales of 16 million Euros.

During the last decade these farm shops have increasingly been interconnected through circular patterns (see Figure 4) that allow a considerable enlargement of the total range carried by each shop (thus making them more attractive to consumers) whilst they also enlarge the sales per farm far beyond the limits of the locally available clients. Again: the building blocks are simple: local farm shops, small trucks with cooling facilities, internet, transparency and trust. Together, these ingredients construct a socio-material infrastructure that strongly supports the nested market in which these farm shops operate. It is an infrastructure that functions as a counter-structure\(^{27}\) vis-à-vis the infrastructure and trading patterns entailed in the

\(^{27}\) A ‘counter-structure is the recognition of the fact that [...] reality is not absolutely predetermined [...] but proceeds open-endedly, dialectically’ (Crosbie 1982, 82). A ‘counter-structure it is radically opposed to the dominant structure’ (p. 74). It ‘manages to surface’ at those points where ‘the faults of the dominant structure occur’ (p. 74). Thus, ‘the hegemony of the dominant structure is denied by the counter-structure’ (p. 74). The counter-structure represents, to borrow the metaphor developed by Deleuze and Guattari (1997), a set of ‘subterranean interrelations’. The latter explain that the unexpected – which initially emerges as a deviation – can grow (like a rhizome) and might start to give birth to new realities.
dominant imperial patterns, represented by large retail chains. There are no single (and hierarchically controlled) entry and exit points – there is instead a confusing multiplicity of entry and exit points: every participating farm shop is both an entry and an exit point.

This counter-structure allows for freshness, quality and flexibility. This latter feature might be grounded in the growth (or contraction) of the total number of participating farm shops; it also occurs through (informal) contracts with other farms that might deliver part of their produce to a farm shop without wanting to incur in the complexities of running a shop themselves (this has also been well documented in the case of Italian farm butcheries by Milone and Ventura 2000). Another mechanism for flexibility (and for further growth) is through delivery to urban farmers’ markets (Kirwan 2004), internet ordering systems (Milone 2009) and box schemes (Lamine 2005). The extension of the circular pattern as a whole might be further increased through the creation of contractual relations with foreign producers (for e.g. wine and olive oil).

The material infrastructure is accompanied by (and reflected in) a symbolic framework that ties producers and consumers together in the reproduction and further development of this specific nested market. De Winter et al. (2010) have documented this symbolic framework and compared it to the way these consumers relate to the large supermarkets. Figure 5 shows the outcomes: It summarizes profile scores on the main variables that characterize the relations between consumers and selling points, and thus gives the overall-view of consumers on farm-shops and supermarkets. Farm shops score significantly higher on the taste of products, the knowledge of the sellers, friendliness towards clients, trust and presentation. Supermarkets, by contrast have a high profile in terms of being commercial, a broad assortment, having everything available, being accessible,

![Figure 5](image.png)

Figure 5. Average profile scores and the resulting consumers’ views on farm shops and supermarkets (Winter et al., 2010).

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28 The research was based on a survey among visitors to ‘open days’ organized on farms (n=353) and another one among members of a consumer panel (n=388). The results coincided closely. In Figure 3 we give the average score of the two samples.
nearby, crowded and offering convenience. A comparison of the two resulting images (see figure 5) clearly affirms the relation between structure and counter-structure: the one is the antipode of the other.

Figure 6 graphically illustrates the Hundred Mile Gallery in China (see Ye et al. 2010 for an extensive description). Here an attractive route, the Hundred Mile Gallery, has been extended in order to include several villages that offer a range of agro-tourism facilities. The route takes in archaeological remains (such as petrified woods) and is an impressive scenic route. It ties together several common-pool resources: rural hospitality, rural lifestyles, the tranquillity of village life, scenic beauty. This is done through the joint capacity to develop networks and to construct and operate high quality agro-tourism villages that offer rural culinary traditions. Thus, a socio-material infrastructure is created that ties together beautiful landscapes, agro-tourism facilities and distinctive high quality food products whilst simultaneously offering visitors different routes: different trajectories for consuming and enjoying these services and goods.

**Nested markets and common-pool resources**

So far we have examined three examples of the socio-material infrastructures that are constructed when creating new, nested markets. The analysis could be extended in order to embrace far more features of these markets (see especially Oostindie et al. 2010) and/or to cover the socio-institutional domains and institutional arrangements that help support these emergent counter-structures (see Knickel et al. 2008 and Broekhuizen and Oostindie 2010 for well documented illustrations). However, we prefer to take the next step in the analysis and to argue that the socio-material

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Figure 6. The Hundred Miles Gallery extending into an agro-touristic infrastructure.

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29This section draws heavily on Polman et al. (2010).
infrastructures (considered, so far, in isolation) are part of, and compose, common-pool resources. This becomes clear as soon as we try to understand these infrastructures (and other elements that play a key role in current rural development processes) within the politico-economic arenas in which they are located. Within these contexts, common-pool resources represent alternatives to capital. They are resources that are different from, and do not function as, capital. They help to resist capital. More specifically: they help to understand how e.g. nested markets may resist competition from, and take-over by, the food empires that operate in the large commodity markets.

In ‘ Governing the Commons’ Elinor Ostrom (1990) presents a theory about common-pool resources. Such common-pool resources (CPR) might be water (for irrigation), fishing grounds, common land, jointly exploited forests, parking garages, etc. These resources are used by a specific group of users who convert them in end or intermediary products (fish, rice, wood, parking spaces or whatever). The users are ‘tied together in a lattice of interdependence’ (Ostrom 1990, 38). Their ‘efforts to self-organize’ result in an effective set of institutional rules for the governance and management of the common-pool resource. These rules avoid the emergence of a ‘tragedy of the commons’ (i.e. overexploitation and degradation); instead they create a continuous flow of joint benefits.

It is important here to signal that the assets (land, water, fishing grounds, etc.) are not to be equated, in any way whatsoever, to common-pool resources. It is the set of shared rules that makes them emerge and function as common-pool resources. The presence of a set of rules that regulate both governance and management is central. These rules differ from the logic of capital – they reflect, instead, the interests and perspectives of the involved producers, ecological cycles and/or principles such as social justice, solidarity or the containment of (potential) conflicts (Schwab and Ostrom 2008, Zak 2008).

We believe that the original CPR model of Ostrom might very well be applied to the nested markets we have been discussing. The model clearly illustrates the potential strengths, as well as the many possible weaknesses, of nested markets – especially the newly emerging ones. The major similarity between Ostrom’s CPR model and the nested markets discussed here, resides in the fact that (1) through a commonly shared set of rules and (2) joint benefits are produced. In this respect, it might be argued that a distinctive product (e.g. Chianina meat) is based on an underlying common-pool resource, i.e. the capability to produce a distinctively different product that is hard to copy or to imitate. Such a capability is a resource that can be open to a potentially increasing number of producers, in which case a potentially increasing number of consumers might benefit from the resulting product. It provides benefits (sometimes considerable benefits) to both producers

30In theoretical terms a CPR refers ‘to a natural or man-made resource system that is sufficiently large as to make it costly (but not impossible) to exclude potential beneficiaries from obtaining benefits from its use’ (Ostrom 1990, 30). Beyond that a CPR is governed in such a way that its ‘long-term economic viability is ensured’ and that ‘joint welfare’ is enlarged (p. 30).

31These rules define specific behaviour, i.e. in the case of Ostrom’s CPRs a specific and jointly defined form of resource-use and, in the case of nested markets, jointly shared specifications of products, trading channels and frames of reference. However, a specification of resource use quite often is also an integral part of the prescribed behaviour.
and consumers. It is a renewable resource. It is scarce. And there is the potential
danger that certain actors (free riders) might severely damage the joint benefits. One
‘bad’ producer can harm many others, and this possibility is offset by the presence of
a, more or less, institutionalized set of rules that governs the use, control and further
development of the common-pool resource.

There are also some important differences, at least at first sight. In ‘classical’ CPR
the final products ‘are not jointly used, but the resource system is subject to joint use’
(Ostrom 1990, 31). Beyond that the producers ‘have no power in final-goods
markets, nor do their actions have significant impact on the environments of others
living outside the range of their CPR’ (Ostrom 1990, 31)32

By contrast, in our case, (1) the final products are jointly defined and promoted,
(2) the producers try to effectively establish power in the final goods market, and (3)
their actions have a significant impact on the well-being of others living outside the
range of the CPR. The common-pool resource is constituted by the rules,
expectations, specifications, product-characteristics, etc. It is a resource because it
allows producers to obtain additional benefits (a higher price, improved marketing,
access to specific groups of consumers) that could not be otherwise obtained. It is a
resource because it renders additional value. And it is common-pool because it is not
private. It assumes not only a producer, but also a consumer and, normally, it
assumes many producers and many consumers. And it is more or less accessible for
new producers and new consumers. There is permeability. It is also common-pool
because it generates and sustains joint benefits.

Thus we think Ostrom’s approach might very well be extended to the analysis of
newly emerging nested markets. Central for such an extension is the thesis that it is
not (or not only) the specific product (or a specific service) that composes the essence
of the CPR. It is, instead, the (1) commonly shared set of rules33 that (2) link specific
producers and consumers, (3) specify resource-use and (4) allow for the transaction
of a specific product, that together make up the common-pool resource (see Figure 7
for a graphical representation).

Throughout this article we have discussed the distribution of specific food
products and rural services through nested markets. Now we can add that the
strength (or competitiveness) of such nested markets is grounded on common-pool
resources. These embrace, firstly, the capacity to produce qualities that are
distinctively different from the ones circulating in anonymous markets. This capacity
is not privately owned; nor is it a strictly individual attribute. It is, instead, jointly
shared by the involved producers and sustained through complex processes of
socialization, communication, experimentation and learning34. This first common-

32Such differences do not exclude the application of CPR theory to our case. Ostrom herself
indicates that her findings can have a more general use and application. She explicitly refers to
‘collective action related to providing small-scale collective goods [or] local public goods’
(Ostrom 1990, 27).
33It is, of course, not only rules, but also experiences, blocks of knowledge, organizational
patterns, infrastructures, etc.
34The development, accumulation and exchange of knowledge (contextual and often hardly
codified) makes it possible for one to truly talk about an ownership dimension […] the
product, the specific modality used for its production, the conservation, distribution,
consumption and appreciation are part of the common property of the local collective’ (Arfini
et al. 2010, 15 who follow, in this respect Bérard and Marchenay 2006). See also Fonte (2008)
on the knowledge dimension.
pool resource is closely associated with others, such as specific breeds and jointly created routes. A second and strategically important common-pool resource is the recognition, by wider and non-agrarian segments of the regional population (and beyond) that the supplied products and services are distinctive in terms of their quality. Related to this is a third common pool resource: the trust that ties together, say, producers, butchers and consumers.

The strength of a nested market resides in it being strongly rooted in such common-pool resources. They help to shape production, processing, distribution and consumption in ways that contrast markedly to those induced by the general commodity markets. They equally help to generate benefits (e.g. higher prices, superior quality, improved energy efficiency, positive environmental impact and a high level of animal welfare) that constitute an attractive alternative to the developmental trajectories defined by capital.

It is important to stress that this strength is not incidental or cyclical. We have already referred to everyday politics and rightful resistance as important factors in creating and sustaining nested markets. The fact that the common-pool resources on which nested markets are grounded ‘have already been paid for’ is also strategically important. These CPRs represent objectified labour from previous and current generations, which allows living labour to engage in the process of production: they do not operate as capital. It is not capital that is used for further accumulation. This creates an immediate competitive advantage: there is no heavy financial burden; no debts to service. Finally, the absence of one single owner (or a small oligarchy that directly controls the main assets) means that the constellation as a whole cannot simply be sold, nor can it be taken over by a third party. This provides a major line
of defence against food empires – a line of defence that simultaneously supports the resilience of food production, whilst increasingly turning rural development into a self-sustaining process.

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