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On land management: landowners' attitudes to land and farming in Valdera, Tuscany

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Chapter 1
Introduction

1.1 Setting the issue

One of the most apparent processes which have characterised urban-rural relationships in Western societies during the past 50 years is the expansion of urban areas (UN, 2008; EEA, 2010). From the spatial development perspective, it causes a high degree of changes in land use and land cover. However, physical urban growth only represents one perspective of urbanisation, which can be understood in terms of land use change, as well as in terms of lifestyle and functional changes (Basile & Cecchi, 2001), which may or may not result in physical urban growth and land use change. Indeed physical encroachment is only a limited part of the urbanisation, nor do the theories of cycles of urbanisation, suburbanisation and counter-urbanisation (Champion, 2001; Antrop, 2004) completely describe current urban-rural relationships (Madsen et al., 2011). In my thesis I especially focus on the above mentioned second aspect of urbanisation, that is on functional and lifestyle changes taking place in the countryside.

Following Primdahl et al. (2010), I argue that the intersecting dynamics of structural changes in agriculture and urbanisation need to be studied in order to better understand changes in rural landscapes.

Changes in population composition, demands for recreation and houses out of city centre, changes in agricultural business structures have contributed to make urban-rural borders more and more permeable physically as well as socially. Transition, mixture (or hybrid) and change – of population, land use, property structure – became key notions underlying urban-rural discourses.

The agricultural landscape component of these changes has often been considered as a reflexive backdrop to urban development. Concern has been perhaps most broadly apparent in the attention to the urban side of the issue, to urban sprawl containment and the expressed aspiration for smart growth (Goetz et al., 2010). Other complementary concerns for urbanisation have often dealt with the loss of amenity and visual qualities of rural areas, which have been valued for the recreation of urban populations: for instance, while the planners' main purpose for London's Metropolitan Green Belt was urban containment, its merit for many

people has been not only related to the control of urban development, but also for the maintenance of the 'rural character' of the landscape (Munton, 1983).

Most of the literature on the impact of urbanisation and growth management focuses on broad understanding of the importance of the physical boundaries for urban containment, which, however, resulted to be not always effective in avoiding unsympathetic or non-essential development, conflicts and contestations between development interests and different local interests (Harvey & Works, 2002). Concerns for landscape amenity and visual qualities as well, with a focus on green space preservation for urban people, have represented an important issue in academic and policy circles (Caspersen et al., 2006); yet, they only slowly spread to farming landscapes where agriculture as productive and economic activity represents a significant component. This was also due to the agricultural over-production that strongly characterised the Western countries food system during the past decades.

Nowadays, concerns over agriculture and urbanisation start to deal with the loss of agricultural productivity as well, as the result of the conversion of productive land from agriculture to other uses. The concern is increasingly expressed in terms of long-term food production potential, within the food security and land security discourses (EEA, 2010).

Other consequent and similar concerns are related to changes in landscape structure, environmental and ecological problems due to urban encroachment, land fragmentation, land neglecting and so forth.

In the following sections I will illustrate how urbanisation impacts on agriculture and farming landscapes. I roughly anticipate that urbanisation in periurban areas and in the rural hinterland may contribute to the weakening of agricultural viability over time in a number of ways.

Urbanisation acts on agriculture in a complementary way with other forces such as changing values regarding lifestyles, employment opportunities, market, family structures, and so on (Bryant, 1984; Bryant, 2011). Nowadays, at the extreme, several forces might be interpreted as complementary. For example, complementary relationships stem from the effect of labour withdrawn from agriculture due to urban labour demand; in this case one effect could be the decision of landowners to contract out the land management to retired or local farmers. Similarly, difficulties to keep farming economically viable may combine with 'hidden urbanisation', i.e. functional change and conversion of buildings (van den Vaart, 1991), pursued by the landowners or even farmers themselves, in order to capitalise on development opportunities. Another example stems from the

effect of the influx of new types of rural inhabitants/landowners, similar to counter-urbanisation, who may perform very different land management attitudes, ranging from active land stewardship, ecological restoration and production of vegetables for self-consumption, to contracting out land management or land neglecting.

These examples would suggest that the management challenge for agricultural landscape under urban pressure is twofold.

First, the range of forces affecting rural areas serves to develop a number of functions, spanning from agricultural production to residential and recreational uses, which leads us to ask: what are the implications for agricultural land use? The increasing urbanisation of the countryside makes owners focus on new interests, sometimes at the expense of traditional agriculture. Indeed rural land is supposed to provide, and is increasingly valued in term of, goods and services other than the agricultural ones (Munton, 2009). Previous studies have proved that land use pattern, i.e. landscape structure (land use and landscape elements) changes more slowly than the functions on the properties do (Marsden & Munton, 1991; Busck et al., 2006; Bomans et al., 2010). However, the socio-economic processes affecting rural areas around the Western world countries (number increase of owners engaged in other activities and the related decrease of full-time farmers) may determine changes in landscape structure and environmental effects in a medium-long term perspective.

The second challenge deals with the raise of diverse set of relationships between land management, land ownership and farming. This issue is particularly complex and involves a number of situations that can lead to different landscape outcomes. Landowners develop their holdings according to their interpretation of constraints, options, and their own values (Lowe et al., 1992). Concretely, the landowner, the land manager and the professional farmer (full-time or part-time farmer) may or may not coincide with each other: landowners are sometimes also land managers or/and farmers. Landowner who relies on source of income other than the agricultural one may decide, for instance, to contract/rent out the management of his land, and to reduce the labour input and seek simple farming or management systems (Lobley & Potter, 2004; Munton, 2009). A recent trend in Western countries is the increase in the number of 'lifestyle' residential landowners as people from non-agricultural backgrounds purchase usually small farm holdings (Lobley, 2002; Bohnet, 2003; Gill et al., 2010; Milburn et al., 2010). In this case they may act as hobby farmers who actively manage and grow the land for different reasons – the liking for ecological restoration, landscape 'beautification', food self-sufficiency ideas – or they may conceive the countryside

just as a place to live in (Primdahl, 1999), and keep the land uncultivated or contract out its management. Finally, challenges to keep the land farmed or managed is posed by expropriation of property rights when land rights are (still) not expropriated. Expropriations of private ownership represent relatively radical types of interventions on private land, taking place on grounds of public interests in the specific area (usually for infrastructures development): the high degree of uncertainty presumed to occur in advance of the specific infrastructure development can represent a shortening planning horizons for farm investments (Sinclair, 1967; Bryant, 1984; Qviström, 2007).

According to these two points and the relevant literature (Primdahl, 1999; van den Vaart, 2005; Bohnet, 2008), it seems evident that landowners play a crucial role for landscape dynamics as they are the key actors who take decisions on landscape structures and functions – termed as landscape management decisions throughout this thesis (or, alternatively, as land management decisions): landowners develop their holdings according to their interpretation of constraints, options, and their own values (Lowe et al., 1992). It is argued that the meaningful engagement of private landowners is an important input to successful policy delivery, as it holds the promise of revealing points of agreement and disagreement between the policy maker and those who will be the subject of policy intervention (Primdahl, 1999; Cocklin et al., 2007).

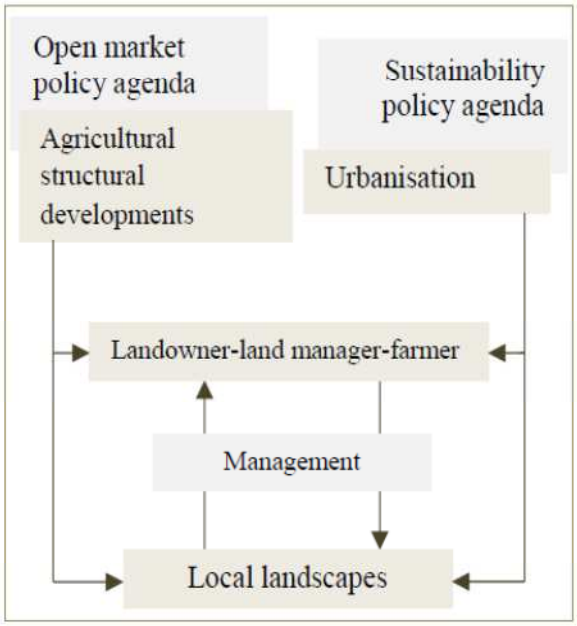

Figure 1.1 *Key drivers affecting rural landscape (Inspired by Primdahl et al., 2011, and modified by the author).*

The combined effects of structural developments in agriculture and urbanisation are expressed in diverse way within different types of landscape system, and are mediated through the responses and attitudes of individual actors.

Given the importance of local landowners, the sustainability policy agenda (land use legislation and spatial planning) and the market policy agenda along with agricultural policies (Figure 1.1), do not impact landscape management decisions in only one way everywhere, since local social, economic, cultural and institutional context will impact on land management practices. This means that the overall drivers of land use change have to be seen in a more local context, which is subject to spatial and temporal (contextual) variability (Jongeneel et al., 2008). It is therefore useful to take landowners' decisions as a point of departure when a deep understanding (and forecasting) of the impacts on landscape is required, for instance when designing and implementing policy related to agricultural landscapes. This and other problems will be addressed and discussed throughout this thesis

On the background of these lines of argumentations, in this thesis I try to undertake a more detailed look at how landowners experience rural landscape and how they conceive landownership and farming, thus taking decisions on land property. The research questions I address are:

- *how and why do landowners differ in their attitudes towards agriculture, land-based investment choices and in their involvement in active farming (landscape management decisions)?*

- *what are the main implications for public planning and regulation?*

I carried out interviews with landowners of the case study area, given their prominent role within the research aims and design. In the next chapter the methodological aspects of this research are presented.

Throughout this thesis I will use the terms 'landowner', 'farmers' and/or land managers as interchangeable when they coincide with each other (which will be specified in the text).

The research focuses on how the decision making of landowners is determined by economical functions and social meaning of land. The research problems raised by the investigation seemed to be relevant to land system change studies and policies: explaining the changes in socio-economic system may help to understand the conditions that determine land use change.

For example, in periurban areas or, more generally, in areas characterised by the shifts in the use of land areas from traditional farming activity to highly dynamic land uses, the concentration of production on a few large full-time farms, or the attitude of absentee landowners (often with 'urban' background and 'urban'

source of income) to contract out land management, have increasingly emerged throughout the Western world countries (Zasada, 2011). It is also clear that landscape decisions are increasingly less related to agricultural production (Marsden & Munton, 1991; Busck, 2002). Thus, increasing attention needs to be paid to non-production values of the agricultural landscape (consumption and conservation) along with the landscape effects. What could be the effects on agricultural landscape structure in the long run?

In order to answer this and similar questions, and to avoid drastic and unexpected land use changes (such as landscape homogenisation, land abandonment and the likely urban growth), researchers as well as planners and politicians need to firstly understand the rationales behind landowners' decisions and to design policies accordingly.

1.2 Some definitions

1.2.1 Urbanisation

Urbanisation means urban expansion – as expressed by the concept of urban sprawl – and land (usually agricultural land) consumption for recreational business and residential purposes (Primdahl & Swaffield, 2010). More broadly speaking, it can be interpreted as a process that creates various kinds of pressure affecting the countryside (Bryant, 1982), or according to Primdahl and Swaffield (2010) as consumption of agricultural land for uses other than agricultural production.

Antrop (2000: 258) defines urbanisation as “a cultural and sociological change caused by the transformation of rural life styles into urban like ones”, acknowledging thus the importance of the socio-economic characteristics of different areas and the patterns of urban-rural migration to interpret recent land dynamics.

The tangible aspect of urbanisation, i.e. spatial growth, is often associated with *urban sprawl*, which has been defined by the EEA (2006) as “the physical pattern of low-density expansion of large urban areas, under market conditions, mainly into the surrounding agricultural areas” (EEA, 2006: 6). Agricultural landscapes are deeply eroded by urban development. The economic basic for agriculture is very often weaker than the investment power of industrial and urban sectors (Caspersen et al., 2006; Abrams & Gosnell, 2012). Despite this, agriculture is still the largest land-user in most OECD countries (OECD, 2003).

Urbanisation is driven by a number of socio-economic factors, as fully reported by the European Environment Agency (EEA, 2006; EEA, 2010). The loss of agricultural land is very often related to diffuse sprawl of residential areas, sport and leisure facilities and highway construction. ~~aggiungere da report~~

A rich literature documents the urbanisation problems and challenges taking place in the countryside, which are increasingly subjected to urban pressure. Indeed rural landscapes in many developed countries have been experiencing major transformations. On the one hand, the expansion of urban areas into the surrounding landscape entails the transformation of land use, population composition and business structures, on the other hand these trends conflict with demands for food production and recreation.

This is especially true in *periurban* areas which represent dynamic landscapes, areas of tensions and conflicts, with frequent clashes of interests as many, often contradictory, demands are made on limited land resources.

Recently the use of the term ‘periurban’ to describe urbanisation of rural areas has become more frequent. In line with Briquel and Collicard (2005), who take a broader view, I use this term within my thesis to identify rural areas that are subject to the influence of a nearby city or town, often marked by the development of hobby farms, second homes etc. Thus, these developments are also characteristic of counter-urbanisation, which can be defined as the population migration from urban to rural areas (Antrop, 2004). However, the source of development, which in the case of *counter-urbanisation* is migration from urban to rural areas, might be different in peri-urban areas. The emergence of periurban areas can also be related, for instance, to the notion of *hidden urbanisation* (see page 4 of this chapter), or to *suburbanisation*, that is the migration from the city centre to the city edge (urban fringe).

Within this thesis I often use the terms 'periurbanity', 'periurban areas' and 'periurbanisation' as synonymous of the general term 'urbanisation', to identify the process of consumption of agricultural land for uses other than agricultural production. Thus I will avoid to use the terms of counter-urbanisation and suburbanisation as the delimitation between urban and rural becomes a difficult task involving a lot of uncertainty and it is very unlikely that land zoning borders remain a stable definition (Antrop, 2004).

General notion of 'periurbanity' is often associated and paralleled with the Italian ideas of *Città Diffusa* – i.e. diffuse cities – (Indovina, 2002). According to some relevant Italian literature, periurbanity can be conceived as the result of urban sprawl even in rural areas which are far from the urban centre; in this case

the urbanisation is an endogenous process taking place in the countryside because of development projects within rural areas, migration of urban people, agricultural marginalisation, etc. (Merlo, 1999; Esposti, 2001; Abbozzo & Martino, 2004).

According to Pascucci (2007), periurban areas became physical and socio-economic spaces where both urban and rural features and processes coexist. When analysing and designing policies, this requires to go beyond the urban-rural dichotomy and to consider places, increasingly hybrid places, in a urban-rural continuum. It is more and more felt that contemporary highly dynamic land systems, not only those close to urban centres but even in the rural hinterland, need to be approached and theorised as a whole, i.e. as an urban-rural continuum, since the 'urban' and 'rural' discrete spatial categories may result to be misleading in contemporary land use studies and planning (Pahl, 1966; Bryant, 1982; Saraceno, 1994; Champion & Hugo, 2004; Pascucci, 2007; Gant et al., 2011).

The current attention to the urbanisation discourses is particularly due to the situation that countries across Europe are facing in relation to agricultural soil consumption, both at the edges of the town and cities and in rural areas. Indeed, in Europe, in 2000-2006 about 1000Km^2 of agricultural, forest and other semi-natural and natural land was covered every year by urban and other artificial surface (EEA, 2010). Among European countries, in 1990-2005 Italy lost 17% of its total utilised agricultural areas; Germany lost 2% of its national UAA, Spain 3%, France 6%, The Netherlands l6% (Eurostat, 2007). Overall, this trend of agricultural surface reduction is accompanied by holdings decrease and regular agricultural labour forces decrease (Eurostat, 2007). The number of people directly engaged in agriculture is diminishing, and rural-based populations in OECD countries are normally less than 10% of the total population, with many residents in rural areas working in services, tourism and other non-agricultural activities (OECD, 2003). This agricultural land reduction is not always the direct result of urban expansion, but is also the result of a social and institutional marginalisation, which may or may not cause physical urban growth (Torquati & Giacchè, 2011).

1.2.2 Structural changes in agriculture

The concept of agricultural structural changes has a variety of interpretation in the academic and policy literature, sometimes being used as synonymous of the less sectorally specific concept of rural restructuring. Following Bohnet et al. (2003), Potter and Lobley (2004), in this thesis I use the term agricultural structural changes to describe the adjustments being made within existing farm

households in order to cope with a changing policy and market context. With the term changes to farm structures I mean the reconfiguration of the land holding pattern due to the exit of farmers, land amalgamation and the entry of newcomers (Bohnet et al., 2003).

There are some common processes within agriculture in Western countries too: literature documents, for instance, that in England (Savills, 2001; Lobley & Potter, 2004), Denmark (Primdahl & Kristensen, 2011), Sweden (Stenseke, 2006), Belgium (Bomans et al., 2010), Australia (Hamblin, 2009) structural trends in agriculture are more and more characterised by the polarisation between large and few farm business, and an increasing number of smaller farms which are often part-time or hobby farms. In the EU-15, 45% of farm households have sources of income other than agriculture (Linares, 2003).

Interestingly, increase of part-time and hobby farming is associated with areas close to the city centre, that we can called periurban areas (which is usually called 'the rural-urban interface' within the American literature), that often seem to attract newcomers with little relation to agriculture as traditional commercially driven activity, such as hobby farms and lifestyle farms (Johnston & Bryan 1987; Heimlich & Anderson 2001). In these areas, the future of farming and the conversion of farmland to non-farm purposes has been a longstanding policy concern for over 40 years (Ilbery, 1985: cited in Inwood & Sharp, 2011; Inwood & Sharp, 2011). Many studies at rural-urban interface have analysed persistence and adaptation strategies of periurban farmers (Sharp et al., 2004; Wilson, 2007; Calus, 2008). Periurban farming activities is often associated with leisure activities such as hunting and 'horsiculture' (Quetier & Gordon). Overall findings show that farms' strategies (mainly farm diversification through recreation activities and direct sale of produce), adjustments and persistence vary across space, context and potential farm succession. In Italy, the number decrease of farms (-32,2% during the period 2000-2010), and the average size increase (+44,4% during the decade 2000-2010) have emerged through the last Statistical Census 2010. In Italy it is not easy to find data related to non-professional farming, thus detailed data related to agricultural structural changes. Indeed the National Statistical Census obtains only data related to professional farms: according to the Italian Legislative Decree 29/2004 n. 99, the professional farmer (IAP) dedicates to agricultural and related activities, either directly or as a member of society, at least 50% of his/her total income from employment, and at least 50% of his/her number of working hours per year. The Italian Census Data system (ISTAT) only takes into account professional farmers and professional farms as defined by the above Decree. Yet, non-professional farming seems to be

important within the Italian society: a study carried out by the National Census in 2006 point out that 37% of population over 11 years old was engaged in different forms of non-professional farming (ISTAT 2008). In 2009, Nomisma and Demetra agencies point out that that percentage increased to 41%. These figures can have relevant consequences related to the interpretation of data on urbanisation in Italy. While ISTAT displays that during the period 1980-2010 the national UUA (ha) decreased of three million hectares, this does not mean that the same amount of land has been urbanised (Barberis, 2009). All in all, data say, at least, that non-professional farming is an interesting and real trend within the Italian society.

1.3 Impact of urbanisation on agriculture

Urbanising forces may affect agriculture in a number of ways. In the following I will list the most frequent ways urban pressure may affect farmlands.

1) Farm fragmentation is often due to new highway construction, scattered non-farm development for housing, recreational or industrial development. Fragmentation can strongly impact farming activity and render continuation of normal farm operations practically difficult or impossible.
   Particular problems are related to access to fields for the farmer, pollution issues. Moreover, extensive ribbon development may create enclaves of agricultural land with very limited access. As a consequence, small parcels may be cut off from the main farm by new infrastructures and become abandoned. At the extreme, the farm adjustments involve disinvestment and idling of the land resources (Bryant, 1984; Pascucci, 2007).

2) The high degree of uncertainty presumed to occur in advance of relatively rapid urban development may discourage landowners to invest in their business activities – an effect which is also called the anticipation of urban development (Sinclair, 1967). Uncertainty is often triggered by proximity to existing urban development especially in periurban areas (Qviström, 2007); however, evidences of agricultural disinvestment also in the rural hinterland where high development potentials exist have been found (Abrams & Gosnell, 2012).
   An example within this group of urban impact is represented by the expropriation of property rights, which is usually followed by the expropriation of land rights due to development projects (infrastructures, roads, commercial areas, etc.). When expropriations take place, development is usually felt as more or less imminent, and landowners in question, therefore, usually tend to increasingly disinvest on their property.

Sinclair (1967: 78) summarizes the issue as follows: “As the urbanised area is approached from a distance, the degree of anticipation of urbanisation increases. As this happens, the ratio of urban to rural land values increases. Hence, although the absolute value of the land increase, the relative value for agricultural utilisation decreases”.

3) Increase in land values, both actual and anticipated, can have significant impacts in other ways on farm structure. For instance, it is increasingly difficult for farmers to purchase additional farmland, in areas close to the city or where urban development is expected to occur, in order to increase their productive land bases (Pascucci, 2007). Of course high land prices give some advantages in case of property selling or rent out. Owning land with some development permission usually increases the land values; selling this land would be gainful even though, according the regional legislation, it might be considered as land speculation.

4) A potentially positive factor is represented by the urban market. The proximity to urban markets is an opportunity for the farm entrepreneur to engage in direct sale to the customer (like Pick-Your-Own, farmers' market, large scale garden centre with supporting nursery production, etc.). A gainful opportunity which can be successfully exploited in urbanised environment (especially in areas close to the cities) is the provision of recreational activities, which can fuel tourism development in the area (Wilson, 2007; Inwood & Sharp, 2011).

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Chapter 2
Research design

2.1 Methodology

The methodological approach I used to study landowners' management decisions focuses on the analysis of the practices and motives of individual actors (local landowners). The subject matter 'landscape management decisions', as defined in the previous Chapter of this thesis – which can be identified with 'the use of rural space' defined by Madsen and Adriansen (2004: 485) as “the practice and values of individual actors” – has been addressed through an explanatory lens.

The *how* and *why* research questions, as well as the overall knowledge gaps and the research agenda, have required the investigation of the causal relationships among the items studied and raised by the empirical work.

The research of explanatory connections between landowners' range of practices and range of motives, as well as the aim to gain deeper insights into land management decision-making processes rather than to test hypotheses, has led to the choice of qualitative methods (Glaser & Strauss, 1967; Lamnek, 1988: quoted in Shenk et al., 2007; Strauss & Corbin, 1988; Sayer, 2000).

Land management practices performed by landowners may change over time as well as according to location. Hence, the “variability, diversity, negotiated, contextual, contingent and adaptive nature of human intentionality and the flux of trade-offs people make among their different goals” (Röling,1997: 250) have suggested to use an inductive approach, where the fieldwork and the understanding of the context proved to be crucial to address my research.

According to this background, I have focused my research on causal explanation and on the interpretation of meanings in context, by combining landowners' practices with values and motives.

The choice to carry out interviews with the landowners was led by the assumption (mentioned in the introduction) that landowners are the key local stakeholders who take decisions on landscapes; hence they need to be increasingly included in landscape research and planning. The landowner does coincide or does not with the farmer and with the land manager, as the following chapters will show (for instance, they don't coincide with each other in the case of external contractors or rural lifestyle landowner).

Understanding land management decisions is not simply a question of market and subsidies since they are not always related to productive activities. Indeed also attitudinal factors are very often involved.

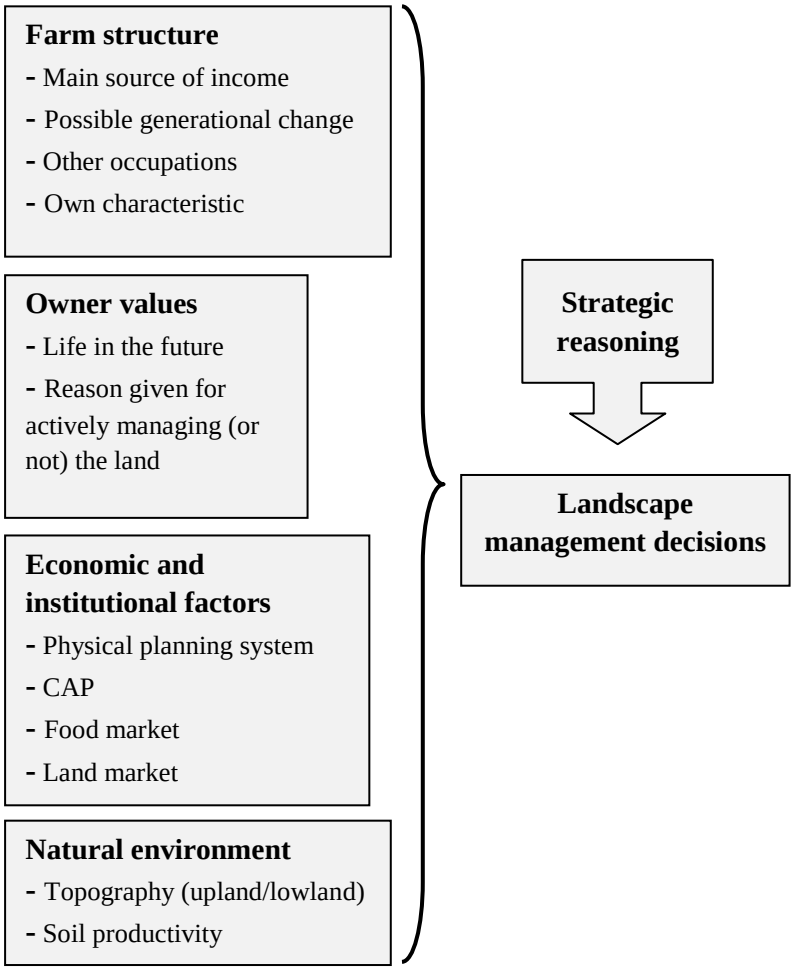

Figure 2.1 *Analytical framework for studying owners' land management decisions. Inspired by Madsen (2003).*

Explaining decisions on landscape functions and structure needs an analysis of the values and practices of landowners, where decisions are understood as a result of the individual landowners 'strategic reasoning', that is landowners' 'weighting' of the different factors of influence: the context within which landowners make decisions ('room of manoeuvre') is thus a combination of contextual factors (van der Ploeg, 1994; Madsen, 2003).

In order to include a broad range of factors in the analytical framework (Figure 1), general studies of the relations between owners' values and their practices have been used (Green & Lemon, 1996; Wilson, 1997; O'Rourke, 1999; Primdahl & Kristensen, 2011; Rymond & Brown, 2011).

Other factors were included in the first draft of the framework, such as age, gender, education degree, but they did not emerge as relevant factors during the

interviews, since it seemed evident that, within the heterogeneous group of interviewees involved in my investigation, there was no connection between those factors and practices. However, this could be related to the small number of people I interviewed.

Concretely, the individual factors that resulted to be relevant to landowners' land management decisions from the interviews have been placed under the headings of Figure 1, i.e. “Farm structure”, “Owner values”, “Economic and institutional factors”, “Natural environment”. In this way the contextual reading process of data resulted to be very straight and clear.

Final decisions within the decision-making processes with regard to landscape structures and functions usually is the culmination of a range of factors, often interrelated: hence, the relationship between values and practice is not a linear one-to-one relationship, and separate analysis of individual factors may be misleading to fully understand the causal relations shaping agricultural landscapes (Wilson, 1997; Madsen, 2003).

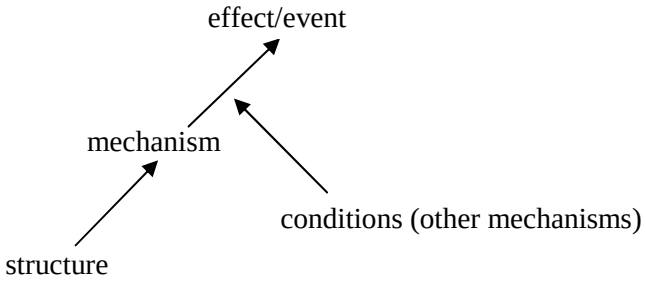

Figure 2.2 *View of causation, by Andrew Sayer,2000.*

Figure 2 may help to understand the relationships between motives, practices and landscape outcomes. It shows that the same mechanism can produce different outcomes (or that a different mechanism can produce the same outcomes) according to context and its spatio-temporal relations with other objects, having their own causal powers. More explicitly, values do not lead directly to a certain action, likewise different values may lead to the same landscape management decisions and, therefore, to similar landscape outcomes.

This would be the case, for instance, of the establishment of uncultivated elements for different purposes, such as for ecological restoration or environmental 'beautification' or for both purposes. It could be also the case of similar management practices in different farmlands/land properties when large tracts of countryside are managed by few or single contractors, or, to give another example, of building recovery for very different purposes such as housing or agritourism development, etc.. Such 'regularities' are usually approximate and limited in duration; regarding landscape studies and monitoring, they may become

less apparent or even vanish together with changes in land holding (Marsden & Munton, 1991).

I anticipate that at the methodological level, the findings of this research highlights the importance of analysing the complex of factors affecting the individual landowner.

In Chapter 3 I focused on the role of human agency, more precisely on the socio-economic context. I used the collected information through interviews on farm structure, owner's values, and economic factors, in order to make a typology of landowners explaining the different types of land management. Other source of evidences were mainly used for methods triangulation.

In Chapter 4 I focused on external-institutional factors, in particular the influence of the planning framework on owners' decision making process on landscape management. The analysis involved the consultation of documents such as Environmental Impact Assessment (EIA) and the Municipal Plans. Interviews were used to understand how landowners relate to, and are influenced by, such external conditions.

In Chapter 5 I used a more holistic approach involving both human and non-human agency (the natural environment) to understand owners' landscape decisions. Indeed the landscape can be also considered as an agency in itself (Ingold, 1993); more precisely, in the case study illustrated in Chapter 5, a hilly landscape in Pontedera represents a source of intrinsic values to a group of lifestyle rural landowners due to its cultural heritage and history, beautiful scenery and natural incompatibility with modern-mechanised agriculture, in opposition to its near lowland where the land represents unit of production and/or economic rent.

Overall, my research design is modelled after the iterative procedure that Vayada called the 'progressive contextualisation procedure', which involve focusing “on significant human activities or people-environment interactions and then explaining these interactions by placing them within progressively wider or denser contexts” (Vayda, 1983: 265). For instance, while socio-economic contextual factors proved to be useful to understand the management practices of different groups of owners (Chapter 3 and Chapter 4), the fact of considering few upland dwellers' turn to land as a phenomenological mode seemed to be the appropriate interpretation of the attitudes towards farming and the attachment to land of the small group of landowners in a sub-municipal scale (Chapter 5). In other words, the socio-economic reading does not represent the only possible interpretation of landscape management decisions, and the phenomenological

description of the lived experience of farming can be an alternative and complementary approach to the analytical socio-economic and institutional explanation based on structural relations.

2.2 Procedure

The present research was designed as a case study with emphasis on in-depth analysis rather than statistical generalisations. Thus, the aim was not to extrapolate from a representative sample (see also Chapter 3 and Chapter 5 of this thesis for more details).

The principle of methods triangulation was applied with the information gathered from a variety of sources including qualitative interviews with landowners, statistical data, direct observation, official documents, local published literature, press reviews, websites.

The use of interviews with key stakeholders is a long standing practice in environmental management and rural sociology studies, where interviews are used to document local attitudes. Interviews are employed in landscape studies as well, in order to investigate the relationships between landscape and people, as well as between landscape management and landscape changes (Primdahl, 1999; Egoz et al., 2001; Busck, 2002; Madsen & Adriansen, 2004; O'Rourke, 2005; Calvo-Iglesias et al., 2006; Qviström & Saltzman, 2007). The most important issues of interviewing included the informants selection, the sample size, the interview-questionnaire format and the use of other sources of evidences to support the interviewees' reports. Detailed information about the sampling techniques, the topics in focus and the analysis of the interviews are presented in Chapter 3, Chapter 4, Chapter 5, and are summarised in Table 1.

Table 2.1 *Interviews with landowners, procedure*

Number of interviews with landowners	61 (theoretical point of saturation, Glaser & Strauss, 1967)
Period	Autumn 2010-Autumn 2011
Contacts	Contacts provided by local extension officers of Coldiretti and Confederazione Italiana Agricoltori + snowball techniques (Berg, 2004)
Criteria of selection	Diversity in farm types (farm size, type of land use, business and local organisation, location) and owners' willingness to be interviewed
Interviews methods and analysis	Face to face interviews, tape recorded and fully transcribed. They were analysed through a contextual reading (Kvale, 1996)
Topics in focus	Property history, owner background, recent investments, recent and likely future decisions on property function and structure, ownership succession, perception of the institutional environment the property is placed in. Exploration of further topics raised by interviewees was encouraged

I used a semi-structured format, in order to obtain homogeneous interviews; however, given the inductive approach, openness and flexibility in the process were preferred. For instance, interviewees were encouraged to tell detailed stories of past and possible future change within their property, by using a guide-interview format and several open questions rather than just yes/no questions. The interviews were both retrospective and prospective in scope. A set of questions within the analytical framework was used to guide the interviews with landowners. The questionnaire I used for the interviews is in Appendix. Other sources of evidences were used, as told and fully explained in Chapter 3, Chapter 4 and Chapter 5.

Figure 2.3 *The case study area, represented by 15 Municipalities placed in Valdera, Tuscany.*

The investigation started in Autumn 2009 and finished in Autumn 2012. It took place in Valdera, a Tuscan area of 15 Municipalities close to Pisa. The choice of this area as a case study for my research is due to the following grounds:

- the landscape of the area is rather heterogeneous, comprising agricultural landscapes under urban pressure (both at the urban fringe and in the rural hinterland), traditional hilly landscapes and flat areas with mechanised-specialised agriculture;

- in 2007 the 15 Municipalities joined in a Union of Municipalities (*Unione della Valdera*) in order to undertake the inter-municipal agreement for services

delivery. Over the next years, these Municipalities are expected to give the Union the main responsibility for spatial planning (see Chapter 4).

Furthermore, I was involved in a project, funded by the Regione Tuscana, aimed at studying the Land Capability Classification of Valdera[1]. Although I did not use for my thesis the data collected for that study nor its results, the participation to local workshops and focus group helped me to gain familiarity with the place and the local stakeholders, therefore to better understand the context of the study area.

NOTES

1. For more information on the project see the site: http://www.avanzi.unipi.it/ricerca/quadro_gen_ric/ricerche_concluse/capability_land/documenti_capability_land/capability_land_progetto.pdf

Chapter 3
Regulating and managing private farmland and public space. Case studies from Valdera, Tuscany

3.1 Introduction

While approaching rural land management and planning, environmental conservation and farm diversification represent two relevant paradigms in a time of crisis of modern agriculture; a quick look at local landscape will show that the relationship between these paradigms, as well as between them and the territorial context(s), are not unproblematic. Over the last two decades, rural areas have been increasingly demanded for leisure and outdoor recreation, wildlife, landscape, and housing. While landowners develop their holdings according to their interests and interpretation of new constraints and new options (Van der Ploeg 1994), in policy circles, the increasing concerns on the preservation of rural landscapes have led to the introduction of environmental measures within the CAP, within planning systems and the European Landscape Convention. These interests, the multiple meanings and uses associated to land (consumption, production, conservation), and its hybrid nature (rural and urban) may cause environmental and institutional pressures on the agricultural landscape.

In this chapter I try to examine land system changes through the lens of local planning processes and landscape management decisions by drawing on three case studies; implications for public planning and regulation are discussed throughout the chapter. I use in-depth case studies of a research conducted in Valdera (Tuscany), which I have already introduced in Chapter 2.

In an Italian context – where landscape planning and policy are characterised by regulatory rather than strategic functions, a 'negotiative' rather than a 'deliberative' approach (Khakee & Barbanente, 2003), and the recognised lack of transparency (Transparency International, 2010) – a number of procedural compliances often emerge in management growth and physical planning fields. Hence, planning processes in the countryside need to be studied from different perspectives. The main notions and perspectives I use in this chapter are those of urban-rural division, land ownership, and landscape policies. Study findings may provide inputs to the ongoing debate on future planning measures in Tuscany.

3.2 Case study area and context

The study context is represented by fifteen Municipalities, under the Province of Pisa, located in a geographical area, called Valdera, crossed by the Era river, an Arno river's affluent. In 2007 the population of the area was 117.517 inhabitants distributed throughout a total surface of 624,17 km^2 (187 inhabitant/km^2).

The area is characterised by different characteristics. The diversity deals both with the socio-economic contexts and physical-environmental elements. For what concerns the first aspect, the area involve industrial and more urbanised municipalities, Pontedera, Ponsacco and Calcinaia in particular, with 27.808, 14.688 and 10.473 inhabitants respectively (2007). The typical rural municipalities of Valdera are Lajatico, Chianni, Terricciola, with 1387, 1536 and 4389 inhabitants respectively in 2007. These municipalities that have maintained a rural character are mainly located in hilly landscapes.

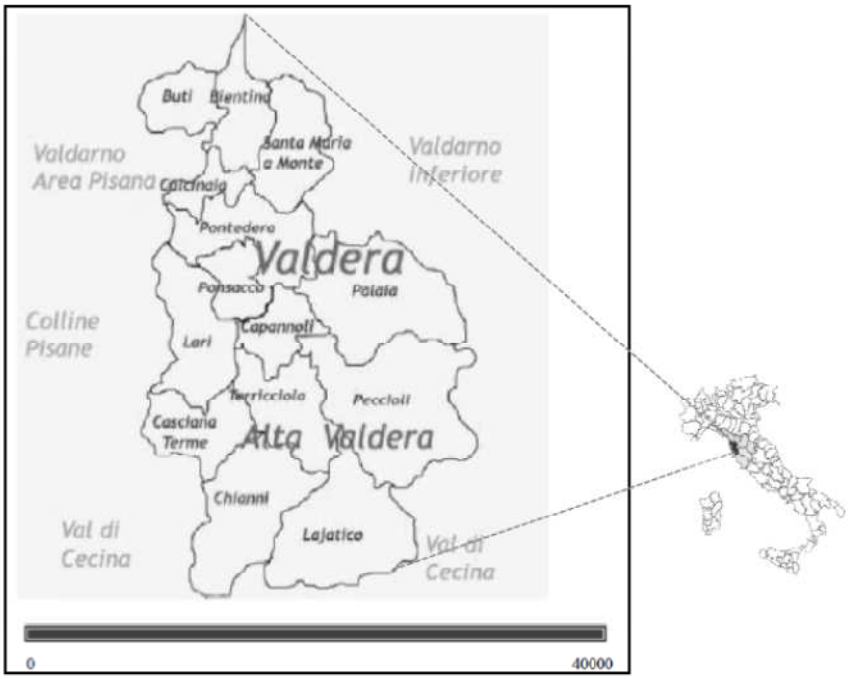

Figure 1*: Valdera, the case study area*

Agriculturally, the main crops are cereals and oleaginous crops, while vines and olives usually represent marginal percentage of the UAA, with the highest values in Terricciola where the UAA of vines is 13% of the municipal UAA, and in Buti where the UAA of olives is 40% of its UAA (ISTAT, 2000). The average farm size is 5,92 ha (ha), with the highest values in Peccioli and Lajatico (12,5 and 17,5 respectively), while the size usually ranges from less than 1 ha to more

than 100 ha in most of the municipalities. The last available statistical data at the municipal level are relative to 2000; more recent data at a provincial level are available and they display a decrease in number of small farms and an overall increase in farm size. Over the period 2000-2010 the number of farms decreased of 50,4% within the Province of Pisa area (39 Municipalities), shifting from 14.473 to 7.174; the UAA decreased of 11%, shifting from 108.611,44 to 96.718,65 (UAA). More explicitly, a great process of land amalgamation has led to the decline of small farms, and to the increase of average farm size from 7,5 ha to 13,48 ha. Although official statistical data of the last census 2010 are not available at the local scale, the fieldwork – by means of direct observation and interviews with landowners and local agricultural officers – proved this process is taking place within the Valdera area as well.

3.2.1 The planning context

The planning system in Italy is decentralised and gives the municipality important responsibilities for spatial planning. Figure 1 shows, through the arrows, the power relations between the different levels – State, Region, Province, Municipality – , and, through the rectangular frames, their weight in the national spatial planning system.

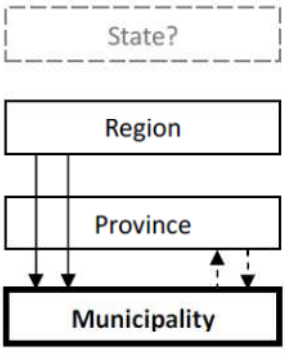

Figure 2*. Relationships between levels in the Italian planning system. Frames in bold represent the main authority (inspired and adapted by the author from Busck et al. 2008).*

Region has the task to make laws on spatial development, which are implemented by Municipality. Region, by means of *Piano di Indirizzo Territoriale* (PIT) identifies the objectives and strategies for territorial development at a general level; through *Piano Territoriale di Coordinamento* (PTC), Province supervises and monitors the implementation of the Regional law at the municipal level, acting as an intermediary between Region and Municipality[1]; a municipal plan – comprising the Urban Plan (*Regolamento*

Urbanistico, RU), and the Spatial Structural Plan (*Piano Strutturale*, PS) – charts public interests, overall strategies and the proposed use of land and water areas; RU and PS are complemented with detailed development plans (*Piani Attuativi*), which are binding for the public and private sector, offering legal rights to build or preserve an area (Legge regionale Toscana 3 gennaio 2005, n.1 "Norme per il governo del territorio", http://www.rete.toscana.it/sett/pta/territorio/lr1_2005.pdf).

The definition of built-up (urban) and non-built (usually agricultural) areas is done locally by the municipal authority through detailed spatial designation and planning restriction tools (zonation system). Building activities outside built-up areas requires building permit of the Municipality. Indeed, the Municipality agenda addresses residential and industrial development within rather a flexible urban-rural-zonation system, through a 'base case' scenario approach (usually assuming growth). The 'predict and provide' way has been often criticised in the past in other countries, both in planning for housing and industrial development, since, it is argued, planning results are often forced to accommodate the projected numbers of houses/industrial development – which are often overestimated – in land allocation policies (Murdoch & Lowe, 2003).

Table1: *Data about the increase of inhabitants and productive areas assumed by each Municipality and the actual ones (Source: Provincia di Pisa, 2008).*

Municipality	Assumed increase inh. 2001-2007 (%)	Actual increase of inh. 2001-2007 (%)	Assumed increase of productive area 1995-2005 (%)	Actual increase of productive area 1995-2005 (%)
Bientina	28,3	17,7	176,5	57,21
Buti	12,4	5,4	31,2	121,11
Calcinaia	17,7	21,7	75,8	51,87
Capannoli	17,2	12,9	217,4	40,5
Casciana Terme	20,6	4,5	8,7	59,95
Chianni	16,3	-1,7	306,9	n.a.
Crespina	18,3	11,1	112,3	50,46
Lajatico	18,2	-0,1	27,4	374,7
Lari	20,9	5,9	23,7	19,89
Palaia	13,3	-0,5	85,0	158,77
Peccioli	16,8	2,1	45,7	224,27
Ponsacco	17,7	16,8	9,9	71,88
Pontedera	22,6	11,4	327,7	95,97
S. Maria a Monte	13,5	11,7	19,8	28,2
Terricciola	15,7	11,4	27,7	87,24
Total	*18,8*	*11,1*	*49,2*	*64,35*

Table 1 shows the discrepancy between the increase of inhabitants assumed by the fifteen Municipalities of Valdera and the actual one in the period 2001-2007. For what concerns the inhabitants variation, it is worth noting that almost every Municipality assumed increase, also those with rural characteristics such as

Lajatico, Chianni, Palaia. In order to understand the meaning and the consequences of this, it has to be considered that new houses and infrastructures are built on the basis of the forecasts made by *each* Municipality, according to the mentioned 'predict and provide approach'.

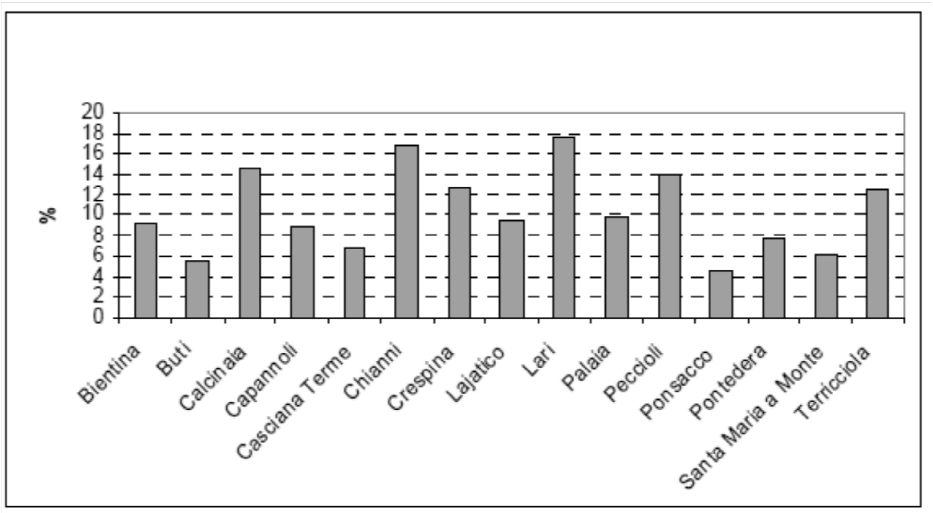

Figure 3: *Soil consumption (%) for new housing in each Municipality of Valdera () 1995-2005 (Source: Provincia di Pisa, 2008).*

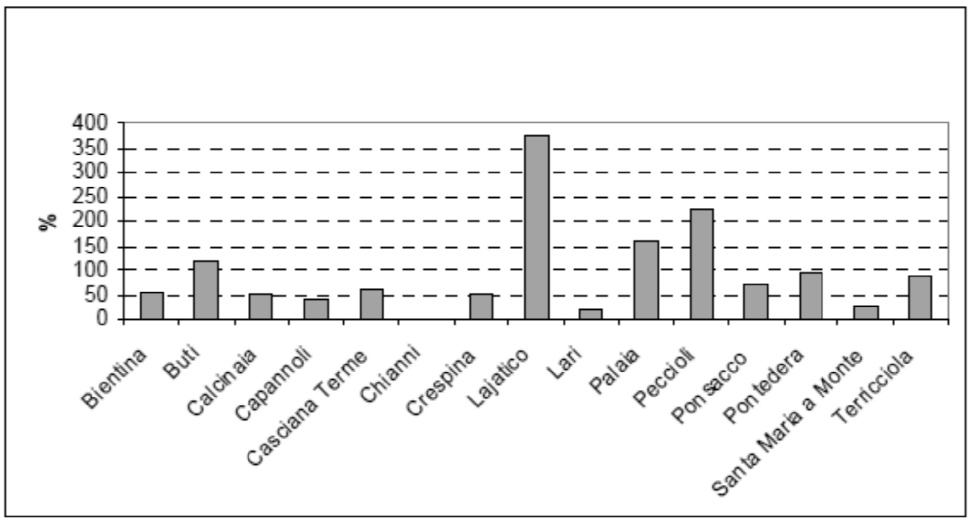

Figure 3. *Soil consumption (%) for production activities in each Municipality of Valdera, 1995-2005 (Source: Provincia di Pisa, 2008).*

Recently, the introduction of the inter-municipal plan (*piano strutturale intercomunale*) within the regional law LR 1/2005 has been proposed in order to achieve a more efficient land allocation for new houses and industrial development, and for an effective integration of spatial and economic planning[2]. In 2007 the 15 Municipalities joined in a Union of Municipalities (*Unione della Valdera*) in order to undertake the inter-municipal agreement for services

delivery. Over the next years, these Municipalities are expected to give the Union the main responsibility for spatial planning.

The environmental restriction (*Vincolo paesaggistico*) is another instrument acting in parallel to the planning restriction tool. It was introduced by the Decreto Galasso D.L. 431/85, which gives the Ministry of cultural heritage and activities[3] the task to design areas subjected to environmental restrictions and to control their preservation status by means of local institutions: When a specific landscape become targets for preservation strategies, policies and actions are promoted by cultural heritage and nature protection agencies[4]. with the aim to safeguard specific spaces from the different contemporary processes that go on elsewhere. This results in a reification of landscape values and a delineation of fixed areas to be "properly" managed to maintain certain esthetical and biological values. Concretely, the *vincolo paesaggistico* prescribes land-use restrictions and management obligations (beyond general legislation); areas under conservation usually remain in private ownership and the affected owners don't receive any payments to compensate for the loss of some land rights.

The mechanism does not forbid, of course, surrounding areas to develop in other directions. As it will emerge by the case studies here presented, there is rather a clear separation between physical planning and environmental conservation fields. Some weakness of this system are discussed at the end of the text.

3.3 Case studies

The case studies described below are selected in order to explore diverse configurations of tensions between different actors, sectors and interests. In order to preserve the anonymity of respondents and to facilitate more comprehensive description and analysis of the research issues under investigation, the locations and interviewees of the chosen case studies are not identified through their real names.

3.3.1 Case study 1 – Stressing outdoor recreation in a periurban context

This case study deals with the development of a car track project within a farmland in a periurban area. The project involves the conversion of about 60 ha of land from agricultural to recreational use, for the development of a racetrack and accommodation facilities. The owner of the farmland, covering a surface of around 100 hectares, is a long established full time farmer; the land cover of the

project area, before its starting, was mostly arable land, woodland patches and small biotopes.

The project also entails the conversion of barn buildings, the construction of new buildings and a parking area.

Permission to develop the project within the farmland was made in the context of an Environmental Impact Assessment, the EIA[5], undertaken by consultants which was finished in 2011. Therefore the *Variante Strutturale*, which allows buildings and land use changes, was approved by the municipality. The EIA materials are available for public consultation through the Municipal authority. It is not the purpose here to provide a detailed analysis of the EIA and express reservations about the scientific credibility of specific conclusions. According to the scope of the chapter, I try to sum up the EIA statements that were carried out prior to the project's development and some aspects of the related decision-making process.

During the interview with the farmer in question, a number of issues related to the decision motives, the past, current and likely future changes within his property emerged. In particular, after the project's development, only part of the woodland patches and small biotopes will be kept, while the farm production within the property will be removed. The following excerpts from the interview with the landowner provide rather explicit explanations: “There is no way to get any return on industrial agriculture... Go back and adjust the farmland business and structure according to the emerging, promising niche market is too late. Now I want this area to represent an important open space area and the green lung of the city, where people come to walk and have fun... And I feel happy the big project has been approved. At last we have got it!”

The farmer has opted for what he considers a more immediate and certain economic strategy, thus eroding the property's agricultural base; moreover, while he claims to provide “open space... where people can walk... ”, in the project plan there is no proposal which does design the area to be open to the public for informal recreation either.

The EIA documentary material shows that the project was accepted by the Municipality with only minor restrictions, in particular limitations on the remodelling of the soils and landscape. No detailed information about the status of the area before the project are present in the documentary material, therefore it seems unclear where the “benefits for the local landscape” could arise from the project. For instance, at a general level the Environmental Assessment suggests that the project will not impact on biodiversity; we are not told how the transition

from farmed arable land of unknown/untold biodiversity status to a racetrack area would not impact the biodiversity and the landscape structure. Overall, the assessment documents lack of many of the well known indicators of state, impact, response, drivers and pressure, which often are calculated and used by consultants/experts within the EIA procedure. The documents don't say anything whether the assessment procedure have considered and explicitly addressed, at the planning stage, social and economic factors: residents' point of view on the project and its impacts, the economic viability and an accurate estimation of demand for such kind of facilities. There is no clear requirement to check that possible benefits or negative impacts that could achieved/avoided in a post-development stage.

During my fieldwork in the area, I asked local farmers about their views on development plans at a general level, and how in their opinion they may affect the neighbouring properties. It was possible to identify two distinct groups of farmers: those who consider land development as something they themselves need to do to survive economically; and those who complain about the environmental impacts and the increase of land prices due to land development, which "makes the young's entrance to agriculture even more difficult". Interestingly, a few farmers, albeit not asked, expressed opposition to the project in question: "The project has not been conceived to save the farm nor to provide the open space for everyone's benefit, as they [the owner and the Municipality officers] claim", "This is speculation. A few people will benefit from it, I feel the local community and us farmers will not", "The environmental impact is going to be great". Furthermore, a group of stakeholders, represented by neighbouring farmers and local residents, have joined in a group opposing the project (*Comitato di La Rosa*): their arguments against the car track mostly deal with the environmental impacts (noise, farmland loss, pollution).

3.3.2 Case study 2

This case is about the tensions between farmers' caretaker task for the land, the politics of housing at a local level and environmental designations. The setting is a rural hilly municipality situated in the context of the *Colline Pisane* wine route[6].

The interviewed farmer is a professional full-time farmer with a rural background, personally engaged in farming and landscape management. He owns 70 ha of land partially located in terrace hill land with olives and vines within an area subjected to environmental restrictions. During the interviews, he shows concerns about reduced income from farming as a consequence of food market

competition. Nevertheless, he rejects the idea of abandon farming. First and foremost, this group of landowners see themselves as food producers, then, as land managers.

During the interview, he reported how he experiences the place his farmland is located in, the constraints and the institutional setting: “The environmental restrictions impose us to keep and manage these terraces, everything at our expenses. Pruning, grapes and olives gathering, and every landscape management operations have to be done by hand because of the terraces and the restrictions. This makes our products very good and different from industrial products, however this also increases the costs of production... Well, I don't ask for incentives, because managing the land is my work... and this landscape is beautiful. Well, developers do what they like, though. Even here, close to these terraces. Look there at the foot of the hill, new houses have been built few years ago. Moreover most of them are still empty [unsold]. You know, actually because of the restrictions nothing could be built here. But restrictions can easily be bypassed!”.

And he followed: I really feel that working the land is something important here. If we abandoned the activity [farming], that houses you see down there, which have been built with a wrong urbanisation, would be flooded whenever it rains. Everything here is a great contradiction”.

3.3.3. Case study 3

Urbanisation in periurban areas represents a traditional threat of farms, especially when 'public interest' is identified with ideas of industrial and urban development. In western society, expropriation on grounds of public interest represents relatively radical type of intervention, and it is followed by economic compensation to the landowner in question.

In this section I will provide one example from interview with a full time farmer who owned 100 ha of arable land in a periurban municipality close to Pisa.

In 2005 the local municipal authority bought 60 ha of his property to use it for industrial development “in the near future”. The industrial development project, which seems will cause the agricultural erosion of the area, has not yet achieved after seven years.

Data provided by the Province of Pisa (2008) display urban and industrial development represent a master development model within the area. A number of projects are facing viability problems, largely due to the fact that development

capacities have been over-estimated at the planning stage. Indeed the 'growth scenario' for the period 1995-2005 provided by the Municipality in question assumed an increase in productive land for industrial development which was three times as much as the actual one was (Province of Pisa, 2008).

The farmer in question still grows the farmland (the expropriated land as well). During the interview he said:

"It is difficult to plan any sort of farm investments here. […] The planning for the next season needs to be done a year ahead... but the local authority might unexpectedly start the construction works. Then I sow my fields at my own risk. [...] I do manage the land, I really feel this is my work. I clean the ditches and drainage channels, we would have flood problems... I do it because I am farmer, but I wonder myself: whose is this land? I don't feel it is still mine, you know". While answering my interview questions, he showed me a recent article in a local newspaper to corroborate his arguments. The article reported: "Owners who will not clean the ditches within their property will be fined by local authorities" (*Il Tirreno*, October 2010). The farmer commented: "Yes, but it's amazing I would be fined if I cleaned the channels and waterways in abandoned field that nobody does care for. I find there are great contradictions... do local bureaucrats really further the public interest"?

He followed:

"The law and bureaucracy have been regulating everything and everywhere and the result is the land is increasingly abandoned and neglected or abandoned. [...] This land [his farmland] is something in-between. Well, abandoned farmland is neither wilderness nor cultivated. It is not easy to define abandoned farmland. There are large tracts of countryside which have not being farmed for several years, while the owner is waiting for the land price to set to soar... Or there is some land, which was bought by the Municipality for development, which is farmed and tilled only occasionally. Should these areas be considered abandoned farmland or not?".

Discussion

Notes

1. When farmers apply, for instance, for planning permissions in order to be allowed to change the use of rural buildings, the Province is required to

verify the actual 'marginality' (its uselessness) of the specific building for the farmland activities.

2. A preliminary document with a list of proposed changes in the LR 1/2005 has been arranged and contains the proposal of the inter-municipal plan adoption within the Tuscan territory. For further information: http://www.regione.toscana.it/regione/export/RT/sito-RT/Contenuti/sezioni/territorio/pianificazione_territorio/rubriche/atti_delibere/visualizza_asset.html_745351690.html, http://www.regione.toscana.it/regione/export/RT/sito-RT/Contenuti/sezioni/territorio/pianificazione_territorio/rubriche/atti_delibere/visualizza_asset.html_802029966.html
3. Ministero per i beni e le attività culturali.
4. Soprintendenza per i beni architettonici e paesaggistici.
5. The Environmental Impact Assessment (EIA) is an assessment of the possible positive or negative impact that a proposed *project* may have on the environment and the socio-economic context (Directive 85/337/CEE). It differs from the Strategic Environmental Assessment (ESA), which aims at aims at introducing systematic assessment of the environmental effects of strategic land use related *plans* and *programs* (SEA Directive 2001/42/CE). However, in Tuscany as well as many Italian regions, the SEA Directive implementation is still not unproblematic (see Pagni et al., 2009).
6. The *Colline Pisane* wine route extends over a large tract of the area under the province of Pisa. More precisely, 14 Municipalities belong to this wine route. The area is characterised by the hilly landscape and the presence of Arno and Era rivers.

Chapter 4

Explaining land management decisions to understand local landscape functions and change. Some insights from Tuscany

Abstract

Structural changes in agriculture and urbanisation affect land management regimes and local landscape functions. Drawing on a detailed case study in Tuscany based on qualitative interviews with landowners and an understanding of the socio-economic context, this chapter analyses landowners' attitudes towards land property and farming in relation to individual motives, local and supra-local contexts. Five relational typologies of landowners are identified: pure farmers, amenity farmers, land developers, land-with-house owners, and house-with-land owners. Diverse trends are found – such as some farmers' attitudes to land development, the emerging role of non-professional farmers in land management – arising challenges in the long run related to the multiple meanings of land and the changes in land management community. Results and discussion highlight the need of institutional setting to adapt its relationship with, and between, farming and land management.

Key words: Land management decisions, urbanisation, agricultural changes, landowners, relational typologies

4.1 Introduction

The shifts in the use of many land areas from traditional and commercially driven farming activity to diverse and highly dynamic land uses – occurring both in the urban fringe and in the rural hinterland – involve socio-economic factors, as well as institutional and environmental challenges. Many patterns of rural land ownership reflect the increasing urbanisation of the countryside, which makes owners focus on new interests, sometimes at the expense of traditional agriculture (Munton, 2009). Indeed the countryside is more and more considered as a recreational place (Potschin & Haines-Young, 2003; Fløysand & Jacobsen, 2007)

and as a place to live in (Halliday & Coombes, 1995; Primdahl, 1999; Milburne et al., 2010).

Urbanisation means land – usually agricultural land – consumption for business, recreational and residential purposes, and, in a broader sense, it can be considered as a process that creates various kinds of pressure affecting the countryside (Bryant, 1982). As acknowledged by M.F. Madsen et al. (2010), urbanisation does not deal with land use change only, but it deals with functional and lifestyle changes as well, involving changes in rural-urban relationships and structural adjustments in agriculture.

The need of study the new functions of land is relevant as the replacement of farming by different activities and different uses of land, landowners' decisions and their long term investments may have significant effects on local landscape's functions and, in the long run, on its structure and environment (Bryden et al., 1993).

Previous studies have focused on particular aspects of the structural change in agriculture and land occupancy. For instance, Bohnet et al. (2003) found that the new groups of lifestyle rural land occupiers do not have the same long term and inter-generational time perspective as most family farmers do, and often contract out their land to local full time farmers. Until now, however, the link between structural changes in agriculture and urbanisation, and the local landscape level implications, have been little addressed, except for some useful, mainly quantitative studies in North Europe countries (see, for instance, Zasada et al., 2011).

Drawing on a detailed qualitative case study, in this chapter I try to explain the intersecting dynamics of structural changes in agriculture and urbanisation in two municipalities of Tuscany (Italy), by addressing the research question: how and why do landowners differ in their attitudes towards the countryside, in their involvement in farming and land-based investments choices?

Tuscan landscape, which is represented both in scientific literature (e.g. Vos, 2001) and in tourism marketing field as a valuable landscape, seemed to be an appropriate case for studying the changes in rural landscape functions. In particular, two municipalities, one located in the urban fringe and one in the rural hinterland, with high degree of contrast, were selected (Marcus, 1998).

As point of departure, it is supposed there are many factors influencing land use and land management, which represents one of the most research problems when trying to link land ownership to land use change and landscape patterns (Munton, 2009). Particular attention is paid to the role of human agency, through

the analysis of what landowners actually do on their land and why: landowners, combining their own motives with external opportunities and constraints, are considered the key local stakeholders who actively manage and change the landscape (Primdahl, 1999; van den Vaart, 2005; Bohnet, 2008).

After a description of the explanatory framework and the methods used, results from the case study, based on qualitative research I drew on in a field investigation carried out in 2010 and 2011 in Tuscany, are presented. Landowners typologies are portrayed and, finally, some concluding remarks are proposed. The aim was not to extrapolate from a representative sample, but to investigate, using a case study analysis, some key aspects in order to separate landowners into distinctive types (Yin, 2002) on the basis of their land management decisions.

The scope of this work is to contribute to current debates on countryside's management and rural planning, which is explicit in recent political discourses, since the link between land property, land holding and land management is more and more indirect and complex (Potter & Libley, 2004; Potter, 2010).

4.2 The explanatory framework

Investigations in local landscape are needed for understanding functional changes of the countryside. It is acknowledged that research on agricultural landscape cannot be analysed on the background of agricultural production only, since the survival of agriculture as a mainly production oriented activity is strongly challenged (Murdoch et al., 2003; Wilson, 2007).

Inspired by the work of the Norwegian geographer Michael Jones (1988), the simple model I used can be presented as a triangle whose sides represent three levels of drivers and whose corners represent the elements which tie them together (Fig. 1): the three levels belong to 'internal' and 'external' (to the owner's family) factors shaping local landscapes, which are produced by the interplay of local actors, local and supra-local trends and worldview.

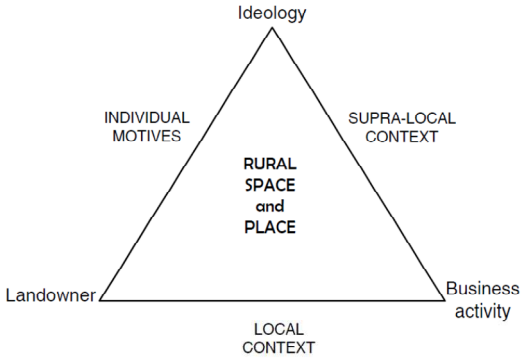

Figure 4.1 *Relationship between factors contributing to understand the use of rural space and place (inspired and modified by the author from Jones 1988).*

At the micro-level, land tenure and land management are related to individual motives: explanations at this level "can be sought in terms of the needs, motives and ideas governing the actions of individuals" (Jones, 1988: 201); the local context and responses run the functional changes occurring in the countryside: explanations at this level "account for the presence and characteristics of items in terms of how they contribute to the working of a system" (Jones, 1988: 202); at a broader level, explanation focuses on "major trends and the structure rather than the individual elements composing it" and it is sought "in relation to socio-economic structure and related ideologies" (Jones, 1988: 203). In other words, land management decisions are framed by a combination of overall conditions, such as global market, local opportunities and constraints, such as local planning, and personal intentions. All of these forces impact the structure and the functions of the countryside and agriculture.

Jones presented the framework as three complementary approaches to explain the patterns of the cultural landscape. In my study, I try to combine all three levels in order to address the research problems related to landscape management explanation, by means of qualitative approach, which is useful in understanding actors' reasoning and circumstances in specific contexts (Sayer, 2000).

4.3 Landowners relational typologies

Typologies of landowner or farmer have been developed in rural sociology and natural resource management studies (e.g. Whatmore et al., 1986, Daskalopoulou & Petrou 2002, Emtage et al., 2007). These typologies have been employed as a tool to understand the diversity of value systems and socioeconomic characteristics of key local actors.

Whatmore (1994) identifies three methods for developing typologies: taxonomic (identifying groups through sorting of empirical data), relational (identifying groups on basis of structural relations) and experiential (identifying groups by interpreting people's reasoning about the meaningfulness of specific practices).

Acknowledging the relevance of contextual drivers for the present research, I developed relational typologies of landowners resting "upon the identification of

coherent patterns of economic and social relations between the object of study and its structural context" (Harré, 1981: quoted in Whatmore, 1994).

The framework in Figure 1 and relational typologies consider the relevance of contextual elements in addition to motives and intentions for understanding the use of rural space. The framework in Figure 1 specifies the explanatory levels the drivers belong to. Following L. M. Madsen and Adriansen (2004), I developed the typologies through an iterative process between decisions on landscape structure and function (indicated as land management decisions in the following) – such as land-based investments, adjustments and strategies, establishing of uncultivated elements – and rationales behind them. I grouped the factors that the landowners said were relevant to their land management decisions in 'internal' and 'external' factors. Thus, the iterative process between practices and reasons identified different types of landowners with different kind of land management decisions.

Diverse sets of factors proved useful in interpreting the empirical material: the availability of diverse source of income within landowner's family and its origin and background, possible successors in the family, local planning framework, food market, land market, external source of capital for investments.

Data for this research have been gathered and triangulated using different sources of evidence: qualitative interviews; maps to check land use changes; fieldtrips for direct observation; planning documents to know and understand the local planning framework; official statistics to get data on local agricultural structure; local literature to have an overview of the local environment. This material was analysed through a contextual reading (Kvale, 1996) which was helpful to establish explanatory typology of landowner types; emphasis is given on in-depth analysis rather than statistical analysis and generalisation.

4.4. The interviews

The first step of the empirical work, I carried out in autumn 2010, which was explorative in nature and purpose, consisted of brief telephone interviews with 48 landowners, with questions on property structure (property size, business and legal organization, off-farm employment, etc.). The contacts were provided by two local agricultural extension officers in order to cover a wide diversity of farm types, distributed throughout the two municipalities. In winter 2010, and April and May 2011, I carried out the second step of the fieldwork, which consisted of in-depth interviews, based on a more restricted number of landowners, sampled from those previously interviewed in order to cover the widest range of actors as possible. In this phase, also snowball technique (Berg, 2004) was used was used

to decrease bias in the sample and to increase my research's validity and reliability, since the data were gathered from a diverse group of actors (Kleinasser, 2000). Each face to face interview lasted around one hour, and was followed by a tour of the farm. Since no new items relevant for the research questions arose (Glaser & Strauss, 1967), 21 interviews in the urban fringe area, and 18 in the rural municipality seemed to be sufficient.

The interviews were tape-recorded after the permission of the interviewee. Therefore, I fully transcribed and qualitatively analysed the interviews to understand the patterns and motivations of the relationships being studied. The themes of the in-depth interviews dealt with the owners' background, the history of their holding, their recent investments, future intensions, all these themes with a focus on the driving forces.

4.5 The study area

Two Tuscan municipalities in the Province of Pisa represent the study area for this research: one of these, Pontedera, is located in the urban fringe, the other one, Lajatico, in the rural hinterland. Lajatico is a small town, with about 1.390 inhabitants, placed in the valuable gently hilly landscape of Tuscany, and represents a successful tourist destination also thanks to its strategic position in relation to the tourist cities of Florence, Siena, Pisa and Volterra. Pontedera, placed in a mostly flat area along the clearway connecting Pisa to Florence, with its 25.000 inhabitants, has experienced a great urbanisation since the '50s, related to industrial, residential and infrastructure development.

The history of Tuscan landscape is characterised by the *mezzadria* (sharecropping), an agreement where a landowner provided the *mezzadro* with a plot of land (*podere*), the stall for livestock (*stalla poderale*), and the house to live (*casa colonica*). Precisely, mezzadria was “a contractual relationship between a cultivator and a landowner, or other holder of rights over land, based on the principle of dividing both expenses and products half-and-half” (Silverman, 1975: 45). In so doing, this system was able to create a multicropping landscape, with vines, olives, wheat, vegetables, wood, etc., known as *coltura promiscua* (Vos, 2001). In 1983 all mezzadria contracts were abolished.

This landscape has been, and still is, subject to many changes.

The two municipalities have been experiencing a combination of changes to farm structure, urbanisation process and agricultural restructuring.

Nowadays, cereals, sunflowers and other oleaginous crops are the main agricultural produces both in Pontedera and Lajatico, while winegrowing yards are around the 5,62% and the 1,8% of the UAA of the two municipalities respectively (ISTAT[1] 2000) – which are modest percentages if compared to many other Tuscan areas strongly characterised by 'viticulture elites'.

While polyculture was often replaced by monoculture, furthermore many socio-economic processes acted as a force of change: several farmers, after the '50s and under the hegemony of the industrial worldview, moved to work in other sectors, and many areas have been urbanised after the abandonment and conversion of the *poderi*, *case coloniche* and *stalle poderali* (Pazzagli 2008). In many cases, small farms – whose owners opted for other job since the farm was too small to secure a decent income – were incorporated into the bigger ones, starting the still ongoing process of appropriation of small farms – especially those under 3-4 ha – into larger holdings, both in Pontedera and Lajatico (ISTAT 2000[1]).

Since the early 1960s, diversification of the farm economy by way of barn conversion into agritourisms, houses, etc., became a successful strategy in a time of changing socio-economic paradigms and in a country like Italy where rural outmigration had left behind several redundant rural buildings available for conversion (Sabbatucci-Severini, 1990). The study area has been experiencing a land development process due to residential development and amenity-driven rural restructuring, where many farmers have themselves been contributing to the process of “hidden urbanisation” (van der Vaart, 1991) by converting old rural buildings into housing, tourist accommodation and recreational sites. Under the Regional Law 1/2005 of Tuscany, also parcels zoned for exclusive farm use have been converted to different uses. Under this law, the final permission to convert building functionality and structure is given by the Municipality. Land parcels, which have previously been zoned for exclusive farm use, may then be used for development, after the approval of the local authorities. This planning system, where the relevance of local discretion in land use regulation is high, along with the 'predict and provide' approach to planning for housing (Murdoch & Lowe, 2003) have led to the conversion of many farm buildings to pure residential estates (including second homes) and to a residential development higher than the population (permanent population and second-homes owners) increase (Provincia di Pisa, 2008[2]).

These lines on the case study context may help to better understand and explain the owners' responses and practices, as illustrated in the following section.

4.5. Typology of landowners

A. Pure farmers (Pontedera)

This typology includes professional full-time farmers personally engaged in farming and landscape management. as economic activity. They have rural background, occupying the land they currently farm for more than two generations. Agricultural production represents the main economic activity within the family. During the interviews, respondents expressed concerns about reduced income from farming as a consequence of food market competition and the "new" CAP regime[3], painting the future of their business in gloomy colours. Notwithstanding, most of the respondents would not abandon farming themselves completely.

When they were asked about their recent investments they commented:

"Sow the field is my gamble. I buy what is strictly necessary, such as fertilizers, machineries, but they are not real investments. Whether I'll replace the old vineyard... [after a pause]... I don't know at the moment" (Owner interview 7).

"Public funds are not sufficient for any sort of investments, and loans are not possible for us farmers, not anymore" (Owner interview 6).

Also the lack of successors and the desire that their children find job outside agriculture does not encourage them to invest on farm activity.

Some of these farmers use to take care and grow the land of their neighbours, who work in other sectors, as contractors:

(What do you grow/what do they [the neighbours] want you to grow in their land?)

"Usually simple crops, cereals, or nothing, they just ask us farmers to keep their field clean and mow lawns. I wonder what will happen, we [farmers who work the land] will stop doing it sooner or later. Who's going to manage their land? It [the land] may fall into the hands of land speculators, and this would be the end for us producers" (Owner interview 18).

(If your neighbour's land was for sale, would you buy it?)

"No, I wouldn't. If you had asked me 15 years ago, I would have said yes, perhaps. Well, land prices are high, [because] we are close to the city, and food price are high too, though it doesn't affect us producers in any positive way. Moreover, my children will not work in the farm, it would not be a good job. Therefore it [buying the land] would not make sense" (Owner interview 5).

First and foremost, this group of landowners see themselves as food producers, then, as land managers. When they were asked about the reasons behind their management decisions, they often added some comments on the current trends and developments within agricultural sector. In particular, they feel their professional identities being challenged through EU policy and society's conception of agriculture. One farmer stated:

"… society wants us to keep the fields and the ditches clean, that's all. But this is what we already do when we grow and work the land to produce [food]. We are not gardeners. Public subsidies are charity... the European policy should be related to production, not to the land as such. It is difficult to accept that people get money without farming their land" (Owner interview 8).

B. Land developers (Lajatico, Pontedera)

This group is constituted by professional farmers who capitalize on land development opportunities, for example, by subdividing, developing, and selling when land values set to soar. During the interviews, they exposed their performances with a sense of pride, because, they claimed, the local landscape may benefit from barn conversion. They stated "my background is very much farming", while adopting land development, which seems to coexist with their view of landscape improvement:

"I completely recovered and renewed old *case coloniche* and *stalle poderali* – the Municipality has given me the permission. I bought the land, around 10 hectares, and I wanted to recover them, this is important for the landscape maintenance"

(Did you receive any public incentives?)

"No, I did not, otherwise I would not be allowed to sell them [for residential uses and accommodation facilities] right afterwards[4]. I would like to do a similar work elsewhere also. The Municipality should be grateful for my efforts to improve the landscape and the environment" (Owner interview 16, PONTEDERA).

On the contrary, a farmer in Lajatico commented about his unsuccessful investment in land development as follows:

"I have recovered some abandoned buildings for the residential use, as second homes. But it was not a good idea: now I can't sell them, because of the crisis. And I have to give money to the bank because of the loan. It has been a disaster!" (Owner interview 2, LAJATICO).

A farmer in Pontedera stated:

" ...we are constrained by the wrong choices of the past. We have focused on industrial production only, then we have realised global competition is horrific! [...] Nowadays we do not grow almost anything, we have debts. Farming is great, it is still what I like to do. Now I have other projects. A private company is going to build a sport facilities park and one big hotel, a very big project, 60 ha of land will be occupied inside the property by new activities"

(Who will run the recreational area?) "A private company will" (Will the land remain under your property?) "I don't know. I will rent it or sell it to the company".

C. Amenity farmers (Lajatico)

This group of landowners consists of farmers who diversify the farm business by means of agritourism, which represents an additional source of revenue they can rely on. When they were asked how and why they have launched out into the agritourism business, they advocated the economic reason and the creation of on-

farm employment opportunities for family members. The farms diversifying into tourism are often the ones that can rely on other source of income already.

Though they are engaged in production activity, these farmers are particularly interested in investing in recreation facilities – such as new bedrooms or swimming pool – and landscape beautification by establishing uncultivated elements:

"We have to keep the ponds, the trees and everything here clean and tidy, you know, tourists come here to enjoy the landscape. We have just planted cypress and hedgerows to create a restful garden area inside the farmland" (Owner interview 14).

Interviewees emphasized the necessity to improve both the farmed and built environment, as explained in the following excerpts:

"My daughter takes care of the rooms and tourists, I work the fields" (Owner interview 15).

(How does the presence of the agritourism affect your farm enterprise operations/decisions?)

"The agritourism requires time and capital. I am going to recover an old vacant building, I want to have more rooms for tourists. It requires a lot of money. The funds of the Rural Development Program were not sufficient, so I had to take a bank loan"

(Was that building inside your property already before?)

"Of course it was... It is not possible to buy a piece of land here, land plus one rural building?... [laughs]... impossible!"

(Was it easy to get the planning permission to recover the building?)

"Yes, it was. Tourism does invigorate local economy" (Owner interview 13).

(How are you going to invest in your property?)

"Well, I have already planned to develop a stable for horses, by restoring an empty building. It's a way to attract tourists. This will change the farm structure, because it will need space for riding and grazing. I will remove the vineyards, they need a lot of costs and labour. Instead, I will maintain the scattered olives, they create a typical landscape, foreigners like that. You know, once you have decided to have to do with tourists, everything change. You have to chose even the rotation according to aesthetic criteria" (Owner interview 15).

For these farmers, the agriculture and farm resources are still important for tourism success; however, farmers especially emphasise the buildings and landscape values. Here, for amenity farmers of Lajatico the supply of experiences around agricultural products – such as typical products and culinary specialities tasting or direct selling, that are very common in other Tuscan areas (see Brunori & Rossi 2000) – is little developed.

D. 'Land-with-house' owners (Lajatico, Pontedera)

This type includes owners who rely on off-farm income, and work the land themselves as non professional farmers. They view themselves in a caretaker task for the land, accounting, for that, satisfaction with their everyday land practices. Their caretaker role entails both growing olives, vines, orchards and vegetables, for self-consumption and for selling to friends, and "environmental restoration" by planting native species, diverse hedgerows, cleaning ponds, and so forth. While telling the embodied pleasure in practical farming and their experimental forms of farming, they acknowledge the visual values of surrounding landscape:

"You can have this house everywhere, but this landscape only here, and only if you work and farm the land everyday" (Owner interview 7, LAJATICO).

During the interviews, they expressed the commitment to agriculture as a way of life choice, by noting, for example: "I'm spending for this land the money I earn working for the Municipality", "The land needs to be managed and grown!",

“I think we will have to go back to farming”. A doctor who owns few hectares of land in Pontedera, told me:

“It is good to have a piece of land where you can grow the food you eat. The crisis has been telling us this is increasingly important. Young people should be aware of this and learn to farm the land” (Owner interview 5, PONTEDERA).

They also expressed their liking for “experimental” farming:

“This land was much too poor to be grown. It improved since I have been using organic compost. When time comes I would like to try out other experimental stuff” (Owner interview 5, PONTEDERA).

While answering my questions and describing their everyday management practices, they place satisfaction in their narratives by claiming familiarity of “pruning”, “ditching”, “planting”, “trapping”, “mucking”, “levelling out”, and so on.

E. 'House-with-land' owners (Lajatico, Pontedera)

This typology is present in both the case study towns, and it is composed of people who do not work their land themselves, as they work in the city (in the case of Pontedera) or live elsewhere and use their countryside property for holidays (in the case of Lajatico). Some of them have inherited the property; in Lajatico, some properties result from the conversion of smallholdings into second homes.

Usually, some local/retired farmers work their land as contractors:

“I can’t work the land because I have no time. However, I love it here, there is my born house and I like to come here with my wife. The landscape is beautiful, there are the hills. It’s a local farmer, a retired man, who does keep the land clean and tidy. Years ago we removed vines and most of the olives that my parents used to grow. Too much labour and little returns” (Owner interview 10, LAJATICO).

(Have you ever considered selling this land?)

"No, we don't want to sell it. We like this house, and this is good to have some land now ... [laughs] ... in these times of crisis, you never know" (Owner interview 9, LAJATICO).

"Yes, this is an option I am just considering, you know, my parents are not able anymore to keep it farmed. Moreover times are good since land prices are quite high. I regret the land is likely to be bought by some private company, farmers are not able to buy anything ... bad times for farmers!" (Owner interview 4, PONTEDERA).

4.5.1 Summary and integration

Table 4.1 reports the main 'internal' factors which resulted to be relevant for landowners' decision making. Not surprisingly, having source of income other than the agricultural one and the possibility to reproduce the business/farming activity (also through successors) are related to each other. Land-based investments are accomplished to create opportunities for the next generation, and, in turn, the availability of an additional source of income makes farm-related activities and investments economically viable.

It is worth noting that the commitment to farming is not always related to landowner's rural background: for instance, whereas type D is connected with farming, the study revealed that type B is inclined to consider the land as a speculative commodity.

Typology	Origin and background	Other source of income (on-farm)	Other source of income (off-farm)	Successors
A. Pure farmers	rural	–	–	unlikely
B. Land developers	rural	–*	x*	likely
C. Amenity farmers	rural	x	(x)	likely
D. Land-with-house owners	urban/rural	–	x	uncertain
E. House-with-land owners	urban/rural	–	x	–

*Note: economic return from land development is here considered as off-farm income.

Table 4.2 shows the main 'external' driving forces. Amongst the five types, D results to be the least dependent on external factors. Yet, all in all, land prices and

food prices affect all the five types' decisions, though in different ways: for instance, high land prices foster some owners' attitude to land development, and at the same time the access to land become increasingly difficult for owners who want to enlarge their farmland or people who would like to launch out into lifestyle farming.

Land prices are influenced by food prices and the local context. The proximity to the city of Pisa in Pontedera, and the reputation of the Tuscan landscape in Lajatico, make land values fairly high for owners and the potential 'new entrants'.

Moreover, owners show reluctance to sell their land/farmland as such: they want to continue holding/farming their land for various reasons and purposes; or they prefer to get some planning permission before selling it.

By means of pluriactiviy, landowners feel to be rather emancipated from agricultural policy, and overall all the types do not significantly rely on agricultural policies that they consider “poor” and “uncertain”.

Here, as argued by Lowe et al. (1993), levels of barn conversion are determined by both local system of regulation and spatially variable markets. The incapacity of some owners to sell the houses resulting from the conversion of rural buildings reveals there is a need to better consider if new uses respond to the social and economic needs and resources of localities.

Table 4.2 *Relationship between typologies and 'external' (local and supra-local) driving forces. 'Very high', 'high' and 'medium' represent the degree of*

Typology	Land market	Food market	External source of money for investments	Planning framework
A. Pure farmers	medium	high	–	medium
B. Land developers	very high	medium	banks/RDP*	very high
C. Amenity farmers	high	medium	RDP*/banks	high
D. Land-with-house owners	medium	medium	–	medium
E. House-with-land owners	high	–	–	high

*Note: RDP=Rural Development Program

5. Discussion

In this chapter, the typologies are identified on the basis of a specific case study context, which mediates wider socio-political dynamics, and the capacity of actors to perform.

Here, the development and description of typologies is not to be understood as an end in itself, rather as a means of understanding relationships between, and the heterogeneity of, land management, land managers and some key drivers. The use of relational typologies proved helpful in the explanatory purpose of this chapter. Causal relations explain how and why, for instance, professional full-time farmers (in group A, B, C in this chapter) may perform in different ways from each other, which cannot be explained through taxonomic typology (Whatmore 1994), that ascribes landowners to pre-defined groups, such as full-time, part-time, hobby farmers (Madsen & Adriansen, 2004).

The qualitative and case-oriented approach has considered the socio-economic contexts of the issue in question, which is deeply situated at the local level and shaped by social processes. I have focused on the role of human agency rather than the natural environment: also land properties locations have been considered in socio-economic terms (proximity to the city, landscape reputation) rather than as natural-environmental features (for example upland/lowland and topography)

Understanding the multiple meanings of land is crucial, since rural land is supposed to provide, and is more and more valued in terms of, diverse opportunities. While non professional farmers stress their attachment to land as a lifestyle choice, the economic meaning of land result to be particularly relevant to other types. For instance, this is evident in the case of landowners in type B, who are interested in capitalising on development opportunities where land is involved as collateral. In line with the general blurring of the distinction between traditionally-defined 'urban' or 'rural' interests (Dwyer & Childs, 2004), aptitude for land development includes both landowners in the urban fringe and those in the rural hinterland: more precisely, in the case study here presented, for pure residential and recreational purposes in the urban fringe town, for amenity-based and second homes development in the rural one.

The economic aspect of land is relevant since it affects the access to farmland. Though 'pure farmers' actively farm their land and they do not abandon farming themselves completely, their long term perspective is affected by lack of successors and the business' profitability: when they get too old to farm, their farmland appear likely to shift to other profiles' ownership, and types B and C, or E seem to be the most likely land purchasers. However, land developers and

house-with-land owners, when purchasing land, mostly act as 'entrants to land market' rather than 'entrants to farming'.

Some views expressed by the interviewees during my fieldwork – “food price are high too, it doesn't affect us producers in any positive way though”, for instance – reflect the views of a recent article of The Economist, “Why the price of farmland is soaring”:

“Of course, only those farmers who are selling their fields can cash in on the land-price boom, and most do not want to, especially now. [...] Types of farmer argue that any financial gains from higher food prices are ploughed back into their farms” (*The Economist* – February 4th, 2012).

Another issue emerged through my study is the 'financialisation' in some land development investments, due to the replacement of public money by financial capital, which can trigger a bad circle in the management of rural resources and their development. As a matter of fact, the investments into second homes in Lajatico proved unsuccessful as the flow of people looking for second homes in the countryside have been experiencing a setback, maybe because of the crisis. In this way, the possible volatility of rural land development processes, as noted by Lowe et al. (1993), risks to undermine the long-term planning and the management of the countryside.

Though landscape outcomes have not been explicitly addressed in this chapter, some remarks can be provide. Currently, some owners increasingly take care of the uncultivated elements on the one side, on the other one they aim at simplifying the agricultural operations, by reducing the variety of crops within the farmland for instance. In general, similar landscape outcomes may be associated with a variety of landowner types. For example, it could be the case of contract farming: the increasing trend towards contract farming, which has been found in previous studies too (e.g. Lobley & Potter 2004), may lead to large tracts of countryside being managed by few (or single) operators, and, therefore, to a homogenisation of the agricultural landscape. In the same way, it could be the case of the establishing of uncultivated elements, emphasised by both types C and E. The continuity and changes in landscape practices after transfer of ownership might be relevant for developments in landscape structure in a longer term perspective, since radical land management and landscape changes are often associated with changes in land holding (Marsden & Munton, 1991).

NOTES

1. The last available statistics on agricultural sector at the municipal level are relative to 2000. The recent available data concerning 2010 are relative to the province-level. These data confirm the past trends, in particular the trend of number decrease of small farms and size increase of the big ones (at least at the province-level). The interviews, maps, fieldtrips and direct observation, proved the trend is still going on at the level of the two municipalities.
2. According to data of the Province of Pisa (2008), Lajatico and Pontedera have, currently, 143 and 900 uninhabited houses respectively. The hidden urbanisation carried out by farmers themselves inside agricultural zones, has been leading to the conversion of large tracts of agricultural land into tourism and recreational areas: over the decade 1995-2005, under farmers' request, 7.859,03 m^2 in Pontedera, and 583,10 m^2 in Lajatico have been so converted.
3. The interviewee was referring to the Single Farm Payment scheme, where subsidies moved to production-based criteria to land-based criteria, and are linked to land farmers manage, while the link between subsidies and production of specific crops is removed.
4. There are two planning instruments owners can apply for in order to be allowed to recover rural buildings, to change their original uses, to increase their size. In particular, this interviewee was here referring to the “Building Recovery Plan”, the grant scheme which allows the owner to sell the converted barn right after the recovery. While this grant scheme does not provide any direct funding to the owner, the “Agro-environmental Plan”, which regulates the barn conversion inside farmlands, does provide financial support through the Rural Development Program. When a barn is converted by using the “Agro-environmental Plans” scheme, the owners cannot sell the recovered building by some years.

Chapter 5

Landscape polarisation, hobby farmers and a valuable hill in Tuscany: understanding landscape dynamics in a periurban context

Abstract

After the Second World War, modern agriculture and urbanisation have contributed to the vanishing of many traditional landscapes. Over the last years, agricultural restructuring, changes in farms' structure and crisis in modern agriculture have led to an increasingly diverse set of relationships between land management and land ownership. This is especially true in periurban areas, where farmlands are often converted from commercially driven agriculture to various and highly dynamic land uses. This chapter presents a micro-sociological study carried out in a municipality close to Pisa, where two types of landscape coexist: a urbanised lowland including areas of mechanised agriculture, and a hilly area preserving traditional Mediterranean elements – such as terraces and ancient wine caves – which was abandoned during the rural outmigration and is currently being restored and managed by hobby farmers. Unlike lowland landowners, hobby farmers frame their 'dwelling' on moral discourses and see the upland as a cultural heritage rather than as a personal ownership of productive units of land. Drawing on qualitative interviews and other sources of evidence, this chapter analyses the landowners' motivations and practices in the two areas and explores some of the implications of this landscape polarisation within the municipality borders for landscape management and planning.

key words: urban-rural discourse, traditional landscape, Tuscany, cultural heritage, hobby farmers, landscape polarisation.

Introduction

Periurban areas are complex landscapes impacted by several social and economic processes, where competing uses and functions – housing, agriculture, recreation, business infrastructures – affect land use and social systems.

A rich literature has documented the blurred distinction between the interests usually considered as 'urban' *or* 'rural'. The traditional urban-rural discourse, based

on the attempt to understand two different types of society, the urban and the rural one, has been criticised since it does not reflect the nuances of real environment (Pahl, 1968; Williams, 1989; Bonner, 1998; Dwyer & Childs, 2004; Qviström, 2007).

The history of urban-rural dialectics based on urban-rural dichotomy begins with the opportunity of comparing two different societies and ends up with the following conclusion: "any attempt to tie particular patterns of social relationships to specific geographical milieux is a singularly fruitful exercise" (Pahl, 1968: quoted in Bonner, 1998).

Bryant et al. (1982) have illustrated the emerging uses and functions of space by adopting a zonal model of the urban-rural continuum, where mixed and heterogeneous locations exist: therefore, they have gone beyond the urban and rural spatial categories. It is important to highlight that changes in urban-rural relationships not only deal with land use and urbanisation but also involve socio-economic dynamics.

Overbeek (2009) suggests that hybrid locations within the urban-rural continuum are characterised by a vibrant heterogeneity of actors, composed of rural (natives and newcomers) and urban people (generally from nearby towns) with diverse interests, who often work in urban places. A relevant aspect for the urban-rural relationship and for agricultural changes is that more and more periurban spaces are converted into land managed by non professional farmers, who start their activities in landscapes that were formerly managed by professional full-time farmers.

The link between urbanisation and agricultural changes has been addressed, for instance, in studies carried out in the periurban area of Brussels (Vandermeulen et al. 2006; Bomans et al., 2010), in Australia (Gill et al., 2010) and in the Scandinavian countries (Præstholm & Kristensen, 2007; Madsen et al., 2011; Primdahl & Kristensen, 2011); similar studies on Mediterranean landscape management have been conducted, for example, by Green and Lemon (1996), O' Rourke (1999, a) and Kizos et al. (2011).

What I try to do in this chapter is to explain how and why changes in land management community can be related to urbanisation and how they can affect traditional Mediterranean landscapes.

This chapter draws on a micro-sociological case study based on the research I carried out in 2010 and 2011, which focused on in-depth analysis rather than on statistical generalisation and analysis and framed the land use dynamics of a Tuscan periurban municipality on the dialectics between concepts associated with

traditional landscapes, changes in agriculture and landscape polarisation. The study area is a periurban municipality, Pontedera, close to the city of Pisa and characterised by the contrast between two areas within the municipality borders: the lowland, a urbanised area with mechanised and specialised agricultural plots, and the upland, where traditional landscape has survived and is currently managed by a group of hobby farmers.

The main research question I address is: how and why do landholders differ in their attitudes towards agriculture, traditional landscapes, and landscape changes in a periurban context?

One of the most relevant research problems when trying to link land ownership to landscape dynamics is that there are many factors influencing land use and land management. This research focuses on both human and non-human agencies: on the one side, the socio-economic dimension is considered as an important driving force for landscape transformations at the local level; on the other side, as several authors claim (O' Rourke, 1999, a; Cloke & Jones, 2001; Stenseke, 2006; Lee, 2007; Kizos et al., 2010), landscape needs to be interpreted as experiential (as the result of the interaction between physical environment and human practices over time) and attention needs to be paid to non-human agencies too (i.e. natural environment).

Therefore, my aim is to explain how local owners interrelate with their land, thus shaping its relevance for them: I will show the case of landscape polarisation as the outcome of differently combined factors such as value systems, knowledge, social organisation, location and history, topography. Providing a portrait of the interrelated "agriculture-nature-society agenda" (O' Rourke, 1999: 142, b) has represented a crucial step in order to approach the case study and understand both the lowland and the upland areas.

Tuscany and traditional landscapes

Tuscany has been represented both in scientific literature (e.g. Vos & Stortelder, 1992; Pinto Correia & Vos, 2004) and in the tourism marketing field as a valuable place, especially thanks to the famous landscape of the triangle Pisa-Florence-Siena.

Besides the popularity of its visual features, many studies have acknowledged the ecological value of the Tuscan landscape, since it is considered as the result of the sustainable land management practices of the old *mezzadria* system – a sharecropping arrangement creating a multi-cropping system – which has dominated the Tuscan countryside, both in hilly and flat areas, until the '70s. An

important characteristic of this system was the *coltura promiscua*, inherited from the Etruscans and extended by the Romans, which Pinto Correia and Vos (2004: 143) have described as: "landscapes with mixed cultures of olives and fruits and vines, with in between either arable crops, vegetables or grassland".

While the Tuscan landscape continues to be appreciated all around the world, diverse and highly dynamic land uses have contributed to the vanishing of this valuable Submediterranean countryside (Vos & Stortelder, 1992): polyculture has often been replaced by monocultures and different socio-economic processes have acted as a force for changes: "Related to the changing land use [...] is the loss of traditional styles in modern constructions [...] the nearby cities cause a strong urban pressure. People who work in town occupy many farmhouses. Except for the *local farmer's initiatives* and the *engagement of urban people with the historical identity* of these landscapes, no specific measures exist for the integrated conservation of these traditional production landscapes" (Pinto Correia & Vos, 2004: 153, my emphasis).

The dynamics of continuity and change make the issues of landscape research, landscape identity and land use extremely complex. The changes in technology, culture, and economy have been threatening traditional landscapes, including environment and ecosystems, and modified the structure of society.

In the following sections I will illustrate the research methods as well as the socio-economic and historical contexts of this case study. I will describe the land use dynamics and the landscape management practices which characterise the study area and discuss the findings.

Case study: emerging polarised landscape experiences

Materials and methods

The methodological approach follows the assumption that studies on current landscapes need to go beyond the large scale and general land-cover changes, as the landscape includes complex interactions between the rural and urban space and functions, as well as between human agency and natural environment at the micro-scale level (Bomans et al., 2010; Gill et al., 2010); it is also assumed that a fine-grained study based on qualitative and ethnographic methods is crucial to understand dynamic landscapes, such as those placed in the urban fringe.

Various sources of evidence have been used to gather information for the case study and the triangulation: interviews with landowners, direct observations, statistics, documents, published local literature.

The first contacts with landowners were given by two local extension officers of two national farmers associations (Coldiretti and Confederazione Italiana Agricoltori), who also provided me with general information about the local agricultural trends. In addition, snowball technique (Berg, 2004) was used to decrease bias in the sample and to increase my research's validity and reliability, since the data were gathered from a diverse group of actors (Kleinasser, 2000). Landowners were sampled in order to cover a wide diversity of farm types (farm size, type of land use, business and legal organisation, location) distributed throughout the municipality's territory. From autumn 2010 to autumn 2011, I carried out face to face in-depth interviews with 30 landholders. The number of interviews was determined by the theoretical point of saturation (Glaser & Strauss, 1967): thirty interviews (12 in the upland and 18 in the lowland) seemed to be enough, since no new items came up after 23 interviews (9 in the upland and 14 in the lowland). In the in-depth interviews, the topics in focus dealt with the property's history as well as with the owner' background, recent investments, land management decisions and their perceptions of the institutional environment the property is placed in. I also encouraged a deeper exploration of the topics raised by the interviewees, such as the general trends of local agriculture.

I recorded, fully transcribed and qualitatively analysed the interviews through a contextual reading (Kvale, 1996).

In order to verify the presence of environmental and planning restrictions and functional changes of zones and buildings I checked the Spatial Structural Plan.

I consulted the statistical data related to the agricultural structure (Table 1) gathered from the Italian National Census (ISTAT).

Table 1: *Data about farms in the study area.*

	2000		2010		Change %
	Pisa*	Pontedera	Pisa*	Pontedera	Pisa
Farms with UAA	14.473	512	7.174	n.a.	-50,4
UAA (ha)	108.611,44	2.293,7	96.718,65	n.a.	-11,4
Average size of farms (ha)	7,50	4,48	13,48	n.a.	+79,7

Source: Italian National Census (ISTAT).

* The figures in this table concern the farms in the 39 Municipalities that fall under the Province of Pisa.

The most recent publicly available census records at the municipal scale relate to the year 2000, but the agricultural sector has experienced a great decline throughout the area of the Province of Pisa over the past 10 years (2000-2010):

the unavailability of an updated cadastre database and of updated statistics at the municipal scale thus limited the straightforwardness and directness of my approach. Nevertheless, the use of multiple methods – which involved, in addition to statistics, discussions with extension officers, interviews, field observations – have proved helpful in making the research as relevant as possible. While interviewing the extension officers, I had access to some official data contained in the files of the local registered farms which benefit from CAP payments. Although these data are not totally representative of the local agriculture – some farmers might not apply for CAP subsidies or may engage private consultants instead of relying on associations – they are in line with the figures of Table 1: over the 10-year period 2000-2010, the number of farms with UAA decreased from 403 to 179 (-55,6%); the UAA decreased from 1.912,08 ha to 1.531,57 ha (-19,9%); the average size of farms increased from 6,68 ha to 11,74 ha (+75,6%). The reduction of the agricultural surface at the municipal level is rather small if compared to the great decrease of small farms and the increase of average farms size. Indeed, according to the available statistics and to the fieldwork, many small farms have been incorporated into bigger ones: this is especially true for those under 3-4 ha, whose owners or potential successors have opted for other jobs since their farm was too small to provide a decent income.

Even though my aim was not to extrapolate from an entirely representative sample, I have tried to cover a broad variety of situations (farm size, type of land use, business and legal organisation) *within each* of the two areas, in order to grasp the spectre of farm types in the sample and provide a reliable characterisation of the two areas, i.e. the lowland and the upland (Table 2). The extension officers' reports, the interviews with the landowners and the direct observations throughout the study area have been crucial for this purpose.

In the lowland the main crops are cereals, sunflowers and other oleaginous crops, while the agricultural landscape of the hilly area is made of olive groves, chestnuts, vineyards. In the municipality, the vineyards represent 5,62% of the UAA (ISTAT 2000), which is a modest percentage if compared to other Tuscan areas strongly characterised by 'viticulture elites'. The agricultural surface covered by olive groves represents 5,58% of the UAA (ISTAT 2000), which is quite a low percentage compared to that of many other Tuscan areas.

Place and context

Pontedera, with its surface of 45 Km^2 and 28.000 inhabitants, is a periurban municipality located at a distance of 19 Km far from the city of Pisa. It is located

along the clearway connecting Pisa to Florence, in a geographical area (Valdera) where the Era and the Arno rivers merge, and bordering the town to the North.

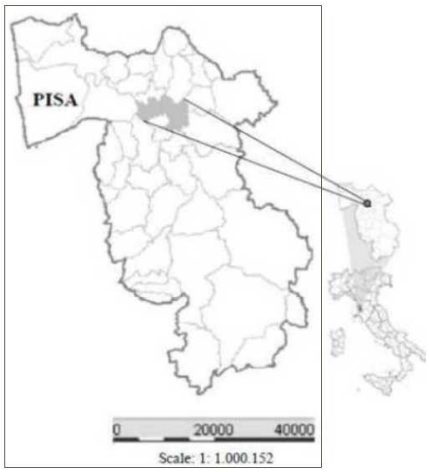

Figure 1: *Location of the case study area (Pontedera). The 39 municipalities of the Province of Pisa are represented in the map.*

The municipality consists of a urbanised and industrialised plain, which includes areas of mechanised agriculture, and the small rural hamlet of Treggiaia in the Southeast part. Treggaia is a hilly area belonging to the *Colline Pisane* (the hills of Pisa), which experienced a process of land abandonment and population decline in the '60s and '70s due to the industrial development and started to be repopulated by urban dwellers in the '90s (Pieroni & Brunori, 2000)

Figure 2. *An aerial photo of Pontedera: the hills of Treggiaia are in the Southest part, as the arrow shows.*

	Lowland	Upland
Size (ha)	From <1 ha to >100 ha	From <1 ha to 22 ha
Farmer/landowner type	Landholders consider themselves as commercial farmers or just as landowners who contract or rent out their land's management	Landholders consider themselves as hobby farmers and 'lifestyle' owners**
Production orientation and dominant land use*	Arable land, olives, vines. Specialised in cereals and oleaginous crops	Olives, vines, vegetables, orchards and chestnuts. More likely to be engaged in uncultivated elements

Table 2: *An overview of the characteristics of the properties included in the sample.*

* Dominant land use is considered as the main way in which the respondents use their farm.

** Hobby farmers and lifestyle owners are used as synonymous.

The history of Pontedera, which is now an important industrial centre (Martinelli, 2009), has been greatly influenced by the presence of the car industry represented by the Piaggio plant which, especially since the Second World War, has become an integral part of the town: Pontedera is geographically and symbolically related to the Piaggio label and its international fame connected to 'the Vespa myth'. In the '50s-'60s, the years of the so-called 'economic miracle', the whole Italian society was beginning to be dominated by a new industrial world-view. The Piaggio plant in Pontedera attracted workers from all over the Country, and large-lot residential developments and multifamily housing complexes were built for the workers' families.

However, Pontedera remained attached to the agricultural world for several decades, even after the Second World War. Indeed, this town's history has also been characterised by the *mezzadria*, an agreement where a landowner provided the *mezzadro* (i.e. the farm worker) with a plot of land, the *podere* (the old sharecropping farm), and a house to live in (*casa colonica*). The *mezzadro* had to manage the farm in order to ensure food for his family and produce commercial goods for the farm's owner. The result was a multicropping system with vines, olives, wheat, vegetables, wood, etc. (*coltura promiscua*).

Until the first '80s, it was possible to find the *metalmezzadro* ('farmer-metal worker') in Pontedera: until 1982, when all the *mezzadria* contracts were

abolished, the *metalmeccanico* of Piaggio ('Piaggio metal-worker') often went on farming the *podere* (Sabatucci Severini, 1990).

Along with the economic modernisation, the municipality experienced a process of urbanisation and changes in agriculture: the former resulted in new built up areas and in the conversion of land and abandoned buildings the rural outmigration had left behind; the latter resulted in the specialisation and mechanisation of agriculture. General outmigration in agriculture was reinforced by labour-saving technological change in farming.

Nowadays, the process of urbanisation together with the conversion of land and rural buildings is still going on, despite the industrial crisis and the weak demand for new houses. As Figure 3 and Figure 4 show, there is discrepancy between the Municipality's forecasts concerning the demand for houses and the industrial development on the one side, and the actual situation on the other side.

In the Italian planning system, the definition of built-up and non-built areas, based on a zonation system, is provided by the Municipal authority: after its approval parcels zoned for exclusive farm use by the Spatial Structural Plan, which is elaborated at the municipal level, can be converted to different uses. This planning system, where the relevance of local discretion in land use policy is high, together with the 'predict and provide' approach (Murdoch & Lowe, 2003) to planning for housing and industrial infrastructures have led to a rise in unused spaces and unfinished buildings, along with the loss of productive agricultural land, especially in the flat part of the municipality, as the following sections will document.

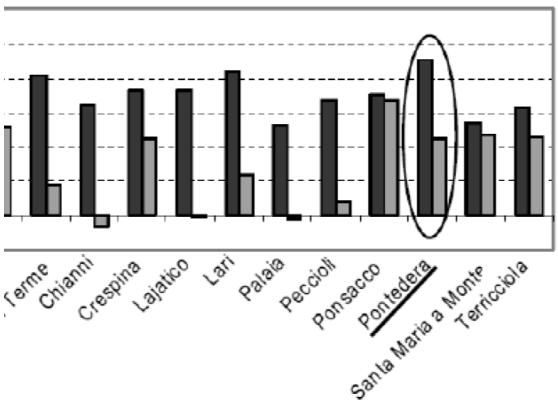

Figure 3: *The increase in population during 2001-2007 projected by the municipal Spatial Structural Plan (dark grey rectangles) is higher than the actual one in Pontedera as well as in most of the other municipalities of Valdera (Source: Province of Pisa, 2008, processed by the author).*

Figure 4: *The figures show the discrepancy, expressed in land for industrial activities, between the industrial growth during 1995-2005 assumed by the municipal Spatial Structural Plan (dark grey rectangles) and the actual development in Pontedera and in the other municipalities of Valdera (Source: Province of Pisa, 2008, processed by the author).*

The possibility of changing the zonal status of an area from rural to urban follows some general criteria, such as the urgency “for the common good”, usually concerning infrastructures and residential or industrial development, or the “marginality” of certain agricultural land (Regional Law on Territorial Government 1/2005),which usually refers to the economic aspect of a specific farm rather than to the land's soil quality and productivity, as shown in the following sections.

Moreover, the 'negotiative' nature of the Italian planning system (Khakee & Barbenente, 2003) as well as the lack of transparency in the national and local public policy (Transparency International, 2010) have encouraged the introduction of a number of special 'changes' in the Spatial Structural Plan, in order to enable the implementation of development projects. This flexible planning approach made it possible to carry out big public projects, e.g. 1990 World Cup (see page 17), as well as many small/medium-sized projects, usually consisting of special housing programmes. More attention is usually paid to immediate economic growth than on strategic orientation; moreover, the negotiations often involve only landowners, developers and elected administrators. This planning system is based on agreements rather than on control procedures and the only condition for getting the development permission is the availability of the primary infrastructure or the developers' promise to build such infrastructure at their own expense (Khakee & Barbenente, 2003); this has fostered the 'financialisation' of some land development investments, with the replacement of public money by financial capital. In some cases, especially during

the last few years, the investments into housing proved unsuccessful due to the crisis in the demand for houses (Province of Pisa, 2008).

Experiencing Treggiaia hill land and farming

Treggiaia, with its surface of 10 Km^2 and 1.150 inhabitants, is a hilly parish within the municipality of Pontedera. As previously told, this rural hamlet experienced a process of land abandonment and population decline in the '60s and '70s due to the industrial development, and, since the '90s, has been repopulated by urban dwellers. Most of the current inhabitants, who rely on off-farm income, have inherited old houses with plots of land from their fathers.

Since they have chosen to live in the upland[1] for its "scenery", during the interviews they showed enthusiasm for the restoration of their dwelling place. They themselves manage the land and grow orchards fruit trees, vegetables, vines, chestnuts and olives in terraces. When answering questions about land management, they put flesh on their descriptions by claiming familiarity with practices such as "pruning", "digging", "mucking", "terracing", "keeping the land cultivated" and so on.

They see themselves as "hobby farmers" and "lifestyles": as a matter of fact, they are not commercially oriented, as they use their products for their family self-consumption or share them with their friends. During the interviews, they described their commitment to agriculture as a life choice, as some of their statements show: "The land needs managing!", "For this land I'm spending the money I earn working for the Municipality", "[Working the land] is a matter of time and money... and something needs to be done for our environment and our children and future generations", "Our work is crucial to prevent the risk of landslide along this sloping land". They showed a moral attitude towards farming, along with the awareness that their practices' effects go beyond their properties.

At the same time, living in an attractive place is widely valued, as well as living in a biologically diverse and heterogeneous rural landscape rich in native plants. Interestingly, these landowners are motivated by rather sophisticated ideas about the joint character of landscape management *and* food production: the interviewees expressed satisfaction for landscape restoration as well as for activities such as growing vegetables and making wine and oil for self-consumption: they thus pursue their desire for "eating healthy" and "self-sufficiency".

Non professional farmers can get CAP subsidies for production activities only: as a consequence, recovering rural buildings – albeit maintaining their original

function and for production-related purposes – does not make hobby farmers eligible for CAP subsidies. Nevertheless, a group of nine olive growers restored an old oil mill in the hamlet and are now using it for pressing the olives of most local olive growers.

Other “initiatives” and “strategic collaborations”, most of which are carried out thanks to “resource sharing throughout volunteer groups”, deal with dry stone walls restoration and hedgerows establishing along mule tracks. A small landowner thus expressed his liking for experimental practices: “Here in Treggiaia small landowners voluntarily preserve the land, *we* are not real farmers but *we* manage the landscape and take care of *our* olive trees, even though *we* have never done it before and we *all* have other jobs. *We* try to help each other, *we* study together how to maintain and improve this hill land” (my emphasis).

In addition to their sense of belonging to a group of people, they expressed a deep connection to the natural environment represented by the hill land. The following statements are just a few examples of their feelings: “Looking at this hill land says a lot about who we are”, “When I work the land, I feel like I am one with it”, “When I spend my time working this land, I feel totally free and satisfied”.

These people's aptitude for taking care of the land concerns both the natural and the built environment. For example, a landholder recovered a vernacular rural building by restoring an independent wine cave dug into a slope-side: “I am recovering this cave first of all because it really needed restoring – since its structure was unstable – and I am respecting its traditional shape and architectonic elements, although this makes the renovations more expensive and difficult. It fell into disuse through generations, because this type of cave can be used for small artisanal production only. I think it's important to restore it because it's part of our family heritage. [...] I applied for the permission with a detailed project and I got it, but without any sort of financial aid. [...] I think that using this wine cellar in order to link wine production with tourism would be a great idea and perhaps I will do it when I retire”.

For what concerns the perception of the institutional environment, the interviewees underlined the adverse effects of local institutions' policies. In their opinion, this upland has been neglected for decades since its depopulation and no management and preservation measures have been fostered: “We are bringing this land back to life... at least we are sure we will leave it in better conditions than we found it”. One of the interviewees said: “The Municipality developed only some aspects of this territory, the industrial and the residential ones. […] The landscape on this hill is very attractive, but lowland citizens and the bureaucrats working for

the Municipality are totally unaware of this". Another respondent claimed: "None of the local administrators have taken care of these terraces, so that some years ago they started to collapse. Nowadays, we care about this upland and we manage it at our expense, but we don't complain. The thing we complain about is that our administrators are urbanising the whole valley, which damages the landscape structure. We are afraid that sooner or later the urban encroachment will get here too".

To sum up, most of the points expressed by Treggiaia residents fall into two main aspects: on the one side the satisfaction they get from managing the landscape, on the other side the lack of trust in local institutions and local land use policies.

Landholders and agriculture in the lowland

While the nearby upland dwellers had a common way of describing farming and the hill land, a more fragmented context concerning landscape framing arose during the interviews with lowland landowners.

This area has been and is still experiencing a combination of changes in the farms' structure, in the agricultural restructuring, and in the urbanisation processes: on the one side, large tracts of agricultural land are being converted for non-agricultural uses, on the other side more and more farmed areas are managed by contractors or incorporated into bigger farms.

Companies or contractors are demanded both by farmers who have found other non-agricultural jobs and owners who inherited their farms and have never worked in this sector before. These interviewees explained their choice of contracting out land management by claiming, for instance: "[I rent out my land management] just because farming is something I have never done before", or: "A retired farmer manages some neighbours' land. We asked him to do the same for us... you know, it is not possible to make a living out of agriculture. We just need him to keep the field tidy, you know, and remove the olive trees since they require labour and cost too much".

The removal of uncultivated elements, such as hedgerows, and the simplification of agricultural operations in order to save time and money are quite common strategies among the owners. When interviewees were asked about their recent investments, they stated their need to focus just on "what is strictly needed, such as fertilisers, machineries, seeds" and acknowledged that "these are not real investments, but this is what we can afford... that's the way it is: just simple

crops... or nothing", thus stressing the overall trend of simplification of agricultural operations in this area.

Concerning the pressure of urbanisation and land development projects, the respondents showed two main opposite feelings.

First, they reckoned that the conflicts between urban and rural interests over land use exacerbate the difficulties of the agricultural sector and those of farmers from the social, environmental and institutional perspective. The following examples clearly show this point of view: "Protecting good and productive soils is a weak argument for preventing [land] speculation". a full-time farmer, who had his 100 ha property expropriated some years ago because of an industrial development plan still not achieved, said "It is difficult to plan any sort of farm investments here. […] The planning for the next season needs to be done a year ahead... but the local authority might unexpectedly start the construction works. Then I sow my fields at my own risk". And here is the evidence of another farmer: "The clearway connecting Pisa to Florence, which was built for the World Cup, split my farm in two. For town planners this is just a matter of drawing a line! They seem to ignore the problems of pollution and flooding... so... being farmers in this area today is rather frustrating".

Second, land development was portrayed by a group of farmers as a strategy they pursue for economic reasons and/or "for local landscape improvement". Development plans, which are usually depicted as successful investments thanks to their proximity to Pisa, entail barn and land use conversion into accommodation and recreation facilities, such as B&B, golf course, and a car track.

Contrary to my initial expectations and to the extensive literature on agriculture in rural-urban interface (e.g. Wilson, 2007; Inwood & Sharp, 2012), I did not find anything in the way of urban-oriented agriculture, such as Pick-Your-Own farms and farmers' markets; indeed, in the study area context, most farms are entangled in globalised-industrialised agriculture. Some of the respondents regretted establishing their farm businesses according to the industrial and global farming patterns: "My farm is negatively influenced by the wrong choices I made in the past, when I used to focus on industrial production. Then I realised how awful global competition is"; another farmer said: "In the past we felt obliged to join the technological treadmill and now it is very difficult to adjust the farm structure to the new demand for alternative chains".

Instead, these farmers are engaged in "passive forms of diversification" (Walford, 2003: 56): in particular, they undertake contract work, change the

buildings' original use and rent them out. Through this diversification, farmers emancipate themselves from an unstable agricultural market and an agricultural policy system that many of them consider as “poor” and “uncertain”.

Summary and integration

Polarisation results in the contrast between a urbanised lowland including areas of mechanised agriculture and a hilly area preserving Mediterranean traditional elements managed by a group of hobby farmers living in that upland. It also results in the different modes farming, landscape and land property are experienced and framed in.

Despite the expected dominance of the 'dwelling' and 'managing' frames of non-commercial farmers on the 'producing' and 'selling' frames of commercial farmers, both groups of landholders is heterogeneous in age, education, gender and economic status. Thus, the main differences between them deal with the availability of off-farm income and the place their properties are located in. Previous extensive studies (Wynn et al., 2001; Tindall et al., 2003; Pannell et al., 2006) have found correlations between some ecological restoration attitudes – hedgerows planting, active land stewardship, etc. – and demographic variables like age, gender, education. The hobby farmers involved in hill land farming I sampled in Treggiaia are rather heterogeneous but share common management practices, which suggests that land management and farming involvement might not be related to the above mentioned variables; however, the small number of interviews and data collected does not allow us to generalise and confidently draw such a conclusion.

Figure 5 shows the relationship between owners and agricultural landscape. By analysing respondents' rationales for supporting their land management decisions, we can say that farmers in the lowland are more dependent on some external factors – especially the agricultural market – than non-commercial farmers are; instead, factors like biophysical processes, local institutions and the natural environment influence all landholders.

Interestingly, although the upland dwellers emphasise the production of landscape elements and values rather than agricultural commodity production, also land productivity represents a significant goal related to their views on the nature of food production, as we can see in the following quotes: “It is good to have a piece of land where you can grow the food you eat”, or “I think we will have to go back to farming”.

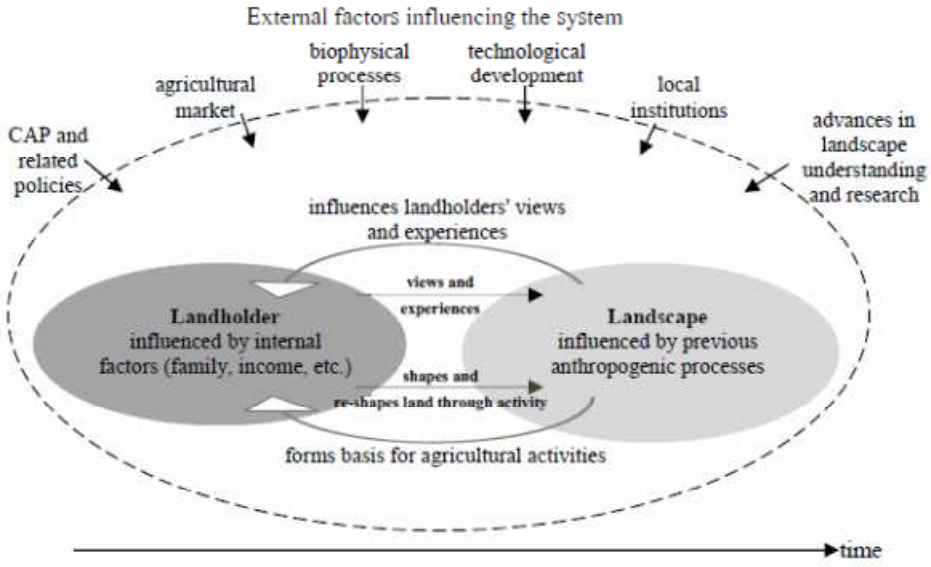

Figure 5: *The relationship between landholders and agricultural landscape. Inspired by Bohnet (2001) and modified by the author.*

When speaking about their land management decisions, upland residents gave detailed descriptions and explanations of each everyday practice. The approach of most lowland owners was quite different: they reported on the economic perspective of farming – especially the costs of production and the sale prices – and primarily considered their farms as units of production.

Discussion

In this chapter, the landscape dynamics at the municipal scale and the role of landholders in landscape management decisions have been analysed. This study shows how periurbanity includes mixed and transitional locations where functional and socio-economic transformations may occur, involving changes in land management community and regime.

When interpreting landscape dynamics, it is crucial to understand the diversity of meanings land managers attach to land and landscape, how these meanings are elaborated and their context. For the lowland landholders, the *land* mostly represents their unit of production and/or economic rent; Treggiaia hobby farmers see the *upland* as a cultural heritage rather than as a personal ownership of productive units of land.

In several areas close to urban centres, the presence of hobby farmers is often associated with that of recreational activities, such as hunting or horse keeping in North European countries (e.g. Busck et al., 2006; Elgåker et al., 2010); instead, people who deal with the Treggiaia hill land frame their 'dwelling' on moral and aesthetic discourses, where they emphasise cultural heritage and practical

engagement rather than recreation and leisure. In this regard, my findings are consistent with the research of Gill et al. (2010) on lifestyle oriented rural landowners in Australia, who resulted to be greatly engaged in environmental management and motivated to enhance ecological restoration and land stewardship.

Active environmental management and restoration are closely related to a set of values and contingencies, especially to the opportunity to set up informal networks and organise local initiatives where “no specific measure exist for the conservation of traditional production landscapes” (Pinto Correia & Vos, 2004: 153). The case presented in this chapter is also consistent with Selman's (2004) overview, which shows how local initiatives in the management of traditional and cultural landscapes can be very effective when they focus on small scale areas (like Treggiaia) and on specific landscape qualities (such as the management of the traditional elements of a Mediterranean agricultural landscape).

Kizos et al. (2010) found out that hobby farmers in Lesvos, Greece, are actively involved in landscape practices, thus contributing to the maintenance of the traditional landscape of local terraced cultivations.

In their study, however, hobby farmers resulted to be more inclined to land abandonment than professional farmers are; similarly, Bohnet et al. (2003) found that the new groups of lifestyle rural land occupiers do not have the same long term and inter-generational time perspective as most family farmers do, and that they often contract out their land to local full time farmers.

In the case study presented in this chapter, the upland lifestyle owners have framed a phenomenological discourse of *dwelling*-in-the landscape (Ingold, 1993; Cloke & Jones, 2001). This does not mean that the hobby farmers will 'never' abandon the hill land and its management, yet the dwelling perspective and the everyday interaction with landscape through active farming foster a powerful place attachment, as the interviewees clearly stated. Indeed, the hilly landscape is a source of intrinsic value for the people who deal with it: in some cases, for instance, “it is part of the family heritage” (see also page 14 of this text). Thus, the upland can be experienced as an agency in itself: the characteristics of the upland – natural incompatibility with modern-mechanised agriculture, cultural heritage and history, beautiful scenery – are a source of “non-human charisma” (Lorimer, 2007: 911) including ecological, aesthetic and affective aspects, which can be a key factor in motivating people to get involved in landscape conservation, environmental ethics and community management.

The presentation of two sub-cases has required the use of a holistic approach, and has provided a broad overview of the interrelated agriculture-environment-society agenda, which is essential to study the perceptions and the objectives of different actors and explain their practices. Farmers in the lowland are engaged in agriculture and land management in rather a different way than those in the upland. In general terms, understanding how the different actors, the socio-economic context and the physical environment are related to each other is crucial when designing and implementing public policies. In the past, farmers were asked to adapt farming and land management to modern standards. Today, the dependence on external forces seems to be no longer acceptable, neither economically from the farmers' point of view (as shown in this case study) nor from a broader social and environmental perspective. On the one side, upland dwellers frame land management as a nature-bonding experience, on the other commercial farmers and modern agriculture in the lowland produce an environment-technology dichotomy.

Though landscape outcomes have not been explicitly addressed, it is possible to state that the complex set of increasingly indirect relationships between land management and land ownership in the lowland is not very suitable for the management of a mosaic agricultural landscape. The increasing trend of contract farming may lead to the increase of large areas of countryside managed by one or few operators and, as a consequence, to the homogenisation of the agricultural landscape. Furthermore, the decrease in the number of professional farms along with the increase in their size, which have been recorded in the plain of Pontedera, seem to be rather common aspects of the structural change in agriculture and this trend can be expected to hold over (Lobley & Potter, 2004; Stenseke, 2006; Primdahl & Kristensen, 2011). Observing the continuity and changes in landscape practices after the transfer of ownership would be interesting in order to monitor the developments in landscape structure in a long term perspective. Indeed, radical land management and landscape changes are often associated with changes in land holding (Marsden & Munton, 1991).

Finally, this case study shows how structural changes in agriculture and in the farms' structure can be interpreted as an integral part of the urbanisation process, as recent studies have proved (e.g. Madsen et al., 2010; Primdahl & Kristensen, 2011). Pontedera is an administrative unit where a mixture of urban and rural zones coexist; furthermore, rural zones are very diverse in nature and use, since they consist of hilly areas with traditional elements and flat areas of mechanised agriculture. In general terms, acknowledging this diversity when designing policies would help meeting the contemporary ideas on local engagement

(Madsen et al., 2010): this deals with the landscape as well as with the land-unit level, where several interests (conservation, production, consumption) may compete and create governance challenges at any scale. Such challenges arise from the hybrid nature and the multiple meaning associated to land, which entails that agricultural landscapes do not stop at the edge of the settlements. Some interviewees criticised the effectiveness of spatial designation: “For planners this is just a matter of drawing a line, they seem to ignore the problems of pollution and flooding” (see page 17 of this text).

A rich literature puts under question the effectiveness of zoning process in physical planning, especially when it is not accompanied by the involvement of local people, so that designations can be easily transgressed by an unneeded or unsympathetic development (Harvey & Works, 2002; Murdoch & Lowe, 2003; Khakee & Barbenente, 2003; Selman, 2009). In the study area, landowners expect the urban-rural dichotomy between the urbanised lowland and the upland to increase in a short time, with the loss of productive lands; and the upland dwellers are convinced that “sooner or later the urban encroachment will get here too” (see page 15). The expectations and feelings of local actors may represent interesting criteria for measuring the quality of public policies such as the effectiveness of spatial designations.

Notes

1. The upland (Treggiaia hill land) is not subjected to any environmental restrictions.

Acknowledgments

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Chapter 6
Conclusions

The present study has been conceived as a combined analysis of individual and contextual driving forces of land management decisions, which enabled an understanding of the intersecting dynamics of structural changes in agriculture and urbanisation, and how landowners differ in their attitude to land and farming. I have tried to grasp the key parameters involved in the decision-making process, showing how structural changes in agriculture is integrated into urbanisation process, whose combined effects are mediated through different responses and attitudes of individual landowners, and are expressed in diverse ways within landscape system.

6.1 Key findings

According to the research questions proposed, the outcomes of the study provide the following answers to the research questions posed at the beginning:

- *how and why do landowners differ in their attitudes towards agriculture, land-based investment decisions and in their involvement in active farming (landscape management decisions)?*

Landowners' experiences and responses, displayed within this thesis, illustrate how diverse factors mediate land management choices. Many land use decisions are related to household's own circumstances, personal attachment to land property or farming, and worldview. A crucial role is also played by the planning framework and, of course, market trends.

Overall, landowners' values and practices are very diverse. Some professional farmers keep on farming, even though the economic uncertainties, or the uncertainty presumed to occur in advance of relatively rapid urban development or expropriation. Other farmers prefer to capitalise on land development opportunities, thus contributing to the functional changes of landscapes. Other farmers, whose property rights have been expropriated, stop farming and managing agricultural land, and wait to capitalise on the economic compensation in order to change activity and abandon agricultural sector.

On the ground of these diverse attitudes towards urban forces, it seems evident that professional farmers do not coalesce in opposition to local politics of erosion of agricultural productivity potential.

In case landowners are not professional farmers, they frame the agricultural landscape experiences in two distinct ways. A group of owners consider the countryside as a place to live in and is not engaged in active farming, thus contract out or neglect the land management. Another group, that I called 'non-professional farmers' or 'hobby farmers' or 'lifestyles' throughout this thesis, actively manage the land on their own initiative (without any economic gain) and even restore traditional landscapes. This group is mainly constituted by people who decided to live in the countryside and who have a 'urban' background and a 'urban' employment. Interestingly, these 'urban' people, directly engaged in everyday landscape practices, are characterised by rather sophisticated ideas about the combined nature of environmental preservation, food production and self-sufficiency.

These lines of argumentations show that urbanisation may have impact on investment, on land, on farm production through the processes of land conversion and land development. However, urbanisation also affects people. On the one side the case study presented in this thesis shows that non-farm employments in urban areas have led, especially in the past, to land abandonment and therefore to land amalgamation, with the increase in size of professional farms. On the other side, there are other forms of adjustment possible: that of non-professional farming displayed in this thesis is an interesting example. In terms of landscape structure, if the process of land amalgamation on one side and the purchase of small holdings by 'lifestyles' goes on, this may lead to a polarisation with few relatively larger full-time farms and many small farms occupied by non-professional farmers, which represents a dynamic that has already been found in other studies in Europe (see, for instance, Kristensen, 1999; Savills, 2001; Primdahl & Kristensen, 2011). In other words, the relationship between farming, land management and land ownership is likely to become increasingly indirect and complex. In Chapter 5 I reported a case study of landscape polarisation resulting by the opposition between professional/non-professional farmers, traditional landscape/landscape of mechanised agriculture, upland/lowland, urbanised/not-urbanised landscapes. Unfortunately, as highlighted in the Introduction of this thesis, in Italy official data on hobby farms are not available; their availability would be useful to better understand the trends within the agricultural sector, and to know whether the loss of the Utilised Agricultural Area (UAA) through time is related to urbanisation and actual land use change or/and to changes in land-ownership. Updated georeferenced data would be useful as well to this purpose.

The other research question was:

- *what are the main implications for public planning and regulation?*

Within this thesis two great threats to the management of a mosaic agricultural landscape have emerged: attitudes to land development, lack of successors within family farms. They are interrelated and can have impacts on landscape functions and structure. First, the study showed the genuine professional farming culture may become increasingly less important; policy makers still conceive the agricultural landscape being managed by the 'mainstream' farmer, whose business and family income mostly depend on production activity, as the only target unit, while the role of agricultural production as economic activity and the main driver of land management has been deeply weakened for a long time, because of the increasing consumption interests in land, the global market competition, other job opportunities, and the emergent role of rural 'lifestyles'. Thus, recognising and understanding the variety in farmers' landscape values and practices is important when designing and implementing policy related to agricultural landscapes (Busck, 2002). Second, planning control, implemented at a supra-municipal scale, represents an important tool, even though its limitations need to be acknowledged in a context where definitions of 'rural' character and 'rural' interests are highly ambiguous.

By way of conclusion, it is suggested that the management challenge for agricultural landscape is twofold. First, institutional settings need to adapt its relationship with, and between, land management and farming, in particular, they need to complement sectoral policies (such as the CAP) with local contexts. Second, policy initiatives are required to maintain the richness of functions of land; the challenge is not only to translate the 'universal knowledge' of policy circles to local farmers, but even to diverse landowners. Of course, meeting each owners' needs is not possible. Rather, policy initiatives need to consider the diverse values, knowledge and practices of landowners, leaving margins of manoeuvre for individual adjustments (Burgess et al., 2000). In general terms, the range of problems, tools and solutions need to be framed in a concerted way by some sort of 'landscape policy'.

There is, of course, no simple solution to diverging trends and practices. Well developed integrated landscape policies still remain to be seen but a number of initiatives taken at different levels may provide some direction for future policies.

6.2 Scientific contribution and recommendation for further research

The qualitative and case-oriented approach has considered the socio-economic contexts of the issue in question, which is deeply situated at the local level and shaped by social processes. There are some research problems which cannot be easily addressed through qualitative methods only, such as the relative importance of the key driving forces of landscape management decisions, that vary with place-specific and time-specific contexts, which makes land-use dynamics understanding and forecasting further problematic.

It is argued that landowners should be considered as key actors by planning and management authorities, because they are those who can make planning goals and interventions implementation possible or not (Primdahl, 1999; Cocklin et al., 2007; Bohnet, 2008). However, as Primdahl et al. (2004) have highlighted, there is still a poor understanding of landowners' decision making in comprehensive and comparative studies. Thus, comprehensive and comparative studies on landscape management decisions are useful as valuable input to public policy decisions about the landscape.

Nowadays, understanding the social transformation of agriculture requires much more than understanding the transformation processes that farming and agriculture have been experiencing. This study has highlighted that a deep explanation of the pressures on rural landscapes requires an analysis of the interrelationship between different dynamics of change (I have considered urbanisation and structural adjustments for my study), as well as analysis of the dynamics themselves. Including urbanisation as a driving force of transformation of agriculture and rural communities has proved helpful in understanding some changing values regarding 'lifestyles' and income aspiration of farmers as producers, as land managers, as land developers. Further similar studies should be encouraged. They should involve not only private landowners, but also local population, town officials, local non-profits, in order to better understand and explore strategies of farmland protection and management in a time of aging of farm population, difficulties with ensuring farm succession, economic crisis and increasing preoccupations of society with land security and food security issues.

Appendix 1 – Questions asked in the interviews with landowners

Part A: The farm-owner/landowner, and the farm/land property

1) Are you the formal owner of this property?

2) Do you have any off-farm income?

3) Do you consider yourself as a professional full-time farmer? If not, do you consider yourself as a part-time farmer/hobby farmer/lifestyle rural landowner?

4) To get an idea of what type of business you run, would you please tell me:
Area owned:
Total area on this holding:
Total area farmed:
Area rented in:
Area rented out:

5) What farming and non-farming enterprises are you currently running on your land/farm?

6) Could you please tell me the current land use on your farm?

7) Do you use to contract out the management of your land? If so, in what proportion?

8) Do you work as external contractors on other owners' land? If so, where? What types of agricultural operations are you asked to do? In your opinion, why do they engage external contractors?

9) How many people work in your business, including yourself and your family?

10) How many members of your family are currently living on this farm?

11) Can you trace the property history?
(Guide: number of family generations involved in the farming activity; personal background including childhood farming experiences; landownership changes and relative changes on the property, e.g. size, land uses, activities; etc.).

12) Have you identified a potential successors who will eventually take over your business management? If so, who is he/she? What is your successor's job at the present?

Other questions/interviewer's observations: age range, education degree, (gender).

Part B: Changes in land management over the last 10-15 years

1) How has your business changed over the last 15 years, and why?
(Guide: area sold/bought; brought unused land into production; substantial changes in the farming system, such as the establishment/expansion/improvement of non-agricultural enterprises; changes in family labour distribution/organisation; land converted to non-agricultural use; established/removed non-agricultural elements e.g. hedgerows, ditches, stone walls, walking paths; entered/withdrawn from agri-environment scheme; changes in the individual/family amount of off-farm work; substantial investment of agricultural/non-agricultural capital; etc.)

2) Now I'd like to discuss these changes more thoroughly. In your opinion, which were the most important ones? Why? Do you think they have had an impact on the long-term viability of your business?

3) What are the main changes that farmers/landowners have been made in this area over the last years?

Part C: Planned changes for the next years

1) How do you think your business develop over the next years? Why?
(Guide: change in business; increase/decrease in the amount of land under production; buy more land; change in the use of contractors; etc.)

2) Is there anything that might prevent you or help you carry out your plans?

3) Do you think these changes will have an impact on the long-term viability of your business? How will these changes affect the environment on your farm? Why?

Part D: Buildings

1) Have you made any changes or renovations on buildings? If so, why? Did you make them after the approval of the authority? Have you received any incentives? How are you using them at present? Will you do the same in the future? If so, why?

2) Are there any buildings on the property which are not used or which are used for purposes other than agricultural ones?

Part E: Urban development and landscape planning

1) Have there been any changes in relation to the development of local town (for instance, over the last 20 years)? If so, how important have they been for your property? Why? (e.g. land economic value, aesthetics, land management decisions, environment, pollution and flooding)?

2) Do you feel your property is located closed to the town (Pisa)? If so, do you think is an advantage or would you like your property to be located at a greater distance from the town?

3) Has your property suffered from land expropriation? If so, when and where exactly? How and why have the expropriation influenced your management decisions?

4) How is your relationship with the Municipality? And with your neighbours?

Before we finish, is there anything else you would like to add?

Thank you for your time.

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