CHAPTER 3

THE 'SOUTHERN MODEL' OF EUROPEAN AGRICULTURE REVISITED: CONTINUITIES AND DYNAMICS

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ABSTRACT

This chapter presents an overview of the 'big' data of Mediterranean agriculture, with a special focus on the four EU countries (Portugal, Spain, Italy and Greece), in order to provide a backdrop for the rest of cases analysed in the volume. In this regard, two thesis are discussed: the assumption that farming systems in the South have not followed the process of 'productivist modernisation' characterising post-war Northern European agricultural change, and that, precisely due to this reason, most holdings and regions from the South would have more possibilities to adapt to new approaches of multifunctional rural development.

Thus, the chapter tackles both the static and dynamic structural traits of Southern agricultures and their differences with the North, as well as several aspects of the organisation of farming in the Mediterranean and other key components of productivist modernisation: farm intensification and specialisation. Later, the diffusion of multifunctional dynamics is

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addressed, in order to introduce some reflections about their meaning and scope in the Mediterranean regions. The chapter ends with a straightforward typology of Southern farming systems and a concluding section, which goes back to discuss the two initial theses.

Keywords: Southern European agriculture; productivist modernisation; multifunctional development; farm structural change

INTRODUCTION

The diversity of realities within the framework of the European agriculture has been widely supported in the scientific literature. This agricultural differentiation stems from the diverse ecological conditions, still being the base of farming, as well as from the way historical trajectories of land appropriation have shaped different patterns of the classical agrarian question in European countries and regions. Likewise, the different paces and chronology of the national processes of industrialisation and economic development in the last two centuries have impacted differently rural areas and farming systems.

These rural and agrarian diversity explains the lack of success of a political construction like the one of the 'European model of agriculture', introduced in late nineties in the context of the CAP reform and the WTO negotiations (Mahé, 2001), but whose 'limited empirical or analytical value' was properly pointed out (Buller, 2001, p. 2).

The analysis on the European agrarian diversity reveals a centre-periphery differentiation between the core of firstly industrialised countries and the periphery (the 'green ring') characterised, until some decades ago, by the importance of agriculture in the national economies and politics (Granberg, Kovách, & Tovey, 2001). In that North-European core around the North Sea, the so-called Danish model of family farming spread, that of a farm early modernised underpinned by an appropriate institutional support. The main exception was the case of United Kingdom, with a different agrarian system based on large holdings from its transformation of the 18th century, and also characterised by the early diffusion of technology and the development of a modern agriculture (Hoggart, Buller, & Black, 1995, pp. 82–85; Sivignon, 1996; Tracy, 1989, pp. 8, 107–110).

In front of that core-model of European agriculture, the several continental peripheries – Mediterranean, Eastern (marked by the socialist

regimes from 1945), and also the Northern-Scandinavian and even the Celtic (Ireland) – would have undergone different trajectories, which have left still visible footprints in their agricultures and rural areas.

In this regard, the existence of a distinctive model of Mediterranean agrarian systems in the South is widely acknowledged in the literature. There is even a consensus to include four countries in such model: Portugal (despite its Atlantic character), Spain, Italy and Greece. They share relatively similar ecological conditions, with the presence of a set of characteristic agrarian systems (Beopoulos, 2003), as well as certain parallelisms regarding their paths of industrialisation. The historical conditions of land appropriation were modified in the 20th century in Greece (where the land reform of the 1920s redistributed 40% of arable land and spread the small holding model), and Italy (also through its post-Word War II and less effective land reform, Fonte, 2001, p. 275). On the contrary, in Spain and Portugal the failure of the several attempts of land reform along the century maintained the dominance of large holdings in many areas of the Southern regions of these countries.

Notwithstanding these disparities, most of the agricultural holdings of these four countries showed, at the end of the 20th century, some common structural traits (dominance of small farms, aged holders and rigid structures that change slowly) clearly differentiated from that of Northern Europe. This allowed referring both a 'Southern model' and a 'Northern model' of farm structures in Europe (European Commission, 1997).

French agriculture, in spite of having large regions with fully Mediterranean agronomic conditions, is as a whole much closer to the structural characteristics and dynamics of Northern-Centre farming systems. The Danish model of family farming spread rapidly in Northern France, although, as Sivignon (1996) pointed out, it is only from 1945 when the model generalised in the country. Also from the 1950s, the French agricultural policy began to include well-defined measures aimed to modernise and consolidate that professional family farming (Delorme, 2000). Regarding Balkan countries, which also include Mediterranean farming systems, their situations are still marked by their recent past of planned economies, where land tenancy regimes and agricultural organisation were substantially altered.

Therefore, taking into account the geographical space we have delimited, the objective of this chapter is to discuss, on the basis of the available empirical information, two hypotheses – well established in the literature – about the agricultures of Southern Europe and about their relationship with the dominant paradigms (see Chapter 2, this volume).

The first one is the assumption that farming systems in the South have not followed the process of 'productivist modernisation' that has been the main pattern of transformation of Northern Europe agriculture along the second half of the past century. This delay in terms of modernisation would explain the structural weaknesses and lack of competitiveness of farms of Mediterranean countries, particularly when – once accessed to the European Union along the 1980s – they were more directly confronted to Northern productive systems. This thesis, widely assumed in Southern countries' agricultural policies, explains the adoption of measures directly aimed to accelerate the structural adjustment of their farms (as illustrated by the Spanish Law of Farm Modernisation in 1995). Paradoxically, the emphasis on these policy stimuli took place precisely when this paradigm and the results of its implementation began to be questioned in Northern Europe.

The second thesis to consider is that most holdings and regions from the South – precisely because in many cases they would correspond to what Marsden (2003) refers as areas 'passed over' by other development models (either productivist of post-productivist), would have more possibilities to adapt and take advantage of the opportunities offered by new approaches of multifunctional rural development. In this line, Laurent (1998) called in the French context for a view of agriculture and agricultural policy not exclusively focused on 'professional' farms; rather, she claimed the importance to consider also the rest of holdings, articulated through other ways to the French rural territories and society.

Our analysis is mostly based on the statistical information available nationally, also including several references from the literature on the development and dynamic of agriculture in regions and systems from Southern Europe. In order to tackle the Northern-Southern differences of European agriculture we focus on EU-12 countries (those making up the EU in late 1980s). This delimitation allows contrasting the agriculture of the four Mediterranean countries and that of Northern-Central European countries, although other peripheries are excluded – both Scandinavian (which accessed in 1995) and Eastern (accessed in 2004) ones, since EUROSTAT does not provide time series long enough to allow identifying some aspect of the transformations at play.

The rest of the chapter is structured as follows. The two first sections focus on both the static and dynamic structural traits of Southern agricultures and their differences with the North. Regarding the later one (the evolution of farm structures) we discuss some elements of the apparent Mediterranean structural rigidity. Third, and also linked to the structural transformations, the chapter analyses three aspects of the organisation of

farming in the South: the diverse footprint that the rural exodus left in the shaping of farm family networks, the diffusion of outsourcing and agricultural contractors and the dynamics of farm labour, with special attention to role played by foreign migration. Fourth, we focus on two other key components of productivist modernisation: farm intensification and specialisation. Fifth, the diffusion of multifunctional dynamics (quality-oriented production and non agricultural diversification) is addressed, in order to introduce some reflections about their meaning and scope in the Mediterranean regions. Since most of these analyses are based on aggregated national data, in order to illustrate the agricultural diversity of Southern countries, sixth section introduces a straightforward typology of farming systems. Finally, the concluding section goes back to discuss the two theses established above.

NORTH-SOUTH DIFFERENCES: THE STRUCTURAL TRAITS

A first step of this analysis is to check to what extent the stereotype about the structural characteristics differentiating Northern and Southern Europe is still valid. Table 1 shows a set of indicators from EUROSTAT, for 2007,² which allow quantifying the key elements of such stereotype.

Table 1. Farm Structural Indicators (2007).

	UAA/ Holding (ha)	LU/ Holding	Economic Size (ESU)/ Holding	% Full Time Holders	% Holders Aged >65	% Permanent Crops
Portugal	12.6	10.2	6.6	26.6	48.3	17.2
Spain	23.8	46.9	20.6	22.2	36.6	17.5
Italy	7.6	32.0	14.9	21.1	44.5	18.2
Greece	4.7	7.0	7.2	12.8	37.4	27.6
Belgium	28.6	105.0	70.3	69.1	21.2	1.5
Denmark	59.7	161.2	80.1	40.0	20.3	0.4
France	52.1	66.0	53.6	56.7	15.4	3.9
Germany	45.7	67.6	49.5	45.7	7.5	1.2
Ireland	32.3	48.6	19.4	55.0	24.9	0.0
Luxembourg	56.9	91.4	51.8	30.3	15.9	1.2
Netherlands	24.9	120.6	111.3	62.9	18.2	1.8
UK	53.8	77.0	31.4	43.2	32.6	0.2

Source: Authors' elaboration from EUROSTAT Farm Structure Surveys.

North-South differences keep well marked in the three size-focused indicators: physical (in both hectares of UAA and livestock units) and economic (in European Size Units, based on Standard Gross Margins). The Spanish farms' average superficial dimension is similar to the ones in Belgium and Netherlands. However, this hides the dual character of Spanish agriculture, with an outstanding weigh of small and very large farms, and with scarce presence of medium holdings, precisely the ones leading the processes of agricultural modernisation in the North of the continent.³

The other exception of the North-South dichotomy is the low economic dimension of Irish farms (similar to the Southern ones), which confirms its peripheral character compared to the Central model of European agriculture that could also, in some aspects, be attributed to Ireland.

On the other hand, the table also shows that less than a quarter of holdings in the South provides full-time employment to the holders, whereas in the North this share is notably higher. This fact does not respond to more pluriactivity or off-farm employment of holders in Mediterranean, but to the limited capacity of small holding to provide employment. A considerable proportion of these non full-time farmers is, precisely, made up with the large group of aged holders shown in the same table.

Finally, the relative balance of permanent/annual crops also shows notable differences in the productive orientation of farms in the two groups of countries.

THE PROCESS OF STRUCTURAL ADJUSTMENT IN SOUTHERN AGRICULTURES: HISTORICAL RIGIDITY AND RECENT CHANGES

The other component of the stereotype about the North-South disparities deals with the dynamics of farm structures, much more rigid in the Mediterranean, whereas Northern Europe shows a more rapid adjustment (reduction of the number of holdings and increase of the size of remaining ones). This concentration trend of agricultural production in fewer and larger production units constitutes ones on the major traits of the so-called productivist modernisation.

EUROSTAT publishes from the 1960s homogeneous series on the evolution of farm structures of the countries that progressively access the EU, allowing in this way the comparison of their respective paces of adjustment (EUROSTAT, 2000). These data show a steady rhythm of concentration, around 3% of annual growth of farms' average size (has UAA)

between 1966/1967 (first year with data) and late 1980s in most of Northern countries. On the other hand, Italy, the unique Southern country belonging in that period to the European Community, showed a virtually frozen agrarian structure (0.3% reduction of the average size of holdings between 1966/1967 and 1990). The three other Southern countries, according to national data series (not comparable with EUROSTAT ones), showed a slow pace of adjustment, with farms' sizes growing at 1% of annual rate (Arnalte, 1992).

For the most recent period, Fig. 1 shows the global results of the structural adjustment for the 12 countries analysed in the last two decades (already with EUROSTAT homogeneous series). Data highlight the core of extensive agriculture of North-western countries, with a uniform and high rhythm of adjustment for these 20 years. This corroborates that farms concentration still goes on in these farming systems. The three exceptions already mentioned in the 'historical period' (Netherlands, UK and Ireland) also appear well delimited.

Regarding Southern countries, we notice some changes in their performance when compared with previous periods. This can be analysed from Table 2, which show for these four countries and for the same period (1990–2007) the evolution of the number of farms and the UAA.

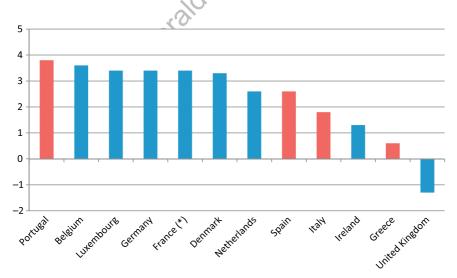


Fig. 1. Evolution UAA/Holding (Annual Variation Rates in %, 1990–2007).
 (*) Metropolitan France. Source: Authors' elaboration from EUROSTAT Farm Structure Survey.

Table 2. Evolution of Mediterranean Farm Structures.

	Greece		Spain			Italy		Portugal				
	A	В	С	A	В	С	A	В	С	A	В	С
1990	850	3,661	4.3	1,594	24,531	15.4	2,665	14,947	5.6	599	4,006	6.7
1993	819	3,539	4.3	1,384	24,714	17.9	2,488	14,736	5.9	489	3,950	8.1
1995	802	3,578	4.5	1,278	25,230	19.7	2,482	14,685	5.9	451	3,925	8.7
1997	821	3,499	4.3	1,208	25,630	21.2	2,315	14,833	6.4	417	3,822	9.2
2000	817	3,583	4.4	1,287	26,158	20.3	2,154	13,062	6.1	416	3,863	9.3
2003	824	3,968	4.8	1,141	25,175	22.1	1,964	13,116	6.7	359	3,725	10.4
2005	834	3,984	4.8	1,079	24,855	23.0	1,729	12,708	7.4	324	3,680	11.4
2007	860	4,076	4.7	1,044	24,893	23.8	1,679	12,744	7.6	275	3,473	12.6
Var. 90/07	1.2%	11.3%	10.0%	-34.5%	1.5%	54.9%	-37.0%	-14.7%	35.3%	-54.1%	-13.3%	88.7%

A: Number of Holdings (x000); B: Utilised Agricultural Area, UAA (\times 000 ha); C: UAA/holding (ha). *Source*: Authors' elaboration from EUROSTAT Farm Structure Surveys.

Structural adjustment underwent a strong acceleration in both Spain and Portugal after their accession to the UE in 1986, as illustrated by the rapid drop of the number of farms in the 1990s. In the 2000s, the process slowed down in Spain,⁶ but continued at similar rates in Portugal, which provoked the disappearance in 17 years of more than a half of agricultural holdings in the country.

Agricultural structure in Italy left behind its historical stability, with a notable pace of adjustment, particularly in the second part of that period (27% fewer holdings between 1997 and 2007). The considerable reduction of agricultural area explains that, despite that drop, the growth of holdings' size has been moderate. Lastly, Greece still responds to the Southern stereotype during this more recent period, maintaining a persistent structural rigidity.

SOME EXPLANATORY ELEMENTS OF THE STRUCTURAL RIGIDITY

Several explanatory factors have been suggested to explain the weakness of the process of farm concentration in Southern Europe for the last decades, among them: cultural and legal reasons (heritage systems, land transfer regulations), lack of effective policies to stimulate farm modernisation, factors related to the productive orientation of Mediterranean agriculture, as well as other arguments around the characteristics of the processes of economic development and the urban–rural linkages in these countries (Arnalte & Ortiz, 2006; European Commission, 1997; Fabiani & Scarano, 1995).

We will refer at this point to two of these factors. On the one hand, we tackle a simple and quantifiable aspect: the low diffusion of land renting. This has been also a relevant issue in the debates about the most effective tools of structural policy to facilitate agricultural adjustment. On the other hand, we focus on a more general and less analysed (due to the lack of quantitative and sound information) aspect: the differences between 'official' farm structure statistics and the real performance of these agricultures.

The Diffusion of Land Renting

Specialised literature has frequently referred the constraints of farmland markets in Mediterranean countries. In particular, the low diffusion of renting in these countries has been pointed out, since this tenancy regime was the main form of land transfer among holdings in the process of adjustment, taking place in a number of North-western European and other industrialised countries (Blandford & Hill, 2005). This lower dissemination of renting in the South is also related to the relative importance of permanent crops in these countries (see Table 1); crops with productive cycle hardly adapt renting contract periods.

Data from Table 3 show the evolution of the relative weigh of farmland under renting. They confirm the high presence of this tenancy regime in Northern Europe (above 50% of UAA, and rising, in four countries). In line with other adjustment indicators, exceptions are found in Netherlands, UK and Ireland, as well as Denmark, where this regime – despite its recent increase – has had little tradition (Harrison, 1982).

Figures also confirm the low diffusion level of renting in Mediterranean countries (around, 20% of UAA in 1990), although it has increased 8–10% in Greece, Italy and Spain during the period considered. The progress of the liberalisation of rental agreements, notably in Spain and Italy is these years, would have pushed its development.

Nevertheless, it is not possible to obtain definitive conclusions in terms of simple cause–effect relationships between farmland renting diffusion and structural adjustment rates. In Portugal, the Southern country where adjustment has been more rapid, the level of renting has not changed substantially. Whereas in Greece, where farm structures seemed to be frozen, data show a considerable expansion of renting.

	1990	2000	2007
Portugal	24.6	23.2	23.3
Spain	19.9	27.0	27.3
Italy	18.4	23.4	27.9
Greece	22.2	27.7	31.8
Belgium	66.2	67.2	66.9
Denmark	19.1	25.2	29.3
France*	56.2	62.7	74.3
Germany	53.0	62.8	61.7
Ireland	12.4	18.6	18.4
Luxembourg	48.9	53.2	56.5
Netherlands	31.4	27.6	25.5
UK	38.4	33.8	31.7

Table 3. Evolution % of UAA Tenant Farmed.

Source: Authors' elaboration from EUROSTAT Farm Structure Surveys.

^{*}Metropolitan France.

Informal Land Cessions and the 'Real' Structure of Holdings

The doubts about what is really behind the data provided by censuses and farm structure surveys have been often addressed in the Mediterranean literature. This has been the case of Italy, where a number of authors (Barbero, 1982; Sotte, 2006) have wondered about 'how many' were in fact the agricultural holdings in the country, and what sort of economic performance is hidden under that image of agricultural activity atomised in many thousands of very small farms. The problem has always been the lack of empirical evidences about the undercurrent of official data.

A recent study focused on a Northern Greece rural area and precisely aimed to obtain 'an authentic picture of the reality of family farming in modern Greece that often lies concealed behind official figures and myths' and to explain how Greek agriculture 'remains in the productive system', provides illuminating data on this issue (Koutsou, Partalidou, & Petrou, 2011, p. 404). In spite of its local character (Kilkis prefecture), we consider the 'real' structure of farm holders of this study to be very illustrative of this situation. Fig. 2 summarises its main findings:

This classification of farm heads interrelates to two informal forms of land cession described in the study:

- Inter-family cessions within enlarged families. In that case, the holding of 'real' farmers are made up of farmland belonging to several 'official' holders e.g. farmer's own land, his wife's or sons' land, or that of other relatives who migrated. This situation is a consequence of the egalitarian systems of heritage and the maintenance of family linkages after the rural exodus, as well as because parents use to register the land in the name of the sons living in the city, so that they could maintain their roots in their original villages and the agrarian family identity which land ownership symbolises. Evidently, land is considered a 'family asset', rather than a component of 'the farming business' (Koutsou et al., 2011, pp. 409–410, 416).
- Informal land cessions to 'professional farmers', who are the real operators. The study illustrates how most of these cessions do not imply an economic remuneration; rather, owners only demand the land to be maintained 'in good agricultural condition, in accordance with CAP obligations'. In this way, the 'official' holder gets CAP subsidies. According to the study's informants, roughly 60% of 'non farmers' (holders living elsewhere, pensioners or widows) participate in this way of land transfer (Koutsou et al., 2011, pp. 411–412).

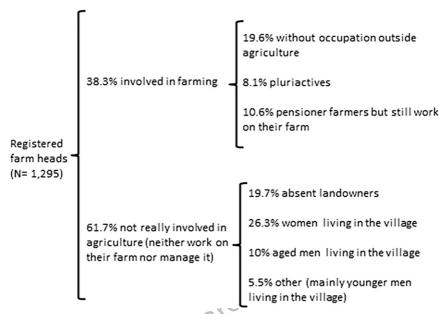


Fig. 2. Farm Heads Classification in Kilkis Prefecture (Greece). Source: Elaboration from Koutsou et al. (2011, pp. 411–415).

As a consequence of these informal flows of land, the real size of holdings is notably larger than the official one, and more likely to be economically feasible. The study concludes that 'the fragmentation of farmland in the area is in essence a fiction and has nothing to do with actual land use or land management practices'. It also underlines that, besides economic factors, social and cultural driving forces also lead to these types of land cessions and this organisation of farming (p. 410).

Koutsou et al. (2011, pp. 415–416) also insist on the informal and temporary character of these cessions, which contributes to somewhat instability, although they acknowledge this has lasted for decades, even 'before the CAP'. These authors also reject this constitutes a simple response to the 'policy framework' and a way to get subsidies, although they also recognise the capacity of this model of organisation to adapt to changing circumstances.

Another case study located in the other extreme of the Mediterranean (Spain) focuses on the organisation of small-scale farming with some similarities to the former one. Indeed, Moragues' (2011) research in Alto

Palancia – an inland rural area in the Region of Valencia well connected to urban zones, analyses the typology of agrarian holders members of the cooperatives of the area. She identifies a small group (3–4%) of full-time farmers (also here referred by the own field informants as 'real farmers'), while the rest distributes fifty-fifty between retired people and farmers with off-farm employment. In this case, pluriactivity is considerably more frequent than that of the case study of Northern Greece (Moragues, 2011, pp. 169–170).

This analysis depicts a continuum from 'real farmers' who 'manage an important amount of land (...) and in many cases are agricultural contractors' (p. 182), to the opposite extreme, that of those holders 'dissociated from farming'. In the middle, Moragues finds a range of levels of involvement in farming operations and farm management, as well as of levels of outsourcing – i.e. amount and type of tasks that are outsourced to either agricultural contractors or cooperatives' services (Moragues, 2011, pp. 182–186).

Our point is that these forms of agricultural structures allow, at least for the time being, for some stability of small-scale farming and could explain the weak concentration of holdings shown by the official statistics. Evidently, these two studies are not representative of the whole Mediterranean, which also include areas of more professionalised farming systems and where the processes of farm concentration and differentiation adopt patterns more similar to the Northern European ones.

However, these two studies bring forward a number of elements and processes that are often found in Mediterranean agricultures, and which can be considered as characteristics of their models of organisation. In this regard, the following section deepens into these informal forms of land cessions.

FARMING ORGANISATION IN THE SOUTH

Rural Exodus and Farm Family Networks

The model of inter-family land cessions within enlarged families described in the Greek region of Kilkis is not so frequent in other Southern areas, like for instance rural Spain. Possibly this would be the consequence of some differences of the intense process of rural exodus these two countries underwent in the 1960s–1970s of the 20th century.

In Greece, some authors insist on the idea that the intense process of outmigration did not break solidarity family networks. In this sense, Kasimis and Papadopoulos (2001, p. 205) argue that the rural exodus was part of a larger family strategy, 'the exodus of some family members is planned'. For Damianakos, 'the peasant family never emigrates as a unit: one or two members always stay behind in the village and take care of the farm' (1997, p. 203).

Out-rural migration did not produce, therefore, the disintegration of rural society; so that the modalities of in-family land cessions currently at play show the way farm organisation and management respond to a strategic family project, in the framework of the emerging relationships between the community of out-migrants and those who remain in the villages (Goussios and Duquenne, 2003, p. 46).

The process was different in Spain. In many rural areas (particularly mountain and dryland interior plains) society did not resist the intensity of the process. Many villages and counties emptied 'from one day to the next' (Camarero, 1997, p. 230). Thus, entire families migrate 'without looking behind'. In these regions, only aged people remained, which provoked deep demographic transformations and seriously affected the dynamic of farms: the two first agricultural censuses carried out in Spain, in 1962 and 1972, reported the disappearance of 365,000 holdings, 12.5% of the total.

A similar situation of massive out-migration and collapse of many areas is depicted for the Portuguese rural exodus in the same period. For instance, Baptista (1996, reprinted in 2001, p. 36) describes 'the flight of hundreds of thousands of men and women who, once open the door to leave, escaped from the arduous life and work conditions they had in the places and villages of rural society'. This massive flight was also a rejection to the 'praise to rural life' still frequent among the elites of traditional rural societies.

At present, although there are still family relationships around land tenancy both in Spain and Portugal (see for instance Chapter 7 in Baptista, 2010), they are neither so widespread nor so intense than the ones the Greek literature points out.

Outsourcing and Agricultural Contractors

The two previous case studies (Kilkis in Greece and Alto Palancia in Spain) also illustrate the presence of a figure that, in diverse forms and more or less diffused, can be found in most of Southern European agricultures. This is the outsourcing of specific farming tasks, or even of the complete management of the holding, carried out by agricultural contractors (with different levels of formalisation as service firms or cooperatives) without the

farm 'owner' losing his/her position as holder. Agricultural contractors manage and carry out farm works using their own machinery and equipment and, if necessary, resorting to hired labour.

This modality of farm organisation is found, as shown above, in Greece, as well as in Italy, where a number of authors made in the 1980s interesting conceptual contributions to this phenomenon (De Filippis, 1985; Pugliese & Ceriani-Sebregondi, 1981; Vellante, 1981). In Spain, outsourcing has been also analysed nationally and at the level of several farming systems (Arnalte, 1989, 2002; Gallego Bono, 2010; Langreo, 2002; Ortiz, Arnalte, Moragues, & Doñate, 2011). In Portugal, Canadas (1998) analysed in depth farm outsourcing in viticulture specialised regions.

It has to be acknowledged that this phenomenon is not exclusive from Southern Europe; rather several authors have described similar processes of agricultural labour reorganisation leading to a more frequent utilisation of external services both in UK (Ball, 1987; Errington & Gasson, 1996) and France (Harff & Lamarche, 1998). However, which clearly differentiates Northern and Southern developments of this phenomenon is its degree of formalisation. Thus, for example, while we find in France a diversity of legal entities giving formalisation to outsourcing – e.g. CUMA (cooperatives of agricultural equipment utilisation) or ETA (farm work firms), in Southern Europe the majority of these services are carried out informally and without a clear regulatory framework.

This also hinders official statistics to capture properly the phenomenon. Indeed, less of 1% of Southern agrarian holders declares they provide contracted farm services using his/her own machinery (a question included in the EUROSTAT's Farm Structure Survey). This figure exceeded 10% in UK and Scandinavian countries (Ortiz et al., 2011 based on data from 2007).

This also means that the characteristics of providers of agricultural services are not well known, so it is necessary to resort to specific researches on this topic (e.g. Fanfani & Pecci, 1991 for the Po Valley in Italy; Ortiz et al., 2011 for three productive systems in Mediterranean regions of Spain; and the already cited Koutsou et al., 2011 and Moragues, 2011). In summary, these studies show that (despite the existence of specialised agricultural service firms) most of the services are provided by farmers having own machinery. These farmers range from large holders having an important fleet of own – and often specialised (e.g. harvesters) – machinery, to medium size holders for whom service provision means an important share of family income. Moreover, authors also highlight this is a clear growth strategy for these farmers.

In addition, what is has been empirically shown in the South is that the relationships between demanders and suppliers of farm services often inscribe and intertwine in the context of territorialised social networks. For instance, Gallego Bono (2010) argues, in his analysis of Spanish Mediterranean citric areas, that part-time farming and outsourcing belong to and evolve within an organisational-institutional network which is defined by both formal rules and shared values and conventions. Moragues' (2011) analysis of small-scale olive production in the Spanish region of Valencia, demonstrates the correlation between the degree of social integration of farmers (the higher) and the modalities of services contracted (the more informal and cheaper agreements).

All this implies that small-scale holdings outsourcing certain farm operations, can take advantage of technical progress and innovation, as well as of economies of scale. This allows for some theoretical considerations. On the one hand, we notice that precisely economies of scale associated to technical progress keeps being a key element even within a context of farm structures seemingly 'frozen' (Arnalte, 2006). On the other hand, the individual holding is no longer the basic unit of agricultural production, which challenges some traditional conceptualisation of farm structure analysis. At higher levels of outsourcing, the farm becomes the mere physical location of a set of operations externally decided and managed, so that the performance of the agricultural productive process takes place at another relevant level, dissociated from the structure of individual farms (Arnalte, 1989; De Filippis, 1985).

In short, outsourcing is one of the several 'heterodox' forms of agricultural organisation in the Mediterranean Europe, through the setting up of several and intense interdependences among different types of farms and actors (between service providers and service takers, between out-migrants and relatives in charge of managing the holdings within family cessions). This model differentiates from that of the Danish model (on the basis of well-sized and professional farms) which dominates Northern Europe. However, the economic rationale of this heterodox way of restructuring has also allowed substantial technical progress in this type of agriculture.

Farm Labour Market and the Role of Migrant Work

The utilisation of a considerable amount of salaried labour, basically provided by foreign migrants, in the Mediterranean areas of intensive farming systems is a well-known feature of these agricultures. In the 1980s,

Berlan (1986, 1987) alerted about the risks of Mediterranean agriculture to become a 'European California' based on the overexploitation of foreign working class, and leading to both social tensions and the 'sacrifice of an important part of family-based farms' (1986: 22; 1987: 244). This contrast between this model of agriculture that was emerging in the South (particularly in Spain, Southern France and Italy) and the 'virtues' of family farming still dominating Northern Europe, was attracting the attention of a part of literature. Other studies focused on the underlying rationale of the substitution of local labour force with foreign migrants in the process of consolidation of intensive farming systems (see Hoggart & Mendoza, 1999, on migrants in Northern littoral in Catalonia).

The current situation of foreign agricultural workers is addressed in other chapters of this volume (Moreno, Laurent and Kasimis and Papadopoulos). However, it is useful to contextualise the situation of Southern countries and the role played by incoming foreign population in the framework of the evolution of agricultural labour markets in Europe during the last decades.

For this purpose, Fig. 3 shows the evolution of salaried labour within agricultural occupied population in selected EU countries. Data from 1980 show that only UK – historically different from the continental one – could be considered to have a non-family agriculture from the point of view of employment. In the rest of the countries agriculture could be said to maintain its family character, although Spain and Italy already had slightly higher levels of salaried employment.

This situation radically changes in the two following decades. The most striking case is that of Dutch agriculture, which passed from 22% of salaried in 1980 to 49% in 2000. A rapid rise is also found in the more extensive French agriculture. Behind this evolution it is the well-known process of breaking up of the family labour group (Blanc, 1987) leading to a gradual individualisation of family farming, i.e. the holder is the unique member involved in farm work (or management) and the rest of family members follow differentiated off-farm labour paths. In any case, the effects of the reduction of work family availability are different according to the characteristics of farming: in more extensive agricultures, where mechanisation is easier, this rise has been slower (as the French case illustrates); in intensive agricultures, where the substitution of labour with mechanisation is more constrained, salaried labour increases rapidly (Netherlands). ¹⁰

It is precisely this later correlation (intensive specialisation and salaried labour) which explains the trend in Southern countries. As Fig. 3 shows, salaried labour increases in Spain the period considered. Also in Italy and

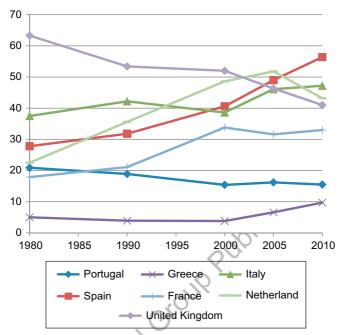


Fig. 3. Evolution of Salaried Employment in Agriculture (% Out of the Total Agricultural Employment). Source: European Commission. Agriculture in the European Union. Statistical and Economic Information. Several years. Available in http://ec.europa.eu/agriculture/statistics/agricultural/index_en.htm. Accessed January 2013.

Greece (the most 'family' agriculture) salaried labour increases from 2000. The only exception is Portugal, where this variable even drops slightly. In addition, this growing demand of salaried labour has been satisfied, almost exclusively, with foreign workers. In order to analyse in-depth that recent process we will refer specifically to the Spanish case.

Two circumstances converge in late 1980s and early 1990s. On the one hand, once finished the transitional period after the accession to the EU (1986), European markets opened, which increased dramatically vegetable exports to the North. On the other hand, the growth of Spanish economy since middle 1980s was absorbing the labour stock that remained in agriculture during the crisis of the 1970s and early 1980s. As a result, intensive agriculture expanded in many Mediterranean regions supported on the massive arrival of foreign migrants. What Pedreño (1999) calls 'vegetable factories' consolidated.

Several studies have tackled the organisation of farming and the resulting social structure in these intensive systems (particularly in Southeastern Spain, Gómez López, 1993; Pedreño, 1999, 2012). The massive and flexible availability of foreign labour force - together with the development of new forms of market organisation and supply concentration – has been a key factor of competitiveness and consolidation of intensive horticulture. The demand of work comes from two types of farms: on the one hand large commercial firms and on the other hand family farms adopting a range of modalities of entrepreneurial character (see Moreno, this volume) and utilising an important share of salaried labour. Pedreño's (1999) analysis of horticultural areas in Murcia shows the diversity of labour sub-contracting modalities – either by means of temporary work agencies or mere informal labour arrangements, allowing non-direct labour relationships between employees and the holdings where they work. This outsourcing of labour management facilitates a high degree of deregulation and informality, which constitutes a characterising trait in the Mediterranean, giving rise to a social construction based upon a vulnerable and flexible work force.

This close correlation between intensive agriculture and labour flexibility is corroborated by the weight of flexible agricultural work in European countries (see Table 4). Indeed, the highest percentages of Annual Work Units resulting from the addition of non-regular salaried plus workers not

Table 4. Distribution of Annual Work Units in EU Agriculture (2010).

	Family	Non-Family			
	0	Regular	Non-Regular	No Directly Contracted	
Portugal	80.1	11.3	7.5	1.1	
Spain	61.1	17.1	18.2	3.6	
Italy	79.1	8.8	11.6	0.5	
Greece	81.7	4.2	13.1	1.0	
Belgium	74.6	18.2	6.7	0.5	
Denmark	57.3	39.8	2.9	0.0	
Germany	62.8	25.4	10.1	1.7	
Ireland	90.6	5.8	1.8	1.8	
France	43.0	44.4	11.0	1.5	
Luxembourg	74.8	20.1	4.0	0.8	
Netherlands	55.3	26.6	11.7	6.4	
United Kingdor	m 64.6	23.8	7.0	4.6	

Source: Authors' elaboration from EUROSTAT Agricultural Censuses.

directly contracted by the holder are found in Spain (21.8%), Netherlands (18.1%), Greece (14.1%), France (12.5%) and Italy (12.1%), all of them with an outstanding presence of intensive agriculture. These data are useful to frame the several references that some of the chapter of this volume make about labour.

And last but not least, the entry of foreign migrants – that reaches 24% of total occupied in Spanish agriculture (MAGRAMA, 2012a) – is not exclusive of intensive littoral farming areas. Gradually, it has taken place also in inland regions where family farming has 'individualised' (as in other European regions), both as itinerant employees for harvesting in several systems (grapes, olives, tobacco) and fixed workers in intensive livestock. Moreover, migrant population has grown in Spanish rural areas (from 2.8% out of total in 2001 to 6.7% in 2007, Camarero et al., 2009, pp. 136–142), and its works in construction and service industry, contributing in this way to the demographic renewal of many rural areas severely affected by the exodus of previous decades. For Greece, Kasimis and Papadopoulos (2005) also point out the role played by migrants in the economic revitalisation of rural areas.

OTHER PRODUCTIVIST TRAITS: INTENSIFICATION AND SPECIALISATION

Together with the concentration of production, literature points out farm intensification and specialisation as the two other identification traits of productivist modernisation. This section reviews, upon the basis of some straightforward indicators, the evolution of these traits for Southern Europe and its differences with that of Northern countries.

The thesis that Mediterranean agricultures have reached lower levels of *intensification* than Northern ones is widely supported. For instance Lamarche (1996) showed that difference in his analysis of the evolution of a set of productive indicators (mechanisation, consumption of chemical fertilisers, livestock intensification) between the 1980s and early 1990s. However, he also noticed a slight convergence due to the slowing down of these indicators in the North, whereas they went on in the South. This author concluded that, in this period, this would be showing that Southern farmers were fully involved in farming system intensifications, whereas Northern ones were beginning to question, or at least moderate, that trend (Lamarche, 1996, p. 90). Also Caraveli (2000) corroborated these

differences, but also showed local intensification processes in some areas of Mediterranean countries, parallel to ongoing processes of extensification and even farmland abandonment in mountain areas or less favoured areas.

In order to update the situation and analyse these changes in the beginning of this century, we utilise two indicators (Table 5). The first one is the most used indicator on physical intensification of farming: chemical fertiliser consumption per hectare of UAA, mainly linked to yields increase. The second one is an economic and more global indicator: the ratio between Intermediate Consumptions (i.e. farms' expenditure in external inputs throughout the productive cycle) and the total value of agricultural production (Output of the Agricultural Industry).

Data show that, in the nineties, fertilisation levels dropped in Northern countries, a similar trend than the observed in Greece and Portugal. On the contrary, Italy and Spain still showed slight increases in fertilisation consumption per hectare in that period, although they began to decrease in the first years of the 21th century. As a result, North-South fertilisation gap remains (being Italy the unique exception). These lower levels are related to the Mediterranean climatic conditions (lower precipitations, periodic droughts) which limit the use of fertilisers, even if the notable expansion of irrigated perimeters in these countries has mitigated these constraints (Caraveli, 2000).

The other indicator of Table 5 (IC/OAI) led to similar conclusions: analogous evolutions in the first decade of the century in both Northern and Southern European countries, so that the existing gap (lower levels of intermediate consumption of external inputs in the Mediterranean) remains. In any case, some factors affect this indicator. On the one hand, we cannot forget that this indicator is strongly associated to the importance of livestock production (and therefore fodder expenditure, a major component of IC) in the North. On the other hand, the general increase of the ratio is explained by the relative evolution on paid input prices by farmers and received output prices (the so called 'price squeeze'), which deteriorates economic margins in all European farming systems.

Together with concentration and intensification, the third trait associated to the productivist modernisation of agriculture is the higher specialisation of farms, which would progressively abandon productive diversity that characterises traditional farming, to specialise its activity in fewer different products.

A way to quantify specialisation from official statistics is to resort to the classification of farm types carried out within the farm structure surveys, upon the basis of the relative contribution of the different products to each

	Total Consumption of Chemical Fertilisers kg/ha, UAA			Intermediate Consumption (IC)/Output of the Agricultural Industry (OAI) (%)	
	1990	2000	2007	2000	2010
Portugal	88.1	75.0	57.0	50.0	61.9
Spain	103.0	106.6	101.4	37.1	44.6
Italy	166.1	177.2	137.3	37.4	46.6
Greece	217.3	153.4	97.2	33.7	47.9
Belgium	351.9*	249.5*	258.5*	61.3	68.8
Denmark	287.8	169.1	149.4	62.9	71.9
France	278.8	191.3	170.2	51.9	59.0
Germany	250.1	195.2	188.8	59.7	69.7
Ireland	203.4	172.1	133.0	53.6	76.0
Luxembourg				52.7	73.7
Netherlands	332.5	248.3	206.4	53.2	65.1
UK	181.7	134.8	120.2	58.7	66.1

Table 5. Indicators of Agricultural Intensification.

Source: EUROSTAT.

holding's Standard Gross Margin (SGM). A holding is considered as specialised in a certain product (or group of products) when it contributes at least 2/3 of the SGM. Table 6 shows, for several European countries, the relative weight of specialised farms.¹¹

Data show a notable level of agricultural specialisation in both Northern and Southern Europe. More than 70% of farms (except Portugal) are specialised. Moreover, the level of specialisation increased slightly between 2000 and 2007, with the exception of Greece and UK. Logically, this generalised specialisation differs among countries. In the North, bovine livestock predominates: 92% of Irish farms, 60% in Luxembourg, 50% in Netherlands and 49% in UK are specialised in *Grazing livestock* type. Also in the North, 54% of Danish and 23% of French holdings specialise in *Field Crops*.

In the Mediterranean, holdings show a different specialisation profile, since most of them are included into the *Permanent Crops* type (52% of Greek and Spanish farms, 47% in Italy and 36% in Portugal). More concretely, most of these farms are specialised in olive production (34% of Greek holdings, 21% in Italy and 20% in Spain), in fruit and citric trees (18% of Spanish farms) and vineyards (11% of Portuguese and 10% of Italian farms).

^{*}Data for Belgium and Luxembourg together.

	% Holdings in Specialised Types (Types 1 to 5, Except Subtype 34)				
	2000	2007			
Portugal	50.6	56.3			
Spain	77.3	80.6			
Italy	74.1	75.7			
Greece	75.9	72.0			
Belgium	77.4	78.5			
Denmark	77.5	80.5			
France	77.8	80.0			
Germany	71.7	78.6			
Ireland	95.9	97.0			
Luxembourg	81.6	86.1			
Netherlands	86.1	86.4			
UK	87.7	64.7**			

Table 6. Farm Specialisation.

Source: EUROSTAT Farm Structure Survey, 2007.

In any case, it is necessary to highlight that this Southern specialisation in not the result of a recent process of productivist modernisation, as it could be perhaps in the North. Rather, the Mediterranean specialisation in export-oriented commercial crops dates back to centuries ago. For instance, Damianakos (1997, pp. 194–196) describes the high specialisation in raisin production in Ionic Islands and Peloponeso during the second half of the 19 century. In the Spanish Mediterranean, Piqueras (1985) analyses the several commercial crops that have been succeeding from the XVIII century. In both cases, these historical processes led to large monocrop areas in these regions. This leads to outline the necessity of a longer historical perspective to analyse some facets of agrarian change.

SOME (INTERNALLY COMPLEX) MULTIFUNCTIONAL DYNAMICS

Previous sections have focused on the dynamics of the structural characteristics of holdings, which relate with the physical traits of farms,

^{*}See endnote 11.

^{**}For UK, the drop is associated to an increase of 'non-classified' farms. The percentage of 'mixed farms' remains for the whole period between 5% and 7%.

as well as with the modalities of management and organisation of farm work. Besides them, other major transformations, which would be related to post-productivist or multifunctional models of agricultural development have taken place. In this regard, we will refer here to two of these changes: the expansion of food quality-oriented practices in the holdings and the adoption of non-agricultural diversification strategies. The aim of these sections is not to present a detailed analysis for the four countries we are dealing with, but to highlight some elements we consider to be relevant for our discussion.

The 'Boom' of Quality-Oriented Dynamics in Southern Europe

Marsden and Sonnino (2006) argued that food quality differentiation based upon the territorial linkages of production has prevailed in Mediterranean countries. Rather, in Northern Europe, quality attributes have been more related to aspects like public health, hygiene or the environmental implications of production. According to these authors, this difference would be in part due to the distinctive legal frameworks, more oriented towards promoting private labels in the North, whereas in the South national policy makers (with the support of EU Regulations) have strongly promoted the development of territorial labels.

Indeed, food territorial labels – namely Protected Designation of Origin (PDO) and Protected Geographical Indication (PGI) – expanded rapidly in the last 15–20 years in the Mediterranean. In 2008, more than 60% of EU food (wine excluded) PDO/PGI and 47% of their production (in value) were concentrated in Portugal, Spain, Italy and Greece, leading, together with France, EU statistics. ¹²

This is clearly illustrated by Spain, which passed from 74 (PDO and PGI) in 1998 to 160 in 2010. Among them, olive oil production (an emblematic Mediterranean product) had in 1998 only 6 PDOs covering 218,804 ha. Ten years later, they were 28 olive oil PDOs with almost a million hectares of olive groves within the protected perimeters.

Our point is that, although these quality-oriented practices have been usually considered as an advance of non-productivist farming models, their growth has been often fully parallel to strong productivist transformations. This can be illustrated again by Spanish olive oil production, which, at the same time it was leading PDO expansion, was simultaneously witnessing an outstanding increase of the land devoted to this crop (leading to monocropping in many areas and transforming and homogenising traditional

landscapes) and a rise of yields thanks to intensive practices (new irrigation districts, new and more dense plantations) (Scheidel & Krausmann, 2011). Similar processes can be found in vineyard production (see Moreno-Pérez, this volume). In this way, some PDO/PGIs have resulted in a rising pressure over natural resources (e.g. water). In addition, the regulation of some territorial labels located in high nature value areas would be presenting limitations when it comes time to integrate environmental considerations — as illustrated by Beaufoy (2009) for the jam PDO of 'dehesas', the Spanish version of Portuguese montados (see Pinto-Correia and Godinho, this volume).

The other outstanding process regarding quality orientation is the diffusion of organic farming practices. Contrary to territorial approaches, this is more a single farmer decision level, although collective action can also play a decisive role (Ortiz-Miranda, Moreno-Pérez, & Moragues-Faus, 2010). EUROSTAT data show how the four EU Mediterranean countries have experienced rapid expansions of organic certification, particularly in the first years of the 21th century (see Table 7). This has led these countries to surpass most non-Mediterranean ones, which could be reflecting an

Table 7. Share of Total Organic Crop Area Out of Total UAA.

	2000	2010
Austria	13.8	17.2
Sweden	5.9	14.3
Italy	6.7	8.6
Greece	0.7	8.4
Finland	6.7	7.4
Spain	1.5	6.7
Denmark	5.9	6.1
Germany	3.2	5.9
Portugal	1.2	5.8
United Kingdom	3.3	4.1
Belgium	1.5	3.6
France	1.2	2.9
Luxembourg	0.8	2.8
Netherlands	1.6	2.5
Ireland	0.6	1.1
EU-27	-	5.1
EU-15	3.0	6.4

Source: EUROSTAT website http://epp.eurostat.ec.europa.eu/portal/page/portal/agriculture/data/database. Accessed on January 2013.

already mature organic sector in Northern and Central Europe and a certain Southern delay in the adoption of these practices. However, the extensive character of many Mediterranean farming systems (due to their agroecological conditions) would be also facilitating organic diffusion, which could also explain this comparative trend. The Spanish organic expansion (more than 1.8 million ha in 2011) corroborates this. Two thirds of that figure correspond to area of forests, grasslands, and fallow land. Organic crops occupied 'only' 610,000 ha. It is not to say this is a minor change; however, a more detailed analysis is needed to assess the driving forces and real implications of this massive organic conversion.

In addition, this expansion has been more remarkable in terms of area than in terms of number of holdings. The reason is that, and this seems to be a distinctive trait of Mediterranean (as well as other EU-12 exceptions), holdings adopting organic practices use to be the larger ones (in physical size) (see Table 8). The reasons of why the existing economies of scale in the adoption of organic practices seem to be playing more importantly in some countries (among them the Mediterranean) than others, remain unclear.

Finally, the expansion of organic production in the South contrasts with the lower level of consumption of organic food in these countries. This would be reflecting, in spite of the lack of specific statistics (European Commission, 2010), that an important share of Southern organic production

Table 8. Percentage of Organic Holdings Out of Total Holdings per UAA Strata (2007).

	(1)	UAA of		
	<20	20-<50	50-<100	>=100
Portugal	0.4	1.4	2.8	5.4
Spain	1.2	2.3	3.9	4.5
Italy	2.1	7.6	9.7	14.2
Greece	3.5	7.7	13.5	20.3
Belgium	0.5	1.3	2.2	2.7
Denmark	3.9	5.5	4.9	5.6
France	1.4	2.1	2.4	1.6
Germany	3.1	4.7	3.9	5.2
Ireland	0.4	0.6	0.6	0.5
Luxembourg	1.7	2.9	3.0	2.2
Netherlands	1.0	1.9	2.4	4.0
UK	0.7	1.7	2.1	3.2

Source: Farm Structure Survey EUROSTAT.

is participating in the intra-EU trade that is feeding the higher levels of organic consumption in the North. For instance, Italy and Spain are among the three first organic exporters (in value) in the world (MAGRAMA, 2012b, from IFOAM statistics). On the opposite, Germany, France and UK are among the four main world organic importers.

In-between farm diversification and product differentiation, other holdings' strategies relate to their connections with the final food consumer (a set of practices that literature has considered, together with quality production, as deepening, see Chapter 2, this volume). The clearest example is direct selling. Here again, we find how this traditional modality has been reassessed through the lens of new paradigms of agrarian development. The re-gained recognition of these practices has led, also here, to include them into official agricultural statistics. Thus, EUROSTAT statistics identify, for some countries (basically Mediterranean and Eastern ones), the number of sole holdings producing mainly for direct selling. The Farm Structure Survey of 2007 shows that 24% of Greek sole holdings producing mainly for direct selling, 17.4% in Italy, 6.4% in Portugal and only 0.1% in Spain.

There are not historical records to assess the evolution of this modality of marketing. It is true that this, as well as other forms of short supply chains, are now more visible thanks to the renewed attention of statistics and researchers. Nevertheless, we wonder if they might have been present in the Mediterranean for long, interwoven with the dense and complex rural-urban, agrarian-non agrarian linkages we have discussed in this chapter and that constitute a historical distinctive trait of Southern countries.

Non-Agricultural Farm Diversification

Another major trait of multifunctional agriculture expresses when other farm-related activities become a business for farmers. This information is collected into EUROSTAT's Farm Structure Surveys from early this century, which reflects again how these practices (historically associated to marginal farming) have become to be considered more relevant under the discourse of multifunctionality. Hence, the diffusion of (statistically identified) diversification practices shows a clear North-South different profile, again with some exceptions (Fig. 4).

Here again, diversification is closely related to farm size (Table 9): the larger the holding, the more prone to diversify, due to a combination, among other, of economies of scale, capital availability, available underutilised land, etc. Contrary to organic farming, which showed some North-South

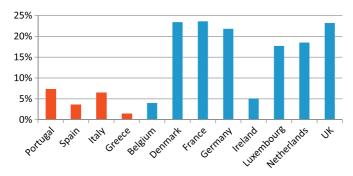


Fig. 4. Percentage of Holdings with Another Gainful Activity (2007). Source: EUROSTAT Farm Structure Surveys.

Table 9. Percentage of Diversified Holdings Out of Total Holdings per UAA Strata (2007).

	UAA of holdings (ha)					
	< 20	20-<50	50-<100	>=100		
Portugal	8.3	8.0	9.7	12.5		
Spain	3.1	5.1	6.8	8.1		
Italy	6.4	14.4	16.7	19.6		
Greece	1.4	6.3	8.3	18.0		
Belgium	3.2	4.6	5.0	6.8		
Denmark	19.2	22.5	26.0	32.3		
France	27.5	23.8	20.7	24.3		
Germany	19.2	24.6	26.6	29.7		
Ireland	3.5	5.4	8.1	11.1		
Luxembourg	9.8	12.2	24.6	24.8		
Netherlands	11.9	25.5	30.9	33.9		
UK	22.7	25.4	27.8	36.1		

Source: EUROSTAT Farm Structure Surveys.

differences, in this case, diversification-size correlation seems to be the general tone in all of the countries considered (excepting France). This correlation would also explain the lower diffusion of diversification in Mediterranean countries having smaller holdings.

Needless to say that, under these national aggregated data, it is possible to find regions and areas where agri-tourism, on farm processing activities,

the provision of farm and non-farm services with own machinery and other modalities of diversification constitute frequent practices, and play a key role in underpinning farming systems. Several studies illustrate these cases, see for instance Alonso Mielgo, Sevilla Guzmán, Jiménez Romera, and Guzmán Casado (2001) for Los Pedroches in Spain, or several examples from Italy: Brunori and Rossi (2000), Sonnino (2004) or Kanemasu and Sonnino (2009) for Tuscany, Ventura and Milone (2000) for Umbria.

Finally, much has been written about the relationships between farm diversification and the provision of environmental services, a key element of the multifunctional paradigm. Moreover, this linkage would seem to offer more opportunities in Southern countries. Indeed, data show unequivocally the deep integration between farming systems and high nature value (HNV) areas in the Mediterranean. According to EUROSTAT's IRENA Indicators, 53% of Greek UAA is within HNV areas, 37% in Spain, 34% in Portugal and 21% in Italy. From EU-15, only two other countries have similar figures: 27% in UK (mainly uplands) and 24% in Ireland. This contrasts with the higher dissociation between farmland and natural areas in countries like France (15%), Germany (3%), Denmark (3%) or Netherlands (2%).

The possibilities to turn the provision of environmental services into income require both complex institutional arrangements and an adequate regulatory framework. By the time being these modalities both privately funded (through diverse forms of private contracts, see for instance Hodge & Adams, 2012) and as part of public policies (whose clearest example is agri-environmental payments included into the Pillar II of the CAP) are much more developed and diffused in Northern Europe than in the Mediterranean (Rosell, Viladomiu, & Correa, 2010).

A STRAIGHTFORWARD APPROXIMATION TO MEDITERRANEAN AGRICULTURAL DIVERSITY

The pages above have addressed the main common traits of agriculture in four Mediterranean countries and its differences from Northern Europe. The analysis has been based on national data, so that the outstanding internal differences among Southern farming systems – in terms of productive orientations, farm structures, processes of intensification and the like – remained concealed. The studies included in the following chapters of this volume will precisely illustrate this internal agricultural and rural diversity in the Mediterranean. However, in the global picture of this

chapter, we consider useful to outline a straightforward typology as a first approximation to that diversity.

Needless to say that this is not an exhaustive scheme including all the existing Southern agricultures, rather it aims to cover a sort of easily identifiable ideal-types (with several intermediate situations) in these countries. This is a typology of farming systems upon the characteristics of farms (with different territorial linkages) predominating in each area, and it also illustrates the degree of advance of the productivist modernisation in several territories.

A *first type* is made up with farming systems of consolidated family-based, modern and professionalised holdings. Some examples are found in the Po Valley (Italy), where farming is closely connected to the strong regional agrifood (livestock oriented) district. In Spain we also find several examples: intensive horticulture in Southeast, intensive olive groves in Andalucía or Castilla's cereal-oriented plateaus where rural outmigration allowed farm concentration. We have also similar cases in Portugal (e.g. vineyard holdings in the Douro region) and Greece (intensive farming in irrigated plateaus). They are the most similar situations to professional and competitive farming in the North, although still far from the agricultural characteristics of Dutch Flevoland or Paris Bassin, emblematic examples of specialised agricultural areas. ¹⁴ In addition, this type of agriculture is more vulnerable in the Mediterranean due to climatic constraints, since they use to be irrigated systems highly dependent on – more and more uncertain – water resources.

A second type corresponds to areas where there is a stable system of small holdings, well integrated with local labour markets, either in close urban areas or within diversified and dynamic rural contexts. They are about systems with a majority of pluriactive holders, frequently resorting to outsourcing. Saraceno (1994) described these characteristics for the agriculture of the province of Udine (North-eastern Italy), although it might be also present in Central Italy. This is also the type of structure that can be found in Northern littoral of Portugal (Baptista, 2001, 2002) and in several areas of Spanish Mediterranean coast. They are systems where land concentration has not taken place (because pluriactivity opportunities), but where productive intensification is going on. In addition, the difficulties to enlarge farm size have led professional farmers to grow by the way of becoming agricultural contractors.

A third type can be found in many mountain areas and depressed inland regions in the four Mediterranean countries. They are deep rural areas poorly connected to urban ones. When these agricultures are dominated by

small farms (a common situation) outmigration does not result in land concentration, but in farmland abandonment. Here, retirement pensions and CAP subsidies become the main sources of income. Some examples can be found in the Portuguese region of Tras os Montes (Rodrigues, 2000), the Spanish Cantabrian Mountains, large extensions of Italian Mezzogiorno or in the many Greek mountains. In most cases, they are about high nature value areas where opportunities for environmental valorisation are open, but they remain uncertain.

Finally, a *fourth type* of agrarian reality can be identified. It is not so general in the Mediterranean, but it has a clearly defined presence in Southern Spain (Andalucia and Extremadura) and Portugal (Alentejo). This is the *latifundio* model. They are about very large agricultural properties, owned by holders following often conservative strategies, based on the perception of CAP subsidies and maintaining extensive agriculture, except when the development of irrigation districts has allowed diverse degrees of intensification.

CONCLUDING REMARKS

This chapter aimed to be a sort of introductory and historical backdrop for the following chapters of this volume, which will enrich with deeper and more detailed studies many of the elements that have been introduced here. Therefore, the conclusions we present in this section are provisional and will be developed and improved along the several case studies. These conclusions revolve around the two working thesis we departed from: one the one hand, that of Mediterranean farms' structural delay and rigidity; one the other hand, that precisely this delay in the modernisation path becomes an opportunity for adopting new practices and strategies in line with the model of multifunctional agricultural development.

Regarding the first argument (the progress of the productivist modernisation), official statistics show unequivocally that the 'stereotype' persists. Average holdings are smaller (physical and particularly economically). However, also clear sights of growing structural dynamism are found in the two last decades, although it does not mean to reach the pace of core countries of the 'Northern model'.

But under the picture drawn by the official statistics, the rich Mediterranean literature (which not always has being able to permeate theoretical paradigms on agrarian change) also reveals the several and diverse flows of informal land cessions leading to the enlargement of 'real' production

units, i.e. a heterodox (but effective) way of concentration. In addition, Southern countries have been adopting (from early 90s) some patterns of transformation typical of modern agricultures, which parallel them with Northern dynamics. Among them:

- Drop of some indicators of intensification like the level of fertiliser consumption.
- Trend towards the individualisation of family farms associated to the decrease of family labour availability in modernised holdings.

However, even if the progress of modernisation or productivism or the adoption of Northern evolution are indeed taking place, they do in a more informal and unregulated way in the South. And this has consequences in terms of:

- Weaker institutional stability of holdings, which differentiates from the Danish model of well-sized holdings upon the basis of a clear institutional support.
- But more territorially and socially embedded, interwoven in fluid forms of rural-urban, agricultural-non agricultural networks and interdependent linkages among different types of farms and actors.

The second thesis we have discussed was related to the development of the multifunctional model of agrarian change in the Mediterranean. The data we have provided show the growing diffusion of these attributes, in part taking advantage of the agro-ecologic conditions. However, some clarifications are needed at this point. First, these developments have shown not to be 'pure' forms as depicted within the paradigm of sustainable rural development. On the one hand, we find parallel processes of orientation towards quality production and productivist developments, particularly in terms of intensification. And it is not just that intensification and quality orientation can coexist in a same area or holding, or that these two trends are 'related'. Our point is that precisely quality orientation has pushed intensive paths. On the other hand, the export orientation of an important share of the growing Southern organic food production is another hybrid situation: organic products sent thousands of kilometers away. The growth of organic demand in the North is a magnificent market stimulus for farming systems accustomed to participate in international markets. And we should not underestimate the capacity of Mediterranean intensive agricultural districts (the 'European California') to adapt to organic standards.

Second, the clear correlations between farm size and adoption of these practices raise doubts regarding their capacity to be a 'solution' for the mass

of small holdings spread over the whole Mediterranean Europe. The adoption of typical multifunctional practices frequently requires well-sized and entrepreneurial farms.

Finally, as we have insisted, a longer historical approach is needed to soundly assess and interpret national and local agrarian dynamics, a perspective even beyond the post-World War II period – when the debate of paradigms centres. European Mediterranean agriculture has had several commercial specialisations, which have developed and depressed again and again as a consequence of both markets' evolution and, sometimes the exhaustion of the natural resource base – a key Achilles heel of these agricultures. So, we could assert that, all in all, their historic and current evolutions are simply forms and phases of the capitalist development in agriculture, obviously adapted to the peripheral conditions of these economies in Europe, as well as to the new demands (culture, origin, environment, leisure) these productive systems are confronted to.

NOTES

- 1. Although some authors also dissent about the existence of a common model for these four countries' agricultures. Damianakos (1997, p. 190) argue that 'the Greek agrarian system has little in common with that of Italy, Spain or Portugal'.
- 2. On December 2012, EUROSTAT provided data from the 2009/2010 Agricultural Censuses from all the European countries (see *Structure of Agricultural Holdings 2010* at http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search_database, accessed on December 2012). However, these data are not yet homogeneous due to the important changes the Censuses introduce regarding the statistical universes in some countries (see http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/EN/ef_esms.htm#comparability, accessed on December 2012). Therefore they cannot be compared with the former data series. Consequently, it is recommendable to base the comparative analysis upon 2007 data. However, some of the national studies included in this volume use data from 2009/2010 censuses, based on national sources that do allow time comparisons.
- 3. The Spain-Netherlands comparison is, at this point, very illustrative. They show a very similar average dimension (ha of UAA) of their farms. However, 77.9% of Spanish holdings are below 20 ha of UAA (58% in Netherlands), 5.2% are above 100 ha (2.6 in Netherlands), whereas in Spain only 16.9% are between 20 and 100 ha, being 39.4% in Netherlands.
- 4. Actually, in 2007 the percentages of holders with Other (main) Gainful Activity are higher in some Northern countries like Sweden (49.4), Germany (43.5) or Denmark (39.8) than in Southern ones like Spain (27.1), Italy (22.7), Portugal (21.8) or Greece (18.3).
- 5. Three exceptions, with lower rates of size growth, are found: (i) Netherlands, where holdings are engaged in trajectories of intensification (leading to a rapid

increase of their economic dimension) and less in terms of physical growth; (ii) UK, whose already large holdings (around 60 ha of SAU in 1970, tripling French, Danish of German ones) were less pressed to grow in the search of economies of scale; and (iii) Ireland, whose lower rate of adjustment would confirm its peripheral character in the domain of European agriculture.

- 6. Arnalte, Ortiz, and Moreno (2008) show how farm growth slowed down in the last decade in terms of physical size, but it accelerated in economic size due to intensification, particularly in some productive orientations.
- 7. These verses from the Spanish song-writer Jose Antonio Labordeta reflect the uprooting feelings of the people leaving inland areas of Aragon (one of the regions where the exodus was more intense): 'If you find in some way people carrying their home on their shoulders, do not ask them about their land, they will look at you furiously' (song 'Todos repiten lo mismo', from the disc 'Cantar y callar', 1974).
- 8. Damianakos (1997, pp. 200, 203) also refers to the development of farming with hired machinery or the existence of sub-contracting relationships within farms.
- 9. Some estimations of the demand of external services, using national statistics, show the widespread diffusion of this phenomenon. In Spain, from data from the Agricultural Census of 1999, 37% of farms used tractors belonging to other holdings, cooperatives or service firms; and 24% also did with other specialised machinery (particularly harvesters) (Ortiz et al., 2011).
- 10. See Blanc, Brun, Delord, and Lacombe (1990) about the maintenance (or not) of the family character of French agriculture; or the more general analysis of Gasson et al. (1988) on family farming transformations.
- 11. There are 8 basic (1 digit) types: 5 specialised (*field crops, horticulture, permanent crops, grazing livestock* and *granivores*) and 3 mixed types (mixed cropping; mixed livestock; mixed crops-livestock), as well as a type of non-classifiable holdings. We consider as specialised the 5 first groups (with the exception of the sub-type *various permanent crops combined*). This later type (code 34) is a common sort of farm diversification in the Mediterranean (more than 2/3 of SGM comes from mixed permanent crops).
- 12. European Commission, http://ec.europa.eu/agriculture/quality/schemes/index en.htm, accessed January 2013.
- 13. Spanish Ministry of Agriculture, http://www.magrama.gob.es/es/alimentacion/temas/calidad-agroalimentaria/calidad-diferenciada/dop/htm/cifrasydatos.aspx, accessed May 2012.
- 14. See the preliminary typology of rural regions established in the EU Project ETUDE (Van der Ploeg & Marsden, 2008).

REFERENCES

Alonso Mielgo, A. M., Sevilla Guzmán, E., Jiménez Romera, M., & Guzmán Casado, G. (2001). Rural development and ecological management of endogenous resources: The case of mountain olive groves in Los Pedroches comarca (Spain). *Journal of Environmental Policy and Planning*, 3(2), 163–175.

- Arnalte, E. (1989). Estructura de las explotaciones agrarias y externalización del proceso productivo. *Información Comercial Española*, 666, 101–117.
- Arnalte, E. (1992). Agriculturas del sur de Europa y reforma de la Política Agrícola Común. *Revista de Economía*, 12, 91–95.
- Arnalte, E. (2002). Ajuste estructural y cambios en los modelos productivos de la agricultura española. In C. Gómez Benito & J. J. González (Coord.), *Agricultura y Sociedad en el cambio de Siglo* (pp. 391–426). Madrid: McGraw-Hill-UNED.
- Arnalte, E. (2006). Economía política del proceso de ajuste estructural en la agricultura de los países desarrollados. In E. Arnalte (Coord.), *Políticas agrarias y ajuste estructural en la agricultura española* (pp. 17–54). Madrid: Ministerio de Agricultura Pesca y Alimentación.
- Arnalte, E., & Ortiz, D. (2006). Lectura comparada de los procesos de ajuste: factores determinantes e incidencia de las políticas. In E. Arnalte, (Dir.), *Políticas agrarias y ajuste estructural en la agricultura española* (pp. 353–381). Madrid: Ministerio de Agricultura Pesca y Alimentación.
- Arnalte, E., Ortiz, D., & Moreno, O. (2008). Cambio estructural en la agricultura española: Un nuevo modelo de ajuste en el inicio del siglo XXI. Papeles de Economía Española, 117, 59–73.
- Ball, R. M. (1987). Agricultural contractors: Some survey findings. *Journal of Agricultural Economics*, 38(3), 481–488.
- Baptista, F. (1996). Declínio de um Tempo Longo. Reprinted in Baptista, F. (2001) *Agriculturas* e Territórios (pp. 9–37). Oeiras: Celta Editora.
- Baptista, F. (2001). Agricultura e capitalismo na Europa do Sul. In Baptista, F. Agricultura e Territórios (pp. 63–81).
- Baptista, F. (2002). Los caminos de la agricultura familiar. In C. Gómez Benito & J. J. González (Coord.), *Agricultura y Sociedad en el cambio de Siglo* (pp. 377–390). Madrid: McGraw-Hill-UNED.
- Baptista, F. (2010). O Espaço Rural. Declínio da Agricultura. Oeiras: Celta Editora.
- Barbero, G. (1982). Quante sono le aziende agricole italiane? Rivista di Economia Agraria, 2, 329–366.
- Beaufoy, G. (2009). Environmental considerations of pig production in the dehesa are they incorporated in the PDO label Dehesa de Extremadura? In K. Biala (Ed.), *Environmental labelling and certification initiatives in the agri-food sector a way of marketing agricultural sustainability*. Proceedings of the JRC Summer Expert Meeting Ranco, 1–3 July 2008.
- Beopoulos, N. (2003). Mediterranean agriculture in the light and shadows of the CAP. In Ch. Kasimis & G. Stathakis (Eds.), *The reform of the CAP and rural development in Southern Europe* (pp. 39–51). Aldershot: Ashgate.
- Berlan, J. P. (1986). Agriculture et migrations. Revue européenne de migrations internationales, 2(2–3), 9–32.
- Berlan, J. P. (1987). La agricultura "mediterránea" y el mercado de trabajo: ¿una California para Europa? *Agricultura y Sociedad*, 42, 233–245.
- Blanc, M. (1987). Family and employment in agriculture: Recent changes in France. *Journal of Agricultural Economics*, 38(2), 289–301.
- Blanc, M., Brun, A., Delord, B., & Lacombe, P. (1990). L'agriculture française, est-elle encore familiale? In P. Coulomb, H. Delorme, B. Hervieu, M. Jollivet & P. Lacombe (Eds.), Les agriculteurs et la politique (pp. 310–327). Paris: Presses de la Fondation National des Sciences Politiques.

- Blandford, D., & Hill, B. (2005). Facilitating farm-level adjustment to the reform of trade and agricultural policies. Trade Policy Issues Paper no. 4. International Agricultural Trade Research Consortium.
- Brunori, G., & Rossi, A. (2000). Synergy and coherence through collective action: Some insights from wine routes in Tuscany. *Sociologia Ruralis*, 40(4), 409–423.
- Buller, H. (2001). Is this the European model? In H. Buller & K. Hoggart (Eds.), *Agricultural transformation, food and environment* (pp. 1–8). Aldershot: Ashgate.
- Camarero, L. A. (1997). Pautas demográficas y espaciales de las transformaciones del medio rural: Ruralidad y agricultura. In C. Gómez Benito & J. González (Eds.), *Agricultura y Sociedad en la España contemporánea* (pp. 225–246). Madrid: MAPA-CIS.
- Camarero, L. A. (Coord.), Cruz, F., González, M., Del Pino, J. A., Oliva, J., & Sampedro, R. (2009). La población rural de España: de los desequilibrios a la sostenibilidad social. Fundación La Caixa, Barcelona.
- Canadas, M. J. (1998). Trabalho, território e tecnologia: Transformação e situação actual na viticultura. PhD Dissertation. Universidade Técnica de Lisboa.
- Caraveli, H. (2000). A comparative analysis on intensification and extensification in Mediterranean agriculture: Dilemmas for LFAs policy. *Journal of Rural Studies*, 16(2), 231–242.
- Damianakos, S. (1997). The ongoing quest for a model of greek agriculture. *Sociologia Ruralis*, 37(2), 190–208.
- De Filippis, F. (1985). Il part-time nel dibattito sulla stratificaziones aziendale dell'agricoltura italiana. *La Questione Agraria*, 18, 3–16.
- Delorme, H. (2000). *La 'cuestión' del agricultor profesional en Francia*. In Agricultura Familiar en España 2000 (pp. 65–75). Madrid: Fundación de Estudios Rurales.
- Errington, A., & Gasson, R. (1996). The increasing flexibility of the farm and horticulture workforce in England and Wales. *Journal of Rural Studies*, 12(23), 127–141.
- European Commission. (1997). Rural developments, Working document, CAP 2000 Situation and Outlooks, DG VI.
- European Commission. (2010). *An analysis of the EU organic sector*. Directorate-General for Agriculture and Rural Development, Brussels.
- EUROSTAT. (2000). Structure des exploitations agricoles. Résultats historiques Enquêtes de 1966/67 à 1997. Luxembourg.
- Fabiani, G., & Scarano, G. (1995). Una stratificazione socioeconomica delle azienda agricole: Pluralismo funzionale e sviluppo territoriale. *La Questione Agraria*, 59, 27–91.
- Fanfani, R., & Pecci, F. (1991). Innovazione e servizi nell'agricoltura italiana. Il caso del contoterzismo. *La Questione Agraria*, 42, 79–121.
- Fonte, M. (2001). Reconstructing rurality in Mediterranean Italy. In L. Granberg, I. Kovacs & H. Tovey (Eds.), *Europe's green ring* (pp. 263–282). Aldershot: Ashgate.
- Gallego Bono, J. M. (2010). La agricultura a tiempo parcial y la externalización de servicios agrarios como vehículo del cambio estructural. Revista Española de Estudios Agrosociales y Pesqueros, 225, 13–45.
- Gasson, R., Crow, G., Errington, A., Hutson, J., Marsden, T., & Winter, D. M. (1988).

 The farm as a family business: A review. *Journal of Agricultural Economics*, 39(1), 1–41
- Gómez López, J. D. (1993). Cultivos de invernadero en la fachada Sureste Peninsular ante el ingreso en la C.E. Madrid: Ministerio de Agricultura Pesca y Alimentación.

- Goussios, D., & Duquenne, M. N. (2003). L'exploitation agricole à distance en Grèce: mobilité, pluriactivité et ruralisation. *Méditerranée*, 100, 45–48.
- Granberg, L., Kovách, I., & Tovey, H. (2001). Afterword. In L. Granberg, I. Kovách & H. Tovey (Eds.), *Europe's green ring* (pp. 359–366). Aldershot: Ashgate.
- Harff, Y., & Lamarche, H. (1998). Le travail en agriculture: nouvelles demandes, nouveaux enjeux. Économie Rurale, 224, 3–11.
- Harrison, A. (1982). Factors influencing ownership, tenancy, mobility and use of farmland in the member states of the European Community. Information on Agriculture, 86. Luxembourg.
- Hodge, I. D., & Adams, W. M. (2012). Neoliberalisation, rural land trusts and institutional blending. *Geoforum*, 43(3), 472–482.
- Hoggart, K., Buller, H., & Black, R. (1995). Rural Europe. Identity and change. London: Arnold.
- Hoggart, K., & Mendoza, C. (1999). African in-migrant workers in Spanish agriculture. Sociologia Ruralis, 4, 538–562.
- Kanemasu, Y., & Sonnino, R. (2009). Dynamics of power and cooperation in rural development: The case of chianina beef production in Italy. *International Journal of Sociology of Agriculture & Food*, 16(2), 36–53.
- Kasimis, C., & Papadopoulos, A. G. (2001). The de-agriculturalisation of the Greek countryside: The changing characteristics of an ongoing socio-economic transformation. In L. Granberg, I. Kovacs & H. Tovey (Eds.), *Europe's green ring* (pp. 179–218). Aldershot: Ashgate.
- Kasimis, C., & Papadopoulos, A. G. (2005). The multifunctional role of migrants in the Greek countryside: Implications for the rural economy and society. *Journal of Ethnic and Migration Studies*, 31(1), 99–127.
- Koutsou, S., Partalidou, M., & Petrou, M. (2011). Present or absent farm heads? A contemporary reading of family farming in Greece. Sociologia Ruralis, 51(4), 404–419.
- Lamarche, H. (1996). Europe du Nord, Europe du Sud: le chassé-croisé de la course à l'intensification. In M. Jollivet & N. Eizner (Dir.), L'Europe et ses campagnes (pp. 77–98).
 Paris: Presses de la Fondation National des Sciences Politiques.
- Langreo, A. (2002). La externalización del trabajo agrario y las empresas de servicios a la agricultura. *Economía Agraria y Recursos Naturales*, 2(1), 45–67.
- Laurent, C. (1998). Activités agricoles et territoires ruraux. Nouvelles questions de recherche. In Delorme, H. (Dir.), Les territoires ruraux en Europe. Questions de recherche (pp. 80–92). Paris: CERI-CNRS.
- MAGRAMA (2012a). Empleo en el sector agroalimentario. *Análisis y Prospectiva*, 7. Ministerio de Agricultura Pesca y Alimentación, Madrid.
- MAGRAMA (2012b). Caracterización del sector de la producción ecológica española en términos de valor, volumen y mercado. Madrid.
- Mahé, L. P. (2001, Spring). Can the European model be negotiable in the WTO? *EuroChoices*, 10–16.
- Marsden, T. (2003). The condition of rural sustainability: Issues in the governance of rural space in Europe. In C. Kasimis & G. Stathakis (Eds.), *The reform of the CAP and rural development in Southern Europe* (pp. 19–37). Aldershot: Ashgate.
- Marsden, T., & Sonnino, R. (2006). Beyond the divide: Rethinking relationships between alternative and conventional food networks in Europe. *Journal of Economic Geography*, *6*, 181–199.

- Moragues, A. (2011). How is agriculture sustained? Following farmers from the field to the market. A case study of olive oil in a Mediterranean region. PhD Dissertation Universitat Politècnica de Valencia.
- Ortiz, D., Arnalte, E., Moragues, A., & Doñate, S. (2011). Las explotaciones agrarias de servicios: la configuración de una vía de gestión de la agricultura. *VIII Congreso de Economía Agraria*. Madrid.
- Ortiz-Miranda, D., Moreno-Pérez, O. M., & Moragues-Faus, A. M. (2010). Innovative strategies of agricultural cooperatives in the framework of the new rural development paradigms: The case of the region of Valencia (Spain). *Environment and Planning A*, 42(3), 661–677.
- Pedreño, A. (1999). Del jornalero agrícola al obrero de las factorías vegetales: estrategias familiares y nomadismo laboral en la ruralidad murciana. Madrid: Ministerio de Agricultura Pesca y Alimentación.
- Pedreño, A. (2012). Trabajadores y agriculturas mediterráneas en la globalización. *Regiones, Suplemento de Antropología*, 47, 16–20.
- Piqueras, J. (1985). La agricultura valenciana de exportación y su formación histórica. Madrid: Ministerio de Agricultura Pesca y Alimentación.
- Pugliese, E., & Ceriani-Sebregondi, F. (1981). Destrutturazione Aziendale, famiglia e classi sociali in agricoltura. *Agricoltura e Societá*, 4, 19–31.
- Rodrigues, O. (2000). Utilização do Território e Propriedade Fundiária. PhD Dissertation. Universidade Técnica de Lisboa.
- Rosell, J., Viladomiu, L., & Correa, M. (2010). Mejora del medio ambiente y nivel de desarrollo: las opciones de los Programas de Desarrollo Rural (2007–2013) de la Unión Europea. Revista Española de Estudios Agrosociales y Pesqueros, 226, 13–37.
- Saraceno, E. (1994). The modern functions of small farm systems: An Italian experience. *Sociologia Ruralis*, 34(4), 308–328.
- Scheidel, A., & Krausmann, F. (2011). Diet, trade and land use: A socio-ecological analysis of the transformation of the olive oil system. *Land Use Policy*, 28(1), 47–56.
- Sivignon, M. (1996). Les systèmes agraires européens: Héritages, mutations, frontières. In M. Jollivetet & N. Eizner (Dir.), *L'Europe et ses campagnes* (pp. 37–55). Paris: Presses de la Fondation National des Sciences Politiques.
- Sonnino, R. (2004). For a 'piece of bread'? Interpreting sustainable development through agritourism in Southern Tuscany. *Sociologia Ruralis*, 44(3), 285–300.
- Sotte, F. (2006). Quante sono le imprese agricole in Italia? *Agriregionieuropa*, 2(5). Available at http://www.agriregionieuropa.univpm.it/dettart.php?id_articolo=111. Accessed on January 2013.
- Tracy, M. (1989). Government and agriculture in Western Europe 1880–1988 (3rd ed.). New York: New York University Press.
- Van der Ploeg, J. D., & Marsden, T. (2008). Unfolding webs. Assen: Van Gorcum.
- Vellante, S. (1981). Innovazioni tecnologiche, forme di produzione emergenti e organizzazione aziendale. *La Questione Agraria*, 4, 67–108.
- Ventura, F., & Milone, P. (2000). Theory and practice of multi-product farms: Farm butcheries in Umbria. *Sociologia Ruralis*, 40(4), 452–465.