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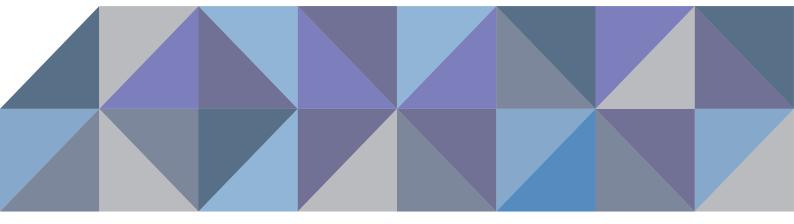
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Family farming in Europe and Central Asia: history, characteristics, threats and potentials

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This publication is part of a series of Working Papers produced in the context of the International Year of Family Farming, helping to inform regional discussions and debates about the phenomenon worldwide.

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FAMILY FARMING IN EUROPE AND CENTRAL ASIA: HISTORY, CHARACTERISTICS, THREATS AND POTENTIALS

Jan Douwe van der Ploeg¹

Most people have a clear understanding of what the term 'family farm' means. This is especially true in Europe. The term refers, in a seemingly straightforward and unambiguous way, to well-known and self-evident realities. It is solidly internalised in the memory of most people, even those with an urban background. People may like or dislike family farming, and scientists may dispute its virtues or shortcomings (Osaba 2014), but there is hardly any confusion or debate over the concept itself.

However, these certainties become less evident when the context in which family farms are embedded changes drastically, and this can lead to a rethinking, questioning or even contestation of the concept. This happened after the Second World War when agriculture experienced a massive restructuring. At that time Folke Dovring, a talented staff member of the Food and Agriculture Organization of the United Nations (FAO) in Rome, observed that "the family farm especially is obscure in definition" (Dovring 1956, 99). The same occurs when the family farm itself experiences deep and far-reaching alterations.²

The uniqueness of our times is that *both* context and the family farm itself are going through drastic transitions. The once stable reality of the family farm is being radically affected—both from the outside and the inside—and this requires, probably more than ever before, a rethinking of the concept.

This paper addresses three basic questions. First, what does the family farm mean for *the actors involved in it*? Second, why, how and under what conditions is family farming important *to society as a whole*? And third, will family farming be relevant, attractive and important in the *future* of Europe and Central Asia?

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^{2.} In this vein Whatmore et al. (1987, 21) observed: "In Britain, the family farm encompasses a wide range of productive, labour and business relations representing neither an empirically nor a theoretically discrete category."

Within Europe and Central Asia³ family farming is the dominant, although not exclusive, landlabour institution.⁴ This has not always been the case, and it is not a foregone conclusion that it will continue to be the case. In recent history (1850–2000), Europe has had an important sub-sector of capitalist farm enterprises. Some pockets apart (notably Scotland, Andalucia, the Italian Mezzogiorno and parts of Eastern Europe and Central Asia) this sub-sector has significantly decreased, mainly due to the devastating agrarian crises of the 1880s and the 1930s as well as to land reform processes that took place, particularly in northern and central Italy, in the immediate aftermath of the Second World War and in Portugal after the Carnation Revolution of 1974. Eastern Europe and large parts of Central Asia witnessed a re-emergence of family farming (alongside a rise of large, capitalist farms) after de-collectivisation (Lerman 2001).

Currently, 11,885,000 (i.e. 97 per cent) out of a total of 12,248,000 farms in the 28 countries of the European Union (EU28) are classified as family farms. The situation is more or less the same in the remaining European countries. The notable exception is Russia, where family farming and corporate agriculture co-exist. In Russia and western Commonwealth of Independent States (CIS) countries family farms only cover 34 per cent of all land (although they produce 62 per cent of all output).⁵ In Central Asia family farming is stronger: family farms control 71 per cent of all agricultural land (on which they produce 88 per cent of total output) (Davidova and Thomson 2013, 14–20). Especially Tajikistan and Kyrgyzstan have strong family farm sectors.

It would be imprudent, though, to hypothesise that this dominant position of family farms (Russia and Kazakhstan apart) represents a stable situation. First, there is a 'growth pole' of rapidly expanding farms within the family farming sector. This is not only leading to an accentuated concentration of land (and other resources); it also gives rise to farm enterprises that are partly built on wage labour (often in disguised form).⁶ Within the EU27 the larger farms,⁷ which on average have a utilised agricultural area of over 1000 ha, represent only 0.6 per cent of the total number of farms. Nonetheless, they cover 20 per cent of all utilised agricultural area in Europe (a total of 35 million ha, equivalent to the total area of Germany) (EUROSTAT 2011, 2–3). These newly emerging 'mega-farms' are having a significant, and often negative, impact on the rest of the family farming sector.

Second, on the 'borders' of Europe one sees the construction of, often extremely large, capitalist farms (mostly with a network structure) that can now-due to deregulation and liberalisation—directly commercialise their products on European markets. Once such large farm enterprises were indeed 'far away', now their presence and produce represent an undeniable reality within European markets: they compete directly with produce from family farms located in Europe. For example, Van Oers United BV is a horticultural enterprise that operates in Morocco, Senegal and Ethiopia and has 1300 hectares of irrigated land in Morocco alone. For horticulture that is unprecedented. Equally there is a dairy farm in Russia (EKOSEM Agrar) that has 18,000 head of cattle and is expanding to 36,000 head. On the Eurasian continent this is unprecedented. In Romania there is an arable farm of 10,000 hectares with only 10 employed workers (Emiliana West Rom). Once again: unprecedented. These newly constructed corporate farms (there are hundreds) may very well flood the main Central Asian and European markets with cheap commodities, negatively affecting the existing family farm sectors. The European Commission organised an extensive e-consultation in the run-up to the International Year of Family Farming (2014) which showed that "competition with large-scale corporate farming" is seen as the second largest "key economic challenge for family farms".8

The largest key economic challenge was "bargaining power within the value chain" (European Commission 2013, 33). This is also related, albeit less directly, to the presence of corporate agricultural enterprises. Their (real or potential) supply evidently weakens the position of family farms vis-à-vis food industries and large retail chains.

The creation of new corporate agricultural enterprises partly occurs through land grabbing (see Franco and Borras 2013). This is especially the case in Eastern Europe and Central Asia. Through the application of extra-economic pressure, large capital groups establish direct control over extended tracts of land (often up to tens of thousands of hectares), after which the land is systematically converted to mono-cropping, while new technologies and increased use of external inputs sharply reduce employment levels.

Third, it should be recognised that in some sectors, in some areas, farmers are so indebted that they hardly actually own the family farm anymore. Most of the value of the farm is owned by the banks. This is an issue for many large and modern horticultural enterprises in the Netherlands that *de facto* belong to Rabobank. The same applies to many wine-producing farms in Italy that are virtually owned by the Monte dei Paschi di Siena bank. If these banks decide to sell these farms (in case of default), it is possible that large-scale, corporate farm enterprises could also emerge in the *heart* of Europe.

In short, the relations between family farms and corporate farm enterprises are being redefined, both within and beyond national and supranational borders. This is a contradiction of a truly global dimension. The presence and apparent dominance of the family farm in Europe and Central Asia is far from guaranteed, and the current situation could well change abruptly.

1 A SHORT HISTORICAL NOTE

The historical roots of family farming are manifold. They include the ancient agrarians of the Greek city states, who were independent producers having title to their land, voted in the local councils and were more or less free from gratuitous political exploitation (Hanson 1995). Later came the soldiers of the Roman Empire, who received land after returning from warfare and also became independent agricultural producers. Another important cradle of family farming was located on the margins of the large feudal systems—notably along the North Sea coast—where the notion of 'free farmers' became a reality from medieval times onwards. The available records show that the creation of the family farm in these places was far from a one-off episode. It took long periods of social struggle to liberate the farm from often asphyxiating dependency relations, and to create what the great agrarian historian Slicher van Bath (1978) termed "farmers' freedom": a freedom *from* abusive relations of power and exploitation as well as the freedom *to* farm in a way that aligns with the interests and prospects of the farming family.

The family farm cannot be considered a simple remnant from the past. It has been actively constructed over time; it adapted itself continuously to changing circumstances and spread from the original cradles to ever larger areas in Europe and Central Asia. This dissemination was tightly interwoven with the development and consolidation of democracy. The French Revolution was a milestone in this respect, just as the introduction of universal (male) suffrage (at a moment when peasants were the largest occupational category in society) brought

increased political (and intellectual) attention for the family farm.⁹ It is telling that the agrarian crisis of the 1880s, which triggered widespread agitation throughout the Mediterranean area and Eastern Europe, also generated the first proposals for redistributive land reforms that aimed at increasing the numbers of family farms.

The making of the family farm into the main and probably the most solid land-labour institution was far from a straightforward process. The enclosures in the UK, the development of large landholdings in the south of Spain, the Italian Mezzogiorno, the claiming of the Scottish Highlands and the Prussian experience were but some of the many countertendencies. The same applies to the brutal collectivisation imposed first in Russia and then in far wider areas. However, many of these countertendencies gave rise, sooner or later, to new sets of responses. In Central Asia, for example, "agricultural reform [....] produced tens of millions of small family farms" (Lerman 2012, 8). As concluded by Gorlach (1989, 23) in his review of recent Polish agrarian history, "the family farm is [and remained] an important battlefield in Polish society" (see also Szumelka 2013).

The dominance of the family farm cannot be seen as a mere organisational matter. The development of family farming coincided with the emancipation of large segments of the rural populations of Europe; wherever this emancipation was blocked, many of the poor and down-trodden migrated (to Brazil, the USA, Canada and Argentina) to develop a family farm over there. In many parts of Europe, family farming translated into ongoing agricultural growth and contributed considerably to the wealth of nations. Not surprisingly, the role and dynamics of family farming became the subject of passionate socio-political debates, just as they gave rise to important scientific contributions from leading European scholars such as Chayanov, Mendras, Sereni, de Vries, Georgescu-Roegen, Shanin Bourdieu and Martinez-Alier.

There are a number of *current* social drivers that together explain the continued ubiquity of family farming. In Europe and Central Asia there still are (just as in other parts of the world) too many places where poverty, oppression and/or hopelessness abound (see, for example, Özturk 2012). Here the family farm offers many a possibility (often the *only* possibility) to make a living and some progress (or at least the hope for it). This occurs through the sturdy struggles that take place in the fields, stables and marketplaces and which translate into investments (HLPE 2013), increases in production and a permanent search for small improvements that, together, result in ongoing development. In many other places (which partly overlap with those mentioned before) family farms offer a kind of economic democracy: being your own boss, having your own farm, having the possibility (but by no means the certainty) of making it prosper makes family farming attractive and (partly) explains why so many people like to be engaged in it. Finally, there are yet other places where family farming allows people access to goods becoming increasingly scarce in our highly urbanised societies: interactions with living nature, the making of one's own (trustworthy) food and even—in some instances at least—being involved in the construction of alternatives that might be important for this world.¹⁰

While the family farm is currently the main land-labour institution, it is currently facing, just as it has in the past, considerable threats and forms of erosion. Agricultural policies, once designed to protect family farms, are disappearing as a consequence of deregulation. New global markets have introduced patterns of competition that are highly detrimental to family farming and, especially, its continuation over time through rejuvenation. Consequently, family farming figures prominently (again) on the intellectual and political agendas, the designation of 2014 as the International Year of Family Farming being just one, albeit important, expression of this renewed attention.

2 FAMILY FARMING AS IT STANDS NOW

In contemporary Europe and Central Asia, nearly everybody agrees on the standard definition of the family farm. It is, in the first place, a farm in which most of the resources required (land, buildings, crops, animals, machinery, knowledge, networks etc.) are controlled by the farming family. Second, most—if not all—of the work is done by family members.¹¹ The advantage of this definition¹² is that it is easy applicable (i.e. it can be operationalised in statistical terms; see, for example, Hill 1993) and mostly uncontested (although borderline cases may provoke considerable debate).¹³ The two features also figure in the definition used by the FAO (2013): "A family farm is an agricultural holding which is managed and operated by a household and where farm labour is largely supplied by that household." At the same time, though, this definition sometimes turns out to be problematic, partly due to its simplistic nature. It takes just two characteristics out of a much wider set of features that together constitute family farming.¹⁴

This wider range of features (see also Gasson and Errington 1993) is described below and illustrated in Figure 1. In practice, these features provide the (potential) *qualities* of family farming. Individually, but especially when taken together, they constitute the attractiveness of the family farm and contribute decisively to its relevance for society. Not all of these features are always present: this depends on time and place. The family farm may unfold completely (then all qualities are strongly present). It may, however, also suffer from processes of erosion (then only a few features remain).

FIGURE 1



The multiple features of the family farm

Source: van der Ploeg (2013); see also Chatel (2014).

2.1 AUTONOMY

A first defining feature of the family farm is that the family retains control over the main resources used in the farm. This control is often (but not necessarily) rooted in property rights. The resource base includes the land, together with the animals, the crops, the genetic material, the house, buildings, machinery, labour force and, in a more general sense, the know-how that specifies how these resources need to be used and combined. Access to networks and markets, as well as shared ownership of cooperatives, are also important resources.

Many of these resources have been constructed and/or acquired through long processes covering different generations. These resources are often the result of hard work, dedication and the hope for a better future. Family farmers use their resources, not to make a profit, but to make a living; to acquire an income that provides them with a decent life and, if possible, allows them to make investments that will further develop the farm.

The ownership and control of the resources provide the farming family with an important degree of (relative) autonomy. It allows them to face difficult times as well as to construct, with their own work, attractive prospects for the future. In this respect, their control over the resource base indeed is a quality, the importance of which is reflected in the value of being independent (of 'being one's own boss'). Autonomy is especially valued because it gives the primary producers control over the labour process, allowing them to mould agricultural production in a way that optimally corresponds with their needs and strategies (thus giving rise to different styles of farming).

At the same time the level of autonomy that farmers have over their resource base is far from self-evident. In reality it is being eroded in many places. High degrees of indebtedness and increased financialisation imply that the real control shifts to banks and/or processing industries. Contract farming often has similar consequences. Strict regulatory regimes imposed by state apparatuses and/or processing industries also reduce farmers' control over their resource base. Through external prescription and sanctioning of the production process, real control shifts to external institutions.

2.2 SELF-EMPLOYMENT

A second defining feature relates to the farming family providing the main part of the labour force. This makes the farm into a place of self-employment and of progress for the family. It is through their dedication, passion and work that the farm is further developed and the family's livelihood is improved. The farm is there to meet the many needs of the family, while the family provides the possibilities, the means and also the limitations for the farm. This feature often emerges as a quality. For the family members working on the farm, work frequently involves an attractive set of highly diversified activities. It is work with living nature, often in the open air, and it is possible for them to avoid a rigid organisation of their working days. The work is also attractive because it builds on an organic unity of mental and manual labour. Available surveys show that all those who work on a family farm appreciate these aspects of their work. However, all is not unbridled attractiveness and satisfaction. In practice family farming always implies a balance of drudgery and satisfaction. The important fact, however, is that—at least in the ideal situation—it is the involved actors themselves who determine, often in a coordinated way, these balances. Equally important, farmers are ingenious at finding novel ways to reduce the drudgery as much as possible.

There is a mirror-side to this. Intra-generational and/or gender relations may induce sharp imbalances, and lead to a highly unequal distribution of drudgery and satisfaction, often resulting in satisfaction for a few (notably the male heads of the family, the *padri padroni*) and drudgery for the others (notably women and young people). Very low levels of remuneration and long working days are modern forms of drudgery. Recent research in Italy indicates that many young people who have an interest in farming actually refrain from doing it due to this new form of externally induced hardship (Rete Rurale 2013).

2.3 CO-EVOLUTION

The nexus between the family and the farm implies a third defining feature. The major decisions about the organisation and development of the farm are taken within the farming family itself. The family's interests and prospects are at the core of the many decisions that are to be taken. Decision-making involves making balances, such as those discussed above, as well as others, such as that between the 'supply' of family labour and the organisation of the farm. Another important balance regards the social organisation of time: short-term actions need to be well coordinated with long-term prospects. Balances like these tie family and farm together. The two co-evolve simultaneously. Through this co-evolution each defines and moulds the other. But again: the unity of family and farm can very well become disarrayed or disrupted. This might occur when prolonged days of hard labour and heavy work, combined with low levels of remuneration, create a seemingly hopeless, endless and inescapable routine. At this point family farming turns into (voluntary) enslavement. As with the other features, co-evolution also can have a bright, as well as a dark, side. That makes family farming an ambiguous concept. It can bring emancipation and development, but it can equally bring stagnation and misery. This balance is highly dependent on time and place. Family farming is not immune from history, geography or society. It is integrally linked to them, and societal conditions strongly influence which of Janus's faces will be visible.

2.4 CREATING WEALTH

There is far more in the family farm than ownership, labour and decision-making. A fourth defining feature is that family farms provide the farming family with a part (or all) of its income and food. Having control over the quality of self-produced food (and being confident that it is not contaminated) is becoming increasingly important for farmers around the world. Family farms have the capacity to produce more, with a given set of resources, than other forms of production (e.g. corporate farms). For the 'post-Soviet space', for instance, Lerman (2012, 1) observes that "the recovery point for agricultural growth is closely linked with the [...] individualization of farming [i.e. the creation of family farms]. Furthermore, the rate and the attained level of recovery are higher in countries that pursued decisive individualization policies (Transcaucasus, Central Asia), while in countries with less sweeping individualization reforms (European CIS) the recovery has been sluggish." There are "significant improvements in agricultural productivity due to the higher incentives in family farming" (ibid.; see also Lerman 2009). In comparative analyses family farms emerge as achieving the highest yields (i.e. the highest levels of physical productivity). In addition, family farms are able to realise, at a given level of total production, the highest incomes. These distinguishing features imply that family farms are able to maximise (far more than other forms of production) the value added from primary production. They do so because obtaining a good family income (and securing

the long-term prospects of the farm) is their prime objective. This search for income translates into intensity levels (yield per hectare, production per animal etc.) that are generally superior to those realised in corporate farms.

In Europe and Central Asia, the majority of family farms have members who are also engaged in off-farm economic activities. This phenomenon is mostly referred to as pluriactivity but also known as multiple job-holding or as part-time farming. In Dutch agriculture, for instance, 80 per cent of all farming families have the man or woman earning an additional income outside the farm. This additional income contributes on average 35 per cent to the total family income. Italian agriculture in 2010 generated EUR26 billion, but pluriactivity added another EUR18 billion. There may be many reasons for engaging in pluriactivity, and they can be contradictory. Pluriactivity may represent a form of risk aversion. Farmers do not like to have 'all their eggs in one basket'. It might represent an attractive alternative to daily routines (this is often the case for rural women) or it may provide the capital needed to invest in enlarging and/or improving the farm (this is often the case for young farmers). But pluriactivity might also be needed to complement the family income because farming itself provides an inadequate income. In this case pluriactivity is experienced as coercion: an unavoidable, rather than enviable, destiny. However, it is also experienced, at least by some, as an opportunity to employ one's own talents and skills outside the farm and extend their social contacts.

Pluriactivity has the potential to combine the best of two different worlds (the rural and the urban).¹⁵ Be this as it may, pluriactivity enables many farming families to sustain their incomes and also make a contribution to supporting and developing the regional rural economy.

A relatively new development occurring throughout Europe is that family farmers increasingly develop new economic activities *within* the farm in addition to conventional farming. This is mostly referred to as multifunctionality.¹⁶ I return to this point later. One interesting finding is that such new, multifunctional activities contribute to sustaining food production itself (de Rooij et al. 2014).

2.5 DOMUS

The family farm is not only a place of production. It is also home to the farming family. It is, indeed, *domus*, as the ancient Latin expression goes (Le Roy Ladurie 1975). It is not only the place that gives people shelter but also the place people belong to. It is where the family lives and where their children grow up. Recent Italian research shows *domus* to still (or again?) be a major factor that explains the vitality and resilience of family farming and thus the continuity of food production (Rete Rurale 2013). *Domus* makes farming into a livelihood: it introduces strong links between cultural repertoire and agricultural practices. The relative weight of *domus* and agriculture will vary considerably (as will be discussed later). Nonetheless, domus is strategic in family farming. In a major Europe-wide study, the Arkleton Trust (1985, 25) observed that "the farm family or household is the most useful unit of analysis... This is the social and economic unit that allocates changing labour and other resources between farm and non-farm activities in response to perceived pressures and opportunities at home and externally. It may be seen as the interface between the farm and the non-farm environment, filtering energies, resources and ideas between them."

2.6 A FLOW THROUGH TIME

The farming family is part of a flow that links past, present and future. This means that every farm has a history and is full of memories. It also means that the parents are working for their children. They want to give the next generation a solid starting point, whether within or outside agriculture. And since the farm is the outcome of the work and dedication of this, and previous, generations, there is often pride. There can also be anger if others try to damage or even destroy the jointly constructed farm. 'Keeping the name on the land' has been important throughout agrarian history (see Arensberg and Kimball 1940) and helps to explain at least a part of farmers' resilience these days to outside pressures (as argued by Whatmore et al. 1987, 33).

2.7 A PLACE FOR LEARNING

The family farm is the place where experience is accumulated, where learning takes place and knowledge is passed on, often in subtle but strong ways, to the next generation. The family farm is a node in wider networks in which new insights, practices, seeds etc. circulate. Thus, the farm becomes a place that produces agricultural know-how which is combined with innovation (Osti 1991) and novelty production (Wiskerke et al. 2004). In a classical contribution to the literature, Giampietro and Pimentel (1993) refer to the "dual nature of agriculture": it provides society's needs and deals with the natural ecosystem and must ensure compatibility between the two (see also Toledo 1990). Agriculture depends on, uses and transforms the ecosystem and the associated natural resources. Due to the highly heterogeneous nature of ecosystems and constant changes in them over time (both short and long term), the interactions between family farmers and their fields, animals, crops and the climate require ongoing cycles of observation, interpretation, intervention and evaluation. In other words, human agency is central in family farming, and with it comes the strategic importance of skills, practical knowledge (or art de la localité, as Mendras (1987) beautifully phrases it) and ongoing learning. The family farm and, at a higher level of aggregation, the rural village are decisive mechanisms. It goes without saying, however, that the centrality of human agency can also get lost. The capacity to learn is particularly decisive on smaller family farms. "The Bolton Committee (1971) found that small firms were innovative and responsive to change. In the farm context, Priebe (1969) suggested that the strength of family farms lay in their ability to react quickly to changing conditions" (Gasson et al. 1988, 16).

2.8 A CARRIER OF CULTURE

The family farm is not just an economic enterprise that focuses mainly, or only, on profits, but a place where continuity and culture are important. The farming family is part of a wider rural community, and sometimes part of networks that extend into cities. As such, the family farm is a place where culture is generated, kept alive and transmitted to others and to future generations. Many farms are places of cultural heritage. As the Regional Conference on Family Farming (2014, 5; 23) observed: "Family farmers [....] preserve traditional cultures. The existence of family farms, particularly small- scale ones, is a significant part of national cultural heritage, customs, dress, music, cuisine and habitats."

2.9 A CORNERSTONE OF THE RURAL ECONOMY:17

The family and the farm are part of the wider rural economy: they are tied to the locality, carrying the cultural codes of the local community. Thus, family farms can strengthen the local rural economy through what they buy and spend their money on and by engaging in other activities. The strategic role of family farming for the regional rural economy is one of the major components of the 'European Model of Agriculture', endorsed by the European Council in 1997. It aims at "a farming sector that serves rural communities, reflecting their rich tradition and diversity, and whose role is not only to produce food but also to guarantee the survival of the countryside as a place to live and work, and as an environment in itself" (European Commission 2004). We can find specific examples of this: the mezzadri in Italy, who transferred their networking capacities into the towns and gave rise to a blossoming small and medium enterprise (SME) sector (Bagnasco 1988), and part-time farmers in Norway, who, having a strong fallback position, were largely responsible for the introduction of strong labour unions and democratic relations in Norwegian society (Brox 2006). A more recent example is the 'social buffer' function exerted by the family farming sector (and especially the subsidiary household plots) in Russia and other Eastern European countries following the demise of the Soviet system (Petrick and Weingarten 2004). In the current crisis this aspect is again strategic.

2.10 BUILDING ON NATURE AND A PART OF THE LANDSCAPE

The family farm is equally part of a wider rural landscape. The family farmer may work with, rather than against, nature, using ecological processes and balances, instead of disrupting them, thus preserving the beauty and integrity of landscapes. When family farmers do this, they also contribute to conserving biodiversity and to fighting global warming. The work implies an ongoing interaction with living nature—a feature that is highly valued by the actors themselves (Regional Dialogue 2013). This quality is increasingly being recognised and supported by the Second Pillar of the EU's Common Agricultural Policy.

The features described above illustrate the strength of the family farm as a major land-labour institution. From an economic point of view the search for autonomy (1), self-employment (2) and the farm being a place for learning (7) systematically translate into *a lowering of monetary costs* and *an increase in technical efficiency*. This latter aspect implies that the function of production is moved upwards.¹⁸ When it comes to *food security* the combination of co-evolution (3), the creation of value added (4) and the flow linking past, present and future (6) translate into *continuity, robustness and resilient food production*. And being a cornerstone of the rural economy (9), a carrier of culture (8), a co-shaper of landscapes (10) and *domus* (5) strongly support the *quality of life in rural areas* just as they *strengthen the regional rural economy*.

If, however, these features are weakened (that is, if family farming is eroding), production and both land and labour productivity will decline; food security will come under considerable threat; food provisioning will become more expensive; and the strength of the regional rural economy and the quality of rural society will decrease—possibly irreversibly.

3 THE DIVERSITY OF FAMILY FARMING

Diversity is intrinsic to family farming due to a combination of internal and external factors. Family farms are developed according to the possibilities, limitations, interests and prospects of the family. The strategies operated by these single families result in differentiation. The differently moulded farms then interact in different ways with markets, policies, regulatory frameworks etc., resulting in further differentiation.

The diversity of the family farming sector resides in the way in which the process of agricultural production is structured and developed (there might be important differences in, for example, the scale and intensity of farming). It equally is grounded in the relationship between farming and the wider economy. This latter aspect has been meticulously elaborated by Laurent and her colleagues (1998). A central aspect in their scheme of classification is the function of agricultural activity for the family. Table 1 summarises their most important observations.

Macro-economic functions	Type of activity system	Main function of the agricultural activity for the household
Commodity production	Employee-run companies (1%)*	Income, profit
	Capitalist agriculture (3%)	Income, profit
	Agriculture as a structured profession (20%)	Income, satisfaction of being a farmer
	Agriculture based on traditional farming logic (21%)	Income, self-employed profession, satisfaction
Combined economic activities in rural areas	Rural enterprises (8%)	Additional income, patrimony
	Non-integrated multi-activity (7%)	Additional income, to keep an inherited family farm
Income distribution system/ social welfare	Subsistence farming for retired farmers (13%)	Topping up a low pension, subsistence and barter
	Qualifying for social benefits or old age pensions (9%)	Access to social schemes, subsistence and barter
Consumption	Agricultural activity for home consumption and barter (2%)	Subsistence and barter
	Luxury agriculture (4%)	Leisure, prestige, patrimony
	Small-scale recreational agriculture (12%)	Leisure, subsistence and barter

Different activity systems in rural France

TABLE 1

* Estimated percentage of the total farming population at national level in France in 1998 (figures rounded up or down to whole percentages).

Source: Adapted from Laurent et al. (1008): Laurent and Pémy (1)

Source: Adapted from Laurent et al. (1998); Laurent and Rémy (1998).

Table 1 shows that, apart from the first two categories that are added for the sake of comparison, family farms may have, indeed, different functions for the family. These range from income and self-employment, through the preservation of patrimony (*domus* and the linkages between past, present and future), access to schemes for social welfare, leisure and cheap housing, to subsistence, barter and prestige.¹⁹ A farm may have (a combination of) different functions for the family, and these functions (or their combination) may very well change over time. Grandfathers might have been farming (together with the grandmothers) for income and food, their children may have kept the farm for housing and/or leisure, and now (as is currently happening in large parts of the Mediterranean area) one of the grandchildren may start again with market-oriented farming to gain an income and thus find a solution to the financial and employment crises.

In practice many rural families combine their agricultural activities with other ones, thereby creating new systems of activity (such as those shown in Table 1). Consequently, farms do not have fixed boundaries, and many of the (smaller) farmers whom it was assumed would disappear (and *leave* agriculture) have reconstructed a rural existence by combining and intertwining different activities and sources of income.

Taken together, the data in Table 1 indicate that there is a 'core' of family farms focused mainly, though not exclusively, on commodity production (20+21 = 41 per cent), together with a more complex layer of family farms (totalling 55 per cent) whose main functions (partly at least) reside in other functions which are equally important to society as a whole (and, evidently, also to the families involved).

Table 1 also makes clear why, in practice, the *application* of the concept of family farming might be contested. When the aspect of *domus* becomes relatively more important, some will argue that there is no proper 'family *farming*' anymore. The same applies to mega-farms, which, it can be argued, is hardly '*family* farming' anymore. Echoing this situation, Davidova and Thomson (2013) argue, in a recent background report on family farming, that "family farming is an umbrella concept". It does indeed embrace a wide range of different types and activity systems (as summarised in Table 1). This wide variety, though, does not make the concept redundant. It rightly points to one crucial feature: repeatedly it is the family (i.e. a concrete set of interrelated social actors) that explains the presence, nature and commonalities of the different forms.

Throughout Europe and Central Asia the quantitative relations between different farm families' activity systems vary considerably. There is a gradient that runs from the west to the east, along which the quantitative importance of subsistence, access to social benefits and barter increases significantly. There is a second gradient running from the north to the south, in which the role of leisure, prestige, patrimony and, to a lesser degree, subsistence and access to social schemes increases. In countries such as Russia, Poland, Romania, Greece and Ukraine agricultural activity for home consumption and barter is widespread. As the Regional Conference (2014, 4: point 16) noted: "Many of the small family farmers are semi-subsistencethey sell less than 50 percent of their output and use the remainder for consumption within their extended households. In the EU28 in 2010 there were six million semi-subsistence farms, most of which (4.1 million) were smaller than two hectares." For the Europe and Central Asia (ECA) region as a whole it applies that "there are millions of people [who] operate household plots". However, the owner-operators of these small household plots are mostly not treated as 'farmers', even if their plots make a huge contribution to food security and mitigating rural poverty (see Oglobin and Brock 2006 for Russia and USAID 2005 for Ukraine).²⁰ Mostly these household plots (which are re-emerging in Western Europe under the aegis of 'urban agriculture') are not registered. However, "their exclusion from the family farming [category] would mean that their role in the ECA Region might be grossly underestimated" (Davidova and Thomson 2013, 9; see also Policy Department 2013).

Within the 'core' of family farms focused on commodity production a second level of diversity can be discerned.²¹ This hinges around different ways of structuring and developing the process of agricultural production. The resulting diversity is often referred to in terms of farming styles. Agricultural production might be more intensive (i.e. have higher levels of production per object of labour) or more extensive. The scale of production (objects of labour per unit of labour force) might be large or small. Taken together, intensity and scale define the economic size of a farm.

The important differences in scale, intensity and economic size of farming (and its associated dimensions) arise because farming is a strategic and goal-oriented activity and the main differences within it reflect the strategic choices of the families involved. Figure 2 provides a graphic summary of the main styles of farming that emerge in this way.²² These styles are especially important because they illustrate the malleability of agricultural production processes. When looking at the future of farming this malleability is a strategic asset.

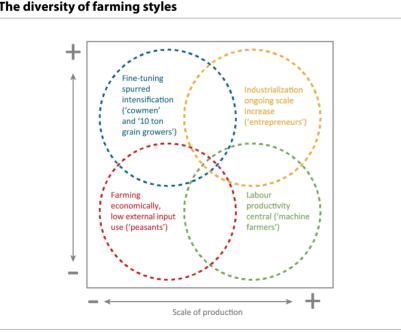
Relatively small-scale but highly intensive family farms mostly are the outcome of a strategy that centres on intensification, a process that basically depends on the quantity and guality of (family) labour. High-yielding milk cows and/or productive grain fields are the frequently used symbols here: they represent the pride of the farmer and express the skill of those involved in the production process. There are relatively few objects of labour, but the earnings per object of labour are high.

Large-scale, intensive farms are mostly built on the application of the newest technologies (and are associated with high levels of input use). The strategy underlying this style centres on ongoing expansion. This style typifies the trend towards the industrialisation of agriculture. Those who pursue this style typically regard farming as, above all else, an entrepreneurial activity. The income here depends largely on the total number of objects of labour.

Relatively small-scale and extensive farms nearly always have low external inputs. Farming economically (keeping monetary costs as low as possible) is central to the strategy that underlies this style. The use of external resources is kept at low levels, while the use of internal resources is optimised. Due to low cost levels, the earnings per object of labour can be considerable. This style is a modern variant of classical peasant agriculture.

In large-scale and relatively extensive farms the decisive strategic objective is that of optimising labour productivity (using as many objects of labour per unit of labour force). Here the 'machine' is used as a telling metaphor.

FIGURE 2



The diversity of farming styles

Source: van der Ploeg (2003).

On any farm and at any given level of production these different styles may generate considerable differences in the income achieved and labour required.²³ The same applies to the efficiency of resource use (water, energy, fertilisers etc.),²⁴ animal welfare²⁵ and the farm's impact on the landscape, biodiversity and overall sustainability.²⁶ Together, these differences provide a rich source for further development. They all have implicit potentials that might open up promising trajectories. At the same time there are complex trade-offs: gains in one dimension might imply losses and setbacks in others (Groot et al. 2007). This may give rise to complex questions about farm design (Rossing et al. 2007; Brunori et al. 2011).

4 FAMILY FARMS AND THE PROCESSES OF AGRICULTURAL AND RURAL DEVELOPMENT

Conventional theories often posit that farming is basically governed by markets and technology: technology defines the function of production (i.e. the technical conversion of inputs into outputs), and the markets (i.e. price–cost relations) define the position of the farm enterprise on this function. From this perspective the family farm is merely an organisational device, the performance of which is dependent on its capacity to adopt the newest technologies and to follow the logic of the market.

This view is accompanied by the notion that agricultural development is basically a selective process that will ultimately exclude considerable parts of the family farming population. Here there are schemes of classification that distinguish three categories of farms. The first category is thought of as consisting of consolidated family farms that carry the promise of future expansion and development.²⁷ The second category has an intermediary nature. The farms in this stratum might evolve towards the first category (this would require extra efforts) or they will be relegated into the third category. The third category is what is known as 'marginal' farms. These family farms are considered to lack the assets or capacity to achieve any substantial growth and development (currently similar schemes are applied in the global South; see Spoor and Moreda 2014 for a critical discussion). Thus, economic rationality would imply that their resources are, in the fullness of time, to be re-allocated to the intermediate and, especially, the consolidated group.

Viewing (and consequently ordering) the process of rural and agricultural development as a selective process, which is ordered through such schemes of classification, was probably useful and justified in Europe and the USA in the 1950s and 1960s (when industrialisation required massive migration from the countryside towards the cities). However, it is blatantly wrong and highly counterproductive under current conditions. This is due to two sets of reasons.

First, we should not ignore the dynamics of family farms. A farm that looks small now might be developed through hard labour (and through changes in cropping schemes and the introduction of new on-farm activities) into a medium or even a large farm enterprise. And a farm that is currently classified as large (having a considerable economic size) might tomorrow turn out to be small—i.e. rendering very little or no income. This might be due to cattle diseases, market volatility or a host of other reasons. Technically well-performing farms might drop, after several years, to the lower echelons, while the initially poorly functioning ones improve their performance (Zachariasse 1979). In the real world there is no such thing as a unilinear farm development trajectory that implies that the larger farms are better, able to earn more, save more, invest more and thus become ever larger and better. The view that smaller farms are necessarily doomed to perform badly and to disappear is not valid either.

Second, we have to take into account the concrete interactions between the agricultural sector and society at large. In large parts of the global South, and equally in parts of Europe and Central Asia, agriculture is needed to provide substantial productive employment. There are currently no industrial sectors that are in dire need of manpower. At the moment, many young people are seeking employment opportunities in agriculture (especially, but not only, in the Mediterranean area). Beyond this, the ongoing general economic crisis requires that domestic markets grow rather than contract. A large and well-remunerated agricultural workforce can contribute to the growth of consumption and thus mitigate some effects of the crisis. Hence, any *a priori* exclusion of parts of the family farming sector should be avoided. The more so since the required shift towards more sustainable forms of agricultural production (and notably the shift towards agroecological practices, as currently promoted by the French Ministry of Agriculture) will require more, rather than less, labour input.

At the Regional Conference on Family Farming (2014, 2: point 3) held in Bucharest it was argued that "a shift towards more equal and balanced development" is needed. In the current circumstances it is counterproductive to concentrate agriculture in a few 'strong' regions and/or in a small group of large farms defined as 'feasible' by experts. What is needed is a development pattern that includes all regions and which offers opportunities to all types of family farms.

Empirical reality clearly demonstrates that agricultural development cannot be understood as a unilinear and selective process that necessarily involves the growth of some, larger farms and the simultaneous elimination of many other smaller farms. Figure 3 shows how (a constant sample) of 117 dairy farms, all located in the western part of the Province of Friesland in the Netherlands moved, in the space of 24 years (1967–1991), from being a more or less homogeneous group and developed along highly different lines. Some farms increased their intensity of farming (here measured as milk yield per cow). Others followed a significantly different pattern: they increased their scale of production (measured here as milking cows per unit of labour force). Others combined the two processes, making considerable jumps in total production. And finally, a fourth group showed step-by-step growth: only modestly increasing their intensity and scale. The underlying difference here is their different farming styles (see Figure 2), which led to different patterns of farm reproduction over time (de Bruin 1997; see also Langthaler et al. 2012 for Austrian data). An important point to note is that these contrasting development trajectories result in comparable income levels for the farmers. There is indeed more than one way to skin a cat.

Thus agricultural development cannot be understood as a unilinear process that converges towards one singular optimum, defined by the markets and technology. Local ecology and the degree to which farms adapt to it or not, cultural repertoires, towncountryside relations (including local markets and culinary traditions), policy arrangements and, above all, the strategic choices of the farmers all play a role in the development of specific agricultural sectors. Consequently, there is multiple causality, and diversity is not a casual, but an intrinsic, outcome. Agricultural development implies differentiation. Today, in Europe and Central Asia, this is more than ever the case.

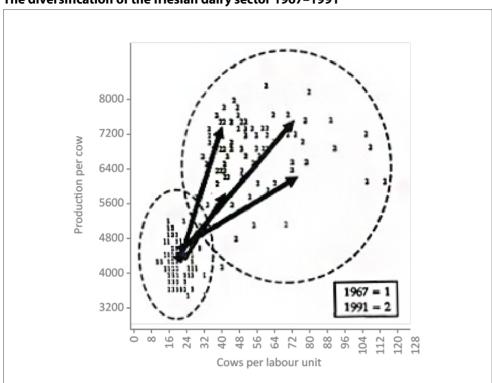


FIGURE 3 The diversification of the friesian dairy sector 1967–1991

5 THE CONTEXTUAL CHANGES CURRENTLY AFFECTING FAMILY FARMS (REQUIRING A RETHINKING OF THE CONCEPT OF FAMILY FARMING)

Over the last 25 years the *context* within which the family farming sectors of Europe and Central Asia operate has changed profoundly. On the one hand, a range of new societal demands (new scarcities) have arisen. Several of these relate to the way in which the countryside is changing (especially in Europe) from being solely a space for production to also being a space for consumption. In this respect the maintenance of scenic landscapes and natural values is becoming more important, and strengthening (or at least maintaining) biodiversity is also more of a priority. There are growing societal demands to increase access to the countryside and develop facilities where people can enjoy the 'green and pleasant land'. The countryside is also becoming a place to live. Rural dwellers who commute to the cities for their daily work (or who work remotely) expect an attractive countryside with a good quality of life. The global environmental crisis is inducing a second set of societal demands. Agriculture is now expected to contribute to water retention, to the provision of green energy and to the mitigation of global warming. This applies everywhere. Especially important in Central Asia, but increasingly also in certain areas in Europe (Bryden 2003) is the key role that agriculture makes in contributing to the strength of rural regional economies and the generation of productive and enjoyable employment (the latter is particularly true for young people) that provides reasonable incomes. Finally, there are emerging specific demands for high-quality food that is diversified (thus sustaining a wide array of culinary traditions), preferably 'local' and respectful of animal welfare.

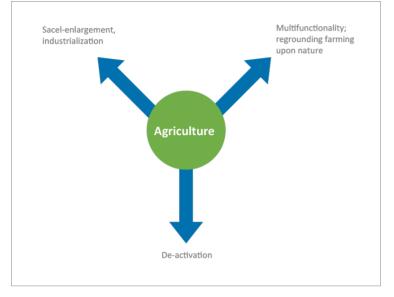
While these new societal demands are being placed on agriculture (often offering the sector new opportunities), the sector is simultaneously suffering a range of negative influences: the squeeze on agriculture has been tightened, the volatility of markets has increased enormously, and regulatory schemes leave farmers very little room for manoeuvre.

The squeeze on agriculture (or the "lack of power within the food chain", as the Policy Department of the European Parliament (2014a) phrases it) comes from two sources, the effects of which often combine. Costs are rising, while farm gate prices are stagnating, if not decreasing. Since farmers are trapped between the upstream markets (for inputs, technologies, quota, credit etc.) and downstream markets for their produce (farms are 'pricetakers'), this squeeze implies a strong downward pressure on agrarian incomes. In addition, European and Central Asian farmers face much more volatility in the most important output markets. This volatility can sometimes bring very good prices that can translate, especially for large farms, into very high income levels. At other times it may well imply a negative cash flow. Thus, market volatility turns agricultural production into a somewhat speculative activity, which in turn induces further 'financialisation'.

The squeeze on agriculture basically provokes three responses (see Figure 4). One is an accelerated increase in scale combined with technologically driven intensification. This combination (also referred to as the 'industrialisation of agriculture') is most noted among the segment of already large 'vanguard farms' (see Figure 2) and is leading towards the creation of mega-farms that might formally be described as 'family farms' but which hardly contain any of the characteristics of the family farm described earlier in this essay. In reality, these megafarms pose a great threat to other family farms (both inside the country where they are located and elsewhere). Second, a large segment of farms is increasingly being deactivated. Capital is being moved out of the farm and invested elsewhere. Production is extensified, and family labour is increasingly re-oriented to jobs elsewhere. The third response (also acknowledged in the Regional Dialogue) hinges on the production of new products and new services (which differ from 'conventional' agricultural commodities) which often are marketed through new market circuits that distribute the value added in a way that is more favourable to the farms. Multifunctionality is the key word here, and these new productive and distributive activities are also referred to as 'other gainful activities' (see, for example, Regional Conference 2014, 3: point 9). Multifunctionality strengthens the family farm and often critically depends on it, partly because it enlarges farmers' autonomy. In this respect the European Commissioner for Agriculture, Dacian Ciolos (2013, 3), argued at the European Conference on Family Farming that "family farms have a huge capacity for adaptation, resistance and re-dynamizing production". He added that this is especially important in times of crisis.

Multifunctional farms often seek to lower the monetary costs associated with acquiring external inputs. They reduce their use of external inputs and increase the quality and efficiency of use of internal inputs. Thus, the multifunctional farm has much in common with a farm with low external inputs. It is important to note, though, that this response (multifunctionality plus low-external-input agriculture) cannot be applied everywhere or by everybody.

Figure 4 makes an *analytical* distinction that is grounded in the different responses that are being developed in response to the squeeze on agriculture and, more recently, the sharply increased volatility of agricultural markets. In *empirical reality* there will be, of course, many in-between situations, many combinations, as well as considerable overlaps between the different tendencies. Nonetheless, Figure 4 helps explain why (on the symbolic level) the debate on family farms is re-emerging in Europe and Central Asia: *what kind of family farm are we talking about?* Second, the figure helps to show why, at the material level, there is a simultaneous strengthening and weakening of family farming.



Differentiated development tendencies within European and Central Asian family farming sectors

The new societal demands articulated towards agriculture are leading parts of the farming population to adopt multifunctionality and new, more agroecological ways of producing. This is leading to a new nexus; new coalitions are being constructed between (parts of) society and (parts of) the family farm sector. This new nexus helps this segment of family farms to escape (at least partly) from the squeeze and protect themselves against volatility. Laurent et al. (1998) showed that farmers engaged in 'other gainful activities' outnumbered, already at the end of the 1990s, the specialised farms without such multifunctional activities (21.4 per cent for the former, vs. 20.8 per cent for the latter). The IMPACT study, undertaken in Ireland, the UK, the Netherlands, Germany, Italy and Spain and based on 3500 surveys, revealed that 51 per cent of *full-time* farms were engaged in multifunctional activities which in total provided an extra income of EUR6. 1 billion (van der Ploeg et al. 2002). A recent survey among *large* farms in Italy (de Rooij et al. 2014) showed that young farmers in particular are turning towards multifunctionality and that multifunctional farmers are more optimistic about their medium- term prospects.

At the same time, the industrialised segment is, as it were, entrapped. The 'race ahead' (*la fuite en avant*, as French scholars say) brings higher costs (including transaction costs), and periods of bad prices translate into negative cash flows. They often see the new societal demands as a threat that implies ever higher cost levels. Thus the gap between social expectations and this particular segment is widening here.

Finally, there is a third type of interaction. The farms that are deactivating do not see the benefits of adopting a multifunctional response or are unable to do so. Equally, they cannot keep up in 'the race ahead' or do not wish to do so. For them the only options are muddling through and, finally, deactivation.

FIGURE 4

The institutional environment within which family farms have to operate is far from neutral in terms of these diverging tendencies. At the Regional Conference (2014, 5; 24) it was observed that "family farms, and in particular small-scale ones, are often constrained in their access to [....] financial capital and to markets". This evidently strengthens the trend towards deactivation (see, for example, Visser 2010 on Russia). It was also observed that "the modern food supply chain may prefer large corporate farms in order to save on transaction costs and achieve a more consistent quality of supply". This strengthens the trend towards industrialisation and the associated rural exodus. Henri Rouillé d'Orfeuil of the French Academy of Agriculture observed during the European Conference on Family Farming: "Every year 65 million farmers [at the global level] quit the farming sector... the main reasons for this development are the growing concentration of farms, unregulated markets and the impoverishment of rural areas" (European Commission 2013, 37).

The implications of these three different trends for the reality of family farming are farreaching. The trend towards industrialisation clearly implies an *erosion* of family farming. Many of the features described before disappear in the course of this process: labour loses its attractiveness; the generation of value added at the level of the agricultural region goes down; autonomy becomes a meaningless concept; etc. etc. Deactivation implies growing insignificance: a *decline* in the importance of the family farm. By contrast, the development of multifunctional farms clearly represents a *renewal* of family farms. These mutually contrasting trends (erosion, deactivation and renewal) are further strengthened through processes internal to the family farm sector.

6 INTERNAL CHANGES AFFECTING FAMILY FARMS

One internal change of utmost importance is the shift from farming as 'destiny' (as a more or less unavoidable, if not compulsory, course of life) towards farming being the outcome of an essentially free choice. This is clearly related to general changes in society and, more specifically, increased mobility, the reduction of poverty, universal education and changing patterns of authority within rural households. This change, together with the demographic changes that have occurred throughout Europe and Central Asia, has without doubt contributed to the decline in the number of young people actively engaged in agriculture (White 2011). Another factor is, of course, the squeeze on agriculture.²⁸ The low numbers of young people entering farming is not a 'natural disaster'; it is a man-made tragedy that might have a very serious medium-term impact on food security and food sovereignty. If more young people are 'squeezed out' of agriculture, the world will become more dependent on industrialised mega-farms.

A second major change has come about due to the changing position and role of women within the family farm. While there is considerable diversity in how profound these changes have been, there has been an unmistakable trend from women's main role being restricted to the household and only undertaking auxiliary tasks and towards women having their own clear, and recognised, responsibilities and areas of competence within production (de Rooij 1994; Bock 2004). This might range from being the *de facto* manager of the farm and the main supplier of labour (although there is often a formal lack of recognition) to being co-owner (and sharing the work) or to having a delineated domain of responsibility in the farm. The latter often focuses on one, or a set of, multifunctional activities.

There is a strong correlation between a high level of education, youth and a strong presence of women and the uptake of multifunctional activities on European farms.

Even when women have no formal role on the farm, they often make a large contribution (through pluriactivity) to its survival and development (Bjorkhaug and Blekesaune 2008). On many farms (especially the larger and quickly expanding ones) the farming family lives from the money earned by the farmer woman's outside job. While still, apparently, very much 'a man's world' (at least in the minds of some), European agriculture would be impossible without the multifaceted presence and role of women.

A third internal change to be briefly discussed here is the disintegration of rural communities. Solidarity is being replaced by mutual envy. This relates to the strict entrepreneurial focus of some farmers and the internalised belief that there can only be a future for a few, very large farms. Extension services, farmers' unions and agricultural education have done much to promote the notion that agriculture is just 'another' economic activity (comparable and exchangeable with any other) and that development of farming can only follow one trajectory.²⁹ This has strongly eroded the normative framework around farming³⁰ and has reshaped internal relations within the sector (with 'colleagues' becoming 'competitors'). Agro-industries, banks and state apparatuses have further strengthened (and materially underpinned) this new set of beliefs.³¹ Overall this internal change has evidently contributed to the rapidly growing concentration of land in an ever-smaller group of very large farms.

7 WHY IS FAMILY FARMING IMPORTANT TO EUROPE AND CENTRAL ASIA?

Family farming is important for Europe and Central Asia. This was explicitly stated at the Regional Conference on Family Farming for Europe and Central Asia (2014, 1: executive summary; see also Regional Dialogue 2013): "At ECA level there is a wide consensus about the crucial role of family farming for food security, sustainable development, employment generation, local development and social cohesion in rural areas." The Eurobarometer (a Europe-wide survey commissioned by the European Commission with a sample size of 27,919) shows the public very strongly agreeing with this position: 92 per cent of respondents considered 'agriculture and the countryside to be important issues for our future'; 87 per cent appreciated the diversity of agriculture and food production; 38 per cent recognised the importance of farmers in maintaining a diversified supply of high-quality food products; and almost as many (36 per cent) considered farmers' contribution to the economic activity and employment levels in the countryside as being the main attribute of agriculture. This is a strong argument for maintaining farming activities in *all* parts of Europe (European Commission 2014).

Family farming is *de facto* important for four reasons. First, it generates much-needed employment. According to the EU27 Agricultural Census, around 25 million people were engaged in agriculture in 2010. "Of this total, 92 per cent were *family members*" (Davidova and Thomson 2013, 12). In full-time equivalents this translates into 18.75 million Annual Work Units. To this we can add for Central Asia at least 22.3 million persons, which probably equates to 13.2 million Annual Work Units (calculations based on WCA/FAO and Mamonova et al. 2013). In the EU27, larger farms (as defined by EUROSTAT)³² cover 20 per cent of all agricultural land but only generate 5 per cent of total agricultural employment (EUROSTAT 2011, 5). This shows that it is especially *family* farming that is decisive for employment generation.

Second, the widespread involvement in family farming generates considerable income. A single family's income from farming might be low or even very low, but when we aggregate all agrarian incomes the total amount generated in 2013 comes to EUR144 billion (for the EU28 and calculated here as factor income). Alongside this there is the acquisition of inputs, machinery etc. (EUR251 billion in 2013). We can also add the earnings from pluriactivity and from multifunctional activities (no data available for the EU28). Together these figures show that the presence and robustness of family farming is an indispensable ingredient for regional, rural economies.

Third, the family farming sector is a decentralised and relatively autonomous system of food provisioning. At the same time family farms are, on the whole, more productive (per unit of land) than larger corporate farms. According to EUROSTAT data, the standard gross margin per hectare in most European countries is higher, if not far higher, on smaller farms than on larger farms. These two elements (the family farms' decentralised nature and productive superiority) are essential for food security, and might be important stepping stones for the construction of food sovereignty. Larger farms might produce, *at the level of the enterprise*, more, if not far more, than smaller family farms, but *per unit of land* the latter generate more production (and wealth). The consequence is that larger farms (as defined by EUROSTAT), which use 20 per cent of all utilised agricultural area, *only generate 11 per cent of Europe's total agricultural production* (calculated here as the total standard gross margin of the EU27). As noted above, this contribution of family farming is widely recognised throughout Europe and Central Asia.

Fourth, family farming undoubtedly represents polyvalency. It sustains (and in some places actively manages) scenic agrarian landscapes, sustains (and in some places actively protects and enlarges) biodiversity and offers accessibility. Beyond that, family farming is an indispensable ingredient for the quality of life in the countryside.

8 THE PROMISE OF FAMILY FARMING

Family farming can be very attractive for those involved in it. It equally contributes to society as a whole. Beyond that, family farming offers a set of potentials for the *future* of European and Central Asian societies. It represents a promise. This applies especially when 'new scarcities', over energy, water, climate and employment, are taken into account. Family farming could well play a strategic role in addressing these new scarcities, but this depends very much on the policy environment in which the family farming sectors have to operate.

Family farming can contribute considerably to the mitigation of global warming (associated with carbon dioxide— CO_2 —emissions) (see FAO and OECD 2012). Thomassen (2008, 90) calculated that Dutch dairy farms emit an average of 0.77 kilogrammes of CO_2 equivalents per kilogramme of standardised milk (based on a sample of 119 family farms). But there is considerable variation around this average: CV = 0.20. Thus, there is a wide range within which substantial improvements are feasible. Thomassen (2008, 91) also shows a negative correlation between net farm income per full-time equivalent and total climate change of -0.214 (p<0.05): the lower a farm's contribution to global warming, the better its income. This linkage makes it probable that family farming will contribute to the mitigation of global warming, at least if the appropriate means to do so are available. Another promising example is associated with on-farm improvements in composting manure. This contributes to elevating soil organic matter and thus increasing the amount of CO_2 stored in the soil (carbon sequestration) (Reijs 2007).

Family farming can play a prominent role in the reduction of energy use (thus also giving an extra impulse to the mitigation of global warming). Following the first energy crisis (in the 1970s), the Dutch theoretical agronomist C.T. de Wit wrote an important article about the 'substitution of labour and energy in agriculture'. He argued that agricultural processes of production contain 'iso-yield curves' that allow, within certain limits, for such substitution. He argued that, given sufficient increases in know-how (developing "the art of growing crops with a minimum of added energy" (1975, 16)), it would become possible to maintain or even enlarge employment, reduce the use of fossil fuels, improve resource-use efficiency and increase overall production (ibid., 159). Later empirical studies showed that different farming styles indeed entail different substitution curves (van der Ploeg 2003, 211) and that the total amount of nitrogen used can be greatly reduced (producing nitrogen fertiliser is a highly energy-intensive process)³³ (ibid., 188; Groot et al. 2006).

Flaminia Ventura has undertaken a strategically important study that compares energy use in animal breeding in two contrasting systems: relatively small-scale family farms (with a 'closed cycle') and large-scale, industrial farm enterprises that buy in most or all of their feed ('feed lots'). She notes that "[t]he energy efficiency of small-scale farms developed around the 'closed cycle' is higher than that of industrial farms, and this is true in both absolute and relative terms. On small-scale farms the production of 1 kg of beef requires 8800 Kcalories and on industrial farms more than 10,000 Kcalories. However, the most interesting features here are the exploitation and profitability of non-renewable resources and the profitability of [the] plant-generated energy transferred to livestock" (Ventura 1995, 228). Pimentel (2006) expanded this analysis by including organic farms. He found that organic grass-fed beef systems consume 50 per cent less fossil energy than conventional grain-fed beef systems. The agroecological movement of today is very much grounded on such differences and continues to strive to improve its environmental performance.

There are structural reasons that underlie the capacity of family farms to reduce fossil energy use and to simultaneously use fossil fuels more efficiently. First, the family farm uses (relatively) more labour than corporate and entrepreneurial farms, and is less inclined than the latter to systematically reduce it (this relates to the feature of self-employment discussed above). The family farm actively seeks ways of using labour and ingenuity to replace purchased inputs. The organic unity of mental and manual labour (as opposed to the systematic separation of the two in corporate farms) means that there is a continuous search for small improvements in the production process (the more so since this translates into improvements in the family income). In this way the 'art of growing crops with a minimum of energy' is developed. Third, in most (though not all) family farms there is a strong tendency to rein in expenditure on external inputs, including energy. These farms use less fossil fuel and less nitrogen-based fertiliser and have a higher overall nitrogen use efficiency, as shown in Table 2. It shows that the style of farming economically (the bottom left-hand cell) might have a large role to play in reducing the agricultural sector's energy use and improving its use efficiency.

Comparisons in nitrogen use and efficiency		
Fine-tuning	Ongoing expansion	
Nitrogen out of fertiliser and concentrates (kg/ha)	Nitrogen out of fertiliser and concentrates (kg/ha)	
Nitrogen out of manure (kg/ha)298	Nitrogen out of manure (kg/ha)	
Total nitrogen (kg/ha)627	Total nitrogen (kg/ha)635	
Nitrogen surplus (kg/ha)217	Nitrogen surplus (kg/ha)227	
Nitrogen use efficiency35%	Nitrogen use efficiency32%	
Kg nitrogen (from fertiliser and concentrates)/100 kg mil1.83	Kg nitrogen (from fertiliser and concentrates)/100 Kg milk2.00	
Farming economically	Maximising labour productivity	
Nitrogen out of fertiliser and concentrates (kg/ha)222	Nitrogen out of fertiliser and concentrates (kg/ha)	
Nitrogen out of manure (kg/ha)231	Nitrogen out of manure (kg/ha)	
Total nitrogen (kg/ha)453	Total nitrogen (kg/ha)586	
Nitrogen surplus (kg/ha)144	Nitrogen surplus (kg/ha)210	
Nitrogen use efficiency	Nitrogen use efficiency	
Kg nitrogen (from fertiliser and concentrates)/100 kg milk1.76	Kg nitrogen (from fertiliser and concentrates)/100 kg milk1.95	

TABLE 2

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Source: Dirksen et al. (2013).

A shift to organic or agroecological farming can make a major contribution to reducing energy use (and mitigating against global warming). Integral assessment (Life Cycle Assessment), which takes wider ramifications into account, shows that conventional dairy farming uses 5.0 MJ/kg of fat- and protein-corrected milk (FPCM), and organic dairy farming only 3.1 MJ/kg of FPCM;³⁴ thus, the organic approach uses 38 per cent less energy per unit of output (Thomassen 2008, 67). Studies by Cederberg and Flysjö (2004) and Haas et al. (2001) show similar results in Sweden and Germany.

More generally speaking, family farming has a potential to become the core of a new ecologically grounded economy (or 'eco-economy'), as outlined by Marsden (2011; 2012), which "relocates agriculture and its policies into the heart of regional and local systems of ecological, economic and community development" (Marsden 2011, 2). Within the context of such an eco-economy, agriculture would make a strong contribution to the delivery of green energy, especially since the dynamics of family farms coincide quite closely with the requirements, flexibility and scale of biogas plants (Bischoff 2012).

By turning towards more sustainable ways of producing, agriculture can help to maintain and further raise employment levels. This would partly come about as a result of lowering energy use, but alongside that there are several other mechanisms pushing in the same direction, such as highquality production (Broekhuizen et al. 1999 offer quantitative data in this respect). By comparing different styles of farming (see Figure 2), we see how malleable employment levels are within family farming. An entrepreneurial farm (large-scale and based on expansion) needs 1.9 labour units to produce 1 million kg of milk. In the 'peasant' style of farming economically the production of the same amount of milk needs 3.3 labour units; 74 per cent more than the entrepreneurial style (data derived from Oostindie et al. 2013). It is often assumed that higher levels of employment come with a price: that lower levels of remuneration are the necessary collateral. Empirical data³⁵ show that this is not true. In the style of farming economically labour income per full-time equivalent in the Netherlands is EUR54,000, while in the style of large, expanding farms it is EUR57,500³⁶—at least, in years with good milk prices. In 2009 (and especially in the first half of the year) milk prices were very low, and dairy farms operated according to the style of farming economically turned out to be far more resilient than those following the logic of ongoing expansion (see also Dirksen et al. 2013 for similar findings).

To this we might add that there are "large reserves of state-owned land in most CIS countries [...]. These reserves are generally used inefficiently by large corporate farms, or in extreme cases are simply left unused. Governments should channel these reserves to more productive use by distributing them to small family farms. [This would] make a crucial contribution to both sectoral growth and rural livelihoods" (Lerman 2012, 9).

Finally, it should be noted that family farming can strongly contribute to maintaining or enhancing the availability, use and conservation of sweet water. Van den Dries (2002) compared two contrasting farming realities in the north of Portugal. The first was the local style, consisting of breeding that was grounded on a closed cycle, the local production of feed and fodder and the joint use of commons (*baldios*). The second was a newly introduced style of dairy farming grounded on irrigated maize production. In his meticulous analysis van den Dries shows that with this modern approach the gross income earned by 1 cubic metre of scarce summer water dropped by 68 per cent (from PTE660 to PTE210). Net income fell even more: by 78 per cent (from PTE500 to PTE110). That is to say: obtaining the same income required nearly five times more scarce, sweet water (van den Dries 2002, 181). This also shows the malleability of water use within farming. The case highlights the need to adapt farming to local ecological and climatic conditions and to prioritise learning (see feature 7 discussed above). There may be synergies involved too. For example, soils with high levels of soil organic matter are much better at retaining water (Pimentel 2006, 28; Sonneveld 2004), and family farms are far better equipped for soil conservation and improvement than corporate farms.

When the data discussed so far are synthesised, the potential of family farming for addressing emerging social and ecological issues becomes obvious. Family farming can significantly help to create more employment where it is needed; it can help reduce energy use, mitigate against climate change and makes far less demands on scarce sweet water supplies. While doing all this family farming also helps to realise and maintain fair income levels. These are the great promises entailed in family farming. There are, though, two provisos. The first is that some forms of family farming more strongly embody these promises than others. The second is that a stimulating institutional and economic framework is needed to allow these (different) potentials to unfold.

9 POLICIES TO ENABLE THESE PROMISES TO BE FULFILLED

As Jerzy Plewa, Director General for Agriculture and Development of the European Commission, clearly stated during the European Conference on Family Farming: "sustainable development [...] is not possible if farmers are too poor. Poverty and sustainability do not go together [...] Family farming can support sustainable development—but not if family farmers are mired in poverty" (European Commission 2013, 45). This argument can be extended: the different promises I have sketched out above cannot be realised if farmers are being squeezed to the bones.

For many decades Europe's Common Agricultural Policy (CAP) aimed to achieve food security within the European Economic Community. This objective was combined with a second one: assuring reasonable and, more or less, stable incomes for the farming population. Price support, protection and the regulation of the internal market for agricultural products and, later on, income support were the major instruments deployed to achieve these goals. It is important to note that both objectives were deeply rooted and widely supported. The terrible famines at the end of the

Second World War induced a generalised feeling that this should 'never happen again', which translated into the widespread public support for assuring food security. Equally the crisis of the 1930s, which strongly affected the agricultural sectors of Europe and impoverished the farming population, gave rise to the first forms of agricultural policy, many of which re-emerged in the CAP at the EU level. In short: the CAP was not just an aberration—it was solidly rooted in recent European history. But circumstances continue to change.

There is no doubt that the CAP has protected family farming for more than 50 years, but it has done so in a highly unequal way. This was echoed in the FAO's Regional Conference: "In the EU15, agricultural policy over the decades has been tailored to, and has reinforced, the overwhelming predominance of family farms within a context of continuous state intervention and support. However, policy measures have increasingly benefited larger farms rather than smaller ones, for which they have been either out of reach or only marginally useful" (Regional Conference 2014, 7; 39). Beyond this, the CAP has also caused multiple additional problems (dumping on world markets, overproduction and budgetary problems, environmental problems and the contamination and degradation of food), many of which have been corrected by complex and painstaking adaptations of the CAP. In the meantime, in CIS countries, the post-communist transition has varied widely, policies have often been inconsistent and progressed unevenly, and in some of these countries large corporate farms (or agro-holdings) have entered the scene.

From the mid-1990s the CAP has become subject to slow but persistent processes of deregulation and liberalisation. The effects of this include increased volatility in the markets for food and agricultural products and a long-term decline in farmers' incomes (although volatility can also mean years with very good incomes).

Under these new circumstances it is almost impossible for the family farming sector to fulfil the many promises that it potentially carries. For example, the new economic environment excludes long-term investments in CO₂ capture, and drives the process of accelerated scale enlargement and the emergence of mega-farms,³⁷ which is definitely at odds with the desire to improve the quality of life of rural areas. These farms rely on industrialised farming techniques and fail to create much-needed attractive jobs in rural areas. Thus, the different promises of family farming are stifled before they can be realised.

A fully fledged return to earlier agricultural policies is neither possible nor justified. The restructured States (and supranational bodies) do not have the budgetary space to go back to the 'big spending' of previous decades. Meanwhile, other urgent problems, such as urban unemployment, have emerged. A return to previous policies (even just a partial one) would not be acceptable either, as it would interfere with agricultural realities that are now far more differentiated than ever before. The potential benefits would be drained away by megafarms and be of no use whatsoever for smaller family farms. Under earlier CAP regimes 80 per cent of the financial resources went to 20 per cent of farms: the larger and richer ones. Under current conditions such a policy would immediately encourage the further expansion of megafarms at the expense of small ones. What is needed, in short, is a *new generation* of rural and food policies. As observed in the Regional Conference on Family Farming (point 4): "The policy needs of family farmers are to be recognized and *specific policies are to be designed*." This new generation of policies needs at least to cover the realms listed below.

- 1. The construction of new, decentralised food markets: In considerable parts of Europe and Central Asia the distribution of food is concentrated in the market segment that is controlled and governed by the large retail chains. This brings both advantages and disadvantages. As empirical evidence shows, it is quite feasible to construct, alongside this now dominant segment, new markets that provide a more direct link between local producers and consumers, which offer a pleasant and proximate place to obtain a wide assortment of fresh and high-quality food products. The same evidence shows that these new markets are not necessarily more expensive than the supermarkets. Indeed they are often cheaper. Local authorities can play a key role in the construction of such new, decentralised markets by making attractive spaces available within towns and cities for these new markets (the city of Rome offers a good example). Adequate regulation is another important element. There is already a strongly rooted trend towards constructing such markets, especially in Western Europe's larger cities. It is important to build on this trend and further strengthen it.
- 2. Throughout Europe and Central Asia there is a high degree of monopolisation in the food-processing industry. It is crucial that the European Commission and nation states design and implement programmes that allow for the building of new SMEs for food processing and distribution. This will enlarge the amount of possible outlets for family farms, strengthen the functioning of new, decentralised markets and help to create extra urban employment. The emergence of such SMEs would also further consolidate emerging regional networks that are able to induce new dynamism into regional and national economies. As part of this policy endeavour it is essential that regulatory schemes (regarding, for example, hygiene or environmental standards) are differentiated. SMEs and multifunctional farms need to have the room for manoeuvre that allows them to develop adapted means to reach specified general objectives and standards, rather than be tied into industrial standards and procedures.
- 3. Agriculture in Europe and Central Asia still has a long way to go on the road of agroecology (see, for example, Spoor et al. 2013). This opens up new fields for the development of know-how, and for new schemes for cooperation between farmers and scientists that give 'field laboratories' a special strategic importance. The new French policy for agroecology appears to be an interesting and important step in this direction.
- 4. The governance of rural areas (regarding spatial planning, the management of landscapes and biodiversity, resource use, the coordination of production and consumption etc.) should be increasingly delegated to new, middle-level structures for legally conditioned self-regulation. The EU's new Rural Development Regulation (for 2014–2020) already offers a range of instruments to do so, and there is a wide spectrum of new but solid initiatives throughout Europe on which these structures can be built (e.g. 'territorial cooperatives' in the Netherlands).
- 5. New rural policies absolutely must include new mechanisms to enable young people to enter the agricultural sector. Here it is again possible to build on existing positive experiences already obtained in practice, such as those of Terre de Liens in France, some rural estates in the Netherlands and some programmes of ISMEA in Italy). As experience shows, there is no need for big capital injections: an intelligent adjustment of regulations can achieve much.

- 6. Well-focused adjustments to flanking policies are also required. These might cover public procurement, fiscal policies, hygiene regulations and other issues. If the maintenance and stimulation of a vibrant family farming sector is a priority, then different state policies and programmes need to be family-farm-proofed and (re)adjusted where necessary. Policy fields where this should be done include energy, public health, transport etc.
- 7. The different obstacles that block or hinder the access of family farms to relevant markets need to be reduced (see also Policy Department 2024b, 15). This also applies to the unequal distribution of benefits and costs between family farms (especially the smaller ones) and large-scale farm enterprises that arise as a result of agrarian policies, markets and service provisioning.
- 8. The "substantial presence of semi-subsistence farms in the NMSs [New Member States]" needs to be more appreciated and to be "recognized in a special Pillar II measure" (Regional Conference 2014, 8; 40). The development and dissemination of cheap technologies that are appropriate to small farms and which have the potential to (strongly) contribute to increases in both land and labour productivity is paramount for these semi-subsistence farms.
- 9. Administrative requirements and procedures that, directly or indirectly, discriminate against part-time farmers making use of the possibilities entailed in Pillar II are to be eliminated.
- 10. Programmes that help to strengthen mutual understanding and cooperation between family farmers and the citizenry (such as the EU's LEADER programme) are to be continued and strengthened, and introduced where they do not exist.

10 SYNTHESIS

At the end of this essay we can return to one of the questions posed in the introduction: how do (or should) we *define* family farming? The most common definition stresses that (1) the farm family has effective control over the main resources employed in the farm; and (2) family labour plays a pivotal role. This definition, which embraces both the labour and the business dimensions, appears fundamentally sound. It is one which is widely accepted and easy to apply in statistical databases and policy interventions.

However, in view of changing circumstances, some additional criteria need to be introduced. For being a family farm, the unit of production (3) must be an instrument, used by the actors involved to defend, accommodate and/or to improve their livelihood.³⁸ Wherever and whenever speculation becomes dominant (for example, leading to land lying abandoned and barren), one can no longer talk of family farming.³⁹ The same applies to those situations where control over the process of production has been reduced to a mere formality. Family farms are also supposed (4) to positively contribute to local and regional economies, (5) to be built on and enrich local eco-systems and (6) to avoid antagonistic relations with other family farms. This last criterion excludes the possibility of mega-farms masquerading as family farms (and obtaining benefits drained from the family farming sector as a whole). These last four criteria will strengthen the focus on *inclusive* development (expressed as a key objective at

the Regional Dialogues on Family Farming in Europe and Central Asia).⁴⁰ It is time to carefully operationalise and integrate these additional criteria in policymaking.

All forms of family farming that fit the six criteria mentioned above are important to Europe and Central Asia. Family farming, as delineated by these criteria, strongly contributes to the strength of European and Central Asian economies and contributes in many ways to the quality of their societies.

In the introduction to this essay I explored the possibility of the re-emergence of largescale corporate farms in Europe. We should also ask whether this would be a problem or not. Tying together the different arguments developed in this piece it is clear that the consequences would be disastrous. In the first place it would imply a complete withdrawal of agriculture from the hills and mountains of Europe and Central Asia. Corporate farming only operates in places where 'optimal conditions' are available. Second, a rise in corporate farming would imply a sharp and massive reduction in productive employment in rural areas. Third, monocultures and the increased use of external inputs and preventive medicines would occur, contributing to global warming, biodiversity loss and water pollution and, possibly, threatening public health. Fourth, there would be an increased risk of animal and plant diseases. Fifth, food security and food sovereignty would become seriously threatened, and, finally, the quality of life in rural areas would be considerably degraded.

Even if family farming is, at the moment, the main form of farming in Europe and (most of) Central Asia, these areas are by no means a 'safe haven' for family farming. As this text has shown, family farming is greatly threatened by several factors: some of these are external threats, while at the same time it is being weakened by internal ones. This implies that family farming tends to fall short of fulfilling its enormous economic, social and environmental potential. Particular parts of family farming may even turn into direct menaces: the negative externalities dominate over the positive ones.

This implies an urgent need to redefine agricultural and rural policies. Some of the key areas where policy changes are required include: the construction of new, decentralised food markets; the promotion of agroecology; local and regional self-regulation; and more support for young people who wish to enter farming.

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NOTES

3. The FAO defines Europe and Central Asia as comprising the following countries, which all are FAO Member Countries: Albania, Andorra, Armenia, Austria, Azerbaijan, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Kazakhstan, Kyrgyzstan, Latvia, Luxemburg, TFYR of Macedonia, Malta, Moldavia, Monaco, Montenegro, Netherlands, Norway, Poland, Portugal, Romania, Russian Federation, San Marina, Serbia, Slovakia, Spain, Sweden, Switzerland, Tajikistan, Turkey, Turkmenistan, Ukraine, United Kingdom, Uzbekistan.

4. A land-labour institution is "the framework within which the individual producer's decisions are made, and the medium through which the [...] flow of events and processes on a societal and world scale become real forces affecting his [or her] life and livelihood" (Pearse 1974, 1). It is an institution that ties land and labour together into a specific whole that puts its imprint on both land and labour. There are many different land-labour institutions, several of which have been very well documented. The family farm is a unique land-labour institution in that labour and control systematically coincide: the direct producers are the owners of the most important resources used in the process of production. This implies that the family farm and productive activities located in it may become a vehicle for emancipation.

5. "Family farmers owned only 13 percent of agricultural land in Russia in 2005 and household plots accounted for less than 5 percent. All other land is controlled by LFEs [large farm enterprises] and agro-holdings, both national and international [...] By mid-2008 [...] 196 large agro-holdings controlled 11.5 million ha. Of these agro-holdings, 32 had landholdings of over 100,000 ha" (Visser et al. 2012, 906). Nonetheless, the family farms and household plots (with less than 20 per cent of all agricultural land) produced more than 55 per cent percent of total agricultural output (Visser and Steggerda 2013,16), which shows that the technical and economic performance of large farm enterprises and agroholdings is very poor.

6. Many aspects of the labour process are subcontracted to external firms that deliver 'services'. Thus, from a formal point of view there are very few wage labourers within the farm.

7. In its definition of 'larger farms' EUROSTAT takes into account the specific distribution of land in each Member State.

8. This mutual competition, of course, is not exclusive to Europe and Central Asia. As Diego Monton, leader of the National Peasant and Indigenous Movement in Argentina, said at the European Conference on Family Farming: "In Argentina and countries like Paraguay, Honduras and Guatemala, farmer organisations are in conflict over land ownership with multinational corporations. There is frequent talk of having harmony between two models of agriculture. But how can these two models co-exist when they are in conflict?" (European Commission 2013, 37).

9. See Blackbourn 1984; McPhee 1992; Pécout 1994 and 2010; Zimmerman 2005; Markoff and Herrera 2013.

10. Here I refer to social struggles that aim at building food sovereignty, to the agroecological movement and to the many activities that re-oriented European agriculture in particular towards multifunctionality.

11. Gasson et al. (1988, 2) propose a slightly different definition based around three features: a) the principals are related by kinship or marriage; b) business ownership is usually combined with managerial control; and c) control is passed from one generation to another within the same family. However, this particular definition omits the labour dimension. As observed by Djurfeldt (1996), this definition carries a UK bias.

12. This definition implies that the essence of family farming and family farms does not reside in size (number of hectares, animals, economic size etc.) but in the organic unity of farm and family. Any upper and lower limits in size cannot but be highly arbitrary. This does not exclude the possibility of making such specifications of family farms (in terms of economic size and the nature of the labour force) within, more or less, homogeneous conditions, which can often be quite useful for focusing support programmes for family farming.

13. As explained later, there is, around a 'core' of full-time farms that are oriented to generating an acceptable income for the farming family, a wide range of other farms where the main function(s) (leisure, semi- subsistence, providing housing, maintaining the patrimony etc.) differ(s). The frontiers between the different types are far from clearly defined. This has, and continues to, set the scene for fervent struggles within, for example, farmers' unions over the questions of who should be considered a 'real farmer' and thereby make a claim to the benefits of agricultural policies. There is another dilemma associated with the emphasis on the 'business' side of the family farm (the family owning and managing the main resources) versus the 'labour' side (the family providing most or all of the labour force). If one emphasises the business side, it is easy to include the newly emerging mega-farms as family farms.

14. As argued at the European Conference on Family Farming: "The concept of family farming encompasses sociological, economic and cultural elements. From a sociological perspective, family farming is associated with family values such as solidarity, continuity and commitment; in economic terms, it is identified with specific entrepreneurial skills, business ownership and management, resilience and individual achievement. Family farming is also often more than a professional occupation because it reflects a lifestyle based on beliefs and traditions about living and work" (European Commission 2013, 34).

15. This is convincingly documented by Kinsella et al. (2000), who show that, in Ireland, pluriactivity is a consistent livelihood strategy that results in family incomes being significantly higher than those of specialised, full-time farmers.

16. This concept refers to non-agricultural activities located at the farm and often closely linked to farming. Examples are: agro-tourism, direct selling, on-farm processing of food, energy production, water retention, management of landscape, nature and biodiversity, care activities etc.

17. The notion of the 'cornerstone of the rural economy' is derived from the Commission on Small Farms of the Congress of the USA (see HLPE 2013, 28).

18. This phenomenon is referred to in the economic literature as 'disembodied technical change' (Salter 1966).

19. However, all these (different) functions are based on agriculture. This implies that, according to the definition of family farming elaborated by the FAO for the International Year of Family Farming, these different activity systems should all be regarded as expressions of family farming. The FAO definition is as follows: "Family farming includes all family-based agricultural activities, and it is linked to several areas of rural development. Family farming is a means of organising agricultural, forestry, fisheries, pastoral and aquaculture production which is managed and operated by a family and predominantly reliant of family labour, including both women's and men's" (guoted in European Commission 2013, 5).

20. In the former Soviet Union the provisioning of food (especially eggs, chicken, pork, dairy products and fruits and vegetables) critically depended on these household plots. They may be tiny, but their aggregate contribution to food security can be huge (if not decisive).

21. This second level of diversity partly relates to the duality inherent in the concept of the family farm: in some styles the 'labour' dimension is central; in other styles the 'business' dimension dominates (see also Niska et al. 2012).

22. In more general terms the Regional Conference (2014, 5: point 19) observed: "Family farmers adopt various strategies to build resilience and adaptation capacity, especially diversification of agricultural and/or non- agricultural enterprises and pluriactivity, and avoiding committing a large share of resources to one activity."

23. See van der Ploeg 2003, Kamp and Haan 2004, Evers et al. 2007 and Oostindie et al. 2013.

24. See, respectively, Van den Dries 2002; Ventura 1995 and van der Ploeg 2003; and Groot et al. 2006 and Dirksen et al. 2013.

25. See de Rooij et al. 2010.

26. See, respectively, Primdahl 1999, Burel et al. 2000 and Schmitzberger et al. 2005; Stefanova and Saled 2012, Mrad et al. 2009, Swagemaker et al. 2009 and Zechmeister et al. 2003; and Darnhofer et al. 2010 and Malaquín et al. 2012.

27. Over time the wording of these schemes changed considerably. The terms 'vanguard farms', 'in-between farms' and 'disappearing farms' are well known. Rich farmers, medium farmers and poor farmers is another system of categorisation. 'Stayers', 'hangers' and 'losers' were once official categories in Dutch agrarian policy. The notions of 'viable', 'in-between and 'non-viable' farms have also been used. Whatever the wording, the implications of such schemes of classification remain the same: they structure the process of rural and agrarian development as a selective process that is intended to exclude considerable parts of the rural population (assuming that the latter can move to the cities).

28. This reflects the powerful argument made by Ibrahim Coulibaly, President of the National Coordination of Peasant Organizations in Mali, about this issue in Africa: "Our young people don't believe in family farming because they see how poor their parents are" (European Commission 2013, 37).

29. As opposed to the wider range of development trajectories shown in Figure 3

30. Cinzia Pagni of the Confederation of Italian Farmers says: "Family farmers across the world share a common set of values, which are constancy, thoroughness, trust, cooperation, sharing, humility and freedom. These values express the relationship between family farmers and nature, their land and their work. Farmers are in touch with nature, share work and returns and have the freedom to choose how they work or what crops they grow." She added: "these values [...] are increasingly [being] lost [but] need to be understood and preserved" (European Commission 2013, 40).

31. For example, through premium prices for large farms, lower interest rates and easier access to loans, selectivity in the criteria for subsidies etc.

32. EUROSTAT's definitions of 'larger farms' and 'smaller farms' does not completely coincide with 'corporate farm enterprises' and 'family farms'. Nonetheless the overlap is considerable. The notable exceptions are large horticultural enterprises and large pig and poultry farms. These have little land but generally have several, or even a lot of, salaried workers.

33. Roughly speaking, chemical fertilisers represent one third of total energy use in modern agriculture.

34. FPCM refers to a kilogramme of milk with standardised fat and protein contents.

35. The analysis by Oostindie et al. (2014) is based on farm accountancy data from 1500 dairy farms. The data were collected and processed by ALFA Accountants and cover four years.

36. Similar findings emerged from a 10-year comparative study by the Animal Science Research Station at Lelystad in the Netherlands. See Kamp and de Haan 2004; Evers et al. 2006.

37. "Participants in the Dialogue expressed concerns that policies favour large corporate farmers and are often influenced by multinationals" (FAO 2014, point 44).

38. In its broadest possible sense, which specifically includes multifunctionality.

39. This criterion seems to come close to the notion of 'active farmers' introduced by the European Commissioner for Agriculture, Dalian Ciolos.

40. This was also echoed in the Presidential Note to the Informal Meeting of the Ministers of Agriculture in Vilnius held in 2013 (see Council of the European Union 2013).



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