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Farmers' land strategies in peri-urban areas: the case of Angevin conurbation

Bertille Thareau¹ · Jean-Paul Billaud²

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Abstract

In a context of differentiation of agricultural worlds, we propose an analysis of the ongoing transformations and social conditions of these recompositions. We approached these questions from the point of view of land issues, based on observations made around a city in the west of France, Angers. Farmers, in their relationship to the land and to the locality, demonstrate four land strategies: “professional anchoring,” “flexibility,” “patrimonialization”, and “hedonism.” These strategies organize a question of land use which is unstable and results in competition and adjustment processes for access to land, both on the part of farmers and institutional procedures. These recompositions operate through different moments of debate, ranging from peer discussions, to local meetings with elected officials or inhabitants, to established negotiations between local authorities. Farmers have to deal with actors from outside their professional world, and paradoxically, rather than entering into a logic of withdrawal, we see a recomposition combining professional excellence and territorial anchoring.

Keywords Land strategies · Territorial belonging · Professional recomposition · Professional culture · Peri-urban agriculture · Land tenure

Introduction

Agriculture is undergoing important transformation which affects it differently because of the great diversity of production (Hervieu and Purseigle 2013). The major features that characterize and explain this diversity are fairly well known in France: an unequal increase in the size of farms and in the economic capital of companies, which goes hand in hand with a change in legal support (development of corporate forms and external

✉ Bertille Thareau
b.thareau@groupe-esa.com

¹ Research department LARESS, Ecole Supérieure d'Agricultures d'Angers, Angers, France

² CNRS, LADYSS, Université Paris Nanterre, Nanterre, France

investment methods), the pursuit of specialized production under the regime of dominant tenant farming, and a recomposition of the family character of agricultural activity (Olivier-Salvagnac and Legagneux 2012). These developments interfere with the base point of all agricultural activity, the land.

This article proposes to analyze how, recently, farmers' relationships to land have become recomposed. By this we mean how farmers position themselves, through intentional actions, with regard to land as a determining element of their activity as producers. This positioning, which can take the form of purchases or sales, choices to rent or to expand, or differentiated forms of productive valorization, is at the same time the expression of a conception of the place of land in the trajectory of the farm and in the farmer's family. In a word, it refers to land strategy. Various authors have described farmers' adaptation strategies to local land tenure contexts, particularly in peri-urban areas (Bryant and Johnston 1992; Houdart et al. 2012; Inwood and Sharp 2012; Nguyen and Doo-Chul 2019). Like them, we will consider land strategies as a succession of changes over the course of the career, relating to the structure of the exploitation and the mode of access to land-holdings, articulated to choices of land use: the production system and the activities (Guéringier et al. 2017). Of course, we pay particular attention to the way these decisions are specific to the farmers' rationalities which we intend to describe. The unique relationship with this production tool, land, which is both an expression of ideals and something more concrete (Godelier 1984), is not indifferent to an attachment to place, more precisely to the locality in which the farm is located. Some literature only considers place as a dimension of the context of farm. However, the place where the profession is practiced is the result of the farmer's choice of location, investments in the development of local social resources (Ackermann et al. 2013; Barral and Pinaud 2017; Sharp and Smith 2003), and an emotional or biographical attachment (Sencebe 2004). We intend to identify the relationship of farmers to their land and locality, i.e., their conceptions of land value and their local settlement, *and* to describe how these conceptions are linked within their land strategies.

Our bias is therefore to describe the diversity of local agriculture based on farmers' land strategies. We consider the preference to rent rather than buy, to expand, to increase the productivity of the land, or to sell a plot of land, as strategies adopted both in function of what is wanted and in response to situations and transformations in their work contexts. In order to understand the farmer's individual strategy, we need to take into account the relationships between the diversity of conceptions of land issues and the way these conceptions are debated and shaped within the community. In particular, we will focus on understanding how farmers' interactions with other social groups contribute to this transformation of land strategies.

During the decade 2000–2010, the relationship between the agricultural profession and local authorities in France became deeply institutionalized due to the evolution of the national political framework (stronger jurisdiction of local authorities, development of more powerful inter-municipal structures, greater consideration of agricultural spaces in urban planning). Within the territory on which our research is focused, this has resulted in the elaboration of local political documents (land use projects, land charter, agriculture and urban planning charter), the institution of new working bodies (an agricultural commission, partnership agreements

between urban and agricultural organizations). This institutional work has generated unique local debate. Our research therefore focuses on this period.

Our proposal is based on a monographic work carried out between 2006 and 2011 around the city of Angers, a medium-sized city in Western France (Thareau 2011). This monograph is based on a survey of different categories of farmer and their organizations (interviews with farmers, elected officials, local professional leaders), on the participatory observation of institutional spaces for the construction of local agricultural land policies and land arbitrations, and on the analysis of local policy documents. In particular, we will focus on semi-directive interviews conducted with 19 farmers operating less than 20 km from Angers, as well as a quantitative survey aimed at testing our results, on their land strategies, with a larger sample of farmers (47 questionnaires) (Thareau 2011). The surveys aimed to characterize farmers' land strategies and to situate farmers in the local social space. The respondents were asked to trace and explain the trajectory of the farm since their installation in terms of the evolution of the structure, production, labor, marketing methods, and practices and to qualify their local social integration. In addition, the participatory observations and interviews with local officials aimed at describing local spaces for dialogue relating to agricultural land, particularly from the perspective of the participants and the objects of debate. This material led us to articulate two scales of observation and analysis. The first level is inter-communality, where rules relating to the preservation of agricultural land and the allocation of land to farmers are negotiated between local authorities and farming professionals. Within the framework of these scenes, the parties involved promote certain relationships to land, certain strategies that are translated into practice in local arrangements (Perrin and Baysse-Laine 2020). The handling of more local, often communal matters is our second level of observation and analysis: urban planning projects generate controversy and mobilization that involve farmers as well as inhabitants and elected municipal officials (we will present here the case of the development of a ring road south of the city of Angers).

We propose to identify the various land strategies where the expression of land issues is most exacerbated, the peri-urban area (part 1). This identification requires an examination of the rationality underlying given strategies. Rationality will be related to the constraints and advantages of the production but also to the constructed—and inherited—links between the farmer, his production tools, and his sense of belonging (part 2). The examination reveals great diversity in situations of coexistence, competition, and sometimes even conflict but also the product of a social and institutional environment which, through the sociabilities and mobilizations it generates or the mechanisms it puts in place to regulate access to land, reinforces, disrupts, or mitigates the expression of such land strategies (part 3).

Peri-urban areas, where competition for land is exacerbated

Peri-urban agricultural diversity

Peri-urban land contexts promote opportunities and constraints. Peri-urban areas are spaces of consumption, employment, and a concentration of infrastructure and services (especially logistics) and offer development opportunities for agriculture. But they are

also places where constraints are exacerbated, characterized by the risks of urbanization of agricultural land, by the presence of non-agricultural land buyers, giving rise to expectations of added value, price increases, and finally by precarious access to land (Bryant and Johnston 1992; Wästfelt and Zhang 2016). This leads to competition on the land market between farmers (for purchase and rent) and an increase in the value of land. Although this competitive situation is not specific to peri-urban contexts (Guéringer 2008), it is exacerbated there. Between constraints and opportunities, risks and potentialities, peri-urban areas appear as areas of innovation and indeterminate forms of agriculture.

Urban proximity seems to accentuate the processes of differentiation of farms in terms of production and activities, structures, or sales methods. Different farmers' strategies become intertwined near cities: expanding and turning the abundance of precarious agricultural land into a resource for coping with the city; enhancing peri-urban settlement to ensure commercial positioning and capture local opportunities on intensified and diversified farms; developing service activities for farmers and landowners; and making agriculture more residential through hobby-farming projects or through gradual professional disinvestment as retirement approaches (Bryant and Johnston 1992; Duvernoy et al. 2018; Fleury et al. 1996; Inwood and Sharp 2012; Jarrige 2003; Jouve and Napoleone 2003; Soulard and Thareau 2009; Wästfelt and Zhang 2016). These strategies deal with different modes of access to land (precarious rental situation, leases, ownership) (Ackermann et al. 2013; Wästfelt and Zhang 2018). Such modes of access to land are linked to specific national contexts, France standing out as having the highest land rental rate in Western Europe (Ciaian et al. 2012). Territorial and productive singularities also seem to play a determining role, sometimes implying strong competition for acquisition (Vianey 2005), sometimes the pre-eminence of land rental practices (Bessièrè et al. 2011; Bryant and Johnston 1992; Levesque et al. 2011; Wästfelt and Zhang 2016). Peri-urban areas offer differentiated contexts within which farmers develop contrasting relationships to land.

A singular social context

These are social spaces in which farmers are in the minority. In fact, these contexts imply singular strategies for them to build social bonds. In particular, the literature explores the links forged with landowners and their neighbors. Various surveys conducted in France have shown that competition between farmers on the land market transforms the relationship between landowners and farmers: the challenge for the latter is to find legitimacy in the eyes of landowners in order to be better placed on the land market (Ackermann et al. 2013). This legitimacy—some authors speak of trust, others of reputation—seems all the easier to obtain if the farmer has practices that are well accepted by neighbors (Barral and Pinaud 2017; Vianey 2005) or if the farmer has been established in the locality for a long time (Jarrige 2003). In Ohio, Sharp et al. show the importance of the frequency of relations between farmers and their neighbors for the maintenance of livestock activities in peri-urban areas. This “social capital” appears as a resource for maintaining farming activities in the peri-urban area (Sharp and Smith 2003). Their work also points out that farmers develop differentiated strategies in this respect: full-time or dual working farmers invest more in their neighborhood relations than retirees or hobby farmers (Sharp and Smith 2004). Social integration of farmers in

peri-urban areas is characterized in particular by strengthened ties with residents within local communities (Candau and Rémy 2008).

A political space structured by the city

Finally, the peri-urban configuration presents a constant feature in the political treatment of the agricultural land question. In spite of contrasting urban and territorial practices, urban intermunicipality still represents the major actor in the question of land. Firstly, since 1983 in France¹, local authorities have organized the sharing of space between housing, business parks, infrastructures, natural areas, and agriculture. However, French law on land use planning changed significantly in 2000, assigning the role of designing and leading genuine intersectoral policies for land development, including the issues of environmental preservation, economic development, spatial organization of land use, and structuring of local food chains, to enlarged urban intermunicipalities (Bertrand 2013). At the same time, in peri-urban contexts, local authorities are an important player in the agricultural land market because of their urban planning policies and sometimes their land acquisitions (Perrin and Baysse-Laine 2020). Even though farmers are demographically a very small minority in these areas and have little institutional presence as elected representatives of local authorities, they are at the heart of a necessary dialogue on the future of their activity and the areas they exploit. In other words, farmers are faced with a form of injunction to situate themselves in a political space structured by the city, within which land issues are the main focus of work.

A peri-urban territory in Western France, marked by diversified competition for access to agricultural land

The Angevine agglomeration is a territory which at the time of our survey included 31 communes, with a surface area of 50,000 ha and a population of 280,000 inhabitants. The presence of agriculture is significant: 48% of the surface area is occupied by agriculture and 3% of the working population work in agriculture (including 541 farm managers at the time of the survey). In this area, agriculture has above all the characteristics of the surrounding territory: as in the rest of the department, livestock farms are found alongside specialized plant farms (arboriculture, horticulture). The evolution of the structures of exploitation presents there, as elsewhere, dynamics of restructuring which result in the enlargement of the exploitations and the reduction of their number (Soulard and Thareau 2009). In addition, between 1996 and 2011, the region saw a significant decline in grassland areas (-28%) in favor of arable crops².

Agriculture and farms here are characterized by a high degree of diversity. Perennial crops (arboriculture, viticulture) rub shoulder with horticultural crops (horticulture and market gardening) to the south and east of the agglomeration, while to the north and west of the agglomeration, suckler cattle breeding and dairy farming dominate (Fig. 1). Perennial crop and horticultural farms operate on smaller than average land areas, more

¹ Law No. 83-8 of January 7, 1983, which gives elected municipal officials responsibility for the allocation of space within the framework of the elaboration of land use plans

² Angers Loire Métropole, Initial state of the environment drawn up with a view to the local urban development plan, 2017

often in ownership. Labor is more abundant. Conversely, livestock farms use large areas of land (especially for dairy farming), mostly leased.

Farmers in this area are in strong competition for access to land. This competition is based on two points. First, existing farmers tend to expand their farms. This translates into an increase in the average size of farms by 42% between 2000 and 2010. Secondly, the Angevin agglomeration is a dynamic territory in terms of agricultural settlement. Between 2002 and 2007, there were 118 departures while 95 new farmers settled (Thareau 2011).

Farmers are also in competition with other users of the peri-urban space for access to land. The intervention of local authorities in the land market was significant and stable between 1995 and 2015. It concentrated around the urban pole and secondary urban polarities. These acquisitions mainly contribute to the implementation of infrastructure projects, housing and business, and commercial zones. It should be noted here that from the 2000s onwards, intermunicipality has shown a political will to contain urban sprawl, which implies preserving the agricultural uses of selected peri-urban spaces. In the second ring to the north of the agglomeration, it is mainly “non-farming” inhabitants who acquire agricultural land, to convert agricultural buildings into rustic houses with a large plot of land or to develop hobby farming. This competition contributes to an increase in the price of agricultural land in this peri-urban area, significantly faster than in the surrounding countryside.

In a context of urban sprawl over agricultural land, farmers compete for land on the local land market, to access the profession, but also to stay in farming.

Contrasting land strategies

Approaching the dynamics of farm structures based on the notion of land strategy implies taking an interest in the margins of freedom, the possibilities for farmers to define a project and to implement arbitrages or long-term orientations concerning their farm land. However, in peri-urban areas as elsewhere, access to land is, on the one hand, framed by the rules relating to the transmission of land and, on the other hand, constrained by the existence of strong competition for access to land. In fact, obtaining new land to be exploited, whether by purchase or lease, is subject to obtaining an

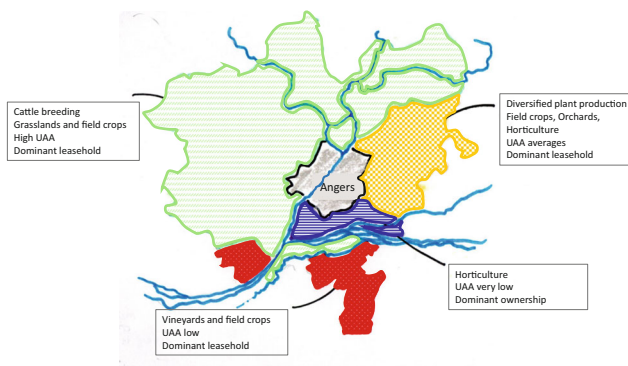


Fig. 1 Diversity of agriculture in the Angevin region, source: the authors

authorization issued by the prefect on the advice of commissions that include representatives of farmers, landowners, local authorities, and sometimes environmental NGOs. In a competitive land context, only farmers who are considered a priority for obtaining new land can implement their projects. However, the fragmentation of farms into several blocks and the relocation dynamics observed broaden the farmers' possibilities of buying or renting on the one hand and the list of competitors for land on the other. Our survey³ shows that in the Angevin territory, while half of the respondents have been expropriated or evicted on part of their land since their settlement, over the same period, more than three-quarters have rented new land and more than half have bought land. Fewer than 10% have seen their land decrease since their installation, while 65% have increased their surface area. Finally, our survey offers another surprising result: three quarters of the respondents say they have no difficulty in finding additional land, neither renting nor buying. We show that farmers are led to make many land decisions during their career (Léger and Alavoine-Mornas 2013), and therefore, most of them have the capacity to implement a land strategy on their farm.

Four contrasting land strategies

Agriculture in this region is characterized by the coexistence of two main production sectors: specialized plant production (horticulture, market gardening, arboriculture, and viticulture) and livestock farming (mainly dairy and nursing cattle). Of course, these productions strongly condition producers' relationships to land and the ways in which they adjust their farms to the peri-urban context. Taking into account all the diversity that characterizes local agriculture, four land strategies can be distinguished (Table 1). We describe these strategies below, explaining the principles that underlie the land choices regarding the evolution of the structure and modes of land tenure, agricultural practices and portfolio of activities, relationships to place and forms of social integration, and then the farms from our sample that fall under this type of strategy.

"Professional anchoring" is one of these land strategies. It consists of acquiring and then preserving the land, both built and unbuilt, throughout the career. This goes hand in hand with investment choices and the intensification of practices in areas without much growth. This strategy is here linked to a vision of land as productive capital whose value must be improved through investment and work (greenhouse performance, quality of farm buildings, improvement of soil fertility, organic conversion, etc.). In addition, the value of land is linked to its location (proximity to transport infrastructure, to the consumption or employment basin, presence of an irrigation network). Some producers even associate the performance of each company with a production basin dynamic (cooperation for sales and supply, maintaining a competent workforce, etc.). Finally, these producers place their professional trajectory in family continuity and are well integrated into professional social networks (within the framework of technical collectives or cooperatives) or local networks (involvement in communal institutions, inhabitants' associations). The maintenance of these dense forms of local sociability is also a structuring value associated with the "professional anchoring" strategy. In a competitive land tenure context, this strategy implies setting up ambitious land protection practices, which mainly involve acquiring the land being

³ Of 47 farmers

Table 1 Characterization of land tenure strategies based on a survey of 19 farmers in the Angevin agglomeration, Thareau 2011

	Professional anchoring	Flexibility	Patrimonialization	Hedonism	Total sample averages (RGA 1988, 2010)	Regional averages (RGA 1988–2010)
<i>Number of enquiries</i>	6	5	4	4	19	
UAA (ha)	19	113	24	6	50	41
Expansion dynamics since installation (ha/10 years)	2,5	23	0,5	0,5	9	14
% UAA owned (owned by the farmer or leased from one of the partners)	66	23	92	73	66	36
Productions	Horticulture, small fruits	Milk,	polyculture-livestock	Arboriculture,	horticulture, poultry farming, farmer imkeeper	Beef, horses
Age of the farm managers	40–60 years	35–50 years	More than 55 years	More than 50 years		
Labor force	2 partners, often permanent and temporary employees	1 to 3 partners, sometimes one employee	1 operator and one or more employees	Pluriactivity, family assistance		

exploited and engaging in individual or collective negotiations with local authorities to prevent the urbanization of their land.

We're the municipality's biggest employer, so very often people also come to us for advice. (...) When a subject begins to affect us, at a given moment we know it. We get in touch with the people who manage them in order to give our arguments. Of course, we joined the Angers Conurbation, which certainly has a much greater power in terms of weight, in terms of evolution on future projects; which it is very difficult to counter. On the other hand, there are arrangements that can be made. In general, this is what leads us to put forward a certain number of positions to bring about these changes, I would say with a less rigid connotation, less problematic in relation to our activities. Having said that, we are inevitably in the vicinity of Angers. We are within a 5-6 km perimeter. We try to make sure that we are in an agricultural zone which is preserved and where there is not too much disturbance for the evolution of our activities. (horticulturist)

Producers of specialized plants are the typical representatives of "professional anchoring." They usually own most of the land they use, as their operating areas are limited, and they develop activities with high added value. Most of them settle by buying the land and the farm buildings (some from their parents). These farmers expand their operations only slightly over the course of their career. Changes in both structures and land ownership therefore take place at the time of transfer/settlement. For them, peri-urban location is a resource for developing a service activity related to agriculture (picking and harvesting), a production activity that requires abundant labor (horticulture), or to facilitate logistics. These farmers who own their land generally approach the issue of urbanization with serenity. Of course, urbanization of all or part of their land would be a major challenge. But they are confident in their ability to negotiate with the community to avoid urbanization or favorable conditions for expropriation or local land compensation (all the more so since the company operates on a small surface area and employs a lot). Finally, let us underline a singular feature of professional sociability in specialized crop production. Dialogue between local producers is not very prevalent, farmers generally considering each other as competitors. Specialized consulting organizations have developed, establishing professional groups differentiated according to specialties (fruit arboriculture, seeds, nurseries, ornamental horticulture...) at extended territorial scales (department, region) (Sarrazin 2016). This fragmentation of professional sociability makes the possibility of collective professional mobilization on a local scale more uncertain.

"Flexibility" is a second local land strategy. It consists of maintaining the agricultural activity within the territory, working with the context of peri-urban precariousness. This translates into expansion practices that farmers associate with the challenge of farm extensification to promote more environmentally friendly practices or the challenge of producing more to feed urban populations. Above all, however, these land choices are justified by farmers as a response to the new constraint of reducing farmland, expansion being a practice of anticipating land risk. The structural dynamic of these farms is therefore marked by a relationship of flexibility to land tenure: some land is perceived as temporary farmland. These lands, sometimes far from the head

office, are often rented, occupied by field crops or ungrazed meadows (forage harvesting).

Q: So, you have 20 hectares of corn and 30 hectares of winter cereals?

A: I don't really like cereals, I'm more of a breeder. The corn is for silage. Some of the wheat is for us, the rest is sold, but we have this land, so we need to occupy it and anyway, it makes straw.

Q : so, do you have too much land?

A: Well, to tell you the truth, the extra doesn't really make a difference! (Dairy farmer)

This flexibility is a means for those with a strong attachment to the land to ensure that they remain within the territory. Originally from the commune, these producers have taken over the family farm and intend to develop it with a view to passing it on. Their social ties are rooted above all in a local professional community. As part of dense networks of dialogue, they are involved in various professional organizations (local equipment sharing cooperatives, local unions, development groups of the Chamber of Agriculture or the cooperative). These links are used as resources to get to know the land movements and develop their strategy. Although they are well integrated into local professional communities, they are more distant from the other inhabitants of the communes: they are involved in long sales chains, they do not develop local commercial links, and there are sometimes tensions with their neighbors (e.g., by intrusions on their land or criticism of their activities).

Livestock farmers have land trajectories that correspond to this strategy of "flexibility." They usually join the profession by renting land and sometimes buildings on large farms. Over the course of their career, these farmers tend to acquire some of the rented land. But unlike with "professional anchoring," buying is not the most important land transaction for them. They access the land primarily by renting it at the time of installation and also during their career, to expand. Indeed, their land trajectories are characterized by a significant increase in the surface area under exploitation. Eighty-five percent of the cattle breeders met during our surveys increased their land area during their career. Access to land is a question that arises throughout the career. These breeders analyze their context of activity with many fears that may be related to agricultural markets, the evolution of the Common Agricultural Policy (maintenance or not of subsidies, increase of constraints related to environmental protection) or constraints related to the proximity of the city (uncertainty about the urbanization of their land, increase in the number of neighbors). They adapt to this context, which is considered difficult, by means of "flexibility."

I've always managed to expand. First of all because there are closures and there are no new farms setting up in the area. And I'm also anticipating, because I know I'm going to lose land. Everything on the outskirts of the town I know that in the coming years we will be expropriated. When land becomes available, we try to take it. Just in case. (Dairy farmer)

A third strategy lies in a "patrimonial" approach to land. These farmers have inherited the family farm, often with a dwelling house or a characterful outbuilding. They

express the desire to keep them in the family, because they consider them a heritage. It is then after having exercised another profession at the beginning of their career that they choose to settle on the family site. In terms of the farm's land structure, their career path is marked by a very strong stability: they "inherit" or acquire the land and buildings from their parents, or other beneficiaries, at the time of installation and then keep this structure. What characterizes their farms is their modest size, which is also linked to high value-added production or the development of forms of direct marketing (pears under a producer's brand, farmhouse inn, etc.). If the land or production choices made by these producers are close to those of the first category ("professional anchoring"), what distinguishes them above all is to think of their link to place and profession as the issue of family and intergenerational continuity.

I've been a farmer since April 2002, when I took over my parents' farm, and then a change was the opening of a farmhouse inn. My journey to a farm inn-keeper, is unusual nowadays. I was a cook before being a farmer. I've been involved in agriculture since I was a kid, but I was a cook for about fifteen years. And when my parents retired, there were no takers on the farm, there was this building that was abandoned. I thought there might be something to do, so I went back to farming, took over the farm from my parents and we refurbished this building to open the farm inn. (Farm inn-keeper)

Their local ties are marked by a degree of professional isolation: both their biographical trajectory (initial professional socialization outside the agricultural world) and the choice of atypical local production distance them from local networks of farmers. On the other hand, as former inhabitants of the locality, they maintain friendly and family ties in the locality and develop commercial relations with the inhabitants.

In our sample, these farmers are quite old. While they have been able to take advantage of a location close to the city to develop a fairly original business, as their career progresses, they perceive this proximity as a difficulty. Moreover, their concerns are largely related to whether or not they can maintain their ability to work in their environment, particularly in light of neighborhood development and urbanization. In the end, proximity to the city gives value to land and buildings in a market intended for urbanization (real or desired), but makes agricultural activity difficult. When preparing for retirement, two logics can be observed: one is oriented towards extending the family trajectory of the farm and the other towards enhancing the value of the farm site as a place of residence. The latter envisage keeping the land in ownership and sometimes renting it, keeping their house and the farm buildings, which are often close by. The age and the prospects for transmission significantly interfere with the development of the "patrimonialization" strategy.

Hobby farming is present within the territory and constitutes a fourth land strategy that could be described as "hedonistic." For these producers, agriculture is a pleasure, a leisure activity. They do not seek to earn an income from it; some even say they devote a part of the household budget to it. In any case, the household has other incomes. In general, they have sought to buy a piece of land near their house to be developed to accommodate a few animals (cows, horses, goats).

My husband finished every afternoon at three o'clock, he had a lot of extra time so that's why. It's true that when you've lived in the countryside, you want to have a little piece of land. (...)"

Q: Do you consider this breeding activity as your job?

A: No, it's a passion for us. We love our animals. We only have them for our pleasure. We know them all, we know all their marks, their faces. (Breeder of suckling cattle)

Their activity, although limited, is integrated into commercial and technical agricultural channels: sale of animals to traders, solicitation of veterinarians, and request for services from neighboring farmers for cultivation work. The fact of approaching this rural world is part of their pleasure. If their activities evolve, it is always in connection with personal changes (their desires, their physical condition), changes in family and professional practices not related to agriculture (changes in availability) or changes in the household budget that determine the ability to invest. Thus, agriculture is often associated with a "life project" of settling in the countryside. As far as the purchase and transmission of land is concerned, their practices are far from those of agricultural professionals: often far from farmers' networks, they are not informed of sales of agricultural land, and it is therefore via an impersonal exchange circuit—with notaries in particular—that they look for land (Barral and Pinaud 2017). When land is offered to them, they are ready to invest a lot to acquire it, without evaluating the profitability of the investment, since their objective is not to earn an income from it. At the time of transmission, this land is considered as a family asset to be passed on to the children.

In order to account for all the configurations of the relationship to land, one should mention farmers who envisage the sale of land and relocation as a structuring moment in the modernization and development of their businesses. Land seems to be considered as a production factor where economic value is assessed in terms of productivity and the investments made; relocation is therefore a marketable factor. In contrast to their predecessors, these farmers are both poorly integrated into local professional and social networks and attach less importance to collective dynamics (they are, e.g., absent from cooperatives). If we do not attempt to qualify them in the same way as the four previous types, it is because we cannot present factual data on farms of this type, as no farmer identified at local meetings or cited by others as being part of this land strategy has agreed to receive us. On the other hand, this type of trajectory appears hollow in the discourse of other farmers, as a figure of failure or as a strategy disqualified by the remaining farmers.

Competition and coexistence

The social group of local farmers is therefore diverse. They express their differences on the basis of two main criteria. Production is a criterion that marks a real cleavage between the world of animal husbandry and field crops on the one hand and the world of specialized plant crops (horticulture, market gardening, nurseries); on the other hand, these two worlds rarely meet. To live or not to live from one's agricultural activity

constitutes the second strong criterion of differentiation generally perceived in the same way by farmers who consider themselves professionals and farmers who place themselves in a hedonistic strategy specific to hobby farming. The former often qualify the latter as “part-timers,” and the latter rarely consider themselves farmers. So, criteria of distinction used by farmers partly cover the identified land strategies.

To some extent, this distinction results in competition between social groups, or even within groups. This competition revolves around two main objectives: the recruitment of employees (essentially between horticulturists) and land. The land issue is most talked about by the breeders in a strategy of “flexibility.” Some farmers emphasize the competition between farmers for land acquisition or leasing. They express the same way of looking at the legitimate criteria for land allocation: by giving priority to the restructuring of the commune’s farms. Influencing local institutions and landowners, they seek to maintain the status quo between farmers in the commune at the expense of farmers in neighboring communes or candidates for settlement. Horse breeders and “hobby farmers” are also seen by farmers as illegitimate competitors. Beyond this competition, the diversity of land strategies observed on the territory is made possible by interdependencies between them. Flexibility implies entering into a dynamic of expansion, which comes up against the lack of land in a peri-urban context and makes it difficult for new farmers to set up. It also limits the development of a “hedonistic” strategy. In the competition for land, existing farmers, who have large farms, have easier access to land. At the same time, many farmers adopt a strategy of “professional anchoring” on smaller farms and orient their activities towards new production, marketing channels, or the provision of new services, linked to the advantages of peri-urban location. The development of “flexibility” and “professional anchoring” are made possible by processes of withdrawal from certain agricultural activities, particularly when farmers’ projects take the form of relocation or in the case of “patrimonial” strategies. Around Angers, two types of activities are particularly weakened by a difficult economic context and by neighborhood constraints: arboriculture and poultry farming. Some producers then cease their activities or relocate, while others, at the end of their career, cease their activity, investing in a place of residence. In fact, this process tends to “remove” farm sites and the land surrounding them from professional agricultural use for the future. But they then found a renewed valorization of the land through hobby farming or by the development of a private natural space. New agricultural retirees adopt practices similar to those of residents who acquire a “piece of land” to develop hobby farming activities. Less than a withdrawal, it is a question here of the development of a form of non-professional agriculture that participates in the diversification of agriculture within the Angevin territory.

The coexistence of land strategies within relatively compartmentalized agricultural worlds seems to maintain a dynamic process of diversification of peri-urban agriculture. While cessation of professional activity and relocation are important components of this local land tenure system, they are largely disqualified among professional agricultural managers and certain farmers. Beyond contingent choices, land strategies refer to conceptions of what should be done, shared within social groups, in other words, to a cultural dynamic that we will now analyze in greater detail.

Scenes of mobilization constructing a reference frame for space sharing

The coexistence of a diversity of land strategies reflects a significant change in farmers' relationships to land. This evolution cannot be understood without relating it to the recent history of different local professional worlds.

Cultural and political processes within distinct agricultural worlds

The typology that we have constructed only makes sense in relation to a context from which it is possible to follow the dynamics of land conceptions, which are less stable than they seem, or at least, as an examination of the two main ones, "flexibility" and "professional anchoring" shows, to be part of the complex interplay of institutional management of peri-urban land.

As we have seen, the world of livestock farming favors a strategy of "flexibility" in its relationship to land. However, the discourse of livestock farmers, and in particular that of local union leaders, emphasizes a recurring challenge: to setup new farmers and preserve jobs on family farms. This political perspective became locally accepted from 1968 onwards. The generalist union in which the parents of these farmers participated then mobilized alongside the workers and demanded a socialist political position that broke with the majority French agricultural unionism of the time. Land was then conceived as a means to access employment, a social status, and entered into a vision in which the farmer and his family were actors in local social dynamics. This was not without effect since today's breeders are mostly farmers from the commune, who settle in the context of family transmission and benefit from dense local social networks based on family and profession. However, these days they often distance themselves from the land policy that is still in effect at the departmental level, which consists of advocating moderate expansion, land sharing among farmers to allow many professionals to remain and young people to settle. In fact, as in other urban peripheries, there are predominantly expansion trajectories with rented land, leading to the creation of large farms. These strategies are the result of a flexible relationship to land among livestock breeders who, in a way, manage to emancipate themselves from the land doctrine, of the departmental farmers' union, in order to better resist the land constraints of the peri-urban area.

As for horticulturists, they traditionally opted for a strategy of "delocalization," but some of them now advocate "professional anchoring." In 1966, an ambitious operation to relocate vegetal activities from the city's suburbs radically transformed the conditions in which these activities were carried out: a vast agricultural area was developed 30 km from the city to accommodate vegetal activities that were hindering urban expansion. More than 200 ha of land historically dedicated to vegetal production have been reclaimed by the city. Particularly marked by this experience, which makes the relocation of farms a reference scenario for thinking about land strategies, horticulturists today adopt two different relationships to land. Some of them are in line with the strategy of relocating local horticultural farms, while others, on the other hand, defend a spatial anchoring of their activities. They justify this deviation from the relocation frame of reference by a more territorial interpretation of the economic dynamics of horticultural activities: the relocation of companies would constitute a risk of

destructuring the horticultural basin. Moreover, this “professional anchoring” is based on a desire to defend a communal horticultural “identity” and on the rejection of certain urban extension projects in their commune.

This historical detour shows that land strategies are evolving. They cannot be understood only as individual adaptive responses to peri-urban contexts. They are part of cultural and political processes that transform local conceptions of the right relationship with land and set dominant conceptions in local political projects. In the recent period, this evolution of farmers' conceptions of their relationship to land is articulated with the emergence of mobilization scenes in which the challenges of maintaining agricultural land use are debated. *Coline Perrin* and *Adrien Baysse-Lainé* have shown how the definition and implementation of local government land policies can promote or disqualify farmers' land strategies (Perrin and Baysse-Laine 2020). Beyond these instituted scenes, we can identify three types of social scenes that produce judgments on land strategies: peer discussions, moments of openness to other social groups, and moments of institutional work.

Peer discussions, moments for the promotion of territorial, and professional belonging

Peer-to-peer dialogues help shape the technical culture and farmers' judgments about what should be done (Darré 1996). However, with respect to land, the choices of whether to acquire, lease, or sell land; whether to expand or not; or whether to intensify practices or activities are not usually discussed among local farmers. This taboo manifests itself in local meetings through refusals to discuss agricultural land issues, justified either by the fact that land practices are part of individual or even private strategies, or by a retreat behind established standards: since institutional positions are adopted by departmental agricultural unions, the discussion of land tenure standards by local farmers without a professional mandate would not be legitimate. The avoidance of this discussion among peers is linked to the competition that most farmers feel on the land market. However, if these farmers do not discuss their own land decisions, they can still speak about third party projects. This is what happens when the intermunicipality, a “non-farmer,” or farmers outside the area seek to lease or acquire land. Farmers within the area who are asked by the administration to formulate an opinion within the framework of land market control mechanisms are then opposed to this entry of new players on the market. The reasons given are less a matter of judgment on the development or characteristics of the applicants' farming structures than of criteria relating to their territorial and professional belonging. The facts of being local and a professional farmer remain the two essential conditions for the legitimacy of access to land within the local agricultural worlds. Farmers who develop strategies of “professional anchoring” and “flexibility” are promoted among their peers, whereas new entrants, who are part of “hedonistic” and “patrimonialization” strategies, are disqualified.

The conceptions that underlie the land strategies in the agricultural worlds of the region are only marginally constructed within peer discussions. They are much more sensitive, in their evolution, to the confrontation between the agricultural profession and the peri-urban world, either in a face-to-face confrontation with other social groups

or within the framework of institutional work. Let us examine these two moments in succession.

Engaging with inhabitants to “anchor” agriculture within the territory

Moments of access to local social groups contribute to the transformation of conceptions relating to land⁴. This is illustrated by the analysis of mobilizations in a commune in the south of the urban area where horticulture is the main activity. From 1995 to 2002, the leaders of communal associations for the defense of the living environment were at the head of the municipality. The local debate then focused on the opposition to an intercommunal bypass project. The new mayor mobilized a local professional leader, the president of a horticultural cooperative, as part of the municipal team. He instructed him to involve horticulturists in the municipal project to defend the “rural” living environment of the municipality around a central argument: if the ring road is built, the horticultural zone will eventually be urbanized. A community of interested parties is therefore structured around the challenge of avoiding the bypass and preserving the horticultural zone. While strong tensions had previously divided communal horticulturists, pitting cooperative horticulturists against commercially independent horticulturists, this land issue brings them together. The leading horticulturist forms a communal horticultural think tank that works closely with the municipality. Hobby farmers are excluded, as are horse owners and horticulturists, who openly defend a strategy of “relocating” their activities. The fact of being a native of the municipality, being a professional farmer, and participating in the defense of the maintenance of horticultural activity on the territory is therefore the basis for belonging to a local professional community. At the same time, local residents’ associations for the defense of the living environment are very active. The dual membership of producers in a municipal agricultural think tank and in the residents’ association, by linking agricultural issues and urban planification, contributes to reinforcing “professional anchoring” and the disqualification of “relocation” strategies within the professional group. In fact, these issues are dealt with in a permanent dynamic that articulates the integration of farmers into heterogeneous discussion groups, followed by work between peers on specific and diversified modes of action, such as the organization of a local festival to promote their activities and products or the renovation of a communal irrigation network and the defense of agricultural land. The initiative for professional reflection and its orientation are the product of the residents’ movement of opposition to the development projects carried out by the city center and of major support from the mayor of 1995–2008. Reflection on the future of local agriculture is therefore largely informed by the views of inhabitants or elected officials. In a local context where the two land strategies of “professional anchoring” and “relocation” coexist, the mobilization of horticulturists and residents is part of the movement described above to promote “professional anchoring” in the local professional culture.

⁴ The evolution of professional culture is of the same type in horticulture and animal husbandry worlds. The choice of the cases presented here is strictly editorial.

Promoting “flexibility” through land devices

Institutional negotiations at intermunicipal level also have a major influence on the evolution of land conceptions. In the world of animal husbandry, these institutional scenes legitimize the development of a “flexibility” strategy. We will illustrate this here by the development of a procedure of agricultural land reserves, which consists of the intermunicipal administration acquiring agricultural land alongside the future urban projects. The purpose stated by the community is to allocate them as compensation to farmers losing land at the time of an urbanization project. This consists in facilitating the implementation of flexible land management: farmers are supported in the relocation of cultivated plots, according to the urban projects. The implementation of this new procedure assumes that the intermunicipality obtains the support of local professional leaders, influential within *SAFER*⁵, which has the power to allocate land. However, acceptance is not self-evident: farmers fear that the community will eventually urbanize this land; they perceive this system as a divestment by farmers of their ability to control the land (Barral and Pinaud 2015); and finally, this implies recognizing that peri-urban land management, by strengthening existing farmers, deviates from the departmental agricultural doctrine that systematically favors settlement. The first land reserve of this type was implemented in 2007, following a process of institutionalizing the relationship between intercommunality and the agricultural profession that lasted nearly 10 years. This process began with the consultation or co-development of projects between institutions (urban development project, land charter); by the initiation of joint work between *SAFER*, the Chamber of Agriculture, and the local authority on various legal tools for land management, including land reserves; and finally, by the establishment in 2006 of an inter-communal agricultural commission under the aegis of the Chamber of Agriculture and the majority farmers' union. This commission makes it possible to mobilize local farmers to collectively formulate opinions on inter-communal projects. During this period, opportunities for work between agents and officials of the intermunicipality and the profession multiply. This leads to the construction of a peri-urban land reference frame that irrigates these different institutional productions. It has four major ambitions: to maintain a significant capacity for intervention by local authorities in the land market, to implement urbanization in such a way as to preserve agricultural activities, to facilitate the maintenance of certain agricultural activities and practices, diverse but chosen, and finally, to focus on the challenge of strengthening farms. This institutional learning process reflects both the shared desire to keep farmers on the land and the difficulty of guaranteeing for everyone the maintenance of their land in the medium or long term. In this respect, the land reserve procedure is an example of institutional innovation that legitimates and frames the emergence of the “flexibility” strategy.

Conclusion

As others before us, we describe differentiated land trajectories by trying to identify and name the strategies that underlie them: flexibility, professional anchoring,

⁵ Land Allocation Commission

patrimonialization, hedonism, and, we must add, delocalization. These strategies intersect with three major types of trajectories described in the literature on peri-urban agriculture: horizontal growth (which can be associated with “flexibility”), vertical growth via differentiation or diversification (which is similar to “professional anchoring”), and the decline of activities (which is similar to the “patrimonial” strategy) (Duvernoy et al. 2018; Inwood and Sharp 2012; Wästfelt and Zhang 2018). Let us highlight here two singular features of our results. “Flexibility” is particularly significant, which seems to be explained both by the provision of precarious spaces at low cost by the municipality (Cavaillès and Wavresky 2003) and by the release of land by farmers on their way out of agriculture. As for “delocalization,” which we were unable to analyze under the same conditions as our four identified strategies, it turns out that the work on peri-urban agriculture says little about it, and it is clear here that it would be useful to better document it, if only because it seems, as we show, to be in the process of disqualification.

Our approach has been to link the different land strategies with the types of production: the farmers’ trajectories show a strong inertia in their production choices since their installation, and it is indeed on the basis of these initial production choices that farmers conceive their land practices. These land strategies are also strongly correlated to the way farmers situate themselves in a specific peri-urban land context. There is a great deal of uncertainty about the mechanisms of the land market itself, where the number of agents likely to be involved is numerous and heterogeneous. This is difficult to predict. This uncertainty acts differently depending on the productive world: it tends to encourage horticulturists to acquire land and livestock farmers to expand by renting it out. Finally, like Inwood and Sharp (2012), we show that the prospect of passing on the farm interferes with the farmers’ trajectories and even that sometimes the patrimonial attachment to the family farm is a major vector of installation and conditions the forms of development of the farm afterwards. In other words, land strategies are complex and are part of plural rationalities that must be arbitrated between the objective constraints of production, those of the entrenchment of the agricultural market in the peri-urban market with its share of opportunities and limits, but also those generated by the will to pass on, which depends as much on the family project as on attachment to heritage values.

Our work also aims to follow the evolution of the place of farmers in local social and political spaces. The analysis of strategies and the observation of the forms of local engagement by farmers shows they develop local social resources of a different nature, which they use to develop their strategies. This is the case of horticulturists, who, by forging close links with elected officials and inhabitants, manage to influence urban planning choices and strengthen their “professional anchoring” strategy. It is also the case of livestock farmers who, by cultivating close social relations between peers, with landowners and with professional officials involved in land allocation commissions, manage to reserve access to free agricultural land, thus reinforcing their “flexibility” strategies. In the struggle to defend access to the land of professional farmers, the founding of “trusting social support” has a decisive role (Ackermann et al. 2013; Barral and Pinaud 2017; Sharp and Smith 2003) and takes contrasting forms depending on the land strategies adopted.

Whether it is to oppose urban planning projects or to contribute to local political choices, farmers debate, between themselves and inhabitants or elected officials; new

alliances are established at different scales. As we have said, these commitments reinforce land strategies, but at the same time they help to transform a local professional culture (Nguyen and Doo-Chul 2019) and produce institutional rules and projects relating to land. In other words, these commitments contribute to the transformation of a local agricultural land reference frame (Muller 1984; Thareau 2011). This reference frame promotes the maintenance of agriculture on the territory through the preservation of spaces and the reinforcement of existing farmers, where, 50 years earlier, local councilors aimed at relocating horticultural activities and limiting the expansion of farms to allow settlement.

However, in spite of strong investment by professional and local institutions in the supervision of agricultural land dynamics, one can only emphasize the fact that these institutional frameworks have been distanced from the farmers' land considerations. This is reflected in their insistence for private or individual land choices and in the adoption of land practices which, although they refer to relatively shared values, are nonetheless diversified (Bertrand et al. 2006).

This diversity of land strategies has, however, in our case study, the particularity of sharing the same value of belonging to the territory. The observation over 15 years or so of the different moments of debate on land issues, whether instituted or not, in conjunction with neighbors and local elected officials, shows an evolution of land strategies. "Flexibility" and "professional anchoring" are emerging (or are promoted), while the choice to relocate one's farm, an option accepted in post-war modernization, appears at best to be in decline, or even to be a figure of professional failure. Through these displacements, certain boundaries between local agricultural worlds are becoming blurred. Breeders and horticulturists find themselves around a promoted value: the attachment to the territory, the will to anchor their activity and social life to the locality, and keep their family life there. Beyond its traditional, patrimonial, and productive functions, access to land becomes again a condition and a marker of belonging to a local community (Lamarche et al. 1980). This process marks an attempt to reinvent what it means to be a farmer in changing peri-urban communities. By affirming values of attachment and commitment to their territory, farmers are beginning a double movement of cultural rapprochement with influential local social groups (Sencebe 2004) and legitimizing their access to land. We can detect an ethical, maybe territorial posture which seems to borrow from both traditional values of family farming and the integration of roles proposed, more than assigned, by third parties, elected officials, and inhabitants, within the framework of mixed dialogue spaces. The social scenes, where conceptualization and values that guide farmers' strategies are forged, are therefore now composite, and the resistance, against which farmers are forced to preserve their working tools in the peri-urban environment, is also a source of reconstruction of their common social world, particularly challenged by the market and the competition it brings.

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Data availability The data are mainly verbatim of interviews. Given the monographic nature of the research, the interviews cannot be anonymized. The data are therefore not available.

Declarations

Conflict of interest The authors declare no competing interests.

References

- Ackermann, G., Alavoine-Mornas, F., Guéringier, A., Léger, C., & Melot, R. (2013). Propriétaires et agriculteurs périurbains : pratiques contractuelles et stratégies contentieuses. In N. Bertrand (Ed.), *Terres agricoles périurbaines. Une gouvernance foncière en construction* (pp. 219–234). Quae: Versailles.
- Barral, S., & Pinaud, S. (2015). Les agriculteurs, maîtres tenaces de l’accès à la terre. Les impasses de la politique foncière française contemporaine. *Mouvements*, 84(4), 64–72.
- Barral, S., & Pinaud, S. (2017). Accès à la terre et reproduction de la profession agricole. Influence des circuits d’échange sur la transformation des modes de production. *Revue Française de Socio-Économie*, 18(1), 77–99.
- Bertrand, F. (2013). L’institutionnalisation locale des politiques climatiques en France. In F. Bertrand & L. Rocher (Eds.), *Les territoires face aux changements climatiques. Une première génération d’initiatives locales* (pp. 25–71). Bern: Peter Lang.
- Bertrand, N., Souchard, N., Rousier, N., Martin, S., & M-C, M. (2006). Quelle contribution de l’agriculture périurbaine à la construction de nouveaux territoires : consensus ou tensions? *Revue d’Economie Régionale et Urbaine*, 3, 329–353.
- Bessière, C., De Paoli, C., Gouraud, B., & Roger, M. (2011). Les agriculteurs et leur patrimoine : des indépendants comme les autres? *Economie et statistique*, 444–445, 55–74.
- Bryant, C. R., & Johnston, T. R. R. (1992). *Agriculture in the city’s countryside* (233 p). London: Belhaven Press.
- Candau, J., & Rémy, J. (2008). Sociabilités rurales. Les agriculteurs et les autres. *Etudes rurales*, 183, 83–100.
- Cavaillès, J., & Wavresky, P. (2003). Urban influences on periurban farmland prices. *European Review of Agricultural Economics*, 30, 333–357.
- Ciaian, P., Kancs, D. A., Swinnen, J., Van Herck, K., & Vranken, L. (2012). Key issues and developments in farmland rental markets in EU member states and candidate countries. *Factor Markets working paper*, 12, 1–34.
- Darré, J. P. (1996). *L’invention des pratiques dans l’agriculture* (194 p). Paris: Karthala.
- Duvernoy, I., Zamboni, I., Sateriano, A., & Salvati, L. (2018). Pictures from the other side of the fringe: Urban growth and peri-urban agriculture in a post-industrial city (Toulouse, France). *Journal of Rural Studies*, 57, 25–35.
- Fleury, A., Moisan, H., & Jegou, C. (1996). Situation et avenir des exploitations maraîchères de l’ouest parisien. *Cahiers d’études et de recherches francophones / agricultures*, 5, 71–76.
- Godelier, M. (1984). *L’idéel et le matériel*. Paris: Fayard.
- Guéringier, A. (2008). “Systèmes fonciers locaux”: une approche de la question foncière à partir d’études de cas en moyenne montagne française. *géocarrefour*, 83(4), 321–329.
- Guéringier, A., Perrin, C., & Barthes, C. (2017). Tensions sur l’espace agricole : quand les enjeux fonciers réinterrogent le rapport entre propriété et usage. *VertigO - la revue électronique en sciences de l’environnement*, 17(1).
- Hervieu, B., & Purseigle, F. (2013). *Sociologie des mondes agricoles* (318 p). Paris: Armand-Colin.
- Houdart, M., Loudiyi, S., & Guéringier, A. (2012). L’adaptation des agriculteurs au contexte périurbain. Une lecture des logiques agricoles à partir du cas de Billom-Saint-Dier (Auvergne). *Noréis*, 224(3), 35–48.
- Inwood, S. M., & Sharp, J. S. (2012). Farm persistence and adaptation at the rural–urban interface: Succession and farm adjustment. *Journal of Rural Studies*, 28(1), 107–117.

- Jarrige, F. (2003). Les enjeux pour l'agriculture dans les territoires périurbains de Montpellier. In M. Elloumi & A.-M. Jouve (Eds.), *Bouleversements fonciers en Méditerranée. Des agricultures sous le choc de l'urbanisation et des privatisations* (pp. 113–143). Montpellier: Karthala - CIHEAM.
- Jouve, A.-M., & Napoleone, C. (2003). Stratégies des agriculteurs et réorganisations spatiales sous contrainte de la périurbanité. Etude du pays d'Aix en Provence. In M. Elloumi & A.-M. Jouve (Eds.), *Bouleversements fonciers en Méditerranée. Des agricultures sous le choc de l'urbanisation et des privatisations* (pp. 145–171). Montpellier: Karthala - CIHEAM.
- Lamarque, H., Rogers, S. C., & Kamoouh, C. (1980). *Paysans, femmes et citoyens. Lutttes pour le pouvoir dans un village Lorrain*. Le Paradou: Actes Sud.
- Léger, C., & Alavoine-Mornas, F. (2013). Les logiques foncières des agriculteurs dans un contexte périurbain : subir ou réagir? In N. Bertrand (Ed.), *Terres agricoles périurbaines* (pp. 199–218). Quae: Versailles.
- Levesque, R., Liorit, D., & Pathier, G. (2011). Les marchés fonciers ruraux régionaux entre dynamiques des exploitations agricoles et logiques urbaines. *Economie et statistique*, 444–445, 75–98.
- Muller P. (1984) Le technocrate et le paysan, *Economie et humanisme*.
- Nguyen, Q., & Doo-Chul, K. (2019). Farmers' landholding strategy in urban fringe areas: A case study of a transitional commune near Ho Chi Minh City, Vietnam. *Land Use Policy*, 83, 95–104.
- Olivier-Salvagnac, V., & Legagneux, B. (2012). L'agriculture de firme : un fait émergent dans le contexte agricole français? *Etudes rurales*, 190, 77–97.
- Perrin, C., & Baysse-Laine, A. (2020). Governing the coexistence of agricultural models: French cities allocating farmlands to support agroecology and short food chains on urban fringes. *Review of Agricultural, Food and Environmental studies*, 101, 261–286.
- Sarrazin, F. (2016). *La construction sociale des bassins de production agricole. Entre facteurs de coordination et liens de coopération* (166 p). Versailles: éditions Quae.
- Sencebe, Y. (2004). Etre ici, Etre d'ici. Formes d'appartenance dans le Diois (Drôme). *Ethnologie Française*, 34, 23–29.
- Sharp, J. S., & Smith, M. B. (2003). Social capital and farming at the rural-urban interface: The importance of nonfarmer and farmer relations. *Agricultural Systems*, 76, 913–927.
- Sharp, J. S., & Smith, M. B. (2004). Farm operator adjustments and neighboring at the rural-urban interface. *Journal of Sustainable Agriculture*, 23(4), 111–131.
- Soulard, C., & Thureau, B. (2009). Les exploitations agricoles péri-urbaines : diversité et logiques de développement. *Innovations Agronomiques*, 5, 27–40.
- Thureau, B. (2011). *Réguler l'accès à la terre, la réinvention locale du corporatisme agricole*. *Sociologie Thesis* (397 p). Nanterre: Paris-Ouest.
- Vianey, G. (2005). Entre conception de l'exercice du métier et représentation de l'activité agricole en péri-urbain : esquisse d'une analyse des logiques foncières. *Les Cahiers de la multifonctionnalité*, 8, 105–114.
- Wästfelt, A., & Zhang, Q. (2016). Reclaiming localisation for revitalising agriculture: A case study of peri-urban agricultural change in Gothenburg, Sweden. *Journal of Rural Studies*, 47, 172–185.
- Wästfelt, A., & Zhang, Q. (2018). Keeping agriculture alive next to the city – The functions of the land tenure regime nearby Gothenburg, Sweden. *Land Use Policy*, 78, 447–459.