

Article

Perspectives of Livestock Farmers in an Urbanized Environment

Ángel Paniagua

Consejo Superior de Investigaciones Científicas CSIC, C/Albasanz n. 26-28, 3D22, E-28037 Madrid, Spain; E-Mail: angel.paniagua@csic.es; Tel.: +34-9122-2546

Received: 31 October 2013; in revised form: 10 December 2013 / Accepted: 16 December 2013 /

Published: 20 December 2013

Abstract: Agriculture and its conflicts is a traditional debate in contemporary rural geography, associated with the organization and transformation of cultural landscapes by social groups. One of the most important areas of research is the perspectives and responses of farmers on the urban-rural fringe. The problems associated with land use change and the varying influences on new uses of traditional landscape introduce renovating and permanent elements to the management, responses and perspectives of farmers: extensification, changes in the organization of farm, relocation, *etc*. The purpose of this research is to analyze the conflicts, key responses and perspectives over farmland uses and their coexistence with the main dynamics of local and regional land use governance in the metropolitan rural area of Madrid, Spain. This contribution presents the main results of an empirical research in a key area in the north of the Madrid region: the municipalities of Colmenar Viejo and Tres Cantos. The methodology is mainly qualitative, based on an ethno geographical approach concerning livestock farmers directly affected by the urbanization process. The main results reflect the relevance of local politics and the individual livestock farmers' strategies.

Keywords: urban-rural fringe; rural geography; farmers; landscape change; Spain

1. Introduction

One of the goals of rural geography has been to study farming activities in different spatial contexts. Traditionally, it has focused on farming in rural areas with low-density population. Parallel to the process of urbanization in western countries, it has begun focusing more on farming close to urban areas, and especially on farmers who develop their activity on the urban-rural fringe [1,2]. As Hoggart indicates [3], until very recently, the area next to the constructed urban space has been largely ignored

in rural geography or by rural studies in general, and studies that do exist tend to focus on the limitations of the land use.

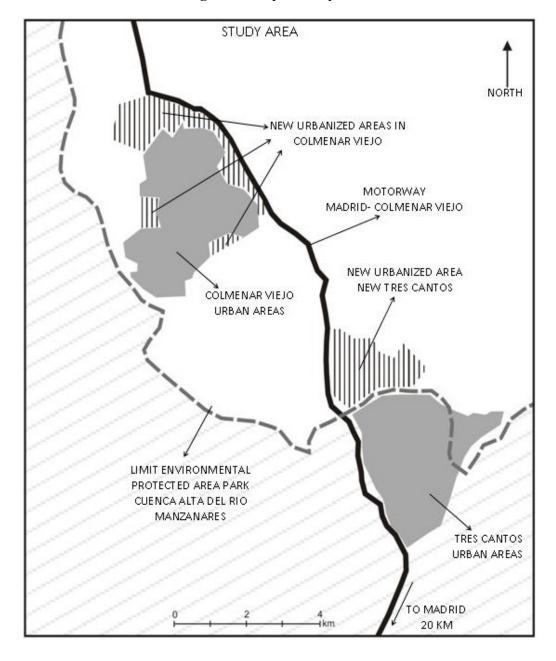


Figure 1. Map of study area.

In any case, more attention is currently paid to rural areas *directly* under urban influence or pressure [1]. Urban pressure only has significant repercussions for livestock farmers located immediately on the urban-rural fringe [3]. A restricted spatial area is associated with farmland resistance, urban land use changes or developable land. However, not all farmers in this same situation have a similar point of view about urbanization processes in rural areas and one should, therefore, not expect equal or equivalent responses to the urbanization or transformation of the rural space. Because of the variety in the farmers' responses, the impact of the restructuring processes on the urban-rural fringe can vary greatly in small areas [2]. Only by studying the different perspectives in relation to

urbanization and rural change in areas close to the constructed space, effective strategies can be developed and implemented among the communities of affected farmers.

The limit between urban and rural areas cannot be understood as a border 'in between' two material ladscapes, with contrasting and rigid sociocultural realities—the countryside and the city—but rather as an area that undergoes continuous processes of response and reconfiguration, of a renewing and permeable identity [4]. Therefore, the study of livestock farmers in these areas must include both urban and rural perspectives.

In these areas, changes in the urban-rural limit can be: (a) perceived through transformations in the material landscape; (b) representations or views of the landscape constructed by different social groups or types of livestock farmers; (c) generated through the local politics of landscape, mainly by successive changes in the municipal planning that tend to orientate the conceptualization, use and future perspectives of the rural landscape.

Changes in the material landscape—mainly associated with transformations in land use—are usually perceived differently by the agents in one local community and generate a social debate that expresses the specific power structure in a community and their environmental objectives [5]. When the farming activity and its cultural landscape (which may be valued because of cultural associations with the natural elements) are considered within the context of local power relations, livestock farmers become a subject of sociopolitical dispute, especially in relation to processes of urban sprawl.

In this context, the aim of this contribution is to analyze the responses, strategies and future outlooks of livestock farmers, as well as the permanence of the place, directly affected by processes of urban sprawl and landscape changes in a selected area, localized in the northern metropolitan area of Madrid (Spain): the municipalities of Colmenar Viejo and Tres Cantos (Figure 1).

2. Farmers at the Limits of the City

In areas of continuous urban development, livestock farmers living and working immediately on the urban-rural fringe face certain problems. In these areas, in addition to managing their farms, the variability in the price of their products or subsidies from farming policies, there is also considerable insecurity in relation to the future of the space and the rural landscape. Transformation of the landscape and its change in land use, whether this is immediate or forecast for the future by planning, condition the professional and personal perspectives and responses of livestock farmers. Generally, this change in land use resulting from urban expansion does not affect all livestock farms, but just some parts of farmers' land. It does, however, increase insecurity in relation to the tenancy of the land and limitations in the availability and use of the rural space [6].

The geographical debate has often focused more on periurban farming—a vague category and in permanent academic dispute in the global North and South [3,7,8]—than on farmers who are directly affected by urban development, or ones located immediately on the urban-rural fringe; a much more limited group both spatially and socioeconomically. For this reason, there are very few and only fragmented specialist studies in the literature about this professional group. As Professor Bryant [9] suggests: "In research on urbanization-agriculture interactions, little attention has been paid to variation in farmers' evaluations of the potential urbanization forces or the strategies adopted". It is clearly a very limited geographical area, affected by processes of consumption, and the concentration

of conflicts of interests in one place. However, this change of land use in the immediate proximity of the urban-rural fringe is variable in duration and intensity [10], depending on local characteristics such as local institutional structures or land use planning policies.

Social interests and the ideology underlying them are expressed in the local environment. This is also the setting for complex interactional processes between the community and processes of spatial planning [11]. As Bryant [12] explains, urban expansion generates a range of factors that may affect, in different forms, agricultural land use practices. These include, among others, increasing taxation of farmland in developable land, rural fragmentation, and an atmosphere of general instability. It is in this sense that Allen [13] suggests the notable complexity of urban interface with rural areas, associated with the multiple traditions derived from categories like urban, rural, local, regional or environmental. The geographical words rural or urban need a (re)qualification in the context of their common limits [14], with some clear differences or visions between the global South and North. The adaptive strategies observed in recent study cases from the farmers in the city-rural borders [15] remark the lack of capacity for other types of responses and the acceptation of a clear irreversibility of the processes of urbanization. In any case, the traditional family farm approach is difficult to accept [16].

In this context, livestock farmers may not play an important role in these areas and their interests may be considered as secondary. Their professional interests are affected by agrarian policy, but also by local or regional land use policies, or environmental policies [17]. As noted by Tacoli [18], local governments can play a relevant role in supporting positive urban-rural linkages, with a clear identification of needs and priorities in the whole of agents and actors. Local policies significantly affect their activity and are often decisive for the continuity of the livestock farm. The farmers are frequently not the ones responsible for preserving the livestock farms in the immediate area of the urban-rural fringe [19]. In the best of cases, this is part of environmental, planning or land use debates. It constitutes a point of convergence between urban planning and the negotiation of traditional land uses and, ultimately, between the regional authorities and local communities [17]. This is the case of the Madrid region, Spain, where values of the rural landscape have not been attributed much importance in the regional planning [20]. Even in cases of conflict in relation to conservation of the rural landscape, where the farmer could play a more important role, this is limited to conservation of the agricultural land. Usually, geographical perspectives based in consumption prevail, mainly orientated towards consumption of the space associated with a change in land use for the purpose of aesthetic-scenic or recreational conservation. Traditional views or discourses from a productive (farming) perspective are often secondary, and partially lost among interests linked to land use and conservation of the landscape. Frequently, continuity in production (farming) is a consumption activity. Farmers immediately on the fringe are a "symbolic product" for urban populations, situated in a context of the urban-rural relationships of the landscape [21].

3. Methodology

As explained in the literature, the processes of change at the urban-rural fringe are usually small in scale and combine a series of individual decisions guided by local and regional regulations. Hence, the scope and depth of the processes of change derived from urban-rural dynamics can be variable even in local areas [2]. Because of this, it was recommendable to investigate these processes in representative

local areas. We consider exclusively livestock farmers situated in the immediately the building urban-rural limit and affected directly by processes of land use change and urban sprawl [3]. The methodology used here combines documentary analysis with in-depth interviews of livestock farmers selected from a delimited space to the north of Madrid, composed of two municipalities (Figure 1):

- (a) The documentary analysis was based on a systematic review of the urban development plans of the municipalities of Colmenar Viejo and Tres Cantos in the Madrid province. The purpose of this analysis was to determine the amplitude of urban development processes, their repercussions on the landscape and on the most important traditional activities, especially on livestock farming. Moreover, a systematic review of the local or regional newspapers and magazines from 2003 (information sources used in previous studies) [1] was conducted, which revealed the existence of a clear debate about urbanization of the rural environment, transformation of the rural landscape and the problems for traditional farming activities. The following magazines and newspapers were consulted: "Gente En Madrid, Norte Noticias, La Nueva Guía Informativa, Diario del noroeste, Boletín Tricantino, El Correo Norte y Tres Cantos. Boletín Informativo Municipal".
- (b) The qualitative methodology was based on an in-depth interview with a geo-ethnographic approach of a number of livestock farmers representative of the area, whose farms had been directly affected by urbanization process. The selection of livestock farmers—beef livestock farm, the predominant stock in the study area—is based in a previous field work in the research area and one preliminary meeting with managers of the livestock farmers association. The research approach was clearly based on previous rural geography studies, which attempts to include ethical considerations about the place and landscape [22]. Some recent contributions in this research area remark the irrelevance of statistical data and suggest a micro geographical approach, founded in qualitative analyses in close zones [23]. By using this approach, it was possible to include voices that are usually marginalized from the micropolitical debate and incorporate them into a more immediate context [24]. It also permits the reconstruction of spatial and social microidentities in settings of pronounced changes on the urban-rural fringe [25].

During the months of June and July 2013, a total of eight interviews of one hour's duration were conducted with livestock farmers of variable age, dedication to livestock farming and size of the livestock farms, in addition to a visit to each farm. All professional livestock farmers in the area are situated in 50. CommentsThe interview scripts covered a range of issues: biography, changes in farm management, changes in rural landscape, opinions about the urbanization process and social importance of the livestock farmer. The aim of the questions was to investigate strategies for permanence in the place in a context of significant landscape changes, by studying socioeconomic, but also moral and ethical aspects [26], and renewed identities in the place [4], articulated as individual responses and outlooks for the future [27]. Extensive field work was also carried out with the purpose of verifying the social and territorial information provided in the interviews.

All professional livestock farmers present three main orientations by age and farm: (a) older livestock farmers without a clear family succession and a strategy based on the progressive reduction of farm size, with 30–45 heads of livestock (four interviews); (b) adult mature livestock farmers (40–50 yr) with a strategy of keep the farm—with 75–90 heads of livestock—for professional and

moral reasons (three interviews); (c) one adult mature livestock farmer with a strategy to keep the farm and with the largest livestock in the area, consisting of 220 heads of livestock.

4. Case Study

As mentioned previously, the study area covers the municipalities of Colmenar Viejo and Tres Cantos, both located in the metropolitan area in the north of the Madrid region. Until 1991, they were both part of the same municipality covering a total of 22,000 ha.

Case Study: Colmenar Viejo and Tres Cantos

The municipality of Colmenar Viejo is the third largest in the Madrid region and currently covers an area of 182.6 km² (18,260 ha). At the end of 2011, it had 46,500 inhabitants (inhab.) and until the 1970s its population increased, characteristic of a municipality barely affected by immigration. In 1900, it had 5,255 inhab.; in 1960, 8,375 inhab.; and between 1970 and 1981 its population almost doubled (12,910 inhab. in 1970 and 21,159 in 1981) (National Statistical Institute, historical data series). This growth continued between 1981 and 2011 as it became consolidated as an area of attraction for the urban population. This population expansion accelerated from the first decade of this century owing to ambitious urban planning and the construction of thousands of dwellings to be occupied in the present decade.

The municipality of Colmenar Viejo, in its geographical context, has a strong tradition of livestock farming [28], with an increasing specialization in extensive cattle farming, which has helped to structure the landscape. Currently, there is almost no professional farming in the area in benefit of livestock farming. There is also some tradition of raising bulls for bullfighting, with some farms becoming renowned for this activity.

The municipality of Tres Cantos is situated 20 km from Madrid. It is a new town, which received its first inhabitants in 1982 [29]. During 1991 it became separated from the municipality of Colmenar Viejo, to cover an area of 3,800 ha. Tres Cantos is a new town that arose in the historical "years of developmentalism" [30], to help satisfy the continuous growth of the Madrid population. Within the context of a series of plans to counteract the overcrowding of Spanish cities, it was planned as a comprehensive and self-sufficient town. It was initially planned for 150,000 inhab. (36,500 dwellings), but was later reduced to 40,000 inhabitants and 10,000 dwellings. It was built in 1982, and 10 years later had a population of around 22,000 inhab., to reach 41,000 inhab. in 2012 (Table 1). After completing the proposed development, an area of urban expansion called Nuevo Tres Cantos covered an area of 329 ha, which increased the existing population by 50%—to 67,000 inhab.—and the area of urban land built on increased by 30%. This also corresponded to the start of a steady long-term process of urbanization of the north and northeast of Tres Cantos, clearly reflected in the Nuevo Tres Cantos development plans (Figure 1). The repercussions of this urban development have already created tension in the area, as an increasing area of currently non-urban land, close to the constructed urban nucleus, is steadily being purchased by estate agents.

Table 1. Population in Colmenar and Tres Cantos (1996–2012). Source: National Statistics Institute, Spain.

Municipalities	1996	2001	2006	2012
Colmenar Viejo	28,328	34,194	40,878	46,321
Tres Cantos	27,715	36,598	39,826	41,302

In both municipalities, the increase of population is supported by new residents from Madrid city or other metropolitan cities (around 70%) [29,30].

Local and Regional Planning

On the immediate urban-rural fringe, conflicts are expressed and channeled through local land planning [21]. Planning is used to define categories such as countryside, nature and rurality and to fuse together ideologies of the rural landscape [21]. In the case study, local and regional planning clearly shows the transition of farmland into urban uses. That is why it is important to study the perspective of the livestock farmers and the rural landscape in the land use plans of the two municipalities studied, as they constitute the main micropolitical negotiating framework.

(1) Tres Cantos municipality. In accordance with state and regional regulations, the urban development plans of Tres Cantos for 2003 distinguished three main types of land: urban land, developable land and non-developable land. For the purposes of this study, it is interesting to consider the categories of developable land and non-developable land: (a) The area of "Nuevo Tres Cantos" corresponds to developable land, where a rural area traditionally used for livestock farming has been converted into land for urban use (Figure 1); (b) The non-developable land corresponds to "...lands delimited by the General Plan as areas with objective conditions which make it recommendable for them to be protected ..." according to current legislation [31]. One of the purposes of protecting land from development is to conserve farming activities, "...especially in lands where farming yields can facilitate the sustainable development of the municipality and its territory ..." [31]. Finally, protected non-developable land is made up of "...land which, owing to its value for farming, livestock, forestry, landscape or fauna and flora, or its morphological characteristics, should be excluded from urban development, and classified as such in order to preserve its natural or productive values..." [31].

In congruence with its value and characteristics, this protected, non-developable land can mainly be found in the area of the Cuenca Alta del Manzanares National Park (Figure 1) and can be divided into: the nature reserve, the productive farming regional parkland, and the parkland in which farming is to be recovered. They also take into consideration drovers' ways, protected riverbanks and protected non-developable agricultural land [31]. The only land planning activities that can take place in these areas correspond to (re) parcelling of land. Parceling of the land, into small groups of plots, is also possible to set up installations and constructions provided that these are not exclusively for use as dwellings or, as mentioned in a rather ambiguous condition, whose function is not directly associated with exploitation of the land for farming or growing crops [31]. This has resulted in the establishment of some small illegal housing estates. Land areas situated in the Nature Reserve only permit farming or forestry activities and educational or recreational activities, while in the regional farming park, productive farming activities are allowed, especially extensive livestock farming, and the

establishment of new livestock farms or farming activities. Any new building in these areas must be associated with traditional productive farming uses, such as livestock farming [32].

The land development plans of 2003 preserve space to be used only for farming activities, and implemented measures to foment the sustainability of this livestock landscape. These plans also restricted large urban development projects, which were limited to the Nuevo Tres Cantos operation. This conferred a degree of stability to the urban-rural fringe, as an area with multiple land uses. Local policies assigned a value to the entire rural place. However, left-wing politicians described a growth of the city for which no "limits" were being imposed [33].

After this time, the classification of protected non-building land for farming use is not acknowledged by the regional authorities, as it does not clearly show the values to be protected. Hence, at the beginning of 2013, the council commissioned a report on the values for land protection in Tres Cantos from the Empresa Municipal de la Vivienda (Municipal Housing Company of Tres Cantos). On the basis of this report, local authorities acknowledged that some of the non-building land protected for farming use was not actually being used for that purpose or, owing to its location, could be used for other purposes. This was particularly relevant in areas of considerable human pressure, or with infrastructure of little attraction or relevance for agriculture. A new classification system was proposed for non-developable land for agricultural protection, which was then referred to as non-sectored developable land, and the classification of protected non-developable land was only reserved for riverbanks or rights-of-way, areas considered to be of the highest ecological value. A proposal was also made to use the system of traditional farming tracks and pathways for the purposes of the general road network [31].

In other words, land initially conserved for farming use, based in the quality of the landscape and, especially, in the large amount of urban land not effectively developed in the area of Nuevo Tres Cantos (329 has for 5,775 new dwellings); has been converted into developable land—associated with a right changes in land uses—over an uncertain time horizon (Figure 1). This change in land use from non-developable to developable endangers the already significantly diminished farming activity in the municipality. The traditional farming landscape is merely land awaiting development and a change of land use. Hence, all the land becomes a speculatable commodity, and the traditional farming activity becomes increasingly residual.

The change from a farming model of a rural environment to an urban situation is being promoted, where the more conventional character of the livestock farmer has been converted into another more temporary one, and outlooks are dominated by insecurity in relation to the future tenancy of the farming land. Ultimately, there has been a change in philosophy and perspective from rural to urban, based on a devaluation of the agricultural landscape. This has also produced sociopolitical tensions and conflicts owing to the urbanization of the rural land nearest to the urban areas. The change in land use is also encouraged by the advantageous sales conditions of the previously non-urban land, under a formula of "agreed expropriation", in which the land owners recover a building potential of 40% on the resulting developable land [34]. This has benefited many of the farmers affected and has softened the social impact of the change in land use. This urbanization of previously non-urban land and livestock farms began at the end of 2004 and continues today [35].

(2) Colmenar Viejo municipality. In the case of the municipality of Colmenar Viejo, the Municipal Land Use Plan was reviewed in 2001. It proposed the urbanization of several areas around the urban

nucleus over a 12-year period, covering a total area of 267 ha (Figure 1). Non-developable areas are defined as those which "...owing to their livestock, agricultural, forestry or scenic values (...) or their morphological characteristics (...) should be temporally or permanently exempt from urban uses ..." [36]. This type of land is divided into: (1) Non-developable land used for livestock farming that does not require any special protection. This is land that, in its current condition, is unsuitable for urban development, but is not covered by any form of protection that limits a change of use in the future. This includes non-developable land currently used for livestock farming; (2) Protected non-developable land which includes areas granted protection owing to the characteristics of the territory. This mainly corresponds to the Cuenca Alta del Manzanares National Park, the drovers' historical ways and areas of archeological protection. In these areas, traditional livestock farming is permitted, especially extensive cattle farming and other recreational uses, but activities that do not promote conservation of the environment are prohibited.

Here, environmental conservation measures are important, as part of the legal declaration of the Cuenca del Río Manzanares as a Special Conservation Area [37]. In protected non-developable land, the landowners are subject to some restrictions exclusively linked to livestock farming and the conservation and maintenance of the land to prevent erosion, fires or other environmental changes. However, they are permitted to create building plots on the land, provided that the buildings are not exclusively for use as dwellings and, functionally, are not associated with exploitation of the land or the cultivation of crops. In this zone, population nuclei are considered as any new housing developments provided with basic municipal services at a distance of less than 125 m.

5. Livestock Farmers in an Urban Environment: A Qualitative Micro Analysis

Interviews with livestock farmers revealed six main key themes:

(1) Perception of the (rural) past in the place. Colmenar Viejo, in both local and regional contexts, is traditionally an area of livestock farming. From the 1970s and 1980s until today, the area has specialized in extensive beef production [28]. The statistical data and particularly the field work show that livestock farming is in decline in the area of Colmenar Viejo-Tres Cantos. There are no professional farmers left, only those who farm as a hobby. The rural landscape reflects a simplification of the farms, which are now mainly dedicated to semi-extensive beef production, in accordance with the characteristics of the land, and depend on production from their own grazing land. There are very few livestock farmers who make a living from it, numbering around 50 in Colmenar Viejo, of whom four or five also livestock farm in Tres Cantos. Part-time small holdings of individuals who also work in the town or city, or hobby or recreational farms constitute 80% of the livestock farms on the census. The situation has changed greatly since 1945–1950 when all the countryside was farmed: "... Colmenar was always a very lively farming area. All the land was tilled and shared out. Lots of people worked in the countryside. At 8 in the morning all the mules came out to till the land. One farm worker for each plot, you met them along the tracks. Now, everything has completely changed, it's really sad ..." (Bar, Col, June, 2013).

This perception of the past that idealizes rural work from a nostalgic or melancholic perspective is based to a large extent on the discourse of the livestock farmer in relation to a dying profession. The profession of livestock farmer only continues because of family tradition, inertia or vocation. The last

of a breed that in many cases goes back as far as four generations, but nearly always, at least for several generations, and which now many cattle farmers consider is coming to an end: "...People have gone from the countryside, 40 years ago there was lots of farming and many sheep. Everyone worked well. This then changed to dairy farming; there was a real craze for dairy farming 20 years ago. But then it couldn't continue because of the prices and the cost of the feed (...). The change to beef farming helped us make ends meet. I already had beef and dairy cattle, then agriculture disappeared, then the sheep farming stopped, we carried on with local breeds, then the dairy farming stopped, now we continue with beef farming to use our own grazing land ..." (Bar, Col, June, 2013). These changes have taken place over three main stages since the second half of the 20th Century: (1) first, traditional agriculture with sheep and beef farming; (2) a second stage dominated by dairy farming; (3) a third in which there was a change-over to semi-extensive beef farming, which currently dominates the entire rural landscape. This dynamic has been conditioned by the following factors: a reduction in the availability of manual workers; changes in policy farming—mainly reduction in quotas to dairy production, and subsides to livestock farming by head of cattle—associated with the successive transformations in the European Agricultural Policy; and a decrease in the amount of land available for farming uses. These themes raise concern mainly among aged livestock farmers and, in secondary form, among adult-mature livestock farmers.

(2) The influence of agricultural, local and regional policies. Livestock farmers who work on the urban-rural fringe are affected by the more sectorial agricultural policy, local or regional policies related to the territory. Judgments about farming policy are associated with the agricultural pricing policies, which have frozen some prices since 1982; so, without the subsidies, the farms would have no future. However, subsidies also make it impossible for market prices to exist, which limits the entrepreneurial capacity of the activity. The general opinion seems to be that leaving the market to operate alone, without subsidies, would benefit farming, although prices would tend to increase. This is a similar problem to the dependence on subsidies encountered in remote rural areas. Hence, farming grants tend to foment professional misrepresentation and marketing occurs through local circuits, facilitated by the designation of origin.

Regional policies are considered to be deficient compared to those of other autonomous communities in which the farming sector is given more importance. On the whole, both the regional health and environmental authorities exert too much pressure on the farmers. This generates an excessive bureaucratic workload, which often makes the farms much more difficult to manage. Parallel to this, they do not seem capable of solving the problems of illegal building developments.

Local politics have conditioned the traditional approach to livestock farming in the municipality. During the 1980s, important industry had arisen around the cattle farms, but they were relocated, as in the case of "Giresa", or could not continue because of the lack of suitable land available. This occurred in the case of the milk cooperative "La Colmenareña", which was relocated to another province around 100 kilometers away, and consequently, dairy farming in the municipality also came to a halt. The idea of setting up a meat packing industrial plant was also completely undervalued. All these decisions have, therefore, converted the municipality into more of a residential and industrial-service space: "... A thriving industry had developed around the livestock farming, but they just wanted to get rid of it, and to build second homes or country houses instead. Where people can come and live and everyone can be part of this idyllic world ..." (Die, Col, July, 2013). Current municipal policy does not

benefit the cattle farmers either, complicating farm management to a great extent and demanding licenses to modify buildings. The livestock farmers are considered to be in the way of the increasing urbanization of the (rural) land. This theme, with different formulations and articulations, raises concern in all livestock farmers.

- (3) The problem of succession. Generational relief has been conditioned by the uncertain future, the long working hours of cattle farmers, an increasingly urbanized space and the relative ease, until recently, to get a job in the city. The older farmers usually regard themselves as the last of their kind. "This'll stop when I go, I can't see it has any future. In a few years time it'll stop altogether. I can't see any of the young people doing it ..." (Val, Col, July, 2013). There does, however, appear to be a certain resistance of the older farmers without generational relief, but with offspring, who consider that some of their children with more financial problems could be forced back into the profession. "...I have four sons and they all work in something else at the moment. I'm old now, but the situation is so bad that I've decided to hang on to the little that I've got left, in case any of them have to come back. I'm doing all I can to keep it going ..." (Bar, Col, June, 2013). There is very little investment in new farming installations given that these only become profitable after several years. This theme is very relevant between the old farmers without succession and is expressed in a problematic form—loss of traditional activity—in the discourse of mature adult livestock farmers.
- (4) "Insecurity" in the countryside is an important problem owing to the proximity to urban areas and the populational pressure. Farm tools and machinery are frequently stolen, fences vandalized and farm buildings taken over, making it difficult to manage the farms as the cattle cannot be effectively controlled, in addition to increasing the costs and workload. These themes are secondary, but mentioned in all analyzed discourses.
- (5) The professional and management responses or adaptations manifested by the livestock farmers affected by urbanization processes are varied: (1) In some cases, they reduce the livestock load in accordance with the reduced size of the farm. This is a resistance strategy in the place that is characteristic of the older livestock farmers. No new investments are made and the workload of the farm is significantly reduced (four cases); (2) In other cases, the livestock farm is relocated to a nearby area or property, further away from the urban fringe. Urban pressure continues, but with no forecast of a change in land use of the farmland. The workload is maintained and new investments are made with the capital gain made from the sale of lands for urban use. This response is more common among the middle-aged farmers. The main advantages of this strategy are the permanence in the local place and the ability to maintain the commercial circuits (two cases); (3) Reduced size of the livestock farm and part-time employment in an urban activity (one case); (4) The owners of larger livestock farms tend to undertake a geographical reorganization of the farm by leasings, outside the local and even the provincial area (one case).
- (6) Direct urban pressure and outlook for the future, urban pressure makes the livestock farmers feel penned in. They consider that they were the first ones to settle in the place and that they are being displaced: "... Before you had the livestock farms in the village and it was easier to manage the cattle. Now the drovers' ways and farms, (...), well, they'll set up a picnic area on the drovers' way. They don't respect what we do ..." (Col, Col, July, 2013). Because of the urban pressure, the only ones to stay will be the ones who have no other professional option because of their age. When the present generation of farmers completes their professional life, very few will be replaced, because of the poor

conditions they have to work in.: "...they will take away your rights and you begin to feel like an endangered species. You're in the way. Something has to go and you are completely unviable. The countryside next to the city is unviable too. They'll get rid of you in the end. I don't think my children will go through that ..." (Die, Col., July, 2013). The disappearance of some farms will lead to the concentration of others and the creation of wasteland, with clear repercussions on the landscape. "...When you're very close to an urban area, the livestock farms nearly always relocate, because of problems with the neighbors and complaints..." (Izq, Col, July, 2013). It is noteworthy that there is no concerted relocation plan for livestock farmers affected by urbanization processes. All the strategies are individual, which is fomented by the low associationism in the sector. Moreover, the relocation of a farm may take several years to complete.

The future outlook for the livestock farmers is pessimistic: "... We will end up getting rid of all the livestock. It's difficult to concentrate the farms as you need a large investment. There'll be no-one left in a few years. I can barely cover costs..." (Val, Col, July, 2013). Some of the livestock farmers consider that the livestock farms will have disappeared altogether in about 10 yr, which will have important repercussions on the present landscape. This theme, with different formulations and intensity, is quoted by all livestock farmers.

6. Conclusions

Few studies have been conducted of the farmers located immediately on the urban-rural fringe [3,38]. This gap in the literature is even more evident if we take into account the great variability, although on a small scale, of the processes of urban-rural change in these areas. The interests of the livestock farmers are often secondary and are overshadowed by land-use or environmental issues [39]. The 'consumer perspective' is predominant in the changes in urban-rural land use. Local and regional policies influence the strategies of livestock farmers to the same extent as agricultural policy. In the cases studied here, urban pressure can accelerate the decline in livestock farming, with clear extensification processes, in contrast to the stable situation in the whole of the country. Traditional livestock farming is an important component of the environmental quality of the non-constructed landscape, rather than being valued as an activity in it. The farming space without specific environmental protection is regarded as land that, sooner or later, will undergo a change in use, in spite of the fact that conflicts arising from competition for land use have not been totally resolved. Farmers are given very little say in the councils' decisions. Unfortunately, livestock farmers present poor competition in local land-use planning [40] and not perceived positively [41]. It would be logical and recommendable for them to have an established channel of participation, such as an agent specialized in management of the local space.

Livestock farmers maintain diverse strategies in response to the urbanization process that are nearly always individual and never coordinated. The sense of agrarian community is definitely lost and a common professional strategy is non-existent. They depend greatly on the age of the farmer and the existence of succession in management of the farms. The resistance strategy is most common among older farmers without any clear succession. The increase in wasteland will affect the current configuration of the landscape and will favor diffuse urbanization processes. The future perspectives

are mainly negative for the livestock farmers in the analyzed areas, associated with a rural to urban land use change and a progressive reduction of livestock farms.

The current paper is a limited contribution in this research area, but suggests some possible ways forward for further research. The future directions of research and planning at the local, regional and national level need to integrate, with clarity, the livestock farm in the urbanization processes, through the idea of "protected rural landscapes" for a new "countryside city" [42].

Acknowledgments

Thank to all anonymous referees for your constructive comments.

Conflicts of Interest

The authors declare no conflict of interest.

References

- 1. Darly, S.; Torre, A. Conflicts over farmland uses and the dynamics of "agri-urban" localities in the Greater Paris Region: An empirical analysis based on daily regional press and field interviews. *Land Use Policy* **2013**, *33*, 90–99.
- 2. Willians, K.; Schirmer, J. Understanding the relationship between social change and its impacts: The experience of rural land use change in south-eastern Australia. *J. Rural Stud.* **2013**, *28*, 538–548.
- 3. Hoggart, K. City Hinterlands in European Space. In *The City's Hinterland. Dynamism and Divergence in Europe's Peri-Urban Territories*; Hoggart, K., Ed.; Ahsgate: Aldershot, UK, 2005; pp. 1–18.
- 4. Masuda, J.R.; Garvin, T. Whose heartland? The politics of place in a rural-urban interface. *J. Rural Stud.* **2008**, *24*, 112–123.
- 5. Zabik, M.J.; Prytherch, D.L. Challenges to planning for rural character: A case study from exurban southern New England. *Cities* **2013**, *31*, 186–196.
- 6. Madaleno, I.M.; Gurovich, A. "Urban versus rural" no longer matches reality: An early public agro-residential development in periurban Santiago, Chile. *Cities* **2004**, *21*, 513–526.
- 7. Lerner, A.M.; Eakin, H. An obsolete dichotomy? Rethinking the rural-urban interface in terms of food security and production in the global south. *Geogr. J.* **2011**, *4*, 311–320.
- 8. Lerner, A.M.; Appendini, K. Dimensions of peri-urban maize production in the Toluca-Atlacomulco Valley, México. *J. Latin Am. Geogr.* **2011**, *10*, 87–106.
- 9. Bryant, C.R. Agriculture in an urbanizing environment: A case study from the Paris region, 1968–1976. *Can. Geogr.* **2008**, *25*, 27–45.
- 10. Maruani, T.; Amit-Cohen, I. Patterns of development and conservation in agricultural lands—The case of the Tel Aviv metropolitan region 1990–2000. *Land Use Policy* **2010**, *27*, 671–679.

11. Scott, M.; Russell, P.; Redmond, D. Managing Spatial Change in the Rural-Urban Fringe: The Role of Active Citizenship and Civil Society in the Republic of Ireland. In *Beyond the Rural-Urban Divide: Cross-Continental Perspectives on the Differentiated Countryside and Its Regulation. Research in Rural Sociology and Development*; Emerald: Amsterdam, The Netherlands, 2009; Volume 14, pp. 249–275.

- 12. Bryant, C.R. The anticipation of urban expansion. Geogr. Pol. 1974, 28, 93–115.
- 13. Allen, A. Environmental planning and management of the peri-urban interface: Perspectives on an emerging field. *Environ. Urban.* **2003**, *15*, 135–147.
- 14. Lerner, A.M.; Eakin, H.; Sweeney, S. Understanding peri-urban maize production through an examination of household livelihoods in the Toluca Metropolitan Area, México. *J. Rural Stud.* **2013**, *30*, 52–63.
- 15. Eakin, H.; Lerner, A.M.; Murtinho, F. Adaptive capacity in evolving peri-urban spaces: Responses to flood risk in the Upper Lerma River Valley, México. *Glob. Environ. Chang.* **2010**, *20*, 14–22.
- 16. Inwood, S.M.; Sharp, J.S. Farm persistence and adaptation at the rural-urban interface: Succession and farm adjustment. *J. Rural Stud.* **2012**, *28*, 107–117.
- 17. Cirelli, C. *Agua Desechada, Agua Aprovechada. Cultivando en las Márgenes de la Ciudad*; El Colegio de San Luis: San Luis de Potosí, Mexico, 2004.
- 18. Tacoli, C. The links between urban and rural development. *Environ. Urban.* **2003**, *15*, 3–12.
- 19. Robinson, G. Geographies of Agriculture; Pearson: London, UK, 2004.
- 20. Hernandez-Jimenez, V.; Winder, N. Knowledge Integration and Power Relations: Pathways to Sustainability in Madrid. In *Beyond the Rural-Urban Divide: Cross-Continental Perspectives on the Differentiated Countryside and Its Regulation. Research in Rural Sociology and Development*; Emerald: Amsterdam, The Netherlands, 2009; Volume 14; pp. 305–322.
- 21. Cadieux, K.V.; Taylor, L.E.; Bunce, M.F. Landscape ideology in the Greater Golden Horseshoe Greenbelt Plan: Negotiating material landscapes and abstract ideals in the city's countryside. *J. Rural Stud.* **2013**, *32*, 307–319.
- 22. Holloway, L. Smallholding, hobby-farming and commercial farming: Ethical identities and the production of farming spaces. *Environ. Plan. A* **2002**, *34*, 2055–2070.
- 23. Evans, N. Adjustment strategies revisited: Agricultural change in the Welsh Marches. *J. Rural Stud.* **2009**, *25*, 217–230.
- 24. Riley, M. Emplacing the research encounter: Exploring farm life histories. *Qual. Inq.* **2010**, *16*, 651–662.
- 25. Castillo Palma, N.A. *Cuando la Ciudad llegó a mi Puerta*; Universidad Autónoma Metropolitana: Mexico City, México, 2012.
- 26. Riley, M.; Harvey, D. Oral Histories, farm practice and uncovering meaning in the countryside. *Soc. Cult. Geogr.* **2007**, *8*, 391–415.
- 27. Spaling, H.; Wood, J.R. Greed, need or creed? Farmland ethics in the rural-urban fringe. *Land Use Policy* **1998**, *15*, 105–118.
- 28. Valenzuela, M. *Urbanización y Crisis Rural en al Sierra de Madrid*; Insittuto de Estudios de Administración Local: Madrid, Spain, 1977.

29. López Yepes, J. *El Territorio de Tres Cantos. Configuración Física e Histórica*; Ayuntamiento de Tres Cantos: Tres Cantos, Spain, 2010.

- 30. Egea, M.; Fernández, D. *Tres Cantos. 20 Años de Historia (1971–1991)*; Iniciativas y Publicaciones: Madrid, Spain, 1993.
- 31. Ayuntamiento de Tres Cantos. Plan General de Ordenación Urbana 2003. Available online: http://www.trescantos.es/portal/uploads/repository/pgou/ (accessed on 10 April 2013).
- 32. Aguado, M. Entrevista. Norte Not. 2003, 24, 1-7.
- 33. Martínez, J.C. Pueblo Tres cantos. Suelo para 5800 nueva viviendas. *El País*, 14 February 2003, p. 6.
- 34. Redacción. Es de esperar que en pocos meses, comience a desarrollarse el PGOU. *Norte Noticias*, 23 July 2004, p. 1.
- 35. Ayuntamiento de Colmenar Viejo. Plan General de Ordenación Urbana; 2001. Available online: http://www.Madrid.org/planeamiento/colmenarviejo/vigente/normasurbnaisticas (accessed on 10 April 2013).
- 36. Municipios. Cambios en la Cuenca del río Manzanares. *Gente en Madrid*, 11–18 October 2013, p. 10.
- 37. Asenjo, F.; Colmenarejo, F.; Fernández, R. *Guía Histórica de Colmenar Viejo*; Ayuntamiento: Colmenar Viejo, Spain, 1994.
- 38. Simon, D. Urban environments: Issues on the peri-urban fringe. *Annu. Rev. Environ. Resoruc.* **2008**, *33*, 167–185.
- 39. Ives, C.D.; Kendal, D. Values and attitudes of the urban public towards peri-urban agricultural land. *Land Use Policy* **2013**, *34*, 80–90.
- 40. Bryant, C.R.; Russwurm, L.J.; McLellan, A.G. *The City's Countryside. Land and Its Management in the Rural-Urban Fringe*; CABI: London, UK, 1982.
- 41. Beauchesne, A.; Bryant, C.R. Agriculture and innovation in the urban fringe: The case of organic farming in Quebec, Canada. *Tijdschr. Econ. Soc. Geogr.* **1999**, *90*, 320–328.
- 42. Bryant, C.R. *Agriculture in the City's Countryside*; University of Toronto Press: Toronto, ON, Cananda, 1992.
- © 2013 by the authors; licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution license (http://creativecommons.org/licenses/by/3.0/).