



eip-agri
AGRICULTURE & INNOVATION



EIP-AGRI Focus Group

New entrants into farming: lessons to foster innovation and entrepreneurship

MINIPAPER: urban-rural relations – 07 12 2015

Andries J. Visser, Teresa Pinto-Correia, Wolf Lorleberg

Introduction

This minipaper focuses on developments in (renewed) urban rural interactions and the possibilities which emerge from this for new entrants. The paper will briefly describe the background on urban rural interactions, discuss different types of urban rural interactions on farms and how new entrants may develop new agricultural business within this.

Urban rural interactions

The interdependence of cities and its hinterland is as long-lasting as we live in cities. Cities size and wealth depended on the (food) production capacity of its hinterland. Agriculture relied on the city as its natural market, labour for work at the fields and for its waste to recycle. In modern times the interdependency between both is blurred due to new means of food conservation, fast transportation of food, mechanisation in agriculture and the development of artificial fertilizers among others. More-over the cities' mouths to feed are being nourished with food from over the world, not necessarily from its surroundings (Steel, 2009). On the cities' rural side, farmers are producing food and products for the world market, having no connection any more to their urban neighbours; it is not their natural market anymore.

The loss of interdependency tends towards a delineation between the urban and the rural environment (Meerburg *et al.*, 2009). As Van der Schans and Wiskerke (2012: 247) put it: Today a complete segregation of agriculture and urban development emerges, quite often even enshrined in physical planning theory and practice. This segregation amplifies the already growing mental and physical distance between the city and its agricultural hinterland (Visser *et al.*, 2009). Where urban-rural linkages growing extinct, cities become increasingly dependent on the global Agro-food complex (Sonnino, 2009). A typical meal travels 3,000 km from farm to fork in the Western countries (Pearce, 2006). In the Netherlands food consumption accounts for one third of the national Greenhouse Gas emissions, partly due to these food miles (Vringer *et al.*, 2010). Growing concerns about peak oil, food prices, food security and the sustainability of the contemporary global Agro-food complex discards a shade on the segregation between the urban and rural environment (Morgan and Sonnino, 2010). City authorities are already starting to look beyond cities' administrative boundaries because of growing concerns about food security, environmental issues and liveability. At the rural side, sub-urban agriculture hesitatingly re-focus at their urban neighbours because a growing group of city dwellers is interested in the provenance of their food, is embracing the values of agriculture, is appreciating agricultural landscapes and is engaging agriculture related services like care, education and leisure (Kierkels *et al.* 2012). An instrument to re-link urbanized regions with fringe agriculture are "productive green belts" or even protected agricultural parks, serving as green infrastructure for the city and offering eco-system services, but managed by professional farmers (Lohrberg, 2015, Timpe *et al.*, 2015).

Re-integration of the city and its hinterland has influenced the functions and values city dwellers demand from agriculture. New forms of agriculture could provide the neighbouring city with social, environmental and green amenities that directly contribute to the quality of urban life (Zasada, 2011).

In general, there is a great potential and diversity of societal benefits of farms and farming projects to the urban world, including important non-marketed contributions (see table 1).

Table 1: Answers on societal demands: Potential contributions of agriculture to urbanized societies

| Economic benefits | Social benefits | Ecological benefits |
|---|--|--|
| Production of food, feed, energy, raw materials, ornamental plants.... Added value, income and taxes Multiplying effects to local/regional economy including demand and supply to forward or backward linked industries Preservation of cultural heritage (historical buildings, traditional local knowledge...) Creation and supply of leisure opportunities by own supply and by management of free areas Valorisation of areas – f.e. Brown site redevelopment (valorisation of industrial fallows) | Employment Contributions to quality of life / well-being of people in general Social inclusion / integration / taking care of disadvantaged social groups (jobless or disabled people, migrants.....) Environmental, nutritional, social and cultural education Food security / food sovereignty for social groups with low income | Protection and renovation of abiotic natural resources: soil, water, air Climate protection by CO ₂ -storage in plants and soil Improvement of micro-climate / controlling air pollution Protection and improvement of biodiversity Cost-effective management of green belts and green areas up to landscape design Improvement of the use of resources: lower transport costs by short value chains, use of waste heat, waste water.... |

Source: Lorleberg 2013

On another side, urban-rural relationships are also shaped by the increasing interest of urban people by rural landscapes, as spaces of recreation, enjoyment, life quality, identity bindings and keepers of cultural heritage. All rural spaces are thus under a certain level of commodification process, starting in the cities, and the distance to urban centers surely plays a role in the intensity of this process (Pinto-Correia and Breman 2009). This process is strengthened in many of the most marginal areas in relation to agricultural production, by the acknowledgment that not all rural land might be needed for food production in an increasingly globalized world, despite the food crisis of the last decade. The agricultural overcapacity as described by Homes (2006; 2012) results from farm intensification in many farm area and lead to farm redundancy elsewhere, expressed in loss of viability and resolved through pluriactivity, extensification, disinvestment and conversion to non-farm uses. At the same time, rural areas have increasingly been consumed by market driven urban interests, for residential, tourism, and well-being motivations. These are the consumption uses. And finally, in addition to alternative market-driven uses, certain societal concerns can only be pursued effectively in rural space, mainly those linked with the quality of natural resource sand nature conservation. These are the protection uses of the rural. In between the three sets of drivers, rural areas are positioned differently today in relation to what they were some decades ago. These changes occur at different intensities and scales, often closely connected with urban drive demand and processes. A review of the literature shows there is a spatial, temporal and structural co-existence of processes of transition taking place in Europe, resulting in an increasing diversification of rural-urban relationships and therefore also of the resulting rural areas (Berkel and Verburg 2011; Marsden and Sonnino 2008; Pinto-Correia and Kristensen 2013; Renting et al 2009; Wilson 2007).

Which values of agriculture are appealing for urban dwellers?

A farm has some specific characteristics which are interesting to people from cities and which are the basis for the development of all kind of products and services for different groups of urban residents. Most of these

characteristics are obvious for people living on the countryside but are not at all evident for people living in cities.

These characteristics are:

- Quietness
- Individuality
- Personality
- Space
- Darkness
- Rhythm (within a day, but also seasonal rhythm)
- Family business
- Live and death
- Animals, plants
- Food
- Scenic views
- Landscape
- Nature
- Fresh air
- Close social relations/networks

These values provide the basis for delivering products and services for different groups depending on their specific needs and desires.

Leisure, recreation

Governments in general are investing less in recreational amenities around cities or in nature and landscape: often they are forced to reduce their engagement due to increasing public land management costs and shrinking budgets. This is both an opportunity for farmers as a threat: developing recreational activities or facilities for tourists or city dwellers may provide an additional or main income depending on the type of activity or facility. But the landscape is of course the scenery in which these activities are offered. Farmers are traditionally involved in landscape & nature management so combining recreational activities with landscape management may provide an excellent opportunity to develop new businesses. Where recreational activities used to be limited to small camp sites or low quality sleeping rooms, recreational farms are developing into professional businesses with high quality lodges and activities.

There are also examples of farms focussing on daytime recreation: they have opened up their farms and allow people to visit the stables, feed the animals and afterwards drink or eat something in their restaurant or buy products in the farm shop. Some farms have meeting facilities where businesses come for a day to meet and discuss plans in a different environment and in that way get out of the hectic daily routine of their work. Other farms use their farm for offering workshops and for teambuilding activities or organizing cultural events or offering their barns for private celebrations.

Some farms are not only a place to stay and enjoy the landscape but are transforming more and more into starting points for all kind of recreational activities, they are developing into hubs where city dwellers and tourists can get information on the area but also on food and all kind of products and how they are related to the landscape.

For all of these new activities holds that it demands other qualities and skills of the farmer compared to traditional farming. Urban dwellers demand high quality, expect the best, and they are service oriented. Moreover they also bring new visions to the farm on sustainability, animal welfare and so on. If you open up your farm to urban dwellers, this asks an open attitude and the willingness to discuss traditional working methods. What is logic to a farmer is not for an urban dweller and the other way around. This asks for flexibility and an open mind but also for recognizing business opportunities. People from cities are willing to pay for services that many farmers feel should be free because it is part of their life. A nice example is that citizens are willing to pay for witnessing the birth of a calf, a lifetime experience for an urban resident and therefore priceless. Important is the notion that many potential customers from urban areas are looking for experiences, not just a product but more a story, something unique which differs from the daily live products that are available. This is important because one can ask a far higher price for an experience compared to a product and therefore opens possibilities for new business models.

Food:

More and more farms sell directly their produce to the consumer in farmer shops, through web shops, box schemes, vending automates or farmers markets. Other possibilities are direct delivery to restaurants or small shops or the development of a regional brand with local products. Recently we see developments where combined producers deliver fresh products to regional hospitals or care institutions. Direct selling can be profitable because intermediate's in the chain are left out and so a higher margin can be obtained. A direct result of this approach is that producer and consumer have more contact, often resulting in a better producer-client relationship. Consumer research (Schoutsen & Vijn, 2010) shows that farmer shops are appreciated because of the high level of knowledge on products, customer friendliness and high quality products. Consumers also state that they appreciate the fact they can see how the products are made. Recent food scares certainly contribute to this. Visiting the farm for shopping often is combined with a cycle trip, a visit to the farm-animals or a drink when that is possible on the farm. So the direct selling of products develops into a multifunctional activity where the shop is the starting point developing into a hub, a meeting place. Research in the Netherlands shows that the potential of direct selling is very large despite the fact that already a large number of shops exists (Vijn *et al.* 2013). Not only do we see a tendency towards people from the city entering the rural area for shopping and leisure, we also see citizens developing initiatives on agricultural production within the city borders. More and more city initiatives use local urban food production as a mean to inform people on good healthy food (contributing so to nutrition awareness and education) and to increase social cohesion in the neighbourhood through working together in community gardens (Veen *et al.* 2014). (See also the minipaper on *barriers and solutions for access to land, capital, labour and markets*).

Care:

More and more people are looking for alternatives for the care which is provided in the traditional, institutionalized care system for elderly, psychiatric patients, drug-addicts, or for young people in re-socialize trajectories and so on. The main critic is that the system is not individually based and therefore not suitable for everyone. In more and more countries over Europe we see the development of professional care farms, farms which have a normal agricultural business and provide care for specific target groups within the daily activities of the farm. Specific farm or gardening projects focus on young jobless people with difficulties to enter the job market or on refugees, serving as a therapeutic instrument to support psychotherapeutic help against traumatizations or as a mean for supporting integration in general. Clients spent the day on these farms in small groups and work on the farm (depending on the possibilities of the client) within the rhythm of the farm. Being on a farm and experiencing the daily routine, working outdoors, doing things which are meaningful are often mentioned as important aspects of care farming which are highly appreciated by clients and or family of the clients (for detailed background on effects of care farming see: Elings, M. (2011)). Care farming makes the connection between the urban and the rural, it brings people in connection with fresh food, how it is being produced, but also with the qualities of a farm attached to that: quietness, rhythm, processes of life and death, real darkness at night, responsibility for animals, the farmer and farmers family as an important role model etc. Care farms are often developed individually but today we see more and more collaboration between farmers resulting in higher professional standards and a broader proposition for different groups.

Education

In the North-west European urban environment the traditional functions of the countryside like food production, natural heritage and landscape are slowly pushed aside resulting in sharp delineation between city and countryside. As a consequence, people become estranged from the realities of food production, nature and the basic values of rural live like quietness, the natural interplay of light and darkness and the rhythm of the seasons (Slingerland *et al.* 2003). As a result the mental and physical distance between city, city dwellers and the countryside is increasing. This is underlined by a recent survey by the British Nutrition Foundation (BNF 2013) which included more than 27,500 children in the research and found that nearly a third (29%) of primary school children think that cheese comes from plants, and nearly one in five (18%) primary school children said that fish fingers comes from chicken. The survey also found that one in 10 secondary school children believe that tomatoes grow under the ground. Through this survey one in five (21%) primary school children and 18% of secondary school pupils said they have never visited a farm. This may partly explain why over a third (34%) of five to eight-year-olds and 17% of eight to 11-year-olds believe that pasta comes from animals. Research

shows that children who grow their own food are more likely to eat fresh fruits and vegetables (Canaris, 1995 and Hermann et al. 2006). In the Netherlands there are approximately 800 farms (1% of all farms) who develop educational activities mainly for children (Kierkels et al. 2012). The income the farmers gain with educational activities is very low. There is hardly any subsidy available and schools often do not have the means to pay for educational activities on farms. The most common business model for education on farms is that activities will produce all kind of other spinoff that does provide an income. For example when children have visited a farm they may want to visit it again with their families and during that visit their parents buy products in the shop or maybe eat something in the farm restaurant. In that sense farm education for school children is the first step in developing hubs between the urban and the rural. In The Netherland no official programs for farm education exists in contrast to for example the United States (Farm to school program) or the UK where all kind of organisations work together in organizing a broad offer on farm education in the FACE initiative (<http://www.face-online.org.uk/>). In Germany there is a network of several specified education farms and of "normal" farms with education offers as well (www.lernenaufdembauernhof.de), supported by German Farmer's Union and other agricultural institutions, but the general problem of financing these activities remains unsolved.

Landscape

The agricultural landscape is per se the object of an increasing demand by urban dwellers. This does not solely happens as a result of a recreation and leisure demand. It is also considered relevant as the support, or the expression of a regional identity and of a regional cultural heritage, which cannot in the same way be kept and felt in the urban space itself. Therefore urban citizens, even if not going out on the countryside for their recreation or for spending their free time, often express their wish that the rural landscape and its assets, particularly the ones which are unique for each region, are preserved. The rural landscape is for many urbans an issue and should be object of management and conservation, even if not used directly by them.

Further, the agricultural landscape is increasingly selected by urban people as a new living place, due to the well-being it supports. The residential demand is thus one of the other ways in which the urban-rural is shaped today, and it tends to be increasing, as more and more work models allows individuals to work at home part of their working time.

Planning for food and sustainability

Cities are facing a number of challenges which they have to tackle the upcoming decennia like access to fresh food to all, climate aspects like heating and water availability or flooding through severe rainfall, lack of social cohesion in neighbourhoods and problems with health among people with low incomes (for example growing number of people with obesitas). There is a tendency of cities becoming more independent of national policy and regulation since the problems they face are very much related to the high densities of people living together on relative small areas. Cities are looking for ways to tackle their specific problems and one of the directions for solution is looking at food.

More and more cities are developing specific food policies in which they develop together with local stakeholder groups strategies on food availability and on linking food to different aspects of city live.

Subjects taking up in these food policies are:

- Part of the food consumption of the city must be local in order to reduce food miles, organize consciousness among consumers and create opportunities for farmers around cities
- Create and protect space for local food production within the city and city fringe (Protect traditional agricultural and horticultural land and make land available which formerly was designated for other use, as far as technically possible)
- Make use of local food production for reintegration projects for different groups within the city, so creating jobs or helping people to prepare for a regular job
- Organize public food procurement based on local production, so reducing food miles and stimulating the local economy, (in some cases through schemes such as Community Supported Agriculture (CSA))
- Facilitate community gardens & farmers markets
- Organize to facilitate the development of local chains and distribution (this is something a lot of cities are struggling with: the last mile)

- Education projects on food and food preparation often collaborating with community gardens or other production sites in the city
- Increase awareness within urban citizens of the importance of agriculture, the delicate balance in the use of natural resources and the need to make an efficient use of the same, the role of consumers in shaping more sustainable agricultural systems, etc.

These food policy plans provide opportunities for farmers who want to switch their focus from the world market to local markets. They are also supported by the raising interest of urban dwellers in the rural space, as a space of consumption and protection – thus interacting with production. Linking the food to the landscape where it is produced in, and which is also enjoyed by many of the food consumers, is another way to connect the urban and the rural, which should not be neglected today.

Changing the farm towards the city requires a transition of both the farming system and the farmer:

- They have to change from bulk produce to diversification of products and differentiated products with a higher price which can be delivered in smaller quantities
- They have to transfer their farming system to an end user driven system: what does the customer want?
- They have to become involved in developing local markets, traditionally the larger bulkmarket is organized for the farmer by chain organizations, this they have to do themselves
- They have to develop (if possible in cooperation with others) local chains and transport since in the food chain all transport is organized nationally or internationally

These challenges ask for specific skills. In a survey among stakeholders of urban agriculture in Italy, Germany, the Netherlands and France skills which were assessed as necessary by at least 40 % of interviewees are presented in table 2. (ranked following importance).

Table 2: Hard and soft skills recommended for starting and running urban and peri-urban farming businesses

| Hard Skills | Soft Skills |
|--|-----------------------------|
| Plant production | Communication ability |
| Communication, Networking, Public Relation | Creativity |
| Project planning and management | Capacity for teamwork |
| Legal framework (legislation, local and regional policy) | Analytical competence |
| Urbanism (urban green, urban society, urban demand, city planning) | Flexibility |
| Market research, marketing and trade | Ability to handle conflicts |
| Business planning, administration, financing | |

Source: Pölling and Lorleberg 2015

Developing new products, creating new experiences and developing businesses from the end user perspective is something which is not common to most traditional farmers. For this they need skills which are often found by new entrants bringing other expertise and skills from other jobs and also being more sensitive to specific needs and wishes of urban residents while they have been part of that. (What kind of expertise and skills new entrants bring see the minipaper *added value of new entrants*)

Possible negative effects of recent developments in urban rural relationships

Is the renewed interest in the urban rural relationship only positive or do we see negative aspects as well? Bringing together two different worlds with different habits and rules inevitably results in some disturbance of existing systems.

From the perspective of traditional farming new business models require often high labour and management efforts, and those, which involve people visiting farms might deliver phytosanitary problems: diseases might spread easier because of transport of people and vehicles between farms so transferring animal diseases. Secondly, people from cities settling in the countryside may have other standards on for example smell, noise or in general on agricultural activities close to their property, particularly if their "vision" of agriculture does not correspond with state-of-the-art operational activities. That may result in problems related to the management of the farms or to difficulties in getting permission for enlargement of agricultural buildings and so on. Some fear problems related to theft of products, machinery or equipment on farms. Finally in Hungary for example, the increased demand of citizens for renewable energy has resulted in lack of available land for food production.

From the perspective of citizens who have developed a renewed interest in the rural areas negative aspects of agriculture are mostly related to smell, pollution and high-tech industrial agriculture which they have problems with on aspects of animal welfare and concentration of pollution.

Concluding remarks on what opportunities for new entrants urban rural interactions provide

There is obviously an increasing demand of urbanized societies towards more local and sustainable produced food, but they ask for a broad range of offers of economic, social and/or ecological activities. Farms serving these multiple consumer and citizen demands are multifunctional in a very high degree. Compared to world market oriented farms, which focus in general on a small product range and following a low cost strategy with little emphasis on marketing, multifunctional farms require in general more demanding business models with a complex organisation, an efficient management and a strong engagement in marketing. This fact offers chances for new entrants, if they are able to turn their probably better understanding of urban demand trends, their entrepreneurial spirit and their skills from professional and private background into a successful business concept. In short, farm activities situated in or at the fringe of urban agglomerations, should use implications and challenges of urban-rural relations as comparative advantages. Urban rural interactions provide opportunities in more remote areas as well as outlined above with obviously different business models focusing on needs and demands of people coming to these specific regions.

In practice, there are a lot of products and services as described above, which can make a profit of a (again?) growing interaction of the rural and urban world: Offering "rurality" in urbanizations can be a successful value proposition for them. On the other hand, multifunctional farms deliver a range of non-renumerated ecological benefits to the urban society.

European urbanities with their growing awareness to food, environment and social cohesion develop more and more specific demands to their related agriculture, which should increase further and which is not covered yet. New entrants focusing on innovative business models can help to close this gap, by serving societal demands and making a living for themselves out of it. They deserve more attention and adequate support by local and regional authorities (see also minipaper "Barriers and solutions for access to land, capital and markets").

Possibilities for new entrants:

All the described developments in this minipaper regarding the different aspects of urban rural relations provide very good opportunities specifically for new entrants. In general there is a tendency towards a demand for high quality services and experiences which are unique compared to city daily life, whether it is related to food,

leisure, care, education or the landscape. Mainly it is about creating new relationships which are personal, meaningful and 'real' and about products that are authentic, fresh and of high quality. This is opposite to the development which traditional agriculture has been undergoing the last decades with uniform bulk products for an anonymous market with no interaction with society. New entrants have specific skills and competences like communication skills, opportunity skills and networking skills (see minipaper on added value of new entrants) which are important in grabbing these opportunities. They often origin from the city and are familiar with the needs and desires of city people, they can relate to that and therefore are able to provide an offer which matches these needs.

References

Berkel D.B. van and Verburg P.H., 2011. Sensitising rural policy: Assessing spatial variation in rural development options for Europe. *Land Use Policy*, 28: 447-459

BNF, 2013. National pupil survey, UK survey results. <http://www.nutrition.org.uk/>

Brockerhoff., M.P. 2000. An urbanising world. *Population Bulletin* 55 (3).

Canaris, I. (1995). Growing foods for growing minds: Integrating gardening and nutrition education into the total curriculum. *Children's environments*, 12(2):134 – 142.

Elings, M. (2011). Effecten van zorglandbouw. Wetenschappelijk onderzoek naar de meerwaarde van zorgboerderijen voor cliënten (in Dutch). Plant research International, Wageningen-UR.

Hermann, J., Parker, S., Brown, B., Siewe, Y., Denney, B. Walker, S. (2006). After-school gardening improves children's reported vegetable intake and physical activity. *Journal of Nutrition Education and behaviour*, 38, 201-202.

Holmes J., 2006. Impulses towards a multifunctional transition in rural Australia: gaps in the research agenda. *Journal of Rural Studies*, 22: 142-160

Holmes J., 2012. Cape York Peninsula, Australia: A frontier region undergoing a multifunctional transition with indigenous engagement. *Journal of Rural Studies*. 28, 1-14.

Kierkels, T., T. Ypma, J. Kars, E.J. Veen, M.P. Vijn, M. Elings, H.A. Oostindie, R. Methorst, M.A. de Winter, K.A. Engelsma, J. Kempenaar, A.J. Visser & F.A.N. van Alebeek (2012). Multifunctionele landbouw in Nederland: Meer dan boeren alleen. Roodbondt: Zutphen.

Lohrberg, F. 2015: Urban Agriculture Europe – agriculture interacting with the urban sphere. In: Lohrberg, F., Licka, L., Scazzosi, L. & Timpe, A. (Editors) 2015: Urban Agriculture Europe. Berlin, Jovis (in printing).

Lorleberg, W. 2013: Macroeconomic benefits of urban and periurban agricultural activities. Working paper of COST-action European Urban Agriculture. <http://www.urbanagricultureeurope.la.rwth-aachen.de/wiki.html> (15.10.2015).

Marsden T. and Sonnino R., 2008. Rural Development and the regional state: Denying multifunctional agriculture in the UK. *Journal of Rural Studies*, 24: 422-431

Meerburg, B.G., Korevaar, H., Haubenhof, D.K., Blom-Zandstra, M., & van Keulen, H. 2009. The changing role of agriculture in Dutch society. *Journal of Agricultural Science*, 147, 511-521.

Pinto-Correia, T. and Breman B., 2009. The new roles of farming in a differentiated European countryside: contribution to a typology of rural areas according to their multifunctionality. Application to Portugal. *Regional Environmental Change*, Vol.3, 9: 143-152

Pinto- Correia T. and Kristensen L., 2013. Linking research to practice: the landscape as the basis for integrating social and ecological perspectives of the rural. *Landscape and Urban Planning* , 120: 248-256

Pölling, B. and Lorleberg, W. (2015): Progress report "Training needs analysis" of Erasmus+-project "Urban Green Education for Enterprising Agricultural Innovation". Soest, SWUAS working paper.

Renting H., Rossing W.A., Groot J.-C.J., van der Ploeg J.D., Laurent C., Perraud D., Stobbelaar D.J. and Van Ittersum M.K., 2009. Exploring multifunctional agriculture. A review of conceptual approaches and prospects for an integrative transitional framework. *Journal of Environmental Management*, 90:S112-S123

Timpe, A.; Cieszewska, A.; Supuka, J.; Toth, Attila 2015: Urban Agriculture goes Green Infrastructure. In: Lohrberg, F., Licka, L., Scazzosi, L. & Timpe, A. (Editors) 2015: Urban Agriculture Europe. Berlin, Jovis (in printing).

Visser, A.J.; Jansma, J.E.; Schoorlemmer, H.B.; Slingerland, M.A. (2009) How to deal with competing claims in peri-urban design and development: the DEED framework in the Agromere project. In: Transitions towards sustainable agriculture and food chains in peri-urban areas

Wilson, G. A., 2007. Multifunctional agriculture: A transition theory perspective. Wallingford: CABI.