

SUMMARY



**DEVELOPMENT STRATEGIES FOR A MULTIFUNCTIONAL  
AGRICULTURE IN PERI-URBAN AREAS**

**CP/18**



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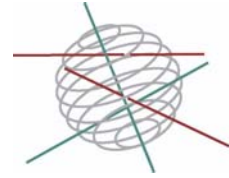
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**Part 1:**  
***Sustainable production and consumption patterns***

SUMMARY



**DEVELOPMENT STRATEGIES FOR A MULTIFUNCTIONAL  
AGRICULTURE IN PERI-URBAN AREAS**

**CP/18**

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## Development Strategies for a Multifunctional Agriculture in Peri-Urban Areas

### SUMMARY

#### 1. Problems

In Belgium, and particularly in Flanders urbanisation has penetrated deeply into the countryside. The agricultural sector becomes more and more confronted with pressures from inhabitants, environmental policy or a stringent spatial planning. Nevertheless, agriculture in these suburban areas plays an undeniable role in maintaining the landscape, locally increasing the socio-economic quality of life, performing an ecological function and so on. To maintain this role, agriculture needs to be sustainable in such urbanised areas. The current research focuses on the new consumption trends, which might offer a survival chance for agriculture in peri-urban areas and how this trend will affect farm strategies. In order to do so, the expectations of the demand side (citizens and consumers) as well as those of the supply side (farmers) in the large fringe of Brussels were mapped (for a total of 70 municipalities, including the 19 Brussels' municipalities). The research concentrates on the multifunctional character of agriculture in an urbanised area and distinguishes activities like active diversification (amongst which direct selling, farm processing, farm tourism or day recreation), passive diversification (renting out land or buildings), non-subsidised landscape measures (hedges, tree rows or wood edges) and environmental measures.

The research starts from a theoretical analysis of the impact of urbanisation on agriculture. Using a description of the Belgian agricultural sector since 1950 it became possible to better understand the farm sector situation in the year 2005 and to describe the concept of sustainable agriculture. Besides the evolution of agriculture it was also important to outline the evolutions in the field of environment, consumers and government. This historical analysis has led to the conclusion that a spatial problem has risen between the development of agriculture or the countryside and the increasing urbanisation. This conclusion was then linked with the societal expectations of the countryside. The expectations of consumers, citizens, recreants, tourists and society in general define the impact and importance of this spatial problem. This problem gives rise to a farming sector located in a peri-urban space. In the Belgian context, this peri-urban space exists of a city region, combining the agglomeration and the banlieue, and other municipalities, in which the commuter towns are located. Agriculture in peri-urban areas is confronted with disadvantages (e.g. increased competition for land) as well as advantages (e.g. larger market) caused by urbanisation. Whenever farmers located in such areas want to survive, they will have to adjust their farm to exploit all opportunities and to counter most of the restraints.

A possible adjusted strategy is exploiting all multifunctional possibilities of agriculture. Multifunctionality is defined as:

*"the idea that agriculture, in addition to producing food and fibre, produces a range of other non-commodity outputs such as environment and rural amenities, and food security and contributes to rural viability". (Maier and Shobayashi, 2001)*

The agricultural sector uses new possibilities that multifunctionality brings about by developing new activities and therefore will actively be involved in broadening or deepening. In recent years, the importance of these 'secondary' functions has also had its impact on policy. Multifunctionality has become an often-used key concept at the European level, at the WTO-negotiations, at the implementation of the European regulation EG 1257/99 into the Flemish or Walloon Program for Rural Development.

## 2. Research methods

The city region of Brussels is a region where farming is subject to high pressure of other land users and where succession of farms is very uncertain. This means that the proposed hypotheses on the expectations of citizens can be tested. The Brussels metropolitan area consists of a part of Pajottenland (located in the west of the study area), it borders on 'Klein-Brabant' in the North-west and on the vegetable area in the northeast. Along the southeast, south and southwest borders, the metropolitan area is adjacent to the Brabant loam region. Based on the degree of urbanization, the study area can be divided into four groups: Brussels Capital region, agglomeration, banlieue and commuter towns. The area contains municipalities from Flanders as well as from Wallonia.

In order to obtain enough information on citizens, farmers and policy in the study area, several surveys were executed. Accordingly data were collected on 1313 citizens (or consumers) from the fringe of Brussels as well as the Capital Region, on 1106 farmers from the fringe and on 48 of the 70 municipalities of the Brussels fringe.

Based on the theoretical part and the description of the research plan an extensive range of research questions and hypotheses were formulated. These are subdivided into function expectation, function fulfilment, potential realisation of functions and function support.

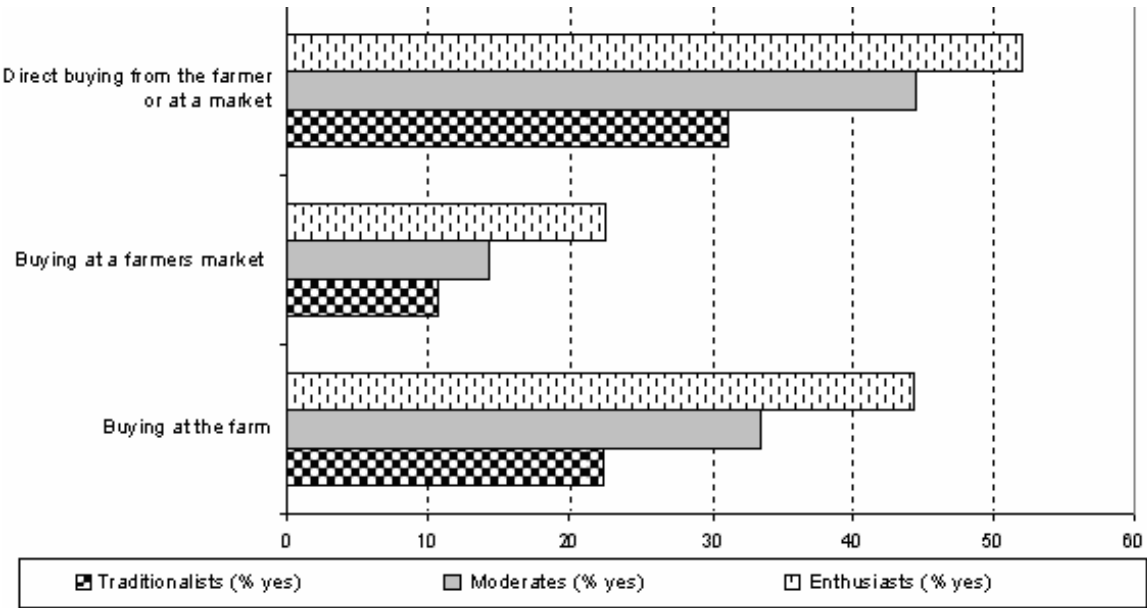
The part on **function expectations** focused on the societal expectations that go far beyond classic agrarian production. Therefore the demand side, the side of the citizens and/or consumers, was studied. The other side, the supply by farmers, was researched in the part on **function fulfilment**. It was examined if the changing societal expectations create new opportunities or threats for farms in peri-urban areas. The third hypothesis handled **the potential realisation of functions** and investigated whether many farms are forced to develop new activities to secure the economic viability, as a result of pressure on agriculture in general and the problems due to a growing city. This part of the research was concluded with a description of the possible **supportive** activities. It was investigated if and how local and regional authorities can, by means of an appropriate policy approach based on a thorough analysis of societal needs and farming possibilities, safeguard the supply of the desired agricultural functions. The research led to the following conclusions.

3. Results

Due to an increased purchasing power and a central policy encouraging people to own their dwelling, combined with a rather liberal town-planning context, many Brussels households left the inner city after the Second World War (since the so-called Golden Sixties). More and more households found a new living in the by that time more or less rural periphery around the city of Brussels. As a result, a rather densely built-up agglomeration emerged around the city, due to this first suburbanisation wave. This causes city-dwellers to have other expectations and aspirations than later suburbanites who later settled down in the banlieue. Amongst others, the shifted approach of leisure time as consumption time has had important repercussions on farmers. Citizens as well as tourists of the peri-urban area enjoy the non-marketable functions (i.e. non-commodity goods) of agriculture to the fullest.

The research of the **demand side** describes whether citizens are able to identify and appreciate the different functions of agriculture. This research concluded that a citizen's appreciation depends highly on his or her personal background and more specifically on the personal connections and contacts with the farming sector. Accordingly, three groups of citizens were distinguished. The first group was named 'the traditionalists'. On average these respondents are younger, higher educated, single and a small majority of them grew up in an urbanised region. Citizens with a high education have a remarkable classic notion of agriculture. This group gives a high score for the food production role of agriculture and rejects the other functions. The second opinion group is called 'the enthusiasts'. They are generally older, usually retired, living together with their partner and the children are moved out. A majority of them grew up on the countryside, knows some farmers, has knowledge about multifunctional farms and buys directly at a farm (see figure 1). They think of multifunctionality as a positive development. The third type, 'the moderates', has an opinion profile comparable with the one of the enthusiasts but is more reserved. Not only their attitude, but also their behaviour is less explicit.

Figure 1 Examples of citizens' behaviour per opinion group



Source: Citizens' survey

In general, agriculture fulfils a lot of functions which are highly appreciated in society (mainly food production and preservation and maintenance of open spaces). The dynamics of sub-urban areas, where a large part of Belgian agriculture is situated, caused these functions to become more emphasised and appreciated. Precisely for these areas it is interesting to find out to what extent the existing agriculture already contributes to the quality of life in these urbanised zones

Firstly, the **supply side** was researched by investigating if farmers in the peri-urban study area already supply some of the desired multifunctional activities. Many farms in the study area are involved in new activities like direct selling, selling farm or local products, processing farm products, agri-environmental measures etc. About 35% of all respondents are involved in active diversification, about 10% in passive diversification, about 1 out of 5 respondents work with some agri-environmental scheme and 60% of them has hedges, tree rows, wood edges etc.

Table 1 *The existence of different multifunctional activities*

		agglomeration	banlieue	commuter towns	total
Active diversification	Number	59	160	135	354
	% in that zone	44,7	38,2	30,1	35,4
Passive diversification	Number	11	50	48	109
	% in that zone	8,3	11,9	10,7	10,9
Environmental programmes	Number	22	88	96	206
	% in that zone	19,0	22,6	23,8	22,7
Hedges, tree rows, wood edges	Number	66	237	253	556
	% in that zone	56,9	60,9	61,0	60,4

Source: Agricultural survey

Although these multifunctional activities do not always contribute much to the farmer's income, they affect the social and ecological aspects of sustainability. Most of multifunctional strategies contribute to social developments and some types provide ecological and (small or large) economical developments that make the farming sector liveable.

Secondly, it was investigated if farmers in peri-urban areas face problems caused by the nearness of the city. In general, agriculture in peri-urban areas is confronted with more difficulties than more rural agriculture, by which the sustainability of these farms becomes less self-evident. Hence, the farmers need to deal with the opportunities and threats that the city brings about. As was the case for the consumers, the decision of the farmer depends on personal characteristics, the family situation, the farm structure and/or the financial situation. Accordingly the farmers can be divided into four different types. A first group of farmers recognises more chances than problems in the impact of the city, on the short term as well as on the long term. They are on average slightly older, more often Flemish and run a horticulture or grazing animals farm. They were named as the 'recreational' farmers. The 'adaptive' farmers, the second group, only recognise a negative impact of the nearness of the city, on a short and long term but they try to adapt to the circumstances. They are more often located in Wallonia, are younger, have grazing animals and are real business farmers. For both groups, the probability that a



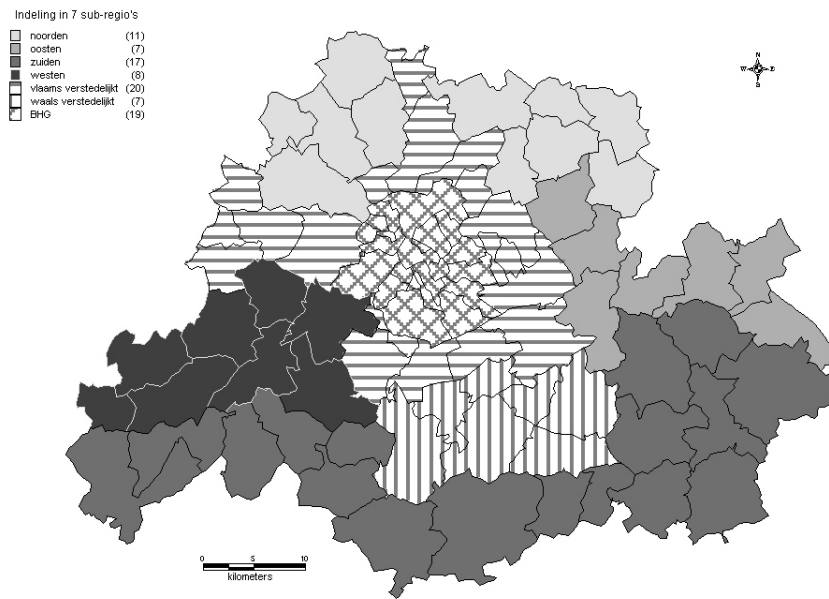
farmer is involved in agri-environmental programs is high, but both are not very much involved in active diversification. A third group of farmers recognises little strength as a result of the nearness of the city, but do believe that in the long term opportunities might arise. They are rather conservative (they are therefore called the 'traditional' farmers) and are not very interested in diversification activities. A fourth group believes that the city brings about strengths or opportunities, but is also aware of the fact that the city might cause difficulties in the future. They therefore believe that farmers should adapt to these possible threats and they are called the 'innovative' farmers. Of all farmers, they adjust their farm strategy the most in the direction of active diversification as well as agri-environmental programs or maintaining and having hedges, tree rows etc.

The most important hypothesis was that the **distance towards the city** has an impact on the attitude of the farmer and the citizen. Therefore it was investigated if a spatial differentiation exists. It appeared that the closer a citizen lives to the city, the less knowledge he has about multifunctional farms and the less contact he has with the farmer himself. However, as will be further stressed, this "simple" distance hypothesis did not satisfy in order to fully understand the spatial variation of attitudes (see further).

Concerning the farmers, the proximity of the city appears to be very important. Closer to the city more farmers are involved in active diversification and less in passive diversification, less in environmental programs and less farms have hedges or tree rows. The higher number of potential consumers and the creation of extra income can explain the increased active diversification for the farmers. The negative relation between the city and environmental measures or hedges or tree rows is influenced by the fact that larger farms are more suitable for this type of multifunctional activities and they are located further away from the city.

It was found that the distance variable doesn't satisfy to estimate the expectations and attitudes of especially the citizens towards farming. Indeed, we found also important **sub-regional differences**. Based on certain criteria the study area around Brussels was divided into seven sub regions (Map 1). We make a distinction between four less urbanised subregions: north, east, south (known as Brabant Walloon and the loam zone) and west (known as Pajottenland) of Brussels. The remaining three areas are more urbanised and we distinguish a Flemish and a Walloon urbanised region and the Brussels Capital Region.

Map 1 Division of the study area in subregions



Cartografie: A. Brulander

K111 Leuven - ISFG - 2015

The majority of the inhabitants of the eastern subregion of Brussels are familiar with farms that have non-agrarian diversification activities, though they do not participate explicitly. This was also confirmed with the most frequent opinion profile in this region namely the moderates. The region suffers from urbanisation pressure and the inhabitants attach a lot of value to living in a rural environment. Opinions that live in the north are comparable to the ones in the east, although in the North the share of narrow-minded traditionalists is clearly larger than the share of moderates. Despite a better knowledge of agrarian diversification activities in the north, their behaviour is similar to the one in the east. Potential purchasing power exists in this region, but there should be more promotion. A complete different situation exists in the western sub region (Pajottenland). There we found the most positive attitude towards multifunctional agriculture. There is a broad knowledge on diversification and this group frequently buys directly from the farmer. In the south we discovered a paradox: despite an enormous knowledge of diversification activities, people are less active involved than in the western area. A majority of inhabitants is open-minded but thinks still traditional about agriculture. Whenever a citizen of the Flemish urbanised subregion knows a farm with diversification, that citizen will also have visited that farm. A quarter of the respondents is enthusiast. This is not the case in the Walloon urbanised subregion: people know the possibilities but do hardly or not participate. In the Brussels Capital Region citizens want to buy directly from a farmer but the distance remains to be a high threshold. 46% of the respondents of Brussels have an enthusiastic opinion about multifunctional farming.

These results indicate that the distance variable doesn't suffice to estimate the expectations and attitudes of citizens towards farming.

The regional and local support also plays an important role for farmers. These spatial variations can contribute to a regional difference in favour of multifunctional agriculture. The research shows that active diversification occurs most frequently in the Flemish urban area and in the north of Brussels. Passive diversification appears more in the south and in the Walloon urban area. Applying environmental programs occurs frequently in the south, the east and the Walloon urban area.

The link between multifunctional farmers and the appreciation of the citizens towards agriculture and agricultural landscape has become clear. Multifunctionality is not only an advantage for the farmers, but also for the citizens whom live in peri-urban areas and for citizens living in the city whom want to recreate in the fringe. Therefore in the last part of this study, it is researched how the different functions of agriculture can be supported. In the case study, the two most important policy levels, which can have an impact on both the citizens/consumers and farmers, are **the regional and local policy**.

The Flemish citizens know fewer farmers with diversification and are less prepared to pay for non-commodity goods than the Walloon citizens. As a result, the regional policy will have to be adapted to the different wishes and needs of the Flemish or Walloon citizen.

This study has however shown that the local agricultural policy level has a major impact on the citizens as well as the farmers. In this way, it seems that in municipalities with a strong agricultural policy more people buy on a farm, go more often to door days, and are more often informed on agricultural walking trails or landscape care. Furthermore, it was seen that whenever a municipality gives more attention to environmental services, this would influence the behaviour of the farmer. In a municipality where policy is focused on active diversification, more farmers actually are involved in active diversification. The policy instruments chosen by a municipality will furthermore be dependent on the participation and impact of farmers as well as of citizens.

#### 4. Conclusion

Demand, supply and support constitute a complicated three folded relation. The citizens or consumers influence the farmers (and vice versa) and both together have an impact on policy. Therefore it remains necessary to study all three actors simultaneously. The analyses have for example shown that the spatial distribution of the demand for farm products, which appears all over the study area, doesn't comply with the distribution of the supply, which is concentrated closer to the city. Concerning landscape care there seems to be a lack of interaction between the opinion of the citizen and that of the farmer. However, the lack of a spatial component doesn't lower the recognition of citizens living close to the city of the fact that farmers should take care of the landscape in an increasingly urbanised environment. It also appeared that local policy could influence the attitude and behaviour of a citizen in a municipality. Every future analysis on survival strategies for multifunctional agriculture in peri-urban areas and the composition of policy implications should therefore always be based on this triangular relationship between farmers, consumers and policy. Furthermore, it should not neglect the local and regional characteristics of a region.

Finally, this research has led to some policy recommendations. The first one is based on the result that the impact of the city on agriculture is not yet well understood. It is hardly ever taken up in rural policy plans. Therefore we recommend that well-targeted policy actions should be developed and researched for agriculture in peri-urban areas, based on the perspectives that agriculture can offer for making urbanised regions sustainable.

Secondly, we suggest that local policy should be used more actively to increase sustainability of agriculture in urbanised regions. There should be a partial shift from policy to the local level as proposed in the European Leader Programme (European Commission Agriculture and Rural Development, 2003). In other words, notwithstanding the continuing upgrading of the agricultural and rural policy level in recent years, our results suggest that the subsidiarity principle will be efficient for policy concerning agriculture (Pacione, 1996). Local policy, which is well suited for dealing with local problems, should never be forgotten (Ray, 1999). What's more, the subregional analysis puts forward the importance of spatial, social and historical elements, which constitute throughout time specific geographical milieus regarding farming traditions and related social and economic processes.

Thirdly, we propose that the government should encourage initiatives that are meant to shorten the distribution chain of food products. This will contribute to a higher awareness of the origin and quality of food. The reduction of transport costs obviously adds to the ecological dimension of sustainability.

Lastly, we observe that up to now, policy has been focused on the total development of agriculture and has to little taken into account the specific role and limitations of farmers located close to a city. This is not only visible in agricultural actions or policy, but also in spatial planning. In stead of building rigid spatial plans, especially around a city, one should use more flexible instruments that combine multifunctional agriculture and the maintenance of an attractive countryside in the fringe of the capital city (Moir et al., 1997). The European, federal as well as regional levels are to little focused on location specific situations and therefore do not sufficiently support the multifunctional role of farmers in these zones (Van Hecke et al., 2000).

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