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**DECENTRALIZED RURAL DEVELOPMENT POLICIES:  
DOES IT MAKE SENSE?  
THE EXAMPLE OF DIVERSIFICATION IN FLANDERS**

VALERIE VANDERMEULEN

PROF. DR. IR. GUIDO VAN HUYLENBROECK

Department of Agricultural Economics  
Faculty of Bioscience Engineering  
University of Gent  
Coupure links 653  
9000 Gent  
Belgium  
Tel: +32 (0) 9 264 59 43  
Fax: +32 (0) 9 264 62 46  
valerie.vandermeulen@ugent.be

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# **Decentralized rural development policies: does it make sense: the example of diversification in Flanders**

## **1 Introduction**

During the last decades, the European agricultural sector has been influenced by different trends. Consumer demands have shifted towards high quality and traceable products, globalisation and modernization have risen production costs of farming, the market prices have become unstable etc (Oostindie, 2002). These changes, together with the pressure of the United States to continue liberalising the farm sector in Europe, have caused the European Union to adapt its policy. There has been a shift in the Common Agricultural Policy (CAP) from production oriented to income oriented support and more focus on rural development and a Leader approach. In the new Rural Development Plan (EU, 2007-2013) the idea of further decentralization of rural policies is strengthened (e.g. by generalizing the leader approach for all actions). Decentralizing agricultural policy is often based on the idea that to create a social optimum, a spatially targeted and applied tailored combination of regional and local policy is needed (Lankoski and Ollikainen, 2003).

In this paper we analyse whether this approach is justified for on-farm diversification by analysing empirical differences among regions in Flanders (Belgium). We argue that in order to efficiently stimulate on-farm diversification, targeted policies should be indeed decentralized to the local geographical level. The main idea is that on-farm diversification appears in different forms in different areas. This might be due to local farmers' initiatives which trigger other farmers for e.g. collectively selling vegetables at an auction or might be due to different geographical characteristics of the area, which creates the possibility to market a location specific product. It might also be based on specific advantages of areas

concerning sales, e.g. in the case of home-selling of farm products near a tourist route. These different forms of on-farm diversification make it very difficult to formulate one policy for all farmers.

This paper starts by describing rural development policy of Flanders. This will make clear that there is already some kind of local targeting, although only to a limited extent. Next we describe our case study consisting of comparing diversification in two regions within Flanders. Because these two regions are not geographically connected, it becomes possible to compare both regions concerning on-farm diversification. In the fourth part, the uptake of on-farm diversification is being empirically explained by use of farm and farmer characteristics as well as location. This leads to the idea that location matters and that policy actions should be diversified towards different zones. The paper ends with a discussion on the policy implications of our results.

## 2 Problem description

In Belgium, although densely populated (with on average a population density of 339 persons per square km), still about 45% of the total surface (in both regions) is dedicated to agriculture. Agriculture in the northern part (Flanders) consists mainly of intensive animal production (pig and dairy) and horticulture while in the southern part (Wallonia) more arable farming is found. The increasing pressure of urbanization results in incentives to develop new activities and to valorise the so-called multifunctional nature of agricultural farms (Ilbery, 2001). More and more agriculture is not only valued because it produces commodities, but also for its contributions to non-commodity values and provision of a pleasant living environment to the urban population. This is e.g. expressed in higher housing prices in rural areas close to the city or in increased tourism and tourism accommodation prices in rural areas

with more landscape amenities (Vanslembrouck and Van Huylenbroeck, 2005). However, the impact of urbanization is not equal throughout Belgium. The Walloon region (located in the South of Belgium) is less densely populated than the Flemish region (located in the North). This has an effect on e.g. land availability and land prices. These differences also call for a different approach with respect to rural development policies.

Our study focuses on farming in Flanders precisely because population pressure is higher, which puts pressure on land and labour available for farming, which in turn will increase the costs of farming and lower the survival possibilities for a farm. Agriculture is playing a diminishing economic role in Flanders. The contribution of agriculture to the gross added value has dropped from 4.6% in 1974 to 1.3% in 2004 (NBB, 2005) However, agriculture remains visually and ecologically very important (in terms of open space, farmland and farmers) (Cabus and Vanhaverbeke, 2003). This contrast between a low economic value and a high societal value of agriculture in Flanders creates the interest to find ways to increase the sustainability of agriculture.

The agricultural and rural policy in this region is of course as in all other EU countries an EU directed policy and subject to the CAP. Because of federalisation, agricultural policy is decentralized in Belgium. The current Flemish Rural Development Program (RDP) 2000-2006 contains price and income support (economic), agri-environmental payments (environmental) and non-agricultural aspects of the countryside (social measures). The Mid Term Evaluation in 2003 stated that a more integrated approach was needed for the Flemish countryside. It was found that the needs and opportunities at different locations are various and that policy should be taken to a local level as to meet the needs of the targeted area (Carels et al., 2005). It was recommended that local and provincial governments should be

more involved in rural policy. The (recent) shift in European Agricultural policy goes in the same direction. In the new Rural Development Policy plan 2007-2013 of the EU, member states, regions and local action groups will have a more prominent role by generalisation of the so-called Leader or bottom-up approach. In such approach the regional or national government still sets the objectives for the rural policies, but provinces, regions and municipalities will be able to stimulate area targeted policy processes.

At this moment already some policy power has been shifted to the local level so that provinces or municipalities can influence application of the overall rural development policies. As an example, the province of “Vlaams Brabant”, in which one of our study areas is situated (see section 3 and map 1) has a specific policy plan for agriculture and horticulture that includes several actions like maintaining open spaces for agriculture, guaranteeing food production and employment, searching for a balance between agriculture and tourism (Anonymous, 2001). In the province of “West-Vlaanderen” (our second study area) more attention is given to the production and sale of local farm products. This province tries to stimulate diversification by e.g. creating three farm teams working on diversification and environmental care (Provincie West-Vlaanderen, 2005).

Decentralization is even more pronounced in the Leader+ programme. Two Leader+ zones can be determined in the study areas: “Pajottenland” and “Brugse Ommeland”. Leader+ (2000-2006) is a European action that wants to encourage rural actors to think about the potential of specific zones and to support them in realising integrated and innovated projects. This action applies to all rural areas in Flanders and each project has to be zone specific, integrated with an experimental character, cooperated between different rural areas and intended to establish networks (VLM, 2005). This approach is based on decentralized

decision-making and recognising the role of local people in the development process. The most local entity is the municipality level. Municipalities have a large bundle of actions which they can implement, e.g. promotion of farm products, services or advice offered to farmers, spatial planning affecting agriculture, information or education on farming. These actions might influence farmers and citizens in a very direct and specific way. They can easily be adapted to local needs and circumstances and therefore become very effective actions. As empirically verified in previous research, the policies at local level may indeed influence the behaviour of local farmers.

The aim of this article is to analyse whether location specific elements are indeed important to explain the uptake of diversification activities. Therefore, the differences in diversification between two regions in Flanders are analysed. In section 3 the two study areas are described after which the differences in diversification are analysed.

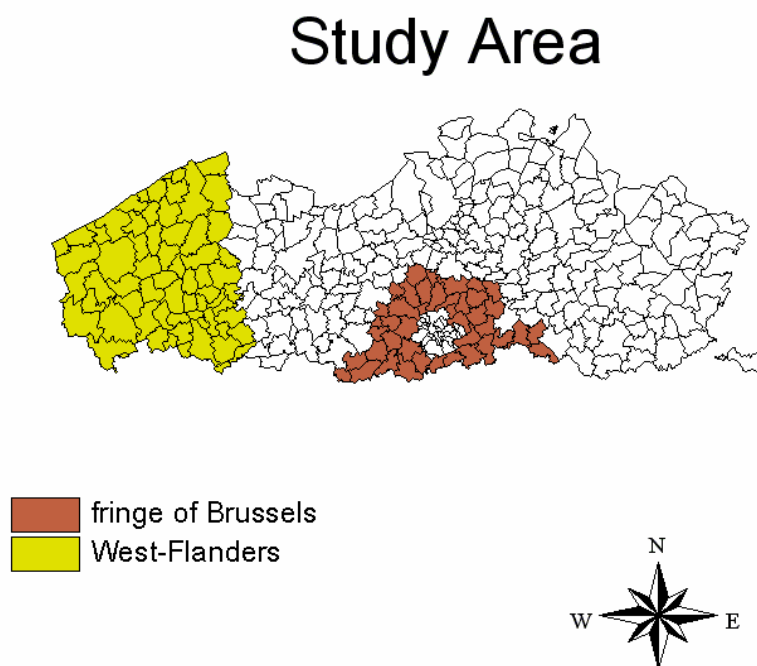
### 3 Description of the case study areas

The first study area is the **Flemish fringe around Brussels** (see Map 1), which is the capital city of Belgium, and constitutes of a spatial amorphous area and an urban area (Cabus and Vanhaverbeke, 2003). The population density is 511 people per square kilometre which is high. Many people travel every day to the capital city to work, study or just visit. The fringe of Brussels plays an important role for the urban people from the city with respect to recreation.

Of the 1,280 km<sup>2</sup> of land in the study area 43% (or 550 km<sup>2</sup>) is used by agriculture. According to the National Institute for Statistics (NIS) for 2004, 2805 farmers were active in this study area. 29% of them, meaning 808 farmers, have been surveyed in 2004. This survey showed that the average age of these farmers is 53 years old. On average, a farmer disposes of 24.4 ha

of land of which he owns about 6 ha and rents 16 ha on a long term permit basis and 2 ha on a short term permit. Most of the farmers are married or live together (78%). Around 85% of the farmers are men and 2/3 of them work full-time on the farm. Moreover, only half of the female farm managers work more than part-time. On more than half of the 630 farms with a married farmer the partners also work at the farm, be it in most cases part-time.

*Map 1 The research area situated in Flanders*



The second region covers the province “**West-Vlaanderen**” (see Map 1) and is located at the seaside. It includes the largest what can be called ‘pure’ rural area of Flanders (Cabus and Vanhaverbeke, 2003). It has in comparison with the Brussels area only a population density of 361 people per square kilometre. Compared to real rural areas in the rest of the EU this is of course rather high, but in the Flemish context this is considered as rural. The region is a tourist attraction for walkers and cyclists. During summer, the sea side is the most successful tourist region of the country.



Around 74% (or 2,134 km<sup>2</sup>) of the 3,144 km<sup>2</sup> available land is used by agriculture. This percentage is a lot higher than the Flemish average (47%) (FOD Economie - Afdeling Statistiek, 2004). In this region, still 12,047 farmers were active in 2004. 20% of them (or 2,400 farmers) have been surveyed in 2004. The mean age of the surveyed farmers is 46 years, a lot younger than in the other region. In the sample, farmers dispose of 26.5 ha of land of which they own 8.5 ha and lease 18 ha. As in the fringe of Brussels, most of the farmers are married or live together (88%) and around 88% of all farmers are men of which 71% works full-time at the farm. 67% of the partners of all married farmers also works at the farm.

In this paper we focus on farm diversification as a development strategy for farmers in an urban context. Under farm diversification, we have taken all activities outside traditional commodity production farmers do in order to increase income. On-farm diversification excludes those activities which no longer are related to agriculture (e.g. off-farm jobs).

In **both study areas** different types of on-farm diversification exist, in the Flemish fringe of Brussels (almost 40% of all farmers) more farmers are doing at least one type of diversification than in West-Vlaanderen (only about 14% of all farmers).

*Table 1*      *Types of diversification in both regions*

	Flemish fringe of Brussels				West-Vlaanderen			
	No	Yes	% Yes of total farmers	% of diversification	No	Yes	% Yes of total farmers	% of diversification
Organic farming	722	17	2,30	5,78	2384	16	0,67	4,92
Care activities	737	2	0,27	0,68	2392	8	0,33	2,46
Catering	736	3	0,41	1,02	2390	10	0,42	3,08
Processing of milk	726	13	1,76	4,42	2342	58	2,42	17,85
Processing of vegetables	735	4	0,54	1,36	2373	27	1,13	8,31
Processing of meat	735	4	0,54	1,36	2384	16	0,67	4,92
Home selling	547	192	25,98	65,31	2195	205	8,54	63,08
Selling at farmers markets or retailers	653	86	11,64	29,25	2355	45	1,88	13,85
Farm tourism	732	7	0,95	2,38	2361	39	1,63	12,00
Day recreation and guided tours	701	38	5,14	12,93	2342	58	2,42	17,85
Other types of diversification	694	45	6,09	15,31	2360	34	1,42	10,46
Diversification (at least one type)	445	294	39,78	100,00	2075	325	13,54	100,00

When looking at the type of diversification, home selling seems to be the most popular type and is done by 63-65% of diversifying farmers. In the Flemish fringe of Brussels this is followed by selling at markets or retailers, day recreation and guided tours. In West-Vlaanderen processing of milk and farm tourism frequently occur.

In order to study the impact of location on the occurrence of on-farm diversification, it is necessary to take into account all differences between farms in both regions. Section 4 describes which farm or farmer characteristics are hypothesised to influence the uptake of on-farm diversification and which part of the difference between the regions cannot be explained by these characteristics and might be caused by the location of the farm.

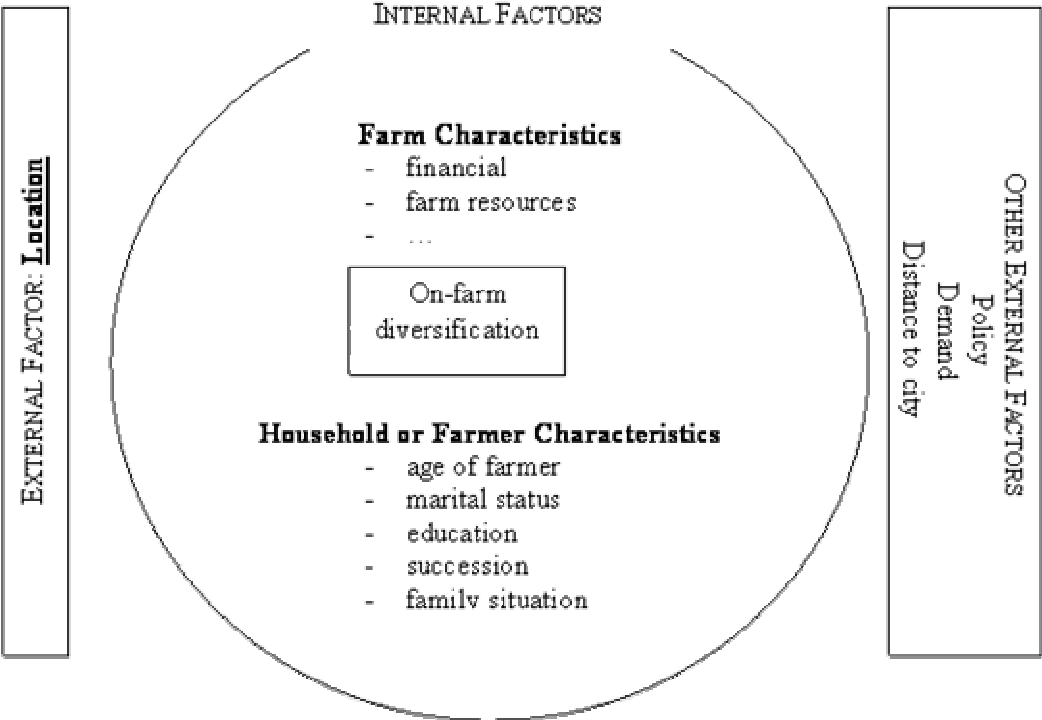
#### 4 Explaining the difference in uptake of on-farm diversification

The general idea behind explaining the presence of on-farm diversification in literature is often that internal as well as external factors explain the decision of a farmer to diversify, as can be seen in figure 1 (next page).

Based on a literature study and previous research on the collected data, following variables were withheld for further analysis: age, arable surface (corrected for the type of farm), having a successor (giving an idea of future expectations), having loans (as a proxy for the financial situation), farm type, gender of the farmer and education. In literature a location variable is often neglected or not fully researched. McNally (2001), e.g., tries to regress diversification on the availability of farm resources and profitability, financial risk, farm characteristics and household characteristics, but her models only deliver Pseudo-R<sup>2</sup> of around 0.15, meaning that only 15% of the variation is explained by these models. The same type of results was reached by Loureiro and Jervell (2004) who analysed the participation in agro tourism. They suggested that the decision to participate was based on the presence of a wife, the age and

education of the farmer, the presence of livestock or pigs, the amount of arable land, the location in a rural area, the financial situation and whether the farm is a cooperative or not. Even though they included a variable which might reflect some location differences (rural area) their attained Pseudo-R<sup>2</sup> is even lower and only reaches 0.05 in their best fitted model.

Figure 1 Conceptual Framework



To analyse whether location increases the explanatory power of these models, we compare two models. One similar to the above mentioned studies with only farm and farmer specific variables (Model 1) and one with the same variables but with location as an extra binary variable (Model 2). In this second model a location variable is added, comparing Brussels with West-Vlaanderen in order to verify whether adding location increases the significance of the model and changes the sign and level of explanatory power of certain variables.

The results of these probit estimations are given in the next table. The first column gives the name of the variable and the second column indicates if the variable is categorical, scale or

dummy. The following three columns give the results of Model 1, while the next three columns present the results for the extended model 2 with location.

Including the location variable in the second stage of the regression creates an increase in the Pseudo-R<sup>2</sup> variable of about 64%, namely from 0.129 to 0.212. Although still low it is already significantly higher than in the previous cited studies. This shows the importance of including an area specific parameter as shift parameter. Moreover, this inclusion does not only improve the Pseudo-R<sup>2</sup> variable, but also has an impact on the significance and sign of some variables as was hypothesized.

*Table 2 Results from Probit analysis*

Name of variable	Type of variable	Model 1			Model 2		
		B	Sig	Sign*	B	Sig	Sign*
Age	scale	0,002	0,813	+	-0,009	0,284	-
Arable surface per type	scale	0,175	0,000	++	0,114	0,018	++
Successor (Ref= Not applicable)	categorical		0,000			0,005	
No successor		-0,650	0,002	--	-0,490	0,027	--
Maybe a successor		0,024	0,912	-	0,123	0,585	+
A successor		0,210	0,417	-	0,259	0,340	+
Loans (Ref= no loans)	categorical		0,194			0,005	
One loan		-0,274	0,113	-	-0,038	0,836	-
More loans		-0,047	0,764	-	0,407	0,016	++
Farm type (Ref= arable farming)	categorical		0,000			0,000	
Horticulture		0,469	0,011	++	0,657	0,001	++
Grazing cattle		-0,527	0,001	--	-0,185	0,262	-
Pigs		-1,700	0,000	--	-1,078	0,000	--
Combination of crops		0,417	0,166	+	0,464	0,147	+
Combination of cattle		-1,451	0,000	--	-0,857	0,000	--
Combination of crops and cattle		-0,771	0,000	--	-0,354	0,056	--
Female farmer		dummy	-0,476	0,017	--	-0,606	0,003
Education (Ref=basic education)	categorical		0,004			0,006	
Lower high school		0,691	0,021	++	0,618	0,045	++
High school		0,648	0,030	++	0,576	0,062	++
Higher education		1,022	0,001	++	0,986	0,003	++
Brussel	dummy				1,559	0,000	++
Constant		-1,636	0,002	--	-2,113	0,000	--
Pseudo-R <sup>2</sup>		<b>0,129</b>			<b>0,212</b>		

\* - or + means negative or positive but not significant at a 10% level

-- or ++ means negative or positive and significant at a 10% level

Although age is often included in regressions on diversification it is not significant for the present research. In the first model, excluding location, one might suspect that older farmers tend to be more active in diversification, which is illogical because older farmers are known to be more conservative, less interested in modernization, often at the end of their professional career, etc. However, after inclusion of location, the sign shifts and the p-value drops, indicating that the formerly found relation was wrong and that older farmers are in fact less likely to be active in diversification. The usable arable area of a farm is significant and shows (as in other research e.g. Ilbery (1991)) that a larger farm more often is involved in diversification. The presence of a successor might be important for doing diversification: a farmer who is certain about not having a successor has a lower probability to diversify. The sign for having a successor or probably having one, shifts after the inclusion of the location variable, but both coefficients remain insignificant. When looking at the financial situation, it is found that having more loans gets a significant coefficient after location is introduced. Having more loans increases the probability of doing some type of on-farm diversification. This might be explained because some types of diversification (e.g. farm tourism) demand some investments. The type of farming has often been mentioned in literature (e.g. McNally (2001)) as being very important in explaining diversification, and the same results are reached in the present research. A grazing cattle farm, a pig farm, a combination of cattle and the combination of crops and cattle have a lower probability for being involved in diversification than a general arable farm. Horticulture raises the probability of diversification. Whenever the farm manager is female, the probability for diversification drops. This might be correlated with the fact that it is often the female partner who takes care of on-farm diversification activities while the male farm manager does traditional farming. However, this relationship cannot be reversed to a female farm manager and a male partner. A final variable is education.

It seems that a higher education increases the probability of diversification compared to only basic education.

With respect to location two important things can be learned from the analysis. One is that the explanatory power increases when introducing the location variable, meaning that besides the other variables the specific location of a farmer still has an impact on this decision. The more urban character of Brussels explains the higher interest in diversification in this region. A second observation is that without location parameter the influence of a number of variables was masked or wrongly estimated meaning that location is a shift parameter influencing the strength of other explanatory variables (like age, succession, financial situation). Because of the impact of location on other variables as well as on the explanatory power of the model, we conclude that location plays an important role in on-farm diversification and thus need to be considered in applying policies stimulating this evolution.

## 5 Conclusion and Discussion

Our empirical findings show that besides farm and farmer characteristics the spatial location and specific area in which farms operate influence on farm diversification.. By including a location variable in the regression, the explanatory power improved (from 12.9% to 21.2%) and the influence of some variables changed (e.g. the impact of age shifted from positive to negative meaning that it might be older farmers who are involved in on-farm diversification). The variable for location itself also resulted in a significant coefficient, showing that there is a difference in the uptake of on-farm diversification between farmers in the fringe of Brussels compared to those in 'West-Vlaanderen'. All of this suggests that location is important when trying to influence the decision of a farmer to do on-farm diversification. Therefore policy should be decentralized to a level where location differences can be dealt with.

As explained in section 2, this decentralization is, to a certain extent, already taken up in the Rural Development Policy in Flanders. Especially after the Mid Term Review of 2003 and in the preparation of the new Rural Development Policy plans of the EU for the period 2007-2013, policies are more region specific. By strengthening the local and intermediate levels in policy design, more emphasis will be given to local needs and local circumstances.

On farm diversification is only used as an example, as the same argument will also be true for other types of diversification of the rural economy like the creation of micro enterprises, encouragement of tourism, village renewal. The same idea can be used to strengthen a bottom up approach for two other main ideas of the new Rural Development Policy plan 2007-2013, namely for environment and countryside actions (e.g. natural handicap payments to farmers in mountain areas, NATURA 2000 payments, agri-environment measures, animal welfare payments, measures for sustainable forestry) and for improving the competitiveness of farming and forestry (EU 2007-2013).

Further decentralization of rural policies, as is done through the Leader approach, seems to be a successful path which should be further developed. A lot of the non-commodities produced by stimulating multifunctionality are indeed local specific commodities and their appreciation and valuation highly depends on local circumstances and preferences. The EU should therefore continue to create a general framework for rural development which leaves ample space for local and regional policy actors to establish the preferred combination of actions for their region.

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