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**REGIONAL IDENTITY AS A TRIGGER FOR AGRICULTURAL  
REGIONAL DEVELOPMENT**

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**Abstract**

Regional development is receiving a lot of attention nowadays in European policy. A possible stepping stone to achieve regional development is regional identity. This paper investigates whether regional identity can contribute to the specific case of agricultural regional development. One possible way for agriculture to profit from regional identity is by diversifying farm activities. The paper shows that regional identity can stimulate farmers to take up diversification and can also stimulate inhabitants of the region to consume products directly from the farmer.

**Keywords**

Regional identity, regional development, multifunctional agriculture, diversification, farm income

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**Introduction**

In a global economy, the regions are the appropriate level for effective organization and development actions (Hamin and Marcucci, 2008). Regional development therefore has received a lot of attention in European policy (Paasi, 2009). The aim of regional development nowadays is to create a favourable business climate, for local or regional enterprises, and at the same time to improve the living conditions for citizens (Raagmaa, 2002).

Regional development can originate from many different aspects. Galton and Vanclay (2009) describe how culture can be employed in innovative regional development. Fawn (2009) describes the roles of geography, identity, culture, institutionalisation, and the role of actors, within regional development. Gualerzi (2006) has studied what role space and territory play within the mechanisms of local development. Within the current article, the importance of identity as a stepping stone for regional development is further analysed. Thereby, we build on the idea of, amongst others, Raagmaa (2002) and Paasi (2009) that regional identity is crucial in securing public participation in regional planning and development.

The main research question in this paper is whether regional identity can have a positive impact on regional agricultural development (arrow with the question mark in Figure 1). Mettepenningen *et al.* (2010) show that agriculture, and especially multifunctional agriculture, contributes to regional identity (arrow C in Figure 1). The question now is whether this regional identity helps to develop agriculture, and thereby stimulates regional development (arrow B in Figure 1). If this is the case, then this indicates that regional development policy should, among other aspects, focus on strengthening regional identity.

The next section will give a literature review on how regional identity can contribute to agricultural development. Then, the methodology will be described, which is followed by the results section in which the focus will first be on the farmers and secondly on the inhabitants of a region. Finally, some conclusions and policy recommendations will be drawn from the research.

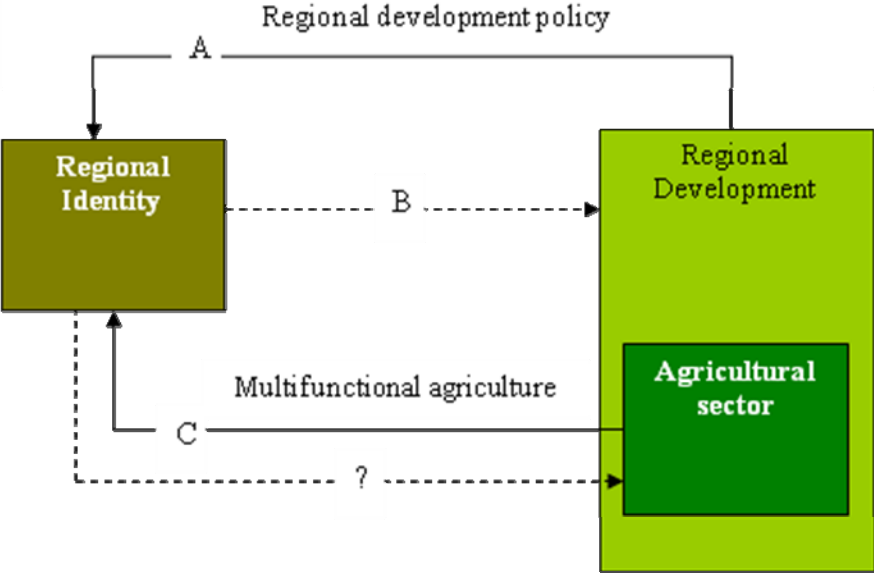


Figure 1. Conceptual framework.

## **Agricultural development through regional identity**

To answer the question whether agricultural development can profit from regional identity, the link will first be described between regional identity and general economic development in a region. Secondly, the effects on the agricultural sector will be described in depth. To conclude this section, some success factors will be given which could increase the economic effects of regional identity on a region and on its agricultural sector.

### *Regional identity and economic development*

Before theorizing the link between regional identity and the development of a region it is important to distinguish between regional identity and the identity of a region (Paasi, 2002a, 2002b, 2003). The identity of a region refers to the recognizable particularities of a region: the natural and cultural landscape. Regional identity, on the other hand, rather refers to how people identify themselves with a region. As such, regional identity becomes a social construct.

It is this regional identity which will incite people to start up initiatives to develop the region. The degree of awareness of a region's identity and the feeling of attachment to the region, positively influence the efforts done to design a region (Keating, 1998, cited in Antonsich, 2010). This affective bond between people and a territory that encourages local development interventions is defined by Oliveira *et al.* (2010) as terraphilia. It completes the formerly known concept of topophilia, which means the love for a place or the affective bond between people and a place (Tuan, 1990, cited in Oliveira *et al.*, 2010), insofar as it integrates the need of development of a territory. According to Antonsich (2010), however, while the region seems to gain more importance in Western Europe nowadays, which is visible in decentralization of governance structures, territorial attachment of people hasn't increased. And if regional identity and territorial attachment is present, this also doesn't necessarily mean that this will have political consequences (Tomaney, 2007).

Many studies exist also on which aspects of regional identity can induce a benefit for the local economy. Ray (1998) delineates many markers of cultural systems which could trigger regional economic development: traditional foods, regional languages, craft, folklore, local visual arts and drama, literary references, historical and prehistoric sites, landscape systems and their associated flora and fauna, etc. According to Albino (1997, cited in Oliveira *et al.*, 2010), the valorisation of the "ancestral typicality" should automatically form a part of local development strategies, insofar as it could lead to new local innovations. He points out the predominant role of heritage or traditions, as development resources. Other studies stress the role of music, theatre or sports. Indeed, through the sets of values they propagate, sport or art can be a substantial element of regional identities. As such they can be used as regional branding tools and a starting point for regional economic development (Gibson and Connell, 2003).

### *Benefits from regional identity for the local economy*

According to Ray (1998) there are four modes of using regional identity in regional development. The first mode is based on the promotion of a local and typical product, which can be the local history and culture like in cultural tourism or a more tangible, for example, agri-food product such as Parmigiano Reggiano. The second mode of using identity in regional development is centered on the entire territory and is aimed towards outsiders. This is the case for the Tornio Valley region, for instance, which is on the border between Finland and Sweden (Prokkola, 2007). The region has used its particular heritage of being an unnatural border to attract tourists. The third mode is also centered on a territory but instead of trying to attract outsiders to the region, regional development is aimed towards the local people. The case of West Cork in Ireland, which created its "Fushia Brand", is a good example of this. Insiders became more aware of the own qualities of their region through the LEADER co-operative promotion initiatives, with the diffusion of calendars, posters, brochures, etc. (Messely, 2009). Making inhabitants aware of the attractiveness of their region can be a goal in itself,

to excite collective pride, but it can also represent a trigger for the endogenous development of this region. The trigger would lie in an increased self-confidence of insiders (local collective organizations or individual) to carry out development actions. As such it opens the door to “new economic opportunities, innovation and a socio-cultural vibrancy” (Ray, 1998, p. 7). The fourth mode of using regional identity in regional development is a mix of the three previous modes. Regional development is aimed here at protecting the local economy by controlling the impacts of the global economy on locality. Regional identity is therefore understood as more than just a way to raise the economic prosperity of the region. Regional branding, which is a sort of commoditization of a region, would be an illustration of this mode (Messely, 2009).

It has been highlighted in several researches that the valorization of regional identity can generate an increased attractiveness and dynamism of the region and a rise of flows of resources to the region. The resources can be human as well as material, financial or intellectual (Romanelli and Khessina, 2005). Human resources in a region can be investors but also tourists or residents. For example, in Branson, Mississippi, USA, the strong musical theatre identity has attracted many country music artists, investors as well as audiences to the region (Chiles *et al.*, 2004). In the case of the Tornio Valley, Finland, the strengthening of regional identity gave rise to an increased cooperation between the Swedish and Finnish municipalities in the border area, which is not limited to tourism. In this way, strengthening regional identity contributed notably to creating networks and social capital. Besides human and social capital, also financial resources can be attracted to a region by the creation of regional identity. For example, local natural resources and other natural amenities as features of a region’s identity can be the basis of a prosperous local economy by, for instance, attracting retirees. This might provide benefits such as increased tax revenue or increased community services (Poudyal *et al.*, 2008).

#### *Benefits from regional identity for farmers*

How farmers are related to regional identity has shifted during the last years, due to some evolutions in society. In Western Europe, the share of farmers in the rural population is declining, while other societal groups are gaining more importance, such as employees, retired people, middle-class workers, etc. Bessière (1998) points out that on the one hand, this shift in society leads to a dilution of peasant identity, which is on the other hand also paradoxically reinforced since urban and new rural populations view agriculture as a kind of “lost heaven”. The countryside is understood as a place of genuine life, with a wild nature and true relationships: eating local and traditional products form a part of this whole myth. In that way, local food is linked with emotions and can be seen as a symbol, a sign of communion and sharing, a class marker (such as champagne) and a regional emblem (Bessiere, 1998). The modern consumer is quite demanding concerning the origin and the nature of the product or service and wants to be closer to the producer.

Farmers are well positioned to reply to this demand by diversifying their activities and thereby valorising regional identity. Agrotourism is one form of diversification which can benefit from an attractive regional identity. Not only does it represent a chance for farmers to increase their income, it can also add value to other products or services the farm provides (Beall, 1996, cited in Comen T., 2009). Next to direct economic effects on agriculture, Das and Rainey (2010) have shown that agrotourism can also have a positive impact on the retail and service sector, in terms of income and employment. Moreover it might stabilize the local economy. On top of that, this type of diversification has a social function: it brings the agricultural, tourism and catering sectors in a region together and creates new links between farmers and non-farmers (tourists or resident). In this way, agrotourism can contribute to social capital building and can promote good relations between farmers and other citizens. Getz and Carlsen (2000), finally, argue that agrotourism can be a means to support rural lifestyles.

Many studies show or suggest that the first purpose of diversification for the farmer is generating an additional income (Mahony *et al.*, 2004, cited in Bowler *et al.*, 1996; Barbieri and Mahoney, 2009). Diversification on the farm will mitigate risks which are inherent in agricultural production, because non-farm income is less sensitive to market fluctuations than the income from agricultural production

(Kilic *et al.*, 2009). But as the example of agrotourism above shows, it can also generate non-economic benefits such as increased social contact and a better quality of life for farmers and their family (Barbieri and Mahoney, 2009).

#### *Success factors for gaining from regional identity on the regional scale*

It is evident that in order to be able to profit from regional identity, the region should be attractive for people. Agriculture can play a role here. Poudyal *et al.* (2008), for example, showed that the percentages of cropland and pastureland are positively correlated to the inflow of people, such as retirees, in a region. Next to other natural features, these agricultural elements expand the possibilities for recreation, increase aesthetic beauty and quality of life. Next to this, there seems to be a kind of symbiosis, i.e. a mutual causal link, between regional identity and the health of the local economy. Romanelli and Khessina (2005) point out several causal links, which show that regional identity is strengthened by some features of a healthy regional economy, such as: frequent interactions among residents, a common and coherent representation of the work organization in the region within its population, a wide range of outsiders interacting with insiders, and finally the presence of a small amount of specialized industries.

#### *Success factors for gaining from regional identity on the farmer's scale*

According to Comen and Foster (2009) the success of agricultural diversification depends on the following factors: the location of the farm, its financial viability, the accessibility of viable markets, technical aspects of farm management, the degree to which the farmer can tune his production to market needs, the government's price support, the farmer's labor management skills, his interest in learning, market knowledge, etc. Most of these factors are linked to work organization and task management. Other studies, however, show that social relationships and communication between farmers and non-farmers are also of high importance. Dufour *et al.* (2007) illustrate this through the example of Coteaux du Lyonnais, in France, where a public forum has been created on the basis of the local agricultural identity (local products, landscape, social network...). Peyrache-Gadeau and Fleury (2005, cited in Dufour *et al.*, 2007) confirm the beneficial effect of this kind of initiative, which makes use of the cultural and territorial dimension of the farming activity and contributes to promoting multifunctionality in agriculture. Exchanges between farmers and local governments through practical projects or local commissions can also increase the extent to which agriculture can benefit from regional identity (Vandermeulen *et al.*, 2006). Finally, also the attitude of the farmer towards diversification and his degree of commitment, attachment and enthusiasm will play a role. Dufour *et al.* (2007) built several typologies of farmers according to their attitude to multifunctionality. The profile with the highest chance of gaining advantage from regional identity through diversification would be the "corporate and local innovator". These farmers consider their activity as inherently multifunctional: producing food but also taking part in the local development and the preservation of the local heritage, developing non-market products, working in an environmentally friendly way, etc. Autonomy and innovation are the driving forces behind their agricultural practices. They are strongly linked to their territory (typically, they sell on the local market), they pay attention to the organization of their work, the work of other people of the farm and finally they take time for non-farming activities. Marsden and Smith (2005) define these farmers as ecological entrepreneurs.

This paper tries to expand the limited literature available on the effect of regional identity and development on farm diversification and the competitiveness of the local agricultural sector. The next section describes which methodologies were used to do this.

## Methodology & Data

In order to answer the main research question of how regional identity can stimulate agricultural development, four Belgian regions were chosen as study areas, which are all active in regional development, but very different with respect to three categories of criteria:

- 1) *Characteristics related to the identity of the region*: whether the region has unique selling points, the historical background of the region, whether the region has typical agricultural products and whether there is a unity in characteristics in the region;
- 2) *Characteristics related to how this identity is perceived*: whether the residents are aware of their region, the image the region has to outsiders;
- 3) *Characteristics related to regional development*: the presence of regional development organizations in the region, vital coalitions between actors in the regions, how the regional development process is organized, the goal of the regional development process and possible problems encountered in reaching this goal.

Choosing several cases can serve as a kind of data-triangulation, increasing scientific credibility and transferability of the results. Based on the selection criteria, the following regions were chosen: Meetjesland and Haspengouw in Flanders, and Parc Naturel des Deux Ourthes (PN2O) and the Gaume in the Walloon region. In Figure 2, the cases are situated.

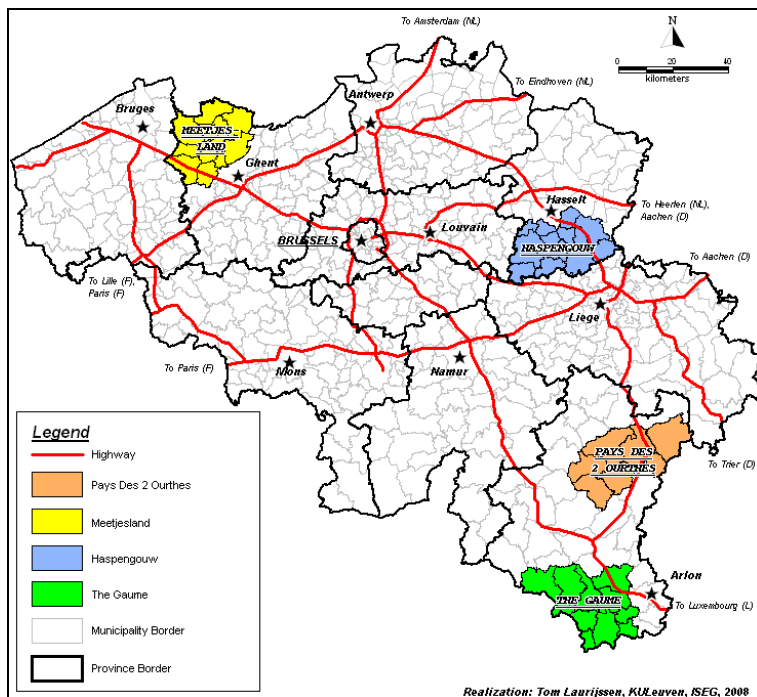


Figure 2. Location of case studies within Belgium.

The regional development is most advanced in the region of Haspengouw. The region has a strong agricultural identity linked with the fruit farms in the region. The region of Meetjesland has fewer distinct natural or agricultural features which could be used in a branding process, but there is a lot of social capital present in the region and a strong motivation for regional development coming from a multitude of organizations. In the Walloon regions, the Gaume has a clear and attractive identity and is well-known in Belgium. Despite (or maybe because of) this fact, very few efforts are done for regional development or branding. PN2O, finally, is only at the start of the regional branding process and lots of efforts are done. Some villages in the region are already famous in Belgium because they're the most touristic part of the Ardennes, but the region itself is not known under the name PN2O.

Two types of questionnaires were done in the four regions. The first questionnaire was targeted at the farmers in the regions. In total, 485 questionnaires were collected, of which 67% through a postal (response rate of 19%) and 33% through an online questionnaire. There was no list of farmers' addresses available for the regions, because of privacy reasons, therefore a convenience sampling strategy was followed. The questionnaires were distributed through local organizations and governments willing to cooperate with the study. This, and the fact that respondents could win a prize by completing the survey, increased the response rate. The questionnaire contained mainly closed questions and consisted of five parts. Part 1 was about regional development and asked which elements influence regional identity, how the farmers are involved in the development of regional identity, how regional development affects agriculture and the region as a whole. Part 2 of the questionnaire dealt with how several sustainability parameters on the farm changed in comparison to the situation five years ago. Part 3 was only aimed at farmers who diversified their activities and contained questions on the type of diversification, cooperation regarding diversification, advice the farmers received and specific training. Part 4 asked all the farmers, with and without diversification, which elements could be an obstacle in developing diversification on the farm and how several elements influence cooperation with other farmers in diversification. Part 5, finally, contained general socio-demographic questions, questions related to the farm and farm management. On top of the questionnaire, 24 face-to-face interviews were conducted with diversifying farmers in the four regions, facilitating the interpretation of the results and enabling to make the necessary differentiations.

The second questionnaire was targeted at all inhabitants of the four regions, and resulted in a database of 868 respondents, all collected through an online application. Again, because of privacy reasons, no addresses of inhabitants were available and obtaining a random sample was not possible. Therefore, promotion for the online questionnaire was done through articles in the local press and mailing lists of local organizations. It was combined with the promotion of the online questionnaire for farmers. The questionnaire for inhabitants consisted of six parts, and was a combination of open and closed questions. Part 1 of the questionnaire dealt with the inhabitants' perception of the character of the region: which elements characterize the region, do the respondents feel they belong to the region, what are the region's main strengths and weaknesses. Part 2 contained questions related to tourism: should tourism be promoted in the region, how should this be done and which are the main touristic attractions. Part 3 was about the role of the farmer in the region: which role does and should the farmer play in the region, do you buy products directly at the farm, why, or why not. Part 4 contained questions related to what could be done to improve regional development: how is the work of regional organizations evaluated, is the inhabitant involved in regional development, what would he/she change in the development process. Part 5 contained one specific question on how regional identity affects the value of the inhabitant's real estate. Part 6, finally, was a socio-demographic part, containing also specific questions on how long the inhabitant lived in the region and the motivation to live there.

The analysis of the data was done with the statistical programme PASW Statistics 18.

Table 1 shows the representativeness of the farmers' and inhabitants' sample, together with some general characteristics of the regions. For the farmers' sample, the objective was to have about 10% of the farmers' population in the sample. This objective was reached in the Flemish cases, but proved to be more difficult to obtain in the Walloon regions, where only 6 to 7% was reached. This is probably due to the fact that farmers are more spatially dispersed in Wallonia. In all the cases, the percentage of farmers in the oldest age group is lower in the sample than in the population. In Haspengouw and Gaume, the percentage of farmers aged 15 to 44 is significantly higher in the sample than in the population. In Meetjesland and PN2O, the age category 45-54 is overrepresented in the sample. For the inhabitant's questionnaire, between 0.14 and 0.19% of the population in each case was reached. Also here the oldest age category of 65-80 is underrepresented in the sample, and in PN2O the youngest group of people aged between 15 and 34 is underrepresented as well. An underrepresentation of the oldest age category could be due to the fact that the questionnaire needed to be completed online, although respondents could also request a paper copy. In Haspengouw and PN2O, the share of males in the sample is significantly higher than in the population.



Table 1. Representativeness of the samples and general characteristics of the regions.

		<b>Meetjesland</b>		<b>Haspengouw</b>		<b>Gaume</b>		<b>PN20</b>	
		Sample	Population	Sample	Population	Sample	Population	Sample	Population
<b>Farmers</b>									
Number		<b>218 (10.29%)</b>	2118	<b>174 (9.88%)</b>	1761	<b>23 (5.68%)</b>	405	<b>35 (6.88%)</b>	509
Age	15-34	<b>5.50%</b>	4.58%	<b>10.50%</b>	5.62%	<b>27.80%</b>	5.19%	<b>9.70%</b>	3.73%
	35-44	<b>18.50%</b>	19.83%	<b>27.50%</b>	18.11%	<b>27.80%</b>	20.25%	<b>16.10%</b>	20.43%
	45-54	<b>36.00%</b>	29.37%	<b>40.50%</b>	31.06%	<b>27.80%</b>	33.09%	<b>45.20%</b>	31.63%
	55-64	<b>30.50%</b>	22.10%	<b>17.60%</b>	24.02%	<b>11.10%</b>	23.70%	<b>25.80%</b>	25.15%
	65-80	<b>9.50%</b>	24.13%	<b>3.90%</b>	21.18%	<b>5.60%</b>	17.78%	<b>3.20%</b>	19.06%
<b>Inhabitants</b>									
Number		<b>370 (0.22%)</b>	164 852	<b>289 (0.14%)</b>	201 029	<b>167 (0.33%)</b>	51 361	<b>42 (0.19%)</b>	21 999
Age	15-34	<b>26.7%</b>	29.06%	<b>32.80%</b>	27.87%	<b>34.30%</b>	33.87%	<b>14.30%</b>	32.93%
	35-44	<b>21.5%</b>	19.43%	<b>21.7%</b>	18.16%	<b>18.20%</b>	19.29%	<b>28.60%</b>	19.27%
	45-54	<b>26.10%</b>	18.42%	<b>26.20%</b>	18.68%	<b>23.40%</b>	17.94%	<b>31.40%</b>	17.73%
	55-64	<b>20.20%</b>	15.57%	<b>15.20%</b>	15.21%	<b>15.30%</b>	13.83%	<b>17.10%</b>	14.46%
	65-80	<b>5.5%</b>	17.51%	<b>4.10%</b>	20.07%	<b>8.80%</b>	15.06%	<b>8.60%</b>	15.61%
Sex	Male	<b>52.80%</b>	49.59%	<b>57.80%</b>	50.54%	<b>51.10%</b>	49.45%	<b>65.70%</b>	49.97%
	Female	<b>47.20%</b>	50.41%	<b>42.20%</b>	49.46%	<b>48.90%</b>	50.55%	<b>34.30%</b>	50.03%
<b>Area (in km<sup>2</sup>)</b>		646.3		672.8		771.2		760.6	
<b>% grassland and arable land (cadastre, 2007)</b>		71.9		59.0		35.2		42.4	

## Results

One way for agriculture to profit from regional identity and development is through diversification. According to the literature review, regional identity provides farmers with opportunities to diversify. This is further explored for the four Belgian study regions.

### *The farmers' perspective*

In the questionnaire, farmers were asked whether they had diversified their activities or not. They could indicate the following types of activities: on-farm sales, on-farm processing, farm tourism, recreation, nature and landscape management, care activities, organic farming and catering on the farm (Van Huylenbroeck *et al.*, 2007). There was also a possibility to add other activities. Using a binary logistic regression model, an attempt was made to determine the factors influencing the probability that a farmer diversifies. The probability of having farm diversification was linked to several variables which, according to the literature, have an influence on this: a) socio-demographic factors such as age, education, family situation, membership of organizations and b) farm characteristics such as size of the farm, type of production, income from farming and the number of employees. Next to these variables, other variables were added which are linked to regional identity and regional development: how does the farmer evaluate his region, what does he think about the effect of regional development initiatives on his region as a whole and on agriculture in particular, and how is the farmer involved in these initiatives. As a result of multicollinearity, not all influencing variables could be kept in the model. The retained model, which best explains the probability of farm diversification, is shown in Table 2.

Table 2. Binary logistic regression model explaining the probability of farm diversification.

<b>Variables</b>	<b>B</b>	<b>Sig.</b>
Participation_reg_dev	1.093***	0.010
Attractiveness	0.243	0.515
Information	0.135	0.648
Organization_membership	0.215**	0.043
Age	0.132*	0.099
Age <sup>2</sup>	-0.002*	0.063
Production type		
cattle	0.100	0.727
pigs and poultry	-1.429***	0.008
horticulture/fruit&vegetable	-0.149	0.693
crops	0.255	0.450
	<b>Reference: mixed farms</b>	
Size_ownership	0.011*	0.078
Constant	-3.811*	0.055
Chi-square for model (p-value)	33.816 (0.000)	
Nagelkerke R <sup>2</sup>	0.123	
Cox & Snell R <sup>2</sup>	0.092	
Chi-square for Hosmer-Lemeshow (p-value)	7.850 (0.448)	

Significance level: \*\*\*= 0.01, \*\*=0.05,\*=0.1

The model shows that factors related to regional identity and the regional development process can have an influence on the probability of farm diversification. When a farmer has been involved in the development of a strategy or vision for regional development, the probability of taking up diversification on the farm increases. Giving farmers a voice in the regional development process could indeed create opportunities for them. They could, for example, argue for walking or biking

routes to pass by their farm so that they can profit from recreants stopping for an icecream or a drink, or lobby for a shop selling regional farm products. However, the observed relationship could also be an effect instead of a cause: because the farmer has diversified his activities, he is invited to participate in the development of a regional strategy. Diversification can indeed increase the visibility of a farmer for the public, and diversifying farmers often have a broad social network which will be shown later in this section. Although the influence is not significant, the model also suggests that when a farmer is informed about initiatives to develop the region (through folders, regional newspapers, websites, etc.), the probability that he has taken up diversification increases. Awareness of initiatives to embellish the region or to increase the possibilities for tourism and recreation could trigger farmers to take up extra activities to benefit from this. Finally, the model also gives an indication, although again not significant, that the more a farmer finds his region attractive for people outside the region, the higher the chance that he has taken up diversification. Hence, increasing the attractiveness of the region could increase the number of farmers engaging in diversification activities.

Concerning socio-demographic variables, the model shows that the more organizations a farmer belongs to, the higher his probability is to have diversification on the farm. The organizations taken up in the questionnaire were: (local) farmers' organizations, environmental organizations, social organizations, sports clubs, political parties, etc. This confirms results from previous research, showing that farmers with a well developed social network have a higher chance of starting up diversification. The age of the farmer is also significantly influencing the probability of diversification: the older the farmer is, the higher the chance of having diversification. This increase, however, is only valid till the age of 33. From age 33 onwards, the probability of having diversification decreases again. Finally, the model retained two farm characteristics significantly influencing the probability of diversification: the production type and the amount of land in ownership. Compared to mixed farms, as a reference category, pig and poultry farmers have a significantly lower probability to engage in diversification. This can be explained by the fact that diversification should be compatible with farm management and for some types of farms this may be difficult to combine. Finally, the model confirms another finding from literature: farmers with more land in ownership have a higher probability to take up diversification. This indicates that starting up diversification requires some entrepreneurship, and maybe –for some activities- also the consent of the landowner.

The model suggests that regional identity and regional development can positively influence the decision to start with diversification on the farm. When farmers were asked this question directly, only 22% of the farmers disagree, while 28% of the farmers agree that regional development initiatives increase their possibilities to start up diversification activities. A majority of 50%, however, is indecisive about the statement. There are significant differences between the four cases. In Haspengouw, the case with the most advanced regional development process, the percentage of farmers agreeing with the statement (37%) is significantly higher than in the other regions. In Gaume however, where the regional development process is least advanced, a majority of 44% of the farmers disagrees that regional development increases the possibilities to start with diversification, which is significantly higher than in the other regions. The main obstacle they identify for not diversifying their activities is that it's not profitable, with 46% of the farmers agreeing. Other important obstacles are the complexity of applying for subsidies for diversification, 45% agree, the fact that it's difficult to combine with other activities on the farm, 42% agree, and a lack of support from authorities, which is the case for 41% of the farmers. 28% of the farmers claim it's difficult to attract customers.

For diversification to increase the competitiveness of the agricultural sector in a region, it is essential that the activities provide economic gains. As the results from the question about obstacles for diversification already reveal, no significant correlations were found between income variables in the database and the fact whether the farmer has diversification or not. The results suggest a slight influence of diversification on farmers' income, with 72% of diversifiers claiming their income decreased the last 5 years compared to 77% of non-diversifiers, but this difference was not statistically significant (Chi<sup>2</sup> test, p= 0.280). It also doesn't mean that there is a higher percentage of diversifiers

whose income increased during the last five years: the diversifiers who didn't see their income decrease claim that their income stayed equal.

Although the economic benefits of diversification are not so clear, the effects it has on a region are quite distinct. Compared to 47% of non-diversifiers, 58% of diversifiers claim the visual attractiveness of their farm improved over the last 5 years (Chi<sup>2</sup> test, p= 0.041). There is also a significantly higher percentage of diversifiers claiming that biodiversity on their farm has increased during the last 5 years, 41% compared to 23% of non-diversifiers (Chi<sup>2</sup> test, p= 0.000), and that the farm's contribution to society has improved, 36% compared to 18% of non-diversifiers (Chi<sup>2</sup> test, p= 0.000). This proves that multifunctional agriculture does have an influence on the region's attractiveness, ecological and economic sustainability, but there is still no clear answer as to whether farmers can also financially benefit from this through diversification. The next section, where the role of the consumer in the rural area is investigated, tries to provide more insight into this matter.

### *The consumers' perspective*

One of the diversification activities through which farmers can gain an extra income is the sales of own products on the farm. Farmers selling products on the farm can benefit from regional branding processes through their marketing activities, because they could link themselves to a powerful regional brand, or through an increase in potential consumers who come from outside the region for tourism or recreation. In this section, however, the focus is on the potential consumers living in the region. In the inhabitants' questionnaire, respondents were asked whether they buy products on the farm. They had two answer possibilities: sometimes/often or seldom/never. Using a binary logistic regression model, the factors were determined which influence the probability that an inhabitant buys products on the farm. Next to socio-demographic variables, such as age, education and family situation, the influence was assessed of variables related to the region and regional development. Due to multicollinearity, not all variables could be kept in the model. The best model which could be obtained is shown in Table 3.

First of all, the model shows that there are clear differences between the regions. Compared to the reference region of PN20, the probability that an inhabitant will buy products on the farm is significantly higher in all other regions. The probability is the highest when the inhabitant comes from Haspengouw. As already mentioned in the previous section, in Haspengouw the regional development process is most advanced. In PN20, where the regional development process is still in a very early stage and where the identity of the region is also still unclear, the probability that an inhabitant will buy products on the farm is smallest. This result suggests that regional development processes can increase the willingness of the inhabitants to buy regional products directly from the farmer.

Next to the region, the inhabitant's feeling of belonging to the region determines the probability that he or she will buy products on the farm. The model shows that the weaker the inhabitant's sense of belonging to the region is, the smaller the probability that he or she will buy products on the farm. The negative signs mean that compared to the reference category of having a very strong sense of belonging to the region, for all other categories the probability that the respondent will buy products on the farm is less. As mentioned in the literature review, good regional development processes not only aim at attracting tourists from outside the region, but also try to create a stronger link between the inhabitants and their region. An increased feeling of belonging to a region can therefore be the outcome of development processes. This in turn could, according to the model, benefit farmers who are involved in direct sales of regional products.

Table 3. Binary logistic regression model explaining the probability that inhabitants buy products on the farm.

<b>Variables</b>		<b>B</b>	<b>Sig.</b>
Region	Meetjesland	0.849**	0.028
	Haspengouw	1.394***	0.000
	Gaume	0.800*	0.054
	<b>Reference: PN2O</b>		
SenseBelonging	very weak	-1.190***	0.006
	weak	-0.880***	0.009
	medium	-0.852***	0.001
	strong	-0.481**	0.032
<b>Reference: very strong</b>			
LengthStay	< 3 years	0.113	0.791
	bet 3 and 8 years	0.469	0.242
	bet 8 and 15 years	0.582	0.137
	> 15 years	0.778***	0.008
<b>Reference: born in region</b>			
OwnContribution		0.635***	0.000
Constant		-0.132	0.749
Chi-square for model (p-value)		57.531 (0.000)	
Nagelkerke R <sup>2</sup>		0.079	
Cox & Snell R <sup>2</sup>		0.112	
Chi-square for Hosmer-Lemeshow (p-value)		5.922 (0.549)	
Significance level: ***= 0.01, **=0.05, *=0.1			

In the questionnaire respondents were asked how long they were already living in the region. The reference category for this variable are people who were born in the region and still live there. Compared to this category of people, the model shows that the people who are not native to the region have a higher probability of buying products from local farmers. Within this group, the probability of buying on the farm increases with the number of years the respondent has lived in the region. It is stated in literature that people who are native to a region in general are less aware of its positive aspects than people who migrated to the region. In regional development processes it often takes outsiders to point out the region's strengths and weaknesses and make local people aware of these. The same phenomenon could apply to the question of buying regional products from a local farmer, and could explain why people who migrate to a region are more likely to buy at the farm.

A final factor influencing the inhabitants' probability to buy products at the farm is the extent to which they feel they contribute to the development of the region. Respondents were asked whether they contribute somehow to achieving a better region with a higher quality of living. A contribution could be translated as being an active member of organizations striving for a better region, being involved in the activities of these organizations or in another way, voluntarily and on one's own initiative. Compared to people who claim not to contribute in any way to the development of the region, people who do say to contribute have a significantly higher probability of buying products directly from the farmer. A possible explanation could be that contributing to the development of the region somehow increases the connectedness to the region and appreciation of the region and its products. People contributing to the development of the region might also have a more extensive social network and may be more stimulated by other people to buy on the farm.

The analysis showed that none of the other socio demographic characteristics (such as age or education) were significant.

The important influence of the connection of consumers to the region on their decision to buy on the farm or not can also be derived from the reasons the respondents give to buy on the farm. The most important reasons why they buy products directly from the farmer are being proud of their region and the freshness of the products. For both, 70% of the respondents claimed this was a reason for them to buy on the farm. The third most important reason why people buy on a farm, with 55% of the respondents claiming this is an important reason, is the fact that these products are produced in a more natural way. The most common reason people give why they don't want to buy on a farm is because it's easier to buy everything you need together in one supermarket. This reason was given by 61% of the respondents. 12% doesn't buy on the farm because there is only a limited choice and 8% doesn't buy on a farm because they don't know where to buy and which farmer sells which products.

## **Discussion and conclusion**

This paper tried to provide an answer to the question whether regional identity can have a positive impact on the development of agriculture in a region, and whether it would be beneficial for regional development policy to focus on strengthening regional identity. In four Belgian regions, two in the Flemish part and two in the Walloon part, questionnaires were collected from inhabitants of the regions and farmers in particular. The selected regions differ with respect to their identity and their stage in the regional development process.

A possible way through which farmers could gain from regional identity, is by diversifying their farm activities and taking up, for example, direct sales and processing of farm products, farm tourism or landscape management. How regional identity is developed in a region, however, also plays a role. In Haspengouw, which has a strong identity and an advanced regional development process, the percentage of farmers believing that regional development provides them with opportunities to diversify is the highest. In Gaume, on the other hand, which also has a strong identity but where there are not so many initiatives taken to further develop the region, the percentage of farmers believing that regional development provides them with opportunities to diversify is the lowest. These results show that not only should the identity of a region be attractive for farmers to gain from it, there should also be a clear vision and plan to further develop this identity and to use it to create benefits for the region. The results also show that when farmers are somehow involved in the regional development process, for example in the development of a vision for the region or by doing practical tasks for regional development organizations (e.g. regarding landscape management), there is a higher chance that they will take up diversification. Involvement of farmers in these processes can make them aware of the opportunities regional identity can give them, but they can also steer the process as such that they could also benefit from it (e.g. by making sure that walking and biking routes pass by their farm).

Taking up diversification, however, doesn't guarantee that farmers can also make a profit from it. The questionnaire gives an indication that diversification doesn't increase farmers' income, but rather compensates losses from agricultural production so that in the end the farmers' income remains equal. Obstacles identified by the farmers to gain from diversification, next to the fact that it can be difficult to combine with other farming activities, are a lack of support for diversification from authorities and difficulties to attract customers. Regional development and branding processes could however facilitate attracting customers to farms. Results from the inhabitants' questionnaire show that in regions where the regional development process is well advanced, the probability that inhabitants buy products on the farm is higher. Results also show that the more the inhabitants feel they belong to the region and the more proud they are of their region, the more likely it is that they will buy products on the farm. By making the region more attractive, and trying to involve the inhabitants in its development, regional development and branding processes can stimulate locals to buy local products from farmers. This stresses the importance of focussing on inhabitants in regional development processes, because it can lead to a sustainable supply of customers. Special attention should be paid to inhabitants which were born in the region, because they are least likely to buy products from local

farmers. Finally, a possibility to gain more economic benefit from diversification could be to sell different products of different farmers together in one shop, which is easily accessible. One of the main obstacles for inhabitants to buy on the farm was namely the fact that it's not so convenient, because of the limited choice in a farmer's shop and the fact that the homeselling farmers are spread over the region. This shop could then also provide its customers with a detailed plan of the region showing the locations of the farmers with home sales and what they're selling. As such, personal contact between the farmer and the customer is still possible and facilitated.

Finally, the research indicates that farms with diversification are visually more attractive, create more biodiversity and have a generally higher contribution to society than farms without diversification. As such, by creating more opportunities for diversification, regional identity doesn't only stimulate agricultural development, but is also benefiting the region as a whole.

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## References

- Antonsich, M. (2010). Exploring the correspondence between regional forms of governance and regional identity: The case of Western Europe. *European Urban and Regional Studies* 17: 261-276.
- Barbieri, C. and Mahoney, E. (2009). Why is diversification an attractive farm adjustment strategy? Insights from Texas farmers and ranchers. *Journal of Rural Studies* 25: 58-66.
- Bessiere, J. (1998). Local development and heritage: Traditional food and cuisine as tourist attractions in rural areas. *Sociologia Ruralis* 38: 21-+.
- Bowler, I., Clark, G., Crockett, A., Ilbery, B. and Shaw, A. (1996). The development of alternative farm enterprises: A study of family labour farms in the northern Pennines of England. *Journal of Rural Studies* 12: 285-295.
- Chiles, T. H., Meyer, A. D. and Hench, T. J. (2004). Organizational emergence: The origin and transformation of Branson, Missouri's musical theaters. *Organization Science* 15: 499-519.
- Comen T., F. D. (2009). Agricultural diversification and agritourism: critical success factors. University of Vermont, Institute for Integrated Rural Tourism. Available at <http://www.uvm.edu/tourismresearch/agtour/publications/Agritourism%20Report.pdf>.
- Das, B. R. and Rainey, D. V. (2010). Agritourism in the Arkansas Delta Byways: Assessing the Economic Impacts. *International Journal of Tourism Research* 12: 265-280.
- Dufour, A., Mauz, I., Remy, J., Bernard, C., Dobremez, L., Havet, A., Pauthenet, Y., Pluinage, J. and Tchakerian, E. (2007). Multifunctionality in agriculture and its agents: Regional comparisons. *Sociologia Ruralis* 47: 316-342.
- Fawn, R. (2009). 'Regions' and their study: wherefrom, what for and whereto? *Review of International Studies* 35: 5-34.
- Getz, D. and Carlsen, J. (2000). Characteristics and goals of family and owner-operated businesses in the rural tourism and hospitality sectors. *Tourism Management* 21: 547-560.
- Gibson, C. and Connell, J. (2003). 'Bongo Fury': Tourism, music and cultural economy at Byron Bay, Australia. *Tijdschrift Voor Economische En Sociale Geografie* 94: 164-187.
- Gralton, A. and Vanclay, F. (2009). Artisanality and culture in innovative regional agri-food development: lessons from the Tasmanian artisanal food industry. *International Journal of Foresight and Innovation Policy* 5: 193-204.

- Gualerzi, D. (2006). Identity and regional development: an introductory analysis. In, *2006 First International Symposium on Environment Identities and Mediterranean Area, Vols 1 and 2*. New York: Ieee, 359-364.
- Hamin, E. M. and Marcucci, D. J. (2008). Ad hoc rural regionalism. *Journal of Rural Studies* 24: 467-477.
- Kilic, T., Carletto, C., Miluka, J. and Savastano, S. (2009). Rural nonfarm income and its impact on agriculture: evidence from Albania. *Agricultural Economics* 40: 139-160.
- Marsden, T. and Smith, E. (2005). Ecological entrepreneurship: sustainable development in local communities through quality food production and local branding. *Geoforum* 36: 440-451.
- Messely, L., Dessein, J., Lauwers, L. (2009). Branding regional identity as a driver for rural development Presented at the The role of knowledge, innovation and human capital in multifunctional agriculture and territorial rural development. Belgrade, Republic of Serbia, December 9-11, 2009.
- Mettepenningen, E., Vandermeulen, V. and Van Huylenbroeck, G. (2010). Perspectives for landscape management by farmers in the framework of regional branding processes, *9th European IFSA Symposium*. Vienna, Austria.
- Oliveira, J., Roca, Z. and Leitao, N. (2010). Territorial identity and development: From topophilia to terraphilia. *Land Use Policy* 27: 801-814.
- Paasi, A. (2002a). The territorial factor: Political geography in a globalizing world. *Tijdschrift Voor Economische En Sociale Geografie* 93: 476-478.
- Paasi, A. (2002b). Bounded spaces in the mobile world: Deconstructing 'regional identity'. *Tijdschrift Voor Economische En Sociale Geografie* 93: 137-148.
- Paasi, A. (2003). Region and place: regional identity in question. *Progress in Human Geography* 27: 475-485.
- Paasi, A. (2009). The resurgence of the 'Region' and 'Regional Identity': theoretical perspectives and empirical observations on regional dynamics in Europe. *Review of International Studies* 35: 121-146.
- Poudyal, N. C., Hodges, D. G. and Cordell, H. K. (2008). The role of natural resource amenities in attracting retirees: implications for economic growth policy. *Ecological Economics* 68: 240-248.
- Prokkola, E. K. (2007). Cross-border regionalization and tourism development at the Swedish-Finnish border: "Destination Arctic Circle". *Scandinavian Journal of Hospitality and Tourism* 7: 120-138.
- Raagmaa, G. (2002). Regional identity in regional development and planning. *European Planning Studies* 10: 55-76.
- Ray, C. (1998). Culture, intellectual property and territorial rural development. *Sociologia Ruralis* 38: 3-+.
- Romanelli, E. and Khessina, O. M. (2005). Regional industrial identity: Cluster configurations and economic development. *Organization Science* 16: 344-358.
- Tomaney, J. (2007). Keeping a beat in the dark: narratives of regional identity in Basil Bunting's Briggflatts. *Environment and Planning D-Society & Space* 25: 355-375.
- Van Huylenbroeck, G., Vandermeulen, V., Mettepenningen, E. and Verspecht, A. (2007). Multifunctionality of agriculture: A review of definitions, evidence and instruments. *Living Reviews in Landscape Research* 1.
- Vandermeulen, V., Verspecht, A., Van Huylenbroeck, G., Meert, H., Boulanger, A. and Van Hecke, E. (2006). The importance of the institutional environment on multifunctional farming systems, in the peri-urban area of Brussels. *Land Use Policy* 23: 486-501.