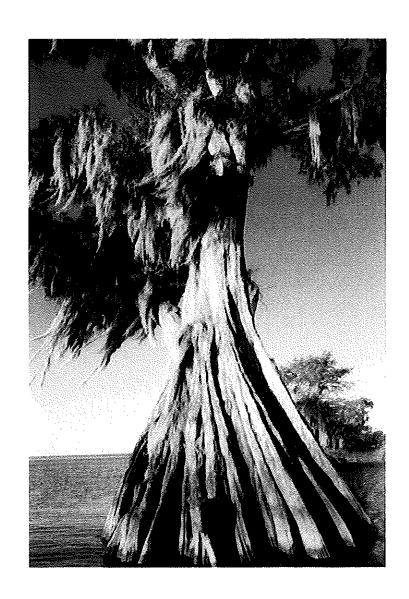


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ORGANIC FARMING AND THE GREENING OF THE COMMON AGRICULTURAL POLICY MADE WALLOON AGRICULTURE BECOME MORE ENVIRONMENT FRIENDLY IN 2015

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ABSTRACT. In Wallonia, organic farming continues to increase its share of agricultural activities, the number of organic farmers exceeding for the first time 10% of the total number of farmers in 2014, with 8.6% of the total agricultural area. Meadows represent 83% of the organic areas, general crops 15% and vegetables 1%. The number of cattle heads is still increasing, while poultry and laying hen recorded a significant progress during the last years. Organic products consumption is also increasing and the market share of organic products in food products reached 2.3% in 2014. On the other hand, the implementation of the new Common Agricultural Policy, and particularly its green payment, obliges 50% of Walloon farmers to practice crop diversification and 46% to have at least 5% of ecological focus area within their arable land in 2015, which represents more than 24,000 ha. So, organic farming and ecological focus areas do have today a significant share of the Walloon agricultural area, leading to a more sustainable agriculture.

Key words: Wallonia, organic farming, green payment, ecological focus areas

INTRODUCTION

The pollution due to intensive agricultural practices and risks for human health have led to changes in the goals and tools of agricultural policy during the last decades. On one hand, organic farming, duly controlled as such, was defined at the European level in 1991 and became a significant new method of production during the first years of the 21st century. On the other hand, environmental considerations and measures were more and more taken into account in the

Common Agricultural Policy (CAP) since 1985. After three years of negotiations (Bureau, 2012), the European Parliament, Commission and Council of ministers defined, in June 2013, the new CAP for the period 2014-2020. One of the main characteristics of the new rules is that they go further in favour of the environment (Matthews, 2013), defining the so-called "green payment" which must represent, in each Member State/region of the European Union, 30% of the national/regional envelope for direct payments to farmers, the most important expenses of the CAP.

This paper examines the situation of organic farming, organic products consumption and the implementation of the green payment in Wallonia, the Southern part of Belgium, a founder Member State of the European Union where agricultural policy is nowadays regionalised. It shows to which extent organic farming and the green payments contribute in 2014-2015 to a more sustainable management of natural resources in a small region where high yields are obtained and large quantities of inputs (fertilizers, pesticides, etc.) were used after the post-World War II agricultural "revolution".

ORGANIC FARMING IN WALLONIA

Evolution of the number of farms and of the agricultural area

The first organic farms appeared in the 1980's (Burny and Gellens, 1988), but this way of production became significant only during the 21st century (figure 1). Between 2000 and 2005, the number of organic farms in Wallonia reached

from 400 to 500 only, but it began to increase more rapidly since 2006. In 2014, the number of organic farms reached 1,287, exceeding for the first time the share of 10% of the total number of farms in Wallonia.

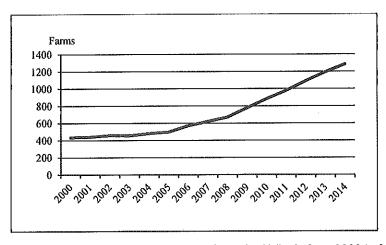


Fig. 1. Evolution of the number of organic farms in Wallonia from 2000 to 2014 (Source of the basic data: BIOWALLONIE 2015).

The total area devoted to organic farming followed the same pathway (figure 2).

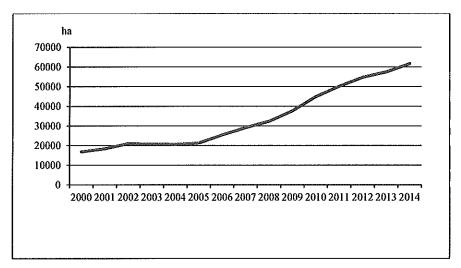


Fig. 2. Evolution of the organic farming area in Wallonia from 2000 to 2014 (Source of the basic data: BIOWALLONIE 2015).

While the total area for organic farming reached around 20,000 ha during the period 2001-2005, it sharply increased later, exceeded 50,000 ha in 2011 and 61,651 ha in 2014, representing the significant share of 8.6% of the total agricultural area. This is not yet the threshold of 20% cited by Dufumier (2012) to be the breakpoint, but an important part of the way has already been done.

The average area of an organic farm reached 39 ha in 2000 and 48 ha in 2014, which is a little bit less than the general mean.

Main organic productions

In 2014, more than 50,000 ha or 83% of the organic farming area were devoted to meadows, while general crops represented 15.4%, vegetables 1.0% and fruits only 0.2%. On the meadows are mainly raised dairy cows (the price of organic milk is much higher than the price of conventional milk, especially after the disappearance of dairy quotas) and the meat races (the Belgian White Blue, Limousine, etc.). The herd reached around 30,000 heads during the period 2003-2006 and then sharply increased, exceeding 70,000 in 2013 and 2014 (figure 3).

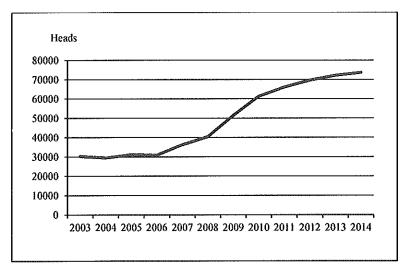


Fig. 3. Evolution of the number of organic cattle heads in Wallonia from 2003 to 2014 (Source of the basic data: BIOWALLONIE 2015).

Cereals are more and more important, some large farms being converted to organic farming. This reflects the evolution of the demand.

The production of vegetables is still modest, but continuously increasing since 2011. The local demand is also increasing.

The poultry sector is remarkably dynamic. In 2014, the number of heads reached 1.6 million, more than three times than in 2003. The number of laying hen exceeded 140,000 in 2014, registering a very sharp increase since 2010.

The number of sheep and goats is modest, but also increasing.

The strategic plan for the development of organic farming towards 2020

In 2013, the Walloon Government approved a strategic plan for the development of organic farming towards 2020 (Comase and Di Antonio, 2013).

This plan defined different measures concerning extension services, agricultural research, teaching and promotion and defined the goals towards 2020: 1,750 organic farms and 14% of the regional agricultural area (Burny and Debode, 2013).

Goals are also defined for the processing industry: to reach 500 enterprises (230 in 2011) with a total turnover of 500 million € (109 in 2011), and for consumption: to reach 3% of the food market (1.7% in 2010).

In 2016, organic farming is also proposed to the citizens as one of the measures of the future "Walloon strategy for sustainable development" (Service public de Wallonie, 2016).

Financial support to organic farmers

Organic farmers are not only eligible to all financial supports from the CAP, including the direct payments (and the green payment among them), but they can also get specific financial support from the second pillar of the CAP, devoted to "rural development".

In Wallonia, the financial support for organic farming for the period 2015-2020 is described in table 1.

Table 1. Financial support (€/ha) for organic farming in Wallonia (2015-2020) Source of the basic data: Service public de Wallonie 2015).

Crops	Area of organic farming			
•	0 to 60 l	ha	Over 60 ha	
Meadows and forage crops	200		120	
Other annual crops	400		240	
•	0 to 3 ha	3 to 14 ha	Over 14 ha	
Fruit trees, horticulture and seed production	900	750	400	

For the conversion from a conventional to organic farm, the support is even higher (table 2).

Table 2. Financial support (€/ha) in Wallonia for a conventional farm in conversion to organic farming (2015-2020), (Source of the basic data: Service public de Wallonie 2015).

Crops	Area of organic farming			
	0 to 60 l	na	Over 60 ha	
Meadows and forage crops	350	350		
Other annual crops	550		390	
	0 to 3 ha	3 to 14 ha	Over 14 ha	
Fruit trees, horticulture and seed production	1050	900	550	

Organic products consumption

Organic food is now relatively successful among consumers (Petrescu et al., 2014). The market share of organic food products is still modest in Belgium: 2.3% in 2014. However, it is still increasing. Even more remarkably, the total expenses for organic food products still increased by 5% in 2014, while the total expenses for food products declined for the first time since many years.

The largest expenses per capita in 2014 concern dairy products $(5.40 \in)$, vegetables $(4.74 \in)$ and fruits $(3.71 \in)$.

The highest market shares for organic products are observed for meat substitutes (21.0%), eggs (11.0%) and vegetables (5.4%). The market share reaches 3.5% for fruits and 2.1% for dairy products.

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88% of Belgian households bought at least once an organic food product in 2014, while 7% bought at least once per week.

THE GREEN PAYMENT

Implementation of the green payment in Wallonia

A new architecture for direct payments to farmers for the period 2015-2020 has been defined in the Regulation (EU) No 1307/2013 of December 17, 2013. This regulation gives a general scheme, but leaves many possibilities of implementation to the Member States (or their regions according to their own organisation), with the exception of the green payment (Hart, 2015). Indeed, it is compulsory that the green payment must represent 30% of the total amount of direct payments to farmers in each Member State/region. Only the way of implementation is left to the choice of the Member State/region: the same amount for each eligible ha or a sum proportional to the basic payment paid for each farmer. The last solution was chosen in Wallonia.

The structure of direct payments in Wallonia for the period 2015-2020 is shown in figure 4.

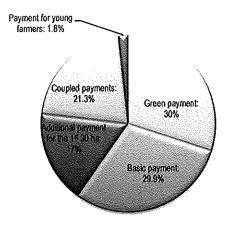


Fig. 4. Structure of direct payments in Wallonia (2015-2020) (Source: Burny and Terrones Gavira, 2016).

In order to get the green payment and avoid financial penalties, the farmers must respect three conditions:

- maintenance of permanent pastures;
- crop diversification;
- implementation of ecological focus areas.

Maintenance of permanent pastures

Permanent pastures are supposed to be good for the environment, avoiding erosion, stocking carbon dioxide...

They are defined as grassland since at least five years.

Each Member State/region has to define a "reference ratio" as the area of permanent pastures divided by the total agricultural area at the national/regional, sub-regional or farmer's level, 2015 being the reference year. In the future, the ratio cannot decrease by more than 5%.

The Member State/region must also define the permanent pastures which are considered as environmentally fragile (article 45 of Regulation (EU) No. 1307/2013). In Wallonia, they are situated in the NATURA 2000 zone.

Crop diversification

Crop diversification must be practiced if the farmers manage:

- between 10 and 30 ha of arable land: in such a case, at least two crops are compulsory (the most important does not exceed 75% of the area):
- more than 30 ha of arable land: in such a case, at least three crops are compulsory (no more than 75% of the area for the most important and no more than 95% for the two most important).

Are defined as "crop": land lying fallow, temporary pastures, one gender considered in the botanical classification (Triticum, Hordeum, Beta, etc.) or one species for Brassicaceae, Solanaceae and Cucurbitaceae.

There is no compulsory diversification when:

- the farmer has less than 10 ha of arable land;
- more than 75% of the arable land are devoted to the production of grass (temporary pastures) or fallow and, on the same time, the remaining arable land area does not exceed 30 ha;
- more than 75% of the total agricultural area of the farm are devoted to permanent pastures or the production of grass and, on the same time, the remaining arable land area does not exceed 30 ha.

For the first year of implementation of this measure, 2015, the impact on Walloon farms is shown in table 3.

Table 3. Number of farms concerned with crop diversification in Wallonia in 2015, (Source: Terrones Gavira et al., 2016)

	Number of farms	%
No obligation	6,323	50
At least two crops	2,040	16
At least three crops	4,221	33
Do not meet the obligations	105	1

Ecological focus areas

When the farmers manage more than 15 ha of arable land, they must devote at least 5% of this land to ecological focus areas (article 46 of Regulation (EU) No. 1307/2013).

The Commission delegated Regulation (EU) No. 639/2014 gives a list of ecological focus areas in which the Member State/region can select which ones are convenient for them. For Wallonia, these areas are presented in table 4.

Some topographic elements need a conversion coefficient to be transformed in an area. Some weighting factors are used because the ecological impact of the different areas is variable.

In 2015, 54% of Walloon farmers were not obliged to implement ecological focus areas (they have less than 15 ha of arable land, are organic farmers).

Among the group of farmers who were obliged to have ecological focus areas, 47% devoted from 5 to 6% of their arable land to these areas, 21% devoted from 6 to 7% and 29% had more than 7% of ecological focus areas. In addition, 2.4% of the farmers did not meet the required 5% and so could get financial penalties.

Nearly 80% of the farmers obliged to have ecological focus areas have only one type of them, and 15% have only two types.

The most important type of area used to fulfil the requirements is by far the "areas with catch crops or green cover", which represents nearly 90% of all the areas to be converted in ecological focus areas (table 5). Far behind are land lying fallow and areas with nitrogen-fixing crops.

Table 4. Conversion coefficients and weighting factors to transform some areas and landscape features into ecological focus areas (Source: Terrones Gavira et al., 2016)

Elements	Particularity	Description		Conversion coefficient	Weighting factors	Ecological focus area (m²)
Surface	Plot	Land lying fallow	Per 1 m ²	n/a	1	1
elements (ha)		Areas with short rotation coppice	Per 1 m ²	n/a	0.3	0.3
•		Areas with nitrogen-fixing crops	Per 1 m ²	n/a	0.7	0.7
		Buffer strips	Per 1 m ²	n/a	1.5	1.5
		Strings of eligible hectares along forest edges – without production		n/a	1.5	1.5
	Intercrop plot	Areas with catch crops or green cover	Per 1 m ²	n/a	0.3	0.3

Elements	Particularity	Description		Conversion coefficient	Weighting factors	Ecological focus area (m²)
	Topographic	Ponds	Per 1 m ²	n/a	1.5	1.5
	elements	Group of trees/ Field copses	Per 1 m ²	n/a	1.5	1.5
Linear	_	Field margin	Per 1 m	6	1.5	9
elements		Ditches	Per 1 m	3	2	6
(m)		Hedges/wooded strips	Per 1 m	5	2	10
Punctual (nb)	-	Isolated tree	Per tree	20	1.5	30

Table 5. Area of the different types of ecological focus areas in Wallonia in 2015 (Source: Terrones Gavira et al., 2016)

	Area (ha)	%
Land lying fallow	983.7	4.1
Areas with short rotation coppice	9.3	0.0
Areas with nitrogen-fixing crops	898.5	3.7
Buffer strips	206.5	0.9
Strings of eligible hectares along forest	99.8	0.4
edges – without production Areas with catch crops or green cover	21,432.8	88.8
Ponds	1.3	0.0
Group of trees/Field copses	111.1	0.5
Field margin	138.3	0.6
Ditches	42.8	0.2
Hedges/wooded strips	200.8	0.8
Isolated tree	1.6	0.0
TOTAL	24,126.6	100.0

CONCLUSIONS

Organic farming in Wallonia is increasingly successful due to the economic, social and environmental problems of the conventional model of agriculture, a strong financial support of the public authorities and a greater awareness of the consumers about health and environmental problems. In such conditions, organic farming is today significant in Walloon agriculture and is a part in the regional strategy for sustainable development. On the other side, the Common Agricultural Policy is going greener and greener, and so-called "ecological focus areas", directly linked to financial support, also represent significant agricultural areas. Organic farming and ecological focus areas represent in 2015 around 12% of the total agricultural area. This phenomenon clearly proves that the farmers are able to adapt to new situations and to respond to the new wishes of our society, especially when this society defines its vision of the future and offers sufficient financial means to reach its goals. Without any doubt, European agriculture, thanks to the agricultural policy, research, extension gets more and more environment friendly.

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