



# UNISECO

## UNDERSTANDING & IMPROVING THE SUSTAINABILITY OF AGRO-ECOLOGICAL FARMING SYSTEMS IN THE EU

### **Deliverable Report D5.1** **Inventory of Market and Policy Incentives** **Supporting AEFS** **Annex 2 - Factsheets**

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DATE OF APPROVAL:	18.01.2019
APPROVED BY PROJECT COORDINATOR:	Gerald Schwarz (Thünen Institute)
DATE OF APPROVAL:	18.01.2019
CALL H2020-SFS-2017-2	Sustainable Food Security-Resilient and Resource-Efficient Value Chains
WORK PROGRAMME Topic SFS-29-2017	Socio-eco-economics - socio-economics in ecological approaches
PROJECT WEB SITE:	<a href="http://www.uniseco-project.eu">www.uniseco-project.eu</a>

This document was produced under the terms and conditions of Grant Agreement No. 773901 for the European Commission. It does not necessarily reflect the view of the European Union and in no way anticipates the Commission's future policy in this area.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N° 773901.

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# 1. Organic mountain haymilk production scheme (Austria)

## CATEGORY

Market

## GEOGRAPHIC SCOPE

Regional

Several mountain districts (i.e. Murau, Styria, Pinzgau, Salzburg, Kitzbühel, Tyrol)

## CLUSTER

4. Organic food promotion and certification

Production scheme on haymilk with joint organic quality certification and marketing initiative

## LEGISLATIVE REFERENCE/ NAME OF OWNER

The joint organic quality certification and marketing initiative “Zurück zum Ursprung” (ZZU) is based on a production scheme on haymilk.

Haymilk is certified through the umbrella organisation *ARGE Heumilch*, which was established in 2004 and unites around 8,000 haymilk producers and 60 dairies. Since March 2016, haymilk is recognized as Traditional Specialty Guaranteed (Council Regulation (EEC) No 1848/1993).

## OVERALL/ SPECIFIC OBJECTIVES

By connecting the production of quality products to alpine landscapes, the organic mountain haymilk scheme aims at creating synergies between the improvement of the income of mountain farmers (e.g. higher organic haymilk premium, premium guarantee) and those of other parties along the value chain, and maintenance of typical landscapes and high levels of biodiversity.

## LINK TO AGRO-ECOLOGY

Haymilk production is a traditional form of a relatively extensive type of farming in which cut grass is processed dried representing the prime fodder base for dairy cows (instead of silage). The organic mountain haymilk scheme of ZZU links haymilk production to both organic and mountain farming.

The organic mountain haymilk scheme ZZU comprises more stringent requirements than those of EU organic regulation (i.e. Council Regulation (EC) No 834/2007), including e.g. silage-free forage, the requirement to use 75% roughage from own production, 100% organic feed from Austrian origin, prohibition of soya bean feeding, a minimum of 180 days access to open runs of which a minimum of 120 days on pasture grazing.

## TOOLS USED TO ACHIEVE OBJECTIVES

The brand ZZU brings together private actors (i.e. farmers, dairy, the retail chain and consultancy firm) in the endeavour to valorise place-specific assets (i.e. biodiversity, alpine cultural landscapes, tradition). These assets function as a competitive advantage and enable the positioning of a quality product, applying a targeted marketing strategy based on unique territorial identities which promote the visibility of rural areas that are embedded in a global economy. Farmers agree to comply with rules and regulations defined by the private standard of ZZU through a declaration of participation.

## DRIVERS



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N° 773901.

## POLITICAL/ LEADERSHIP

## ECONOMIC

The retail chain offers an organic haymilk premium payment. The vertical integration of the value chain also helps to reduce transaction costs and mitigates the production risk of producers.

## SOCIAL

A range of individual intrinsic motives such as prestige, tradition, independence, environmental attitudes influence the adhesion of farmers to ZZU scheme.

## TECHNOLOGICAL

## LEGISLATIVE

Public support (i.e. support under agri-environmental schemes and Areas of Natural Constraints) are decisive factors impacting on farmer's land management decisions and contribute to increasing participation to ZZU scheme.

## ENVIRONMENTAL

The increased economic viability and attractiveness of ZZU scheme plays a role in the continuation of farming in mountain areas as well as in the maintenance of small structured mosaic like cultural landscapes and high levels of biodiversity.

## EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

The positive impact of both hay farming and organic agriculture on levels of biodiversity have been widely recognized in the scientific literature. With regard specifically to organic and haymilk in Austria, Schader et al. (2014) showed that the organic dairy production systems assessed at farm and product levels showed significantly higher biodiversity potentials than did the conventional systems.

## STRENGTHS/ WEAKNESSES

### STRENGTHS

ZZU is a prime example of horizontal and vertical cooperation in the Austrian context. The private quality marketing generates added value by the market and distributed under improved terms of trade along the value chain.

### WEAKNESSES

The development of the European milk market (e.g. overproduction, declining prices) undoubtedly impacts the directions taken by the initiative ZZU and its appeal to producers. Firstly, because extensive haymilk production is only a part of agricultural practices and the prevailing cultural landscape in mountain regions. Secondly, a declining price of conventional milk will also increase pressure on the organic sector. Therefore, experts argued that it would be advantageous to decouple the haymilk price from the general milk price and to market it as specialty product

## REFERENCES

Nigmann, T., Hovorka, G. & Dax, T. (2017) Organic farming in the mountain region Murau. PEGASUS D4.3. Vienna: BABF.

Schader, C., Drapela, T., Markut, T., Meier, M. S., Lindenthal, T., Hörtenhuber, S., & Pfiffner, L. (2014). Farm-and product-level biodiversity assessment of conventional and organic dairy production in Austria. *International Journal of Biodiversity Science, Ecosystem Services & Management*, 10(1), 20-39.







## 2. Soil fertility program and carbon sequestration certification (Austria)

### CATEGORY

Mixed (policy+market)

### GEOGRAPHIC SCOPE

Regional

### CLUSTER

2. Agri-environmental practices

### LEGISLATIVE REFERENCE/ NAME OF OWNER

Business partner and the communities of the Ökoregion Kaindorf finance the scheme. The certificate does not have an authorized and official status. All agents are independent, and required legal contracting is made case-specific.

Depending on the specific measures (e.g. organic farming; environmentally sound and biodiversity-promoting management; greening of arable land; direct seeding and seeding on mulch), the farmers receive payments as part of the Austrian agri-environmental programme ÖPUL (pillar 2). ÖPUL 2015 is part of the Austrian Rural Development Programme for the period of 2014 to 2020 (LE 14-20).

### OVERALL/ SPECIFIC OBJECTIVES

The overall objective of the bottom-up initiative is to establish an ecological circular-flow economy in the region, targeting different sectors, to combat climate change and develop mitigation strategies.

Specific objectives:

- pursuing ecological circular-flow economy.
- reduce the societal CO<sub>2</sub> balance of the entire region.
- sequester carbon by various methods to increase soil fertility and reduce soil loss.
- transfer of knowledge and spread of information to farmers and society on circular-flow economy related to agriculture but also other sectors.

### LINK TO AGRO-ECOLOGY

The Association “Ökoregion Kaindorf” with roughly 250 conventional and organic farmers is focusing on increase of soil fertility and carbon sequestration. More efficient and environmentally friendly use of nutrients originating from manure, compost and charcoal. The program includes knowledge transfer to farmers (“Humusakademie”), CO<sub>2</sub> compensation certificates, compost application and a biochar initiative, reduced soil tillage and compulsory green cover of arable land, mixed cropping, etc. Furthermore, agro-forestry was introduced as a separate approach in 2012. Findings on soil fertility and carbon sequestration are exchanged in a group of regulars (“Humus-Stammtisch”).

### TOOLS USED TO ACHIEVE OBJECTIVES

Various technical, educational and monitoring tools are used to improve agro-ecology:

- Provision of information and training in the broader context of soil fertility to farmers.



- Cultivation techniques: reduced tillage, bio-char and compost application, green cover and mixed cropping, agro-forestry.
- Promotion of national and international networking, including research.
- Collection and provision of essential research knowledge to practical operators.
- Certificates for carbon sequestration are issued to farmers.
- On-farm research and experimental projects.

#### DRIVER – POLITICAL/ LEADERSHIP, ECONOMIC, SOCIAL, TECHNOLOGICAL, LEGISLATIVE, ENVIRONMENTAL

*Political/leadership:* The concept was developed by communities, farmers and other actors, to establish an ecological circular-flow economy

*Economic:* Various players, e.g. buyers of carbon credits (business partners), composting and biochar production was established (international market).

*Social:* Close cooperation among farmers, communities and sectors and a large network established with partners from politics, society, consumers, education (schools), companies, science and research. Furthermore, the region is a “Fairtrade region”.

*Technological:* Composting and biochar technology was developed and a market established.

*Legislative:* -

*Environmental:* Concerns for the quality of the environment and the impact of farming, especially on soil resources and climate mitigation.

#### EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

The methods applied have numerous positive effects on mitigating climate change, adapting to climate change, reducing loss of soil and soil quality and higher diversity of cultures and landscape features. On average 10 tons CO<sub>2</sub> per hectare and year are sequestered on a total of 2500 hectares. Water-storage capacities have significantly increased. Companies (e.g. retailers) are purchasing certificates. Meanwhile an international audience is participating in events of the Association.

#### STRENGTHS/ WEAKNESSES

##### Strengths:

The integrated approach combines various sectors (e.g. energy, agriculture, education, mobility), which helps to raise societal knowledge of AEF systems and their importance. The active engagement of SMEs and value chains of various sectors is to establish an excellent atmosphere and cooperation for innovation – in agriculture and beyond.

##### Weaknesses:

Apart from compost/biochar, no marketing initiative is related to the initiative, which would have potentials.

#### REFERENCES:

General description of the project (in German): <https://www.oekoregion-kaindorf.at>



### 3. Upper Austrian Soil and Water Protection Advisory Service (Austria)

#### CATEGORY

Policy

#### GEOGRAPHIC SCOPE

Regional - Communal to regional (federal state of Upper Austria)

#### CLUSTER

8. Research and capacity-building

The “Soil and Water Protection Advisory Service” (BWSB) is the key project of the federal government of Upper Austria to reduce soil, nutrient and pollutants transfer from arable land to surface and ground waters by the implementation of soil and water protection and law enforcement regarding drinking water protection.

#### LEGISLATIVE REFERENCE/ NAME OF OWNER

Owner: Federal State of Upper Austria (under the organizational umbrella of the Upper Austrian Agricultural Chamber)

#### OVERALL/ SPECIFIC OBJECTIVES

Due to the alarming condition of soil and water bodies (e.g. by soil erosion and phosphorous emissions, nitrate and pesticide leaching), the government of Upper Austria reformed soil and water conservation approaches with the overall goal to fulfill the aims of the EU water-framework directive. Apart from legal and financial support measures the scheme is focusing on improved extension and knowledge transfer.

Specific objectives:

- Reducing nitrate leaching into ground water;
- Reducing nutrient transfer to surface water;
- Reducing pesticide contamination of ground and surface water;
- Reducing soil loss from erosion and substance inflow to surface water;
- Providing a sustainable supply of drinking water;
- Sustainable soil protection.

#### LINK TO AGRO-ECOLOGY

The BWSB provide support to over 55 working groups (>55) on soil and water protection for both, conventional and organic farming. Furthermore, so-called “water farmers” (more than 40), who are leading working groups and assist the knowledge transfer between farmers and extension services are supervised in the topic. Specific agro-ecological practices are the implementation of erosion control, green cover of arable, buffer and riparian strips; reduced and no-tillage; etc.), improved pesticide and fertilizer management to reduce water contamination.

#### TOOLS USED TO ACHIEVE OBJECTIVES



The program is a combination of a new federal legislative (e.g. the pesticide Bentazon was forbidden) and increasing numbers of extensions serving farmers. Furthermore so-called “water farmers” were attached to programs in various communities, managing demonstration plots for water and soil conservation (farmer-to-farmer approach). Comparing to other federal states Upper Austria has a much bigger impact on soil and water protection. The program is not linked to marketing initiatives.

- provide site-specific information and training in the context of soil and water protection.
- assist farmers in establishing measures to counter soil erosion, e.g. reduced soil tillage, green cover on arable land.
- provide support to working groups (>55) on soil and water protection for both, conventional and organic farming.
- provide support to so-called “water farmers” (>40), who are leading a working group and assist the knowledge transfer between farmers and extension service.
- Advise drinking water suppliers on water protection areas.
- supervise on-farm experimental- and research projects for demonstration (farmer-to-farmer), e.g. reduced tillage (including no-till), optimized fertilizer application, reducing pesticide inputs and research project.
- Advise farmers on the Upper Austrian Pesticide Strategy 2015.

#### DRIVER – POLITICAL/ LEADERSHIP, ECONOMIC, SOCIAL, TECHNOLOGICAL, LEGISLATIVE, ENVIRONMENTAL

*Political/leadership:* The program was developed by the federal government of Upper Austria (due to pesticide and nitrate contamination of groundwater bodies).

*Economic:* -

*Social:* -

*Technological:* Link with applied research to develop soil protection measures (e.g. site-specific no-till adaption).

*Legislative:* Some measures are compensated via the existing RDP-ÖPUL. The government formulated a Pesticide reduction strategy (2015), including restriction on pesticide usage.

*Environmental:* Water quality of ground water bodies is of high importance to many communities and cities for drinking water. The central region, which supplies drinking water to the capital Linz, was detected as a hot-spot under the EU water framework directive.

#### EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

Official and communal ground- and drinking water monitoring states in most areas, where the initiative is active, a significant decrease of e.g. nitrate. Furthermore level of key pesticides in groundwater bodies were successfully reduced, which resulted in the central region of Upper Austria no longer being a hot-spot under the EU water framework directive. The increase of working groups and “water farmers” shows an increasing level of acceptance for measures of BWSB.

#### STRENGTHS/ WEAKNESSES

Strengths:



- The approach was jointly developed by the federal state and the Upper Austrian Chamber for Agriculture and is backed by civil society organisations.
- The concept of “Water farmers” (farmer-to-farmer approach) as part of the advisory service changed the perception of farmers towards soil and water conservation successfully (awareness-raising).
- Targeting hot-spots of soil erosion and water contamination showed positive impacts already only after a few years (e.g. in groundwater bodies for drinking water).
- Reach both major farming systems with specific advice by the organisation of conventional and organic agriculture working groups.

Weaknesses:

- No marketing initiatives or additional payments (apart from regular RDP-ÖPUL compensations) are linked.

REFERENCES:

Official website of the advisory service (in German): <https://www.bwsb.at/>



## 4. Water quality scheme in Flanders (Belgium)

### CATEGORY

Policy

### GEOGRAPHIC SCOPE

Regional

### CLUSTER

2. Agri-environmental practices

Result-based agri-environmental scheme

### LEGISLATIVE REFERENCE/ NAME OF OWNER

The scheme is financed under the Measure 10.1 of 2014-2020 RDP of Flanders. M10.1 operations are divided in two levels/types of operations: a group of broad and shallow operations, relevant and available across the territory; and a group of more targeted operations only available to a subset of the beneficiaries (often defined on the basis of their location so as to target areas of interest/concern).

The Water quality scheme financed under M10.1 is a hybrid Result Based Payment Scheme (RBPS)/Management Based Payment Scheme (MBPS) replacing the MBPS water quality scheme of the 2007-13 RDP, which required reductions on fertiliser use.

### OVERALL/ SPECIFIC OBJECTIVES

The main objectives of the scheme are:

- Safeguarding and improving water quality by reducing the risk of nitrates leaching from arable land;
- Reducing the risk of soil erosion;
- Encouraging farmers to improve the levels of organic matter in their soil.

### LINK TO AGRO-ECOLOGY

- Prevention of soil erosion and better soil management;
- Water quality, specifically achieved in many cases through the reduction of fertiliser and pesticide use.

### TOOLS USED TO ACHIEVE OBJECTIVES

The MBPS requirements and controls concern the types of arable crop, because the risk of nitrate leaching (and also soil erosion) varies for different crops (e.g. potatoes are a much higher risk crop than cereals). Farmers in the scheme must grow no less than four main crops, of which three must be low-risk crops other than grassland, and the low-risk crops must occupy at least 90% of their arable land each year.

The RBPS result indicator is the residual soil nitrogen at the end of each growing season in all the fields on the farm, and the threshold for payment is a residual soil nitrogen level on all fields (grassland and arable) which is at least 4 kg N ha<sup>-1</sup> yr below the lowest threshold value set by Flemish regulations for permissible soil nitrogen levels on farmland. The indicator is measured by the farmer (and controlled by the paying agency) in soil samples taken by the farmer from each field, which are analysed by an approved laboratory.

There are also compulsory technical advice and soil testing requirements. Before signing the agri-environment-climate contract, the farmer must have on-site advice from a specialist farm adviser,



who will explain the requirements of the scheme and discuss how these will fit with the farm's crop rotation system and nutrient management planning.

#### DRIVERS

##### POLITICAL/ LEADERSHIP

-

##### ECONOMIC

-

##### SOCIAL

-

##### TECHNOLOGY

-

##### LEGISLATIVE

The 2007-2013 scheme had to be discontinued because it no longer met the new EAFRD verification requirements; also, farmers were finding it difficult to fulfil the administrative requirements for record keeping.

##### ENVIRONMENTAL

Need to reduce the risk of nitrates leaching and soil erosion.

#### EVIDENCE OF ACHIEVEMENTS/OUTCOMES

The operation is currently being implemented and data on the number of beneficiaries and the areas involved are not yet known. The environmental impacts of the operation will be measured in the coming years.

#### STRENGTHS/ WEAKNESSES

##### STRENGTHS

First attempt to measure the results of the application on the basis of environmental indicators measured at farm level. Although nitrate levels in watercourses could be measured, any changes would not be attributable to specific farms, and might be influenced by non-agricultural factors, so this is not a suitable result indicator. One potential source of nitrogen pollution (the residual nitrogen left in the soil at the end of the season) can be measured for individual parcels of land, and this is used as a result indicator.

##### WEAKNESSES

Potential difficulties for a correct interpretation of the results deriving from measurements of soil samples.

#### REFERENCES

ENRD (2018) Result-based payment schemes (RBPS) for Soil and Water in Europe.

ENRD Thematic Group (TG) on sustainable management of water and soils.





## 5. Action Plan For Development Of Organic Farming 2016-2020 (Czechia)

### CATEGORY

Policy

### GEOGRAPHIC SCOPE

National

### CLUSTER

1. National food and farming plans

National strategy for organic farming

### LEGISLATIVE REFERENCE/ NAME OF OWNER

The Action Plan was approved by the Government of the Czech Republic - RESOLUTION No. 938 dated 20 November 2015.

### OVERALL/ SPECIFIC OBJECTIVES

Main goal is to support the growth of organic farming in the Czech Republic. It includes priority areas and recommended measures, the implementation of which will contribute to the further development of organic farming (OF), to the benefit of the whole of society.

### LINK TO AGRO-ECOLOGY

The term agro-ecology is not used in document, but by the OF development contributes to all its principles. The main OF vision to 2020 mentioned in the Action Plan (AP): "OF will be a fully developed branch of agriculture with all appropriate characteristics, such as a stable market for organic products and organic foods, accessible services and consistent state policies supporting both the provision of public goods, including aspects relating to the environment and animal welfare, and production of organic foods."

### TOOLS USED TO ACHIEVE OBJECTIVES

Measures and tools are continually proposed to achieve objectives in the 5 priority areas:

1. ORGANIC FARMS - economic viability  
(improve economic viability of organic farms - *by increasing efficiency of production and improving organic sales, including appropriate setting of subsidies*);
2. MARKET - production and marketing  
(increase the proportion of Czech organic foods on the market - *by raising efficiency of production and improving sales of organic foods*);
3. CONSUMER - organic food consumption  
(increase the consumption of organic foods, especially of Czech origin - *by raising consumer confidence = promotion and information*);
4. ORGANIC FARMS - benefits to environment and welfare  
(raise awareness of the benefits of OF to the environment and animal welfare - *by evaluating the influence of OF on the environment and animal welfare, show results*);
5. SPREADING INFORMATION - research – education – consultancy



(increase the use of research results and innovation - *in the field of organic food production, provision of public goods and modernisation of organic food production*).

Quantification of strategic aims to the year 2020:

- Increase the value of organic farm production by 15% (according to FADN method);
- Increase the proportion of Czech products on the organic food market to 60%;
- Achieve a 3% share of organic foods in total food and drink consumption;
- Raise average expenditure on organic foods to 600 CZK per person/year;
- Achieve a 15% organic share of total agricultural land in CZ;
- Achieve a proportion of at least 20% arable land in total acreage of OF land;
- Ensure finances for research in OF equal to share in UAA (15%).

Following the strategic aims there are operative aims, for which subsequent possible measures are proposed to enable their implementation, along with indicators for evaluation of progress.

On the basis of the AP, new and new smaller and larger activities are being created, for example - a project to support the production of organic milk, an order for excursions of children to organic farms, an analysis of the introduction of organic food into school canteens, and perhaps the biggest event is to launch a national campaign promoting organic food in 2019.

## DRIVERS

### POLITICAL/ LEADERSHIP

There is a long-term interest of the MoA to have the Action plan for OF development (whether it is an influence of EU and neighbouring countries, lobby of bio sector, strategy of the OF department at MoA...). This AP is the third and the first approved by the government.

### ECONOMIC

One of priority area = increase demand for organic food and subsequently improve economic viability of organic farms (less dependence on subsidies).

### SOCIAL

(rather not) it is assumed that organic food is quality food and safety, but unfortunately in the Czech Republic this is not yet sufficiently perceived by the society.

### TECHNOLOGICAL

(rather not) there is a presumption that AP will bring together interesting experts and projects to promote effective organic production including technologies.

### LEGISLATIVE

The existence of Action Plans is mentioned in a number of policy strategy papers.

### ENVIRONMENTAL

It is one priority area - benefits to environment and welfare thanks to a larger extension of OF.

## EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

The annual monitoring and evaluation of the AP is performed – with help of indicators. In such a wide document it means collecting activities, focused on OF, during the year and monitoring changes of indicators.



The institution responsible for implementation of the AP is the Ministry of Agriculture (MoA). Coordination and practical implementation of the AP, including progress evaluation, is carried out by the Commission for fulfilment of the AP, established in January 2016 for the whole AP period, i.e. 2016–2020.

#### STRENGTHS/ WEAKNESSES

##### STRENGTHS

AP as a strategic document supporting the further OF development across the policy system, motivates major players to meet regularly and discuss further steps. The strong point is its existence - a strategic document that can be used for argumentation.

##### WEAKNESSES

Too broad intention, fragmentation - many ideas and suggestions that the group is unable to solve; there is no dedicated budget, it is tied to subsidy policy (RDP), and there is a need to look for integration into existing measures or to launch new projects – that causes time lags and changes in the environment; for some partners it is a vague document and the interest in cooperating disappeared. Impact of the AP on the public is small - AP goals should be more outwardly discussed. It does not have its own budget, it is tied to subsidy policy (RDP), it also reduces its efficiency and functionality.

The AP does not mention specific effective measures to promote agro-ecology. If the AP were to be effective, it would have to include targeted measures for the transition to agro-ecology.

#### REFERENCES

Czech Action Plan for Development of Organic farming 2016–2020

[https://aa.ecn.cz/img\\_upload/7331e1faea7fac726e0197358f83ecdd/akcni\\_plan\\_cr\\_pro\\_rozvoj\\_ez\\_2015-2020.pdf](https://aa.ecn.cz/img_upload/7331e1faea7fac726e0197358f83ecdd/akcni_plan_cr_pro_rozvoj_ez_2015-2020.pdf)

## 6. Fruit And Vegetables To Schools / Milk To School (Czechia)

#### CATEGORY

Mixed (policy+market)

#### GEOGRAPHIC SCOPE

National

#### CLUSTER

6. Alternative food chains

Utilization of the European project to increase the consumption of fruit, vegetables, milk and dairy products in schools.

#### LEGISLATIVE REFERENCE/ NAME OF OWNER

Government Decree No. 74/2017 Coll., Laying down certain conditions for the provision of aid for the supply of fruit, vegetables, milk and products thereof to schools and amending some related government regulations, as amended. <http://www.szif.cz/cs/skolni-projekty>



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N° 773901.

The Moa is responsible for schemes and The State Agricultural Intervention Fund (Paying Agency) is an administrator.

#### OVERALL/ SPECIFIC OBJECTIVES

The School Fruit and Vegetables project was launched in the Czech Republic in the school year 2009/2010. It is EU project aimed at contributing to a sustained increase in the consumption of fruit and vegetables, creating the right dietary habits in children's nutrition and at the same time fighting child obesity.

The milk to school project is aimed to cope with child obesity, reduce the calcium deficiency, instil healthy eating habits for schoolchildren, and increase milk sales for domestic farmers. School milk in the Czech Republic has been running since 1999, then as a support program for agriculture, since 2004 it has been adapted to EU regulations.

Since 2014/2015, the project has been extended by accompanying education programs.

#### LINK TO AGRO-ECOLOGY

The LINK TO AGRO-ECOLOGY is not very strong, but within the program, the supply of organic fruit, vegetable, milk and milk product are also included and favoured by a higher rate of support since 2017/2018. Plus a priority is given to short supply chains and local or regional production.

#### TOOLS USED TO ACHIEVE OBJECTIVES

Regular fully subsidized deliveries of fruits, vegetables, milk and dairy products to schools. Domestic products and short supply chains are preferred (*but only on paper not in reality*).

The target group of the fruit and vegetable program is pupils of elementary schools, which are supplied of fresh fruits and vegetables (min. 75%) or juices. Products are delivered to children free of charge, at least twice a month for the entire school year.

The target group of milk program is pupils of elementary schools (before 2017/2018 as well secondary schools). The priority is for drinking milk and non-flavoured dairy products, which are delivered completely free of charge since 2017/2018, flavoured dairy products are only available at parents' extra.

There is a list of approved suppliers - adjusts every year, the choice is entirely up to the school.

From 2017/2018 there is the possibility to deliver the organic products with a premium - price limit is 50% higher (10 CZK and 15 CZK for organic).

In case of education - as part of the programs, applicants can also take into account the issue of organic farming based on its supply of bio products.

#### DRIVERS

##### POLITICAL/ LEADERSHIP

The main driver was the OF Action Plan (mentioned in it as a useful activity) – priority 2.

##### ECONOMIC

Support for the production and processing of domestic organic fruit, vegetables and mainly milk – as well some organic farms newly joined the program.

**SOCIAL** (rather not) Improve the health of children, educating the future consumer in the field of healthy eating habits. But the inclusion of organic food is not promoted anywhere.

##### TECHNOLOGICAL



LEGISLATIVE (rather not) - due to the existence of the program it was easier to add organic food than to build the whole system.

ENVIRONMENTAL

### EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

Indicators: numbers of schools and children involved, the number of children involved in accompanying educational measures, and increased consumption of supported products.

Fruit and vegetables to schools: In the school year 2009/2010 the project was attended by 2883 schools, 71% of children in the target group. Participation in the project increases every year; in school 2017/2018 3935 schools and 905 917 children are involved.

Milk to school: The interest in dairy products grew enormously in 2017/2018 - especially since they started to be provided free of charge, before that year dairy products had collected around 300 thousand pupils. In the school year 2017/2018 it was over 900 thousand school children from almost 4 thousand schools (3x more).

But the result on the organic products share is not monitored yet - this shows their priority. Only info is that 11 out of 20 suppliers of dairy products also offer bio, 3 of 24 suppliers of fruits and vegetables also offers bio.

### STRENGTHS/ WEAKNESSES

#### STRENGTHS

Greater chances of spreading organic food to schools (available for all schools), thereby raising awareness of organic food in schools as well as program administrators, ensuring a further form of sales for growers / breeders.

#### WEAKNESSES

The program is not sufficiently promoted - the public does not know about it, the children will get the product without education and the information will not get to the parents... about bio products, even less. The effect of engaging bio products could be greater.

There is no link to more environmental farming (there is no information on how many times the apple was sprayed). The program does not target agro-ecology as such, rather support the regional - national market (preference of Czech food).

It does not sufficiently motivate to transition to organic farming or better agricultural practices.

### REFERENCES

Strategy for the Implementation of the School scheme from 2017/2018 to 2022/2023

Government Decree No. 74/2017 Coll., Laying down certain conditions for the provision of aid for the supply of fruit, vegetables, milk and products thereof to schools and amending some related government regulations, as amended. There is a list of products approved for the school project - annex to the Government Decree.

Decree No. 282/2016 Coll. on food requirements for which advertising is admissible and which can be offered for sale and sold in schools and school establishments.

Commission Regulation (EU) 2017/40

Commission Implementing Regulation (EU) 2017/39



## 7. Demonstration Farms for agri-environmental measures (Czechia)

### CATEGORY

Policy

### GEOGRAPHIC SCOPE

National

### CLUSTER

2. Agri-environmental practices

National subsidies for demonstration farms

### LEGISLATIVE REFERENCE/ NAME OF OWNER

Subsidy program under the national subsidies of the Ministry of Agriculture for the activities of Demonstration Farms.

Principles setting out the conditions for granting subsidies under § 1, § 2, § 2d of Act No. 252/1997 Coll., On Agriculture, as amended. Grant program 9.F.m. Demonstration farms.

### OVERALL/ SPECIFIC OBJECTIVES

Support for the transfer of knowledge in agriculture to help farmers in the form of illustrative practical demonstrations of comprehensive sustainable management practices such as techniques for reducing water and wind erosion, excessive soil consolidation, practices contributing to water retention in the countryside or presenting mitigation and adaptation measures relating to climate change, integrated plant protection and organic farming.

The aim is to present a coherent and sustainable management of arable land with an emphasis on soil protection, sustainable sowing, intercropping and water conservation together with subsequent direct inputs in the form of application of fertilizers and plant protection products.

*In case of organic farming the aim is to present organic farming practices and technologies with a focus on arable land without use of herbicides, fast-dissolving mineral fertilizers and chemical-synthetic plant protection products.*

### LINK TO AGRO-ECOLOGY

The Ministry of Agriculture, in accordance with the "Strategy of the Ministry of Agriculture of the Czech Republic with a view to 2030", has prepared a subsidy program to assist agricultural entities in the form of illustrative practical demonstrations of comprehensive practices of sustainable farming practices and soil protection in practice.

### TOOLS USED TO ACHIEVE OBJECTIVES

Grant program for demonstration farms was launched in 2017 and the main focus is the protection and maintenance of soil. In 2018 organic farming topic was added.

In 2017 seven model farms were selected by the evaluation committee - meeting the requirements for innovation, experience with anti-erosion protection and the balance of crop rotation. In 2018 the number was increased to ten model farms (2 organic farms).



Selection criteria for OF: compliance with GAEC, no erosion offense, manage at least 50 ha of arable land in OF system and cultivate at least 4 market crops on significant part of land.

Five topics proposed for 2018:

- integrated management systems with emphasis on soil protection-anti-erosion measures;
- technologies for growing of erosive dangerous plants in accordance with GAEC;
- preservation of organic matter in soil and its effect on erosion, water management and its retention in the landscape;
- integrated plant protection as a comprehensive arable land management system using agro-technical processes;
- organic farming as a comprehensive arable land management system.

The annual activity plan is required - required actions at the demonstration farm:

- Open day = field day – one per year;
- Individual demonstration events -at least 20x during year;
- Group demonstration events for min. three subjects -at least 5x during year;
- Processing of information materials and promotion of the farm;
- Preparation of demonstration areas and cooperation with research;

Budget of program is around 10 mil. CZK (1 mil. CZK per farm), but in reality the average costs is around 500 000 CZK per farm annually.

#### DRIVERS

##### POLITICAL/ LEADERSHIP

The main driver was the OF Action Plan (mentioned in it as a useful activity).

The model farm scheme was discussed for a long time - inclusion in RDP was considered, but in the end, national subsidies were chosen. To test the system, which has not yet existed in the CZ, one theme was chosen - soil care and erosion.

##### ECONOMIC

In program is mentioned - measures presented must meet the criteria of positive ecological impact on the environment but at the same time efficiency and economy.

##### SOCIAL

In program is mentioned - the sustainable use of natural resources contributes to the overall quality of life in rural area.

##### TECHNOLOGICAL

Introduction of the program expected the presentation of innovative arable farming practices and technologies – it is a prerequisite for selecting a model farm.

##### LEGISLATIVE

The program was included among the programs financed from national subsidies from the MoA (much easier than RDP) - based on example from abroad.

##### ENVIRONMENTAL

In CZ, issues of the environment are becoming more discussed - drought, soil degradation, water pollution... therefore such programs have ever better conditions for launch.

#### EVIDENCE OF ACHIEVEMENTS/ OUTCOMES



Because the program is subsidized - each farm must meet prescribed activities = number of field consultations and visits, publishing in advance invitations on the MA website with a specific topic ... attendance at farm events is increasing.

#### STRENGTHS/ WEAKNESSES

##### STRENGTHS

Excellent start to transfer good experience in the field, location of demonstration farms throughout CZ, participation the best farms – conventional as well organic.

It is good to have the best farms where people can go for information and it is good that they are domestic and it is not a lesson from foreign practice where the argument arises “what works in Germany may not work in the Czech Republic”.

##### WEAKNESSES

So far a narrow topic - just arable land and a focus on soil erosion; the activity plan is only for one year and then it must be approved again; the program is dependent on the national budget of the MoA; poor promotion and awareness of the program.

The spectrum of farm types is not taken into account in the selection process. There are also few model farms.

#### REFERENCES

<http://eagri.cz/public/web/mze/puda/demonstracni-farmy/>

Principles setting out the conditions for granting subsidies under § 1, § 2, § 2d of Act No. 252/1997 Coll., On Agriculture, as amended.

Call for Proposals for the Demonstration Farm Activity in 2018.

## 8. Support For Biological Plant Protection Product (Czechia)

#### CATEGORY

Policy

#### GEOGRAPHIC SCOPE

National

#### CLUSTER

2. Agri-environmental practices

National subsidies for biological protection

#### LEGISLATIVE REFERENCE/ NAME OF OWNER

Subsidy program under the national subsidies of the Ministry of Agriculture for the activities 3. Supporting the recovery of field and special crops – one of measure - 3.a. biological protection as a substitute for chemical protection of plants.

Principles setting out the conditions for granting subsidies under § 1, § 2, § 2d of Act No. 252/1997 Coll., On Agriculture, as amended.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N° 773901.



### OVERALL/ SPECIFIC OBJECTIVES

The goal of the whole grant program is to increase the quality of crop production by replacing chemical treatment and preventing the spread of economically important viral and bacterial diseases and diseases communicable with seeds and seedlings.

The objective of the measure is the extension of the use of biological plant protection for listed crops (tomatoes and peppers and cucumbers grown in the greenhouse, oilseed rape, maize (including grain maize for food and feed use), sunflower, cereals, legumes and ornamental plants) in accordance with the List of authorized plant protection products for the year authorized the ÚKZÚZ (Central Institute for Supervising and Testing in Agriculture).

### LINK TO AGRO-ECOLOGY

Direct support for the replacement of chemical sprays by approved biological preparations.

### TOOLS USED TO ACHIEVE OBJECTIVES

Provision of a subsidy for proven costs of bioagents and bio preparations used, and of the professional service for biological protection:

- up to 80% for vegetable species of cucumber, tomato and pepper cultivated in the greenhouse, but maximum for cucumber 227 200 CZK/ha, tomato 181 906 CZK/ha and pepper 74 560 CZK/ha, (*before 2017 – only 70%, cucumber 185 184 CZK/ha, tomato 107 832 CZK/ha, pepper 73 850 CZK/ha*).
- up to 50% for sunflower, maximum 290 CZK/ha, (*before 2017 – only 25%, 145 CZK/ha*)
- up to 25% for field crops of oilseed rape, maize, cereals and legumes, maximum rape 384 CZK/ha, maize 450 CZK/ha, cereals 518 CZK/ha and legumes 366 CZK/ha, (*before 2017 – no support for cereals and legumes, rape 345 CZK/ha, maize 473 CZK/ha*).
- up to 40% for ornamental plants, maximum of EUR 15 000, in order to comply with the conditions of Regulation (EU) No 1408/2013 (*before 2017 same conditions*).

Subsidy cannot be granted for commitments covered by the measures Organic farming.

### DRIVERS

#### POLITICAL/ LEADERSHIP

The measure has been operating in the Czech Republic for a long time, over 10 years. The measure get support by the National Action Plan to reduce pesticide use in the Czech Republic, which was approved by Government Resolution No. 660 on 12 September 2012. (NAP is based on Directive 2009/128 / EC). Actually the measure is approved by the EU as a state aid for RDP (2014-2020) and fulfils the incentive effect under RDP.

#### TECHNOLOGICAL

Lobby of researchers / advisors to promote an alternative to the chemical industry.

#### ENVIRONMENTAL

Overall motivation to increase the quality of crop production + save environment.

### EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

There are no target values for the measure, it only monitors how many areas have been treated by biological agents. The applicant shall annually document the total consumption of the biological plant protection product and the total treated area, broken down by the permitted listed crops.



Budget of the grant program: 6 million CZK in 2015, 7,5 mil. CZK in 2016, 16 mil. CZK in 2017 and 2018? - notified by European Commission up to 25 mil. CZK.

#### STRENGTHS/ WEAKNESSES

##### STRENGTHS

Confirmed motivation effect (payment of about a quarter of costs), is not as strict as the RDP, long history and growing interest, especially recently, the 5-year commitment requirement also increases the environmental effect.

##### WEAKNESSES

Supplementary program - smaller budget, smaller areas, against a lot of administration - forms and confirmation - annual reporting.

Little impact because it is done on a small area. The risk of economic loss versus use of the subsidized organic preparation is high. The subsidy needs to be increased. Very important is to provide advice / information (not enough to just replacements for bio preparations), it is necessary to know when and how to use bio agents (more demanding, need good knowledge).

#### REFERENCES

Principles setting out the conditions for granting subsidies under § 1, § 2, § 2d of Act No. 252/1997 Coll., On Agriculture, as amended.

<http://eagri.cz/public/web/mze/dotace/narodni-dotace/zasady-zemedelstvi-potravinarstvi/zasady-pro-rok-2018/zasady-kterymi-se-stanovuji-podminky-pro-1.html>

## 9. Organic GÄA Standards (Czechia)

#### CATEGORY

Market

#### GEOGRAPHIC SCOPE

National

#### CLUSTER

4. Organic food promotion and certification

Efforts to impose higher standards to ensure better sales for organic products

#### LEGISLATIVE REFERENCE/ NAME OF OWNER

Production standards for organic farms which are member of Germany association GÄA.

The GÄA Ökologischer Landbau e.V. Production Guidelines are based on the legal provisions of Council Regulation (EC) No 834/2007 of 28 June 2007 on organic production and labelling of organic products. In addition, the Gää contracting / member companies are required to comply with the Gää Directive.

#### OVERALL/ SPECIFIC OBJECTIVES

To motivate Czech organic farmers to be certified according to the higher standards GÄA of German GÄA association - based on the cooperation with Czech PRO-BIO association.



Due to the large demand for organic raw materials in Germany - especially milk and grain, an agreement was established between the associations of organic farmers - the German association GÄA and the Czech association PRO-BIO. PRO-BIO has taken over their directive - higher standards and motivates its members to be certified according to the directive, which will ensure better sales in Germany.

#### LINK TO AGRO-ECOLOGY

General support for organic farming. Motivation to expand Organic Farming (OF) in general (business opportunity) and improvement of farming principles and knowledge even within certified farms.

#### TOOLS USED TO ACHIEVE OBJECTIVES

First, the certification was provided directly from Germany. Then the dates were harmonised - the GÄA controls took place on the same day as the national check. Nowadays, control and certification are entrusted by Czech control body for OF, they are certified to check the GÄA guidelines.

Motivation for higher standards certification is the price – for organic milk around 11 CZK/liter – plus 2 CZK as a premium.

Obtaining above-standard certification usually takes two to three months and is charged. The price depends on the size of the business in the order of thousands of crowns.

#### DRIVERS

##### POLITICAL/ LEADERSHIP

The main driver was the OF Action Plan (mentioned in it as a useful activity) – priority 1 and 2 - improve economic viability of organic farms + efforts to promote the sale of organic products.

The reason was also the crisis in the dairy market, when the big dairy finished with the processing of organic milk in the Czech Republic in 2011. At that time there was enormous pressure to cooperate and jointly find a new outlet.

##### ECONOMIC

PRO-BIO collaborates with the German Association of the GAA for several years. Thanks to higher standard certification, farmers can find better sales for their production and improve the economy of their farming – in Germany market.

##### ENVIRONMENTAL

Mutual cooperation with GÄA concerns the certification of Czech ecologically produced commodities, but also the sharing of information and know-how in the field of environmentally sound farming.

#### EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

The certification and export of Czech organic milk through the GÄA Association started in 2012 and today export represents 40% of all Czech organic milk production (40% from 32 million litres). Growing interest is also on cereal certification.

Export is realized through cooperative Czech organic milk - cooperative was founded in 2012 by 8 first members = organic farmers, to date 31 members are involved.

During the 5 years: members of cooperation get premium nearly 72 million CZK more than if the milk was processed under the organic brand in the domestic dairies and nearly 135 million CZK more than if the milk ended in conventional processing.

#### STRENGTHS/ WEAKNESSES



## STRENGTHS

Cooperation between countries is beneficial - commercially, but also due to transfer of know-how. Although it would be much better to consume organic milk in CZ, so far there is not enough demand and the export saves the existence of a local organic farm.

Also, from the point of view of the long-term future, the higher standards will be needed (above the rules given by the EU regulation for OF) - that is, the start of the preparation of Czech higher standards that we have not yet.

Furthermore - it is a good example of practice.

## WEAKNESSES

It is only a temporary solution - relying on exports forever is not possible. - it is now clear that German interest in foreign organic raw materials is declining - the number of domestic suppliers is growing, and German consumers clearly prefer local products including raw materials. It is unstable sales way and opportunity.

Insufficient marketing.

## REFERENCES

<https://pro-bio.cz/aktuality/preklad-smernic-gaa/>

<http://www.gaea.de/>

# 10. Organic Action Plan For Denmark (Denmark)

## CATEGORY

Policy

## GEOGRAPHIC SCOPE

National

## CLUSTER

1. National food and farming plans

National strategy for organic farming

## LEGISLATIVE REFERENCE/ NAME OF OWNER

Organic Action Plan for Denmark. Working together for more organics.

Ministry of Food, Agriculture and Fisheries of Denmark 2012 (Økologiplan Danmark Sammen om mere økologi)

## OVERALL/ SPECIFIC OBJECTIVES

Further develop and enlarge the organic production in Denmark. Double the organically cultivated area by 2020 from the 2007 level.

## LINK TO AGRO-ECOLOGY

An integrated plan to encourage organic farming and the production, processing and supply of organic products to the market, as well as stimulation of consumption of organic grown products by consumers.



## TOOLS USED TO ACHIEVE OBJECTIVES

The government:

- Supports exports of Danish organics.
- Promotes domestic demand.
- Promote sales of organic products in Denmark.
- Supports public kitchens to go organic.
- Supports more organics in public food purchases.
- Promotes organic food brands.
- Promotes the spread of organics across many public institutions, including strengthening collaboration between institutions to speed up the transition to organic production on publicly owned land, and to increase the use of organics in public canteens.
- Provides know-how and experience to non-profit foundations in their work with organics and promotes organics in local municipalities and schools, including publishing annual digital maps of all organic fields.
- Promotes organics in the EU.
- Supports organic producers by providing advisory services for organic products and local green sales efforts.
- Develops the organic through support for research, innovation, demonstration, knowledge synthesis.
- Promotes more and greener producers - conversion, preservation, sustainability and experimental organics.
- Subsidizes organically farmed land and the development of alternative forms of ownership and operation.

As organic agriculture has higher production costs and often faces greater challenges than conventional farming the government lends support to those parts of the organic sector that are particularly challenged and eases their access to new types of fertilizer and fodder, including support for the production of organic plants, fruit and berries; improved recirculation of nutrients; promotion of the development of organic protein-rich fodder; promotion of the development of organic pig production.

## POLICY DRIVERS

### POLITICAL

The government wants the public sector to lead the way to greater organic production.

### ECONOMIC

Increasing demand for organic production in Denmark, EU, internationally.

### SOCIAL

Concern for healthy diet, food safety.

### ENVIRONMENTAL

Concern for the quality of the environment and the impact of farming systems.

## EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

Consumers' demand for organic food increasing. 97 percent of all Danes know the national organic logo, which can celebrate its 25 years anniversary in 2015, and eight percent of all food sold in Denmark is organic. This is the highest percentage in the world and the share is rising. Danish organic export has also risen by more than 200% since 2007. This holds great potential for the future.



STRENGTHS/ WEAKNESSESSTRENGTHS

- An integrated policy for organic production and products.
- Support for supply of organic production and products through incentives for producers, processors, supply chain, research.
- Supports demand for organic products through information campaigns, promotion of products in public venues, promotion of exports.
- Cooperation between farsighted farmers, organisations and politicians that has turned Denmark into the world's leading country for organics.
- Organic products have evolved from biodynamic idealism in small health food stores to a natural and ordinary shopping choice in supermarkets.

REFERENCES

[http://en.fvm.dk/fileadmin/user\\_upload/FVM.dk/Dokumenter/Landbrug/Indsatser/Oekologi/7348\\_FVM\\_OEkologiplanDanmark\\_A5\\_PIXI\\_English\\_Web.pdf](http://en.fvm.dk/fileadmin/user_upload/FVM.dk/Dokumenter/Landbrug/Indsatser/Oekologi/7348_FVM_OEkologiplanDanmark_A5_PIXI_English_Web.pdf)

Daugbjerg, C. 2010. Why Danish organic farming policy has been successful. ICROFS News, 1 August 2010, pp. 3-4. Available at <http://orgprints.org/17489/>. ICROFS, Aarhus University, Tjele, Denmark

## 11. Nutrient Recycling: Making Use Of Agricultural Nutrients (Finland)

CATEGORY

Policy

GEOGRAPHIC SCOPE

National

CLUSTER

8. Research and capacity-building

Provision of information on the funding possibilities, promotion of networking and provision of research knowledge to practical operators

LEGISLATIVE REFERENCE/ NAME OF OWNER

Governmental key project which is carried out as a part of Government Programme aiming at to bring the Finnish economy onto a path of sustainable growth. [https://valtioneuvosto.fi/documents/10184/1427398/Ratkaisujen+Suomi\\_EN\\_YHDISTETTY\\_netiti.pdf/8d2e1a66-e24a-4073-8303-ee3127fbfcac/Ratkaisujen+Suomi\\_EN\\_YHDISTETTY\\_netiti.pdf.pdf](https://valtioneuvosto.fi/documents/10184/1427398/Ratkaisujen+Suomi_EN_YHDISTETTY_netiti.pdf/8d2e1a66-e24a-4073-8303-ee3127fbfcac/Ratkaisujen+Suomi_EN_YHDISTETTY_netiti.pdf.pdf)

OVERALL/ SPECIFIC OBJECTIVES

The objective is to advance the Government Programme's goal of bringing at least 50% of the manure and municipal sewage sludge in areas sensitive with regard to the Baltic Sea and other water systems under advanced processing by the year 2025.

LINK TO AGRO-ECOLOGY

More efficient and environment-friendly use of nutrients originating from manure and organic waste is a basis for balanced nutrient recycling which contributes to better soil and growing conditions as well as reduced nutrient leaching to water bodies. From the agro-ecological point of view, it is essential that mineral fertilizers can be increasingly replaced by organic fertilizers and that nutrient loops become more and more closed.

#### TOOLS USED TO ACHIEVE OBJECTIVES

- Provision of information on the funding possibilities related to the recycling of nutrients.
- Promotion of the networking and new experiments of nutrient recycling operators.
- Provision of essential research knowledge to practical operators.
- Collection of information on the results of existing research and experimental projects and new research need.
- Identification of the bottlenecks in nutrient recycling and facilitation of their elimination.

#### DRIVERS

##### POLITICAL/ LEADERSHIP

Promotion of bioeconomy and circular economy is one of the main objectives in the current Government Programme.

##### ECONOMIC

Nutrient recycling and organic fertilizers are considered as a key measure to reduce fertilizing cost in agriculture.

##### SOCIAL

In the public debate farmers are heavily criticized because of nutrient leaching to water bodies. Nutrient recycling and more efficient use of organic fertilizers show that farmers take these concerns seriously and are willing to change their production practices.

##### TECHNOLOGICAL

The use of processed organic fertilizers has not increased as much as anticipated. This is why there is a clear need for the promotion of innovations in this area.

##### LEGISLATIVE

The use of new type of organic fertilizers is in some cases restricted by the existing legislation. Identification and removal of these regulatory obstacles is essential.

##### ENVIRONMENTAL

Water quality of inland waters and especially the Baltic Sea is much discussed in Finland. Nutrient leaching from agriculture is one of the reasons for reduced water quality, and with more efficient nutrient recycling it is possible to decrease nutrient emissions from agriculture.

#### EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

The project will continue until the end of June 2019. So far more than 120 stakeholders have been contacted and over 30 of them got financed from the experimental program. The project has also participated in the publication of compilation reports, analyses and handbooks covering the topic. The project has produced materials on nutrient circulation e.g. infographics, videos, Policy brief, articles, and coordinated a consumer campaign of 27 different stakeholder organisations. The project has advised small and medium-sized enterprises (SMEs) in their innovation processes and funding seeking. The nutrient recycling pilot programme, which is supporting this project as another branch of the governmental key project, has funded several pilots that develop and test new kind of fertilizer



products based on nutrient recycling, the use of algae in the utilization of municipal waste water nutrients, the use of manure as raw material of biochar, and collaborative arrangements in the promotion of local level nutrient and energy self-sufficiency. In most of these projects there is also a research partner involved.

#### STRENGTHS/ WEAKNESSES

##### STRENGTHS

- The approach which activates especially SMEs is efficient in the promotion of innovations also at local and regional scale.
- Also wider cooperation among various stakeholders is purposefully advanced.

##### WEAKNESSES

- Because of the rather short term of the project (3 years) it may be difficult to activate all the relevant stakeholders and advance a bigger systemic change with permanent agro-ecological benefits.

#### REFERENCES:

General description of the project:

- <https://mmm.fi/en/recyclenutrients>

## 12. Certificate For Beef And Lamb Meat From Natural Pastures (Finland)

#### CATEGORY

Market

#### GEOGRAPHIC SCOPE

National

#### CLUSTER

7. Territorial-based farming practices

Certificate for meat producers' marketing purposes

#### LEGISLATIVE REFERENCE/ NAME OF OWNER

World Wildlife Fund Finland, Forest Center Tapio (a government-owned forest management advisory and consulting organization) and two Finnish agricultural producer associations (Finnish Sheep Association and Beef Cattle Association) teamed up in the Fall 2012 to develop certificate criteria for meat (beef and lamb) produced by grazing on natural (forest) pastures. The certificate criteria have existed since May 2013 although the certificate does not yet have an authorized and official status.

#### OVERALL/ SPECIFIC OBJECTIVES

Provide a means (certificate) for beef and lamb meat producers who are interested in an agro-ecologically favourable and animal welfare considerate way of production to differentiate their activities from conventional agriculture with a possibility of receiving a premium through pricing of their meat.

#### LINK TO AGRO-ECOLOGY





Beef and lamb meat production which is based on (summer-time) grazing on natural (forest) pastures has numerous positive effects in terms of biodiversity and animal welfare. It helps to maintain endangered traditional biotopes in agro-forestry settings, supports extensive farming practices and allows species-typical behaviour for cattle and sheep.

#### TOOLS USED TO ACHIEVE OBJECTIVES

The developed certificate contains several criteria which contribute to agro-ecologically beneficial outcome (here just a few of criteria):

- Farms have to be enrolled into the agri-environmental scheme of the Finnish RDP.
- All GMO related production inputs are forbidden.
- Over 50 % of pastures which are used for grazing during the grazing season must be natural pastures.
- At annual level 100 % of the feed used must be either domestic origin or organically produced, soybean is not allowed.
- Tillage of soil (other than necessary activities needed for the maintenance of biodiversity) is not allowed on natural pastures.

#### DRIVERS

##### POLITICAL/ LEADERSHIP

Finnish agriculture is heavily subsidised and because of these initiatives that are market-oriented and not policy-based but which can contribute to profitability of farming are valuable.

##### ECONOMIC

Profitability of beef and lamb production is low in Finland in absolute terms and also in relation to many other sectors of agriculture. Thus a certificate which might make a price premium possible is considered to have economic potential.

##### SOCIAL

Farmers are constantly seeking collaborative ways to increase their influence in the food chain.

##### LEGISLATIVE

Certificate of organic production is at the moment the only certificate in the Finnish food market which has larger visibility. It does not, however, pay special attention to grazing on natural pastures.

##### ENVIRONMENTAL

Environment-friendly farming is important in Finland where more than 90 % of farms belong to agri-environmental schemes. Increased grazing on natural pastures is likely to reduce harmful environmental effects of livestock rearing and promotes animal welfare.

#### EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

Although the certificate does not yet have an authorized status, a number of beef and lamb meat producers have committed to the criteria in their production and also refer to them when market their products.

#### STRENGTHS / WEAKNESSES

##### STRENGTHS



- Both NGOs, governmental bodies and producer organisations have been involved from the beginning in the development of the certificate criteria which gives the initiative broad acceptability and support.
- The certificate provides a clear market-based incentive for beef and lamb meat producers to develop their production practices in an agro-ecologically sound way.
- From the consumers' point of view, the certificate makes it possible for environmentally conscious consumers to support sustainable agricultural development through buying decisions.
- Reduces intensity of beef and lamb meat production which is agro-ecologically desirable.
- Agro-ecological benefits can easily be seen and shown.
- More neutral than organic production which has its fierce opponents in Finland.
- High nature value areas can be utilized in production which is good for their management and also good for raising awareness on their importance.
- Especially in the climate change mitigation context meat production is considered as a major problem. With this kind of certificate it is possible to show that meat production can also be agro-ecologically feasible. From the community perspective, this kind of meat production makes it easier for local supply and demand to meet.

#### WEAKNESSES

- So far nobody has volunteered to administrate the certificate.
- It is not easy to find funding for the operationalisation of the certificate.
- Grazing on natural pastures is inevitably limited in volume because natural pastures are a scarce resource in Finland.

#### REFERENCES

Unfortunately there are no references in English. The following references are in Finnish.

- General description of the idea:  
<https://wwf.fi/alueet/suomi/metsalaidunhanke/luonnonlaidunliha/>
- Criteria for the certificate: <https://wwf.fi/mediabank/4446.pdf>

## 13. Palopuro Agro-ecological Symbiosis (FINLAND)

#### CATEGORY

Mixed (policy+market)

#### GEOGRAPHIC SCOPE

Local

#### CLUSTER

7. Territorial-based farming practices

Locally developed agro-ecological cooperation

#### LEGISLATIVE REFERENCE/ NAME OF OWNER

Palopuro Agro-ecological Symbiosis / Mr. Markus Eerola, the owner of the Knehtilä Farm. The Knehtilä Farm is the key operator of Palopuro Agro-ecological Symbiosis. There is no legal ownership of the title "Palopuro Agro-ecological Symbiosis". All actors (three farms and related other businesses) are independent, and required legal contracting is made case-specific when appropriate to strengthen or safeguard collaboration. It combines organic farming, biogas production, nutrient



recycling and food processing, in cooperation with the University of Helsinki and other research organisations.

#### OVERALL/ SPECIFIC OBJECTIVES

Palopuro Agro-ecological Symbiosis aims to produce local, organic food using bioenergy produced from own biomasses and recycled nutrients. Its purpose is to serve as a model for organic food production and processing, enhancing energy and nutrient self-sufficiency. There is also a strong social dimension incorporated: consumers and customers are invited to get acquainted with the operations and participating farms are open to visitors.

#### LINK TO AGRO-ECOLOGY

Recycling of nutrients and self-sufficiency in energy production are in the core of operations. From the agro-ecological and socio-ecological point of view, relevant is also the shortening of the food supply chain by bringing producers and consumers closer to each other.

#### TOOLS USED TO ACHIEVE OBJECTIVES

In the integrated system of Palopuro Agro-ecological Symbiosis, the grain from the fields is milled in Knehtilä Farm, and baked to bread by Samsara, an organic bakery, which has plans to establish its operations on the farm. Connected to the Knehtilä Farm there is also a small food processor called Pieni Puro producing oat flakes and granola. The losses from milling and baking are to be used as feed for hens in the neighbouring organic henhouse. They can also be utilized as energy source for the biogas production which is about to become operational. Biomass from green manuring leys in Knehtilä Farm's organic crop rotation combined with the hens' manure and manure from local horse stables are processed by anaerobic digestion. The result is biogas which will be used for grain drying, the bakery's ovens, running the farm machinery, and local sale for passenger cars. The nutrient-rich digestion residue from biogas production will be used as organic fertilizer and soil conditioner in the farm fields. With this system, the biomass loops are more closed and the Palopuro Agro-ecological Symbiosis is able to operate in a sustainable manner. Palopuro Agro-ecological Symbiosis has already succeeded so well that its concept of biogas production is planned to be duplicated in the neighbouring rural areas.

#### DRIVERS

##### POLITICAL/ LEADERSHIP

The idea of Palopuro Agro-ecological Symbiosis has originated among local farmers who have been concerned about the future of their farming. With the help of funding from the Ministry of Environment, Palopuro Agro-ecological Symbiosis activities and related investment plans were further elaborated.

##### ECONOMIC

All the actors have been confident that high quality organic production combined with self-sufficiency in nutrients and energy is also economically profitable way of production. Public investment subsidies for the biogas plant and the participation of a municipal energy operator have been in crucial role when the investment decision concerning the biogas plant was made.

##### SOCIAL

All the actors of Palopuro Agro-ecological Symbiosis have committed to the idea to further develop the Palopuro village community.

##### TECHNOLOGICAL



Biogas production and related nutrient recycling have been seen as a technology solution which is in congruence with current and future prerequisites of sustainable food production.

#### LEGISLATIVE

For environmental and climatic reasons food production will face further restrictions in the future. Palopuro Agro-ecological Symbiosis has chosen a production system which most likely can be easily adapted to tighter environmental and climatic legislation.

#### ENVIRONMENTAL

Palopuro Agro-ecological Symbiosis has already in advance taken into account raising environmental concerns with its progressive agro-ecological thinking.

#### EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

First scientific article describing the achievements of Palopuro Agro-ecological Symbiosis will be published in Agricultural Systems Journal (under revision).

- Nitrogen and phosphorus surpluses are projected to be reduced by 36 kg/ha and 4.0 kg/ha respectively, compared to current situation.
- 70 % more energy is produced than consumed.
- More food produced without importing more inputs.

#### STRENGTHS/ WEAKNESSES

##### STRENGTHS

- All three dimensions of sustainability (ecological, economic and social) are taken into account.
- Enhanced farm level profitability.
- Less environmental stress indicating agro-ecological benefits.

##### WEAKNESSES

- Management of a system which does not have a well-developed governance structure is demanding and depends too much on individual people.
- Setting up the system and allocating resources to further development is challenging when it has to be done simultaneously with day-to-day farm and business activities.

#### REFERENCES

General description of Palopuro Agro-ecological Symbiosis:  
<https://blogs.helsinki.fi/palopuronsymbioosi/english/>

Koppelmäki, K. et al (2016) 'Palopuro Agro-ecological Symbiosis' A pilot case study on local sustainable food and farming (Finland). In: P. Rytkönen & U. Hård (eds.) Challenges for the New Ruralities in a Changing World. 7th Int. Conf. Localized Agri-Food Systems, 8-10 May 2016 Stockholm, Sweden.: <https://blogs.helsinki.fi/palopuronsymbioosi/files/2016/03/Koppelmäki-et-al-2016-Palopuro-Agro-ecol-Symbiosis-COMREC-Stud-Env-Dev-2.pdf>

## 14. Pasture Bank - Laidunpankki (FINLAND)

#### CATEGORY



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N° 773901.

Market

#### GEOGRAPHIC SCOPE

National

#### CLUSTER

2. Agri-environmental practices

Internet-based service for providers of grazing animals offering landscape management activities

#### LEGISLATIVE REFERENCE/ NAME OF OWNER

The Pasture Bank service is maintained by ProAgria Southern Finland which is a branch of the major Finnish rural advisory service provider ProAgria (<https://proagria.fi/en>). Other organisations supporting the Pasture Bank service are Rural Women's Advisory Organisation (<https://www.maajakotitalousnaiset.fi/english>), the Central Union of Agricultural Producers and Forest Owners (MTK) [https://www.mtk.fi/MTK\\_english/en\\_GB/frontpage/](https://www.mtk.fi/MTK_english/en_GB/frontpage/), Metsähallitus (which is a state-owned enterprise that runs business activities while also fulfilling many public administration duties, <http://www.metsa.fi/web/en/metsahallitus/logo>) and Fingrid (which is a Finnish public limited liability company responsible for the electricity transmission in the high-voltage transmission system in Finland, <https://www.fingrid.fi/en/pages/company/in-brief/>).

#### OVERALL/ SPECIFIC OBJECTIVES

The objective is to increase contractual, mutually beneficial collaboration between owners of grazing animals and those who could benefit from landscape, scenic and biodiversity impacts of grazing animals.

#### LINK TO AGRO-ECOLOGY

Promotion of grazing opportunities is valuable in the context of traditional agricultural biotope management. This is especially important in Finland where traditional agricultural biotopes are disappearing rapidly.

#### TOOLS USED TO ACHIEVE OBJECTIVES

An internet-based service has developed a register of providers of grazing animals, potential areas to be grazed and various kind of actors offering landscape management activities. Through the register anybody in the need of landscape management services can get the contact information of service providers. However, the actual legally binding contracting between parties is not facilitated by the Pasture Bank service.

#### DRIVERS

##### ECONOMIC

Especially in the case of big suckler cow cattle, extra grazing area may offer considerable economic benefits.

##### SOCIAL

Reduced grazing is considered as a scenic threat to rural landscape and this is why services like the Pasture Bank can contribute to the overall pleasantness of rural areas.

##### ENVIRONMENTAL

In the Finnish agri-environmental policy, it is recognised the importance of traditional agricultural biotopes and grazing plays an essential role in their maintenance.



### EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

Currently (2018-11-29), in the Pasture Bank there are 36 announcements of potential grazing areas (varying from 0.3 ha to 80 ha) and 27 announcements of potential grazing animals (7 cattle, 17 sheep and 3 horses, number of grazing animals varying from 2 to 500). In addition, in the register there are 28 providers of landscape management services.

### STRENGTHS/ WEAKNESSES

#### STRENGTHS

- Internet-based service makes it easy to search and find suitable grazing and landscape management services.

#### WEAKNESSES

- In certain areas in Finland the supply and demand of grazing services do not meet, and high transportation costs of grazing animals limit the usability of the Pasture Bank service.

### REFERENCES

Pasture Bank [Laidunpankki] [https://www.laidunpankki.fi/index.tml?sivu\\_id=1](https://www.laidunpankki.fi/index.tml?sivu_id=1) (unfortunately the information is available only in Finnish)

## 15. The Agro-ecological Project For France (FRANCE)

### CATEGORY

Mixed (policy+market)

### GEOGRAPHIC SCOPE

National

### CLUSTER

1. National food and farming plans

National strategy for agro-ecology

### LEGISLATIVE REFERENCE/ NAME OF OWNER

The Agro-ecological project for France, 2012 (Le Projet agro-écologique pour la France), along with the Law No. 1170 for the Future for Agriculture, Food and Forestry, 2014 (Loi n° 2014-1170 du 13 octobre 2014 d'avenir pour l'agriculture, l'alimentation et la forêt) and nine related action plans

### OVERALL/ SPECIFIC OBJECTIVES

The overall objective is to enable French farms to achieve economic, environmental and social performance - to ensure access to food, produced under conditions enabling the protection of the environment and to develop agricultural production and food processing industries. The intention is to make farming systems more reliant on ecosystem functions emphasizing voluntary, bottom up approaches over regulation.

The specific objectives are:

1. To revise agricultural educational curricula;
2. To foster collective initiatives;



3. To reduce pesticide use;
4. To provide better training to farmers (including a farm-level, agro-ecological diagnosis tool);
5. To financially help farmers with the transition to agro-ecology;
6. To support organic agriculture;
7. To engage and create synergies among local stakeholders;
8. To reduce antibiotic use;
9. To promote seed selection for sustainable agriculture;
10. To increase soil organic matter (notably through the 4 per 1000 initiative);
11. To support beekeeping activities,
12. To promote agroforestry.

#### LINK TO AGRO-ECOLOGY

The Agro-ecological project represents an integrated cross-cutting nationwide approach to supporting and fostering a transition to agro-ecological production systems in France. It offers a wide range of tools and actions.

#### TOOLS USED TO ACHIEVE OBJECTIVES

Few regulatory measures are used. Actors are incentivised in various ways to change their practices through, for example, reduced tax to facilitate organic farming, demonstration farms and on-farm experiments, or the use of a system of certificates to incentivise pesticide savings by farmers and distributors. Tools and actions that have been implemented include:

Revision agricultural educational curricula. In 2014/15, some 135 teachers/lecturers and members of staff of the regional Ministry services received specific training on agro-ecology with a view to acting as advisors to other teaching staff in colleges and universities. The network of chambers of agriculture launched a plan in 2015 to train their advisers to develop their skills to advise farmers on agro-ecology. A free online university course (Agreenium-IAVFF) and a first Massive Open Online Course on agro-ecology as a voluntary e-learning tool have been introduced.

Fostering collective initiatives through the economic and environmental interest groupings "GIEE". The creation of the GIEE, aims to facilitate the emergence of collective projects involving farmers and other local actors, and to help them apply for funding and implement agro-ecological 'projects'. Other actors include chambers of agriculture, agricultural research or technical institutes, agricultural colleges, cooperatives, food processors, environmental NGOs, local government, etc. The idea is that agro-ecology must be based on local knowledge and a willing transition by farmers/local stakeholders. The legislation allows existing groups to apply and be labelled a 'GIEE' if the project is in line with the criteria of the regional sustainable farming plan. Once certified, a group may be prioritised in the allocation of funding and/or benefit from increased support rates. Funding may come from the EU (EAFRD, ERDF, ESF, EAGF), Horizon 2020/EIP-Agri), state aid, regional aid or support from the water or environment agencies (ADEME).

Reduction of pesticide use. Pilot farms have been established to test and disseminate good practice. Regular monitoring bulletin to alert farmers a programme to monitor sprayers used on farms. Distributors of plant protection products are incentivised to take action to reduce farmers' pesticide use through a system of 'pesticide saving certificates'.





Provision of better training to farmers including a farm-level, agro-ecological diagnosis tool.

The Ministry of Agriculture and the network of technical agricultural institutes have developed an online advisory tool whereby farmers (or their advisers) can run an agro-ecological assessment of their farms by answering a set of questions tailored to the type of production. The results can be benchmarked. Another module identifies possible agro-ecological practices the farmer could explore and details their performance potential.

Financial assistance to farmers to transition to agro-ecology. Providing financial support to emerging agro-ecological initiatives through the CAP; fostering innovation; facilitating the emergence of bottom up initiatives.

#### Support to organic agriculture

Develop organic production by improving the rate of public support for organic farming, reducing the tax burden on organic farms, strengthening the support available with funds from local water agencies in certain target zones, and facilitating access to land for new entrants. Support is available for restructuring the organic farming sector by developing specialist supply chains (e.g. cooperatives, food processing), coordinating various sources of funding available and developing multi-annual contracts with farmers. Other objectives include developing market share and overall consumption of organic foods (via communication on the environmental benefits of organic farming, around the theme “organic and local” and by setting a 20% organic food target for public sector catering).

Reduction in antibiotic use. Awareness raising and the promotion of good practice to avoid the build-up of antimicrobial resistance (hygiene rules, design and maintenance of buildings, implementation of biosecurity measures and monitoring). Development of alternatives to antimicrobials.

Promotion of seed selection for sustainable agriculture. Dissemination to farmers of information on intellectual property rights; measures to ensure that traditional varieties best suited to local conditions are available on the market; and measures to encourage the breeding of plant seed varieties for lower input agriculture, including environmental criteria.

Support to beekeeping activities. Improving bee health in particular by introducing measures to reduce the impact of pesticides, diseases and non-native species; promoting pollinator habitats (notably through the creation of Ecological Focus Areas under Pillar 1 of the CAP), and supporting research to assist in the development and re-structuring of French honey production.

Support to agroforestry through the creation of a legislative framework and support to agroforestry, to develop specific advice and training/education for agroforesters, and to increase the economic value of agroforestry.

Increased production of plant-based proteins from legumes and other protein crops to improve forage self-sufficiency in the livestock sector through various CAP and national instruments (including the organic farming plan ‘Ambition Bio 2017’).

#### DRIVERS

##### POLITICAL

Strong political will and leadership.

##### ECONOMIC

The Agro-ecological Project in its first phase focused solely on achieving ‘win-wins’ - ecological and economic. The idea of turning the environment into an economic asset rather than seeing it as a constraint, was intended to appeal to a broad spectrum of stakeholders. Difficult economic times in





various sectors (poultry, pig and dairy notably) was an impetus. Russian ban on EU agricultural products from August 2014 along with slowing demand from China was a driver.

## SOCIAL

The Agro-ecology Plan promotes a bottom up approach and puts great emphasis on collaborative initiatives by farmers grouped in GIEEs, as opposed to a more stringent regulatory framework. The salient features of this new structure are that all of its projects must be agro-ecological and must also be in conformity with regional sustainable farming plans. In return, GIEE projects enjoy priority access to funding. The GIEEs aim to empower farmers (or other groups) to deliver agro-ecology and give them complete autonomy in deciding their agro-ecological objectives and initiatives. The structure enables participants to use their own knowledge and experience to find tailored and appropriately-scaled solutions.

## TECHNOLOGY

Setting up of “living laboratories”, or on-farm experiments, to foster innovation at local/regional level between farmers, enterprises and actors involved in research and education.

## LEGISLATIVE

The 2014 reform of the French Agricultural Law introduced a series of statements about the Government’s role in promoting and establishing agro-ecology. The Law now states that public bodies will promote agro-ecological systems and seek to make them permanent and that the State will encourage farmers to adopt innovative practices and systems. To help with this, it will support those engaged in the development of biocontrol measures and expects the process of market authorisation to be speeded up. The Government will also facilitate interactions between social scientists and agronomists to develop better means of knowledge sharing to facilitate the transition towards agro-ecology. These provisions are an expression of the French government’s determination to pursue a vigorous policy towards agro-ecology.

## ENVIRONMENTAL

Deteriorating state of the environment and growing societal concerns.

## EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

A survey undertaken for the Agriculture Ministry shows that farmers’ awareness of agro-ecology as a concept has increased (79% in 2016, up from 50% in 2014 and up to 86% amongst farmers less than 40 years old) and that a majority (92%) of those interviewed are engaged in or planning to join one or more “agro-ecological initiatives” such as reducing agrochemical inputs (76%), improving soil quality and limiting soil erosion (72%) or preserving water resources (61%). The number of farmers declaring to be in, or about to join, a GIEE project (11%). Some 57% of French farmers knew about the concept of GIEEs in 2016, while 31% of farmers said they were willing to join a GIEE project.

## STRENGTHS/ WEAKNESSES

### STRENGTHS

- Cross cutting actions to achieve the Agro-ecology Project’s objectives.
- Steering and managing the Agro-ecological Project itself (e.g. setting up of a steering group, evaluation indicators and the regional implementation of the Project).
- Engaging researchers to work alongside and train farmers.
- Providing financial support to emerging agro-ecological initiatives through the CAP.



- Fostering innovation.
- Facilitating the emergence of bottom up initiatives.
- The CAP instruments used in France to promote agro-ecology include mostly Pillar 2 measures, notably the agri-environment and climate Measure, the organic farming Measure and the cooperation Measure to support EIP groups and short supply chains, among others.
- RDPs contain some options aimed at fostering a farm-wide agro-ecological approach.
- Educational programmes and training for farmers were reformed to encourage the adoption of agro-ecological practices and systems.
- GIEEs created to encourage greater collaboration and cooperation among farmers and between farmers and other types of local actors.

#### WEAKNESSES

- No means (especially financial ones) and no obligation (no norms to be achieved), so the plan was not really followed by concrete actions nor concrete consequences/effects.
- CAP support not directly targeted at agro-ecology.
- The project was launched in November 2012 but the corresponding law was published in October 2014 so a lot of time was already wasted because of this delay.
- The current CAP is not adapted to support agro-ecology and it is expected to be difficult to get agro-ecology to fit in the CAP framework.
- The rural development programs were built before the elections for the regional councils. The newly elected members of the regional council did not really agree with the RDP and tried to re-orient it in AuRA. In AuRA, there is a willingness to support investment, but not the immaterial investments (like extension services, accompanying actions etc which are important for transition towards agro-ecology).
- Since 2017, change of government at national level. The new minister for Agriculture S. Travert did not carry this plan very strongly (not as strongly as S LeFoll) so that was no real strong message given to push for continuing the transition in the last months. We will see how the new minister D. Guillaume will take it up. All these changes slow down the process.
- The agro-ecology project might not really show concrete and measureable outcomes (yet).
- The timetable: the agro-ecology project for France was designed at a public policy time scale while in practice, such transition takes time (more than a five year public policy). So if we want to carry out a public policy evaluation, we might consider that the results/outcomes are not sufficient.
- The level of ambition of the project : some stakeholders have considered that the project wasn't ambitious enough.

#### REFERENCES

2014 (Loi n° 2014-1170 du 13 octobre 2014 d'avenir pour l'agriculture, l'alimentation et la forêt) and nine related action plans, 2012-2017 (Plan protéines végétales pour la France, Plan semences et plants pour une agriculture durable; Plan Energie, méthanisation, azote, autonomie, Plan Ecophyto pour réduire les pesticides; Programme Ecoantibio 2; Plan national de développement de l'agroforesterie; Stratégie nationale pour le bien-être animal; Programme Ambition Bio 2017; Plan de développement durable de l'apiculture).



The Agro-ecological project for France, 2012 (Le Projet agro-écologique pour la France).

Mottershead, D. and Maréchal A. (2017), *Promotion of agro-ecological approaches: Lessons from other European countries*, Report for the Land Use Policy Group.

## 16. GIEE - Economic And Environmental Interest Groupings (France)

### CATEGORY

Policy

### GEOGRAPHIC SCOPE

National

### CLUSTER

7. Territorial-based farming practices

Implementation of one of the actions/tools listed in the agro-ecological project for France.

### LEGISLATIVE REFERENCE/ NAME OF OWNER

GIEE is a national label and recognition given by the State to some farmers groups engaged in maintaining or developing agro-ecological farming practices in their farms and systems. The initiative was launched by the ministry of agriculture and it was stated in the law for the future of Agriculture, Food and Forestry. Its implementation is carried out by the ministry of agriculture and its regional representatives.

### OVERALL/ SPECIFIC OBJECTIVES

The overall objective is to recognise and label farmers' groups engaged in improving the sustainability of the farming systems (from an environmental, economic and social perspectives) via collective action. The rationale that underpins this initiative is that changing farming practices or even re-designing a farming system might be risky and that experimenting these in a collective frame might facilitate the transition for farmers. The aim is thus to offer specific supports to groups of farmers willing to get involved in such a collective dynamics. Once labelled as GIEE, these groupings can benefit from financial supports or from a higher rate of financial supports (than those offered to individual farmers), for example to finance collective investment in machineries, time of extension services staff for accompanying the creation of the group and its activities (experimentation).

### LINK TO AGRO-ECOLOGY

GIEE frame is part of the agro-ecology plan for France. The aim of this initiative is to bring into focus systems taking up agro-ecological practices (or willing to do so in the near future). GIEEs cover a wide range of topics related to agro-ecology and its environmental, economic and social dimensions such as systems' self-sufficiency, soil biology, crop diversification, improvement of working conditions and workload, diversification of distribution channels etc.

### TOOLS USED TO ACHIEVE OBJECTIVES

Different calls for applications have been published firstly at national level and then at regional levels to give the opportunity to farmers' groups to apply for the GIEE recognition (applications are to be made on a voluntary basis only). Applications must be sent to the regional state representatives.



Then a committee composed of a diversity of stakeholders (state representatives, farmers' representatives, actors from the food chains (acting to collect, process or sell agricultural products, extension services, technical or research institutes, environmental and consumers NGOs) decide on the attribution of the GIEE label. Selection criteria concern the objectives of the group's project, their relevance as well as the composition of the group. Farmers must play a prominent role in the group but there might also be other stakeholders involved (such as extension services, cooperatives collecting the agricultural raw materials etc...). The added-value offered by collective action in the group must be demonstrated.

Labelled groups can then access financial supports (for example higher financial support for investments, funds for paying extension service staff for organising group activities).

### DRIVERS

#### ECONOMIC

The objective is to facilitate the cooperation between farmers by giving prior access to some financial support to farmers' group.

#### SOCIAL

It aims at promoting collective action to enhance collaboration on working for the adoption of agro-ecological practices.

#### TECHNOLOGICAL

GIEE is often used by farmers to experiment and/or implement in their specific context new or innovative agricultural practices and techniques (i.e. conservation agriculture, soil tillage reduction, biological control, etc.)

#### LEGISLATIVE

The creation of the GIEEs was one objective stated in the 2014 Law for the future of Agriculture. The selection criteria for GIEEs have also been stated in national state guidelines.

#### ENVIRONMENTAL

Environmental performances of the farming systems should be tackled in the groups' projects.

EVIDENCE OF ACHIEVEMENTS/ OUTCOMES: The first 11 GIEE have been labelled in February 2015. In 2017, there were 350 GIEEs in France. New calls for applications will be published in the future.

### STRENGTHS/ WEAKNESSES

#### STRENGTHS

- Promotion of collective actions amongst farmers.
- Ability of this measure to give a lot of freedom to the group in designing the projects and the issues they want to work on.

#### WEAKNESSES

It is a broad policy framework and the main risk relates to the level of ambition that the GIEEs will actually have. In other words, there is a risk of labelling initiatives consisting in green-washing mainly or, in many cases, in minor changes related to a weak agro-ecology (efficiency, substitution).

### REFERENCES

Lamine, C., Barbier, M., 2018. Synthèse des résultats - Projet de recherche Observatoire Sociologique des Transitions Agro-écologiques. 10p.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N° 773901.

## 17. Guide To Agro-ecology In Wine Growing (FRANCE)

### CATEGORY

Mixed (policy+market)

### GEOGRAPHIC SCOPE

National

### CLUSTER

5. Local food promotion

National guidelines for the adoption of agro-ecological practices in PDO wine making

### LEGISLATIVE REFERENCE/ NAME OF OWNER

INAO (agricultural ministry department in charge of quality and origin labels) and IFV (French institute for grapes and wine).

### OVERALL/ SPECIFIC OBJECTIVES

The overall objective is to give guidelines to stakeholders involved in the management and defence of wine PDO (protected designation of origin) on how to integrate more agro-ecological practices in the cultivation of grapes that will be processed and sold as PDO or PGI (protected geographical indication) wines. The aim is to promote the introduction of certain farming practices in the regulation that states the production methods rules required by the PDO or the PGI. This would be a way to promote a wide adoption of certain practices considered as environmentally friendly.

### LINK TO AGRO-ECOLOGY

This initiative was launched by the minister of agriculture S Le Foll (who did also launch the National Agro-ecology Plan for France). It aims at using existing quality schemes as a frame to speed up the uptake of agro-ecological practices.

### TOOLS USED TO ACHIEVE OBJECTIVES

No new specific policy and/or market tools have been elaborated. But guidelines stating possible ways of implementing more agro-ecological practices have been published. In this document, 8 agri-environmental measures which could be included in the regulation of PDO/PGI wines have been listed. The inclusion of one or more of these measures in a PDO/PGI wine regulation will be done on a voluntary basis only. It is up to the local stakeholders involved in the PDO/PGI defence and management to decide whether they wish to include one or some of them in their regulation.

The 8 agri-environmental measures are the following:

1. Mandatory sowing of grass or other cover crops on the edge of the grape fields.
2. Ban of chemical weeding on the whole field surface (*i.e.* chemical weeding should concern part of the field only, for example on the row (and not on the inter-rows)).
3. Sowing of grass or cover crops in the inter-rows.
4. Improvement of the efficiency of spraying machineries.
5. Reduction of quantities of pesticides used.
6. Limitation of mineral nitrogen fertilisers use.



7. Conservation of stone walls, terraces and groves.
8. Respect of original soil morphology/shape.

### DRIVERS

#### POLITICAL/ LEADERSHIP

Strong political will from 2012 to 2017 with the previous government and minister of agriculture S. Le Foll. A lower political will currently.

#### ECONOMIC

Currently it is difficult to expect certain economic advantages on the prices of the products but it remains a possibility for the future or in specific cases.

#### SOCIAL

Greening the image of some PDO/PGI, with some potential marketing advantages.

#### TECHNOLOGICAL

Technological: implementation of one or some agri-environmental measures which have, at least for some of them, not only environmental advantages but also agronomic advantages.

#### LEGISLATIVE

A general objective to take up environmental issues in PDO/PGI quality schemes was formulated and stated in an environmental law (Grenelle de l'environnement Law) in 2009. These guidelines are an implementation action derived from this law.

#### ENVIRONMENTAL

Increasing the environmental sustainability of grape production by using existing quality schemes.

### EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

These guidelines were published in 2017. It will be necessary to see if and how this is taken up by each PDO/PGI management committee (at local level).

### STRENGTHS/ WEAKNESSES

#### STRENGTHS

- Using existing PDO and PGI quality schemes (currently used to promote the specificity and the origin of a product) to get the involved operators and stakeholders to tackle environmental problems. In other words, to use an existing marketing tool to improve their production methods and the sustainability of their farming practices.
- In France, the majority of wines are sold as PDO/PGI (94% of the wines are sold with a geographical indication), so using these quality schemes to tackle environmental problem can be a very powerful tool.

#### WEAKNESSES

- The main risk is that only practices that are already widely implemented locally will be included in the PDO/PGI regulation.
- The process to modify PDO/PGI specifications is very long (more than 5 years), and complex. The objective of this guide is to simplify and to shorten the process. But up to now we don't know if it will be efficient. Indeed a major difficulty is to obtain a collective agreement of the



different stakeholders of a PDO/PGI and there is no certainty that the guideline will reduce this time significantly.

#### REFERENCES

INAO, IFV, 2017, Guide de l'agroécologie en viticulture. Développement des mesures agroenvironnementales, 52p

<https://www.inao.gouv.fr/Nos-actualites/Agro-ecologie-des-outils-a-disposition-des-viticulteurs>

## 18. Challenge For Poor Families Towards Quality And Organic Food (FRANCE)

#### CATEGORY

Market

#### GEOGRAPHIC SCOPE

National

#### CLUSTER

4. Organic food promotion and certification

Projects aiming at working with low income families on increasing their consumption of organic food without increasing their food expenses.

#### LEGISLATIVE REFERENCE/ NAME OF OWNER

The original name of the project is "Famille à alimentation positive". This project was first initiated by the regional federation of organic farmers in the former Rhône-Alpes region. It has been transferred and implemented in many other regions. It is now the national federation of organic farmers that is carrying the initiative. The local implementations of such projects are always done in partnership with local organisations (such as social centres, municipalities).

#### OVERALL/ SPECIFIC OBJECTIVES

The overall objective is to work with low income families on increasing by 20% their organic food consumption without increasing their food expenditure. More generally, the aim is to raise awareness about quality food and help families to be gain autonomy in their choices for food.

#### LINK TO AGRO-ECOLOGY

This initiative aims at giving access to healthy food to low and moderate income families. The rationale is that food produced by organic (and thus considered as agro-ecological) farming systems should be affordable to anyone (and should not be reserved for a financial elite only).

#### TOOLS USED TO ACHIEVE OBJECTIVES

The project is organised like a "challenge" to be taken up by voluntary families. In a local project, families are organised in several "teams" (composed of 8 to 12 families). The project lasts 6 months. During that period, about once a month, different events are organised to raise families' awareness about organic food and cooking: farm visits, trainings, cooking classes, workshops, debates, shared meals, social events (at beginning and at the end of the project). These events can be seen as education tools.





Communication tools are also used to create links between families and with the project (publication of newsletters, etc.).

Economics tools (simple budget tool to record and manage food expenses) are also used to help families to follow the evolution of their food expenses and to give them tips about where and when to buy affordable organic products.

#### DRIVERS

##### POLITICAL/ LEADERSHIP

This initiative was launched by the organic farmers federations. It was supported financially by different local authorities (such as regions, municipalities).

##### ECONOMIC

The economic dimension is central in the project as the aim is to give to low income families more autonomy and education towards foods purchases.

##### SOCIAL

Giving access to organic and quality food to a wide public including low income families by the way of educational activities and collective emulation.

##### LEGISLATIVE

The project is not part of an institutionalised policy. But its objectives fit to the general scope of the national plan for organic farming which aims at developing both organic production and consumption. It also fits with the previous French debate about food and agriculture in 2017 (“états généraux de l’alimentation” debate).

##### ENVIRONMENTAL

The aim is to promote an environmentally friendly production methods (organic farming) and to develop local consumption.

#### EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

Since 2012 (when the first project was launched), about 1000 families have participated to the project over the country. The objectives to develop organic food consumption and to empower low income families have been largely achieved in numerous challenges. But we don’t know exactly the durability of such changes after the end of the 6 months challenges.

#### STRENGTHS/ WEAKNESSES

##### STRENGTHS

- A project with a strong social dimension with an original purpose (connecting high quality food and low income families).

##### WEAKNESSES

- A costly project (need for funds to have one staff person responsible for organising the different events) so a strong dependency on financial public support.
- Policy makers might consider that with such project, it is difficult to show concrete outcomes (from a public policy perspective).

#### REFERENCES





Fleury, P., Cresson, C., Vincent, A., 2016. Agriculture biologique et développement local. Innovations agronomiques Vol.51, 77-88. <https://www6.inra.fr/ciag/content/download/5904/44217/file/Vol51-7-Fleury.pdf>

<https://www.famillesalimentationpositive.fr/>

## 19. Federal scheme for organic farming and other forms of sustainable agriculture - BÖLN (GERMANY)

### CATEGORY

Mixed (policy+market)

### GEOGRAPHIC SCOPE

National

### CLUSTER

8. Research and capacity-building

National strategy for organic farming

### LEGISLATIVE REFERENCE/ NAME OF OWNER

Ökologischer Landbau und andere Formen nachhaltiger Landwirtschaft' (BÖLN)

Federal Scheme for Organic Farming and Other Forms of Sustainable Agriculture

The Federal Agency for Agriculture and Food was charged with the implementation of the Scheme. The Office for the Federal Scheme for Organic Farming and Other Forms of Sustainable Agriculture (GS-BÖLN) was set up there for this purpose.

### OVERALL/ SPECIFIC OBJECTIVES

The BÖLN coordinates research on organic and other forms of sustainable farming. It does not coordinate wider German activity to promote organic and other forms of sustainable farming.

### LINK TO AGRO-ECOLOGY

The term 'agro-ecology' is not specifically used, but the programme promotes research on more sustainable agricultural farming systems and practices and fosters both the supply of and demand for organic and sustainable products through advisory services to farmers and information services e.g. participation in trade fairs.

### TOOLS USED TO ACHIEVE OBJECTIVES

The main tools to support objectives of the scheme:

- Research projects on production, processing, marketing and support;
- Knowledge transfer to target groups, including the exchange of knowledge between researchers and farmers;
- Strengthening both the supply of and demand for organic and sustainable products; this includes, for instance, advisory services to help farms to convert to organic farming;
- Provision of information services about, and participate in industry trade fairs for organic farming and other forms of sustainable agriculture;
- Active involvement of sectoral stakeholders in the selection of priorities for BÖLN;



- Specific research themes for sustainable agriculture include: resource efficiency, halting biodiversity loss, livestock husbandry practices aiming at the sustainable management of natural resources, animal welfare and product quality;
- Specific research themes for organic farming include a wide range of issues, including cross-cutting issues (e.g. greenhouse gas emissions in organic systems), crop production (e.g. quality of organic products, adapted varieties), animal-friendly rearing systems, nature conservation and biodiversity (e.g. maximising the conservation benefits of organic farming), storage, collection and processing of organic products, and the marketing of organic products.

## DRIVERS

### POLITICAL/ LEADERSHIP

The BÖLN scheme has been strongly driven by political factors. It was introduced in the year 2002 as the Federal Organic Farming Scheme under the impetus of Renate Künast, who was Minister for Consumer Protection, Food and Agriculture between 2001 and 2005 in the federal government. A member of the Green Party, Ms Künast had a strong personal ambition to develop organic farming in Germany. Alongside the initial BÖL scheme, Ms Künast introduced a target for organic farming to cover 20% of all agricultural land in Germany within 10 years i.e. by 2011, with an interim target of 10% by 2006. The Scheme was extended to include other forms of sustainable agriculture under a resolution adopted by the German Bundestag on 26 November 2010.

### ECONOMIC

Economic considerations have contributed to the increase in organic farming area in Germany since 2001, facilitated by the activities undertaken under the BÖLN scheme (e.g. information, research, developing markets). Market demand has been a critical driver.

### SOCIAL

Public reaction to the outbreak of BSE in Germany garnered support for organic farming. Previously, most organic produce was only distributed through specialist health food shops. The lack of an effective distribution system for organic produce to consumers prompted BÖL to support organic products which led larger retail chains to recognise and respond to the gap in consumer demand.

### LEGISLATIVE

The extension of BÖL into BÖLN to cover 'other types of sustainable agricultural practices' in 2011/12 demonstrates the evolving rationale of the scheme from a response to a collapse in consumer confidence in 2001 (due to outbreak of BSE) to a continued and widely supported component of Germany's sustainable development plan.

### ENVIRONMENTAL

Environmental benefits for water and soils, and animal welfare benefits.

## EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

The programme has been critical to furthering the achievement of 20% target for organic farming and continued strong public support for organic production and produce. The BMEL (2019) reports that, since the start of the funding of the programme in 2002, more than 1,000 research projects have been supported with a funding volume of some € 150 million. In addition, more than 50 measures, including a knowledge transfer and advanced training programme for value-added chain actors, were developed and implemented, while five guidelines provided support for 2,131 companies at trade fairs, 162 information and sales promotion projects on organic farming and more



than 600 holdings either in the lead-up to or during their conversion to organic farming (as of 1.1.2019, BMEL, 2019).

#### STRENGTHS/ WEAKNESSES

##### STRENGTHS

- Research has made a major contribution to the solution of practical problems as well as the further development of the organic sector. Balanced programme of research covering all production sectors as well as knowledge transfer mechanisms and market development techniques.

##### WEAKNESSES

- The scope of BÖLN is focussed on the coordination of research on organic and other forms of sustainable farming. It does less coordinate wider German activity to promote organic and other forms of sustainable farming.

#### REFERENCES

<https://www.bundesprogramm.de/was-wir-tun/projekte-foerdern/informations-und-absatzfoerderung/informations-und-absatzfoerderung/infos-und-absatzfoerderung-nachhaltige-landwirtschaft/>

[http://www.bmel.de/EN/Agriculture/SustainableLandUse/\\_Texte/OrganicFarmingInGermany.html](http://www.bmel.de/EN/Agriculture/SustainableLandUse/_Texte/OrganicFarmingInGermany.html)

Mottershead, D. and Maréchal A. (2017), *Promotion of agro-ecological approaches: Lessons from other European countries*, Report for the Land Use Policy Group.

BMEL (2019). Organic Farming in Germany.

[https://www.bmel.de/EN/Agriculture/SustainableLandUse/\\_Texte/OrganicFarmingInGermany.html](https://www.bmel.de/EN/Agriculture/SustainableLandUse/_Texte/OrganicFarmingInGermany.html)

## 20. “Organic Farming – Looking Forwards” Strategy (GERMANY)

#### CATEGORY

Policy

#### GEOGRAPHIC SCOPE

National

#### CLUSTER

1. National food and farming plans

National strategy for organic farming

#### LEGISLATIVE REFERENCE/ NAME OF OWNER

“Organic Farming – Looking Forwards” Strategy.

Federal Ministry of Food and Agriculture

The strategy was developed jointly with representatives of the organic food sector, with the federal states and with scientists.

#### OVERALL/ SPECIFIC OBJECTIVES



This project has received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement N° 773901.

The overall objective of the strategy is to promote organic farming and to increase the share of agricultural land farmed organically towards the target of “20 % organic farming” included in the federal government’s sustainable development strategy (BMEL, 2019). It aims to help address resource policy challenges in agriculture and identify additional development prospects for farm operators in Germany. The strategy attempts to support the creation of an appropriate policy framework for the relevant economic operators in the organic farming and food sector and to provide an overview of the removal of barriers between organic and conventional methods of production.

#### LINK TO AGRO-ECOLOGY

The strategy encourages the production, processing, supply of organic products to the market, as well as stimulation of consumption of organic grown products by consumers.

#### TOOLS USED TO ACHIEVE OBJECTIVES

The following key lines of action are identified in the strategy:

- designing a viable and coherent legislative framework;
- facilitating access to organic farming;
- fully utilizing and expanding the demand potential;
- improving the productivity of organic farming systems;
- rewarding ecological contributions adequately.

Depending on the particular weakness or barrier identified a wide range of support instruments and approaches are outlined including legal and financial support instruments, action to promote research, technology and knowledge transfer as well as other conceptual responsibilities of the federal government. Key funding instruments to achieve the forward-looking strategy goals are the budget for the Federal Organic Farming Scheme and other Forms of Sustainable Agriculture (BÖLN), and the Protein Crop Strategy (EPS).

#### DRIVERS

Main drivers are political, economic and environmental.

##### POLITICAL

Although the area of organic farming has grown over the last decade, current levels of organic farming are substantially below the target of “20 % organic farming” included in the federal government’s sustainable development strategy. The Federal Ministry of Food and Agriculture initiated the development of the forward looking strategy to provide new stimulus for growth in organic farming and foods.

##### ECONOMIC

Rising consumer demand for organic products can only partly be met by organic produce grown in Germany.

##### ENVIRONMENTAL

Concerns about the environmental impacts of farming lead to the promotion of organic farming as a more environmentally compatible form of agriculture which is based on the principle of sustainable development.



### EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

The strategy has only been finalised in 2017. It is thus too early to review the achievements of the strategy. The Federal Ministry of Food and Agriculture plans to conduct an initial status assessment in 2019 and a progress report with an assessment of the successes achieved in implementing certain measures in 2020. However, right from the outset of developing the integrated strategy some measures have been designed and implemented, e.g. to improve advisory services and training, research projects aimed at providing solutions in the breeding of animals and crops.

### STRENGTHS/ WEAKNESSES

#### STRENGTHS

- An integrated strategy which combines a wide range of support instruments and approaches for organic farming and food.
- Joint development between policy-makers, stakeholders and scientists led to an innovative mix of measures addressing key challenges of organic farming
- Provides a forward looking roadmap with milestones to be achieved in the coming years to promote organic farming in the longer term.

#### WEAKNESSES

- Current financial basis probably not sufficient to implement wider set of measures at larger scale.

### REFERENCES

BMEL (2019). Organic Farming in Germany.

[https://www.bmel.de/SharedDocs/Downloads/EN/Agriculture/OrganicFarming/Organic-Farming-in-Germany.pdf?\\_\\_blob=publicationFile](https://www.bmel.de/SharedDocs/Downloads/EN/Agriculture/OrganicFarming/Organic-Farming-in-Germany.pdf?__blob=publicationFile)

BMEL (2017). Extract from the "Organic farming - looking forwards strategy".

[https://www.bmel.de/SharedDocs/Downloads/EN/Publications/OrganicFarmingLookingForwards.pdf?\\_\\_blob=publicationFile](https://www.bmel.de/SharedDocs/Downloads/EN/Publications/OrganicFarmingLookingForwards.pdf?__blob=publicationFile)

## 21. Flowering Meadows in Alb (Germany)

### CATEGORY

Market

### GEOGRAPHIC SCOPE

Local

### CLUSTER

7. Territorial-based farming practices

Bottom up initiative of cooperative nature conservation with elements of market incentives

### LEGISLATIVE REFERENCE/ NAME OF OWNER

Flowering meadows in Alb (Blumenwiesen-Alb) is a society founded in 2009. The society includes members from farming, nature protection, county administration, local communities, scientific community and private persons.



### OVERALL/ SPECIFIC OBJECTIVES

The overall objective of the initiative is the conservation of the quality and beauty of the meadows and grassland in the Alb region. In its work the initiative is guided by the “principle” that an appreciation and recognition of the contributions of the farmers to maintaining the quality and beauty of the meadows by local communities and tourists is important but also needs to be transformed into an improved value added for farmers. Otherwise, the biodiversity benefits can’t be achieved and the meadows will disappear.

This has led to the following more specific objectives:

- The conservation and promotion of species rich flowering meadows and grassland and to support those farmers who maintain high quality meadows;
- To carry out public relations work for the flowering meadows of the Alb to create a positive image of farming and the region and to improve the awareness amongst local people and wider non-farming actors (including tourists);
- To develop and manage a multi-actor network with actors from farming, nature protection and tourism, as well as local communities and administrations;
- To promote the active engagement of a wide range of actors in the conservation of flowering meadows and a cultural landscape with high biodiversity;
- To acquire funding for the support of actors contributing to the conservation of the flowering meadows.

The initiative was founded in 2009 and was building on previous cooperations of the regional farmers union and nature protection organisations such as the meadow championships in 2005 and 2007.

### LINK TO AGRO-ECOLOGY

The initiative promotes the conservation of flowering meadows and cultural landscapes with high biodiversity value. It aims to integrate biodiversity management and the generation of additional value added for farmers operating low-input and extensive livestock systems. The initiative promotes direct and quality marketing, diversification, certification and labelling and championships to raise awareness and the increase the potential of establishing farm shops and local markets to directly sell specific flowering meadows cheese and meat products as well as vegetables. This includes also the promotion of joint production and marketing and establishing new products and business opportunities such as particular seed mixtures.

### TOOLS USED TO ACHIEVE OBJECTIVES

The following activities are organised by the initiative:

- Organisation of local markets and ecological championships;
- Educational and informative activities and materials are produced for the local communities and the tourism sector as well as to further expand the network;
- Implementation of projects on good practice in meadow management and biodiversity monitoring – knowledge transfer to farmers and other actors.

### DRIVERS

Main drivers are economic and environmental. In addition social aspects play a role as well as potential linkages with support measures in the RDP.



## ECONOMIC

Low income of farmers due to extensive systems and relative poor soils.

Promotion of local and high quality products associated with high biodiversity benefits through establishment of better and shorter marketing and direct sales.

## SOCIAL

Maintaining and building social capital through cooperation of farmers and with other actors.

Maintaining local communities.

## LEGISLATIVE

Does not receive funding from RDP, but championships build on experience of previous ecological championships with some of them linked to payment-by-results schemes (e.g. MEKA and the flowering Meadows in France). However, it can be expected that a high share of the flowering meadows and grasslands receive the payment-by-result AEM in the MEKA programme.

## ENVIRONMENTAL

The region is one of the key areas (hotspots) for species rich flowering meadows in Germany. The conservation of the cultural landscape in the “Schwäbische Alb” is of particular ecological value.

## EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

There are no quantitative numbers available about the success of the society and their specific contributions to conserving the flowering meadows and increasing added value. However, the number of good practice examples available which benefit from the initiative and the long-term experience with the Championships suggests that the activities of the society do indeed provide a meaningful contribution.

## STRENGTHS/ WEAKNESSES

### STRENGTHS

- Cooperative approach developed by local actors and stakeholders.
- Promotes viable business opportunities for farms conserving flowering meadows.
- Incorporates awareness raising amongst the wider rural community through different events fostering communication, cooperation and opportunities for direct sales of specific flowering meadows products.
- Initiative / society independent from RDP funds – currently financed through member fees and donations.
- Potentially closely linked with existing payment-by-results in MEKA programme.

### WEAKNESSES

- Current financial basis probably not sufficient to implement wider activities.
- More formal mechanisms such as producer groups and labels could be explored and developed to enhance positive economic and environmental impacts.

## REFERENCES (all in German)

Blumenwiesen-Alb Landwirte stellen sich und ihre Produkte vor [http://blumenwiesen-alb.de/wp/wp-content/uploads/2008/11/plenum\\_broschuere-okt2008.pdf](http://blumenwiesen-alb.de/wp/wp-content/uploads/2008/11/plenum_broschuere-okt2008.pdf)





Qualitätsmerkmal Blumenwiesen-Alb <http://www.blumenwiesen-alb.de/wp/wp-content/uploads/2016/09/Qualita%CC%88tsmerkmal-Blumenwiesen-Alb-final-M%C3%A4rz2016-11.pdf>

Website: <http://www.blumenwiesen-alb.de/wp/>

## 22. Water Protection Bread (Germany)

### CATEGORY

Market

### GEOGRAPHIC SCOPE

Local

### CLUSTER

7. Territorial-based farming practices

Cooperation along a regional value chain from farmers to the bakeries with water utility as financier and beneficiary

### LEGISLATIVE REFERENCE/ NAME OF OWNER

The Wasserschutzbrot (Water Protection Bread) initiative was founded through a project commissioned by the local administration in Franconia in 2014 and managed by FiBL Germany

The initiative has secured the cooperation of farmers, mills, bakeries, water works, local administration and research and won sustainability championships in Germany. After an initial testing phase in 2014 and 2015 it includes now 16 farms in different drinking water catchments which have reduced fertilisation in the cultivation of wheat for baking and 15 bakeries which produce the "Water Protection Bread" from the less fertilised wheat.

### OVERALL/ SPECIFIC OBJECTIVES

The main objective is to reduce nitrate leaching into the ground and drinking water through reduced N fertilisation in the production of "baking wheat". Ground water can be used as drinking water without expensive treatments by the water utilities.

### LINK TO AGRO-ECOLOGY

The initiative is targeted at improving water quality through the agro-ecological practice of fertiliser management reducing nitrate leaching. The main contribution to the analysis of agro-ecological transitions in UNISECO might be the example of value chain actors cooperating to make farm management more sustainable. The initiative also combines financial support from the local government administration (e.g. for the management of the initiative) and the private sector (water utilities paying farmers a compensation for the lower protein content of the wheat).

### TOOLS USED TO ACHIEVE OBJECTIVES

The initiative combines different tools and support elements. Farmers receive a *financial compensation* from the water utility for the lower quality of the wheat (lower protein content). The farms have to be located in the water catchment of a public drinking water supply. Farms have to do without the last application of N-fertiliser, altogether no more than 160kg / ha / a. Treatment with Glyphosat is forbidden and farms have to put up notice boards of the Water Protection Bread at each parcel.





The mills process the less fertilised wheat separately, sell the flour to the bakeries participating in this initiative and have to do exact documentation of the amount of wheat and flour bought, produced and sold.

Bakeries are committed to offer Water Protection Bread every day and at least 30% of the flour they use in total has to come from the initiative. Bread can be labelled as Water Protection Bread, if the bread contains at least 60% of the wheat from the initiative.

The initiative has thus established *cooperation along a regional value chain* from farmers to the bakeries with water utility as financier and beneficiary (less treatment cost for clean drinking water). A particular *label* has been created which together with information on the benefits of the initiative is used on brochures, bread bags and the bread itself.

### DRIVERS

#### ENVIRONMENTAL

The region is because of the soil structure particular prone to nitrate leaching into ground and drinking water. Fertilisation management and water quality is thus one of the main environmental concerns in relation to agricultural land management in Franconia.

#### ECONOMIC

High treatment cost of the water utility to ensure drinking water quality of the ground water led to the acceptability of paying financial compensation to the farmers to reduce fertiliser use.

The initiative creates new local / regional value chains with improved sales opportunities.

#### INSTITUTIONAL / LEGISLATIVE

Research interest in piloting the concept of a Water Protection Bread has contributed to the launch of the initiative.

### EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

There are no quantitative data available about the reduction in cost for the water utility companies or the improved in water quality. However, the reduction in N-applications has been monitored. The initiative has been established and expanded after a pilot phase. The number of participating farms and bakeries increased over the years and the initiative won sustainability rewards.

### STRENGTHS/ WEAKNESSES

#### STRENGTHS

- Interesting example for cooperation of different value chain actors.
- Strengthening of regional marketing and promotion of new sales opportunities.
- Awareness raising amongst the wider rural community through different events and labelling.
- Initiative largely independent from RDP funds.

#### WEAKNESSES

- Reduction of N-application could be higher.
- Change in single practice and not more complex redesign of farm management at systems level – could however be combined with other practice changes in the future.

### REFERENCES (in German)

<https://www.wasserschutzbrot.de/>



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N° 773901.

## 23. Payment-by-results for species rich grassland (GERMANY)

### CATEGORY

Policy

### GEOGRAPHIC SCOPE

Regional

### CLUSTER

2. Agri-environmental practices

Result-based agri-environmental scheme

### LEGISLATIVE REFERENCE/ NAME OF OWNER

Sub-measure in the RDP of Lower Saxony (similar measures exist in many other Federal States) [http://www.ml.niedersachsen.de/themen/landwirtschaft/agrarfoerderung/agrarumweltmassnahmen\\_aum\\_details\\_zu\\_den\\_massnahmen/gl5\\_artenreiches\\_gruenland\\_gl51\\_gl52\\_gl53/gl-5---artenreiches-gruenland-gl51gl52gl53-122454.html](http://www.ml.niedersachsen.de/themen/landwirtschaft/agrarfoerderung/agrarumweltmassnahmen_aum_details_zu_den_massnahmen/gl5_artenreiches_gruenland_gl51_gl52_gl53/gl-5---artenreiches-gruenland-gl51gl52gl53-122454.html)

Payment-by-results for grassland have a long history in Germany. The first and best known example is the MEKA programme which has also inspired the implementation of payment-by-results in other Federal States. In addition, early pilot schemes of payment-by-results for grasslands were piloted in Lower Saxony including the use of auctions. Also, payment-by-results for the improvement of water quality have been tested in Germany and subsequently implemented in the rural development programmes of a few Federal States.

### OVERALL/ SPECIFIC OBJECTIVES

The main objective is the preservation of species-rich meadows based on the application of indicators species and genera.

### LINK TO AGRO-ECOLOGY

The initiative is linked to the agro-ecological practice of extensive use of permanent meadows and promotes the conservation of species rich grassland with high biodiversity value. While payment-by-results for grasslands might not be anymore considered as an innovative policy incentive, experience with the PBR approach is still limited in other EU countries. The example in Lower Saxony includes a three-level payment differentiation with different payment levels for achieving 4, 6 or 8 indicator species.

### TOOLS USED TO ACHIEVE OBJECTIVES

The PBR sub-measure of the AEM grassland support in the RDP in Lower Saxony provides payments for achieving different numbers of indicator species:

4 indicator species: 190 Euro / ha;

6 indicator species: 220 Euro / ha;

8 indicator species: 310 Euro / ha;



Farmers can move to a higher payment level during the duration of the contract, but a reduction (e.g. from 6 to 4 species) is not possible. 31 indicator species are defined in the measure description of the RDP.

### DRIVERS

#### POLITICAL/ LEADERSHIP

Increased interest and funding for pilot schemes of payment-by-results by DG ENV and increased recognition of the approach by DG Agri has likely contributed to a greater willingness of regional and national policy administrators to consider or to continue result-based measures.

#### ECONOMIC

The PBR approach was also implemented with the ambition to increase the acceptability of AEMs and the flexibility for farmers to achieve the desired outcome.

Removing managerial restrictions allows the farmer more flexibility in the management of the land to deliver the environmental outcomes as well as pursue economic interests.

#### INSTITUTIONAL / LEGISLATIVE

The successful implementation of the PBR approach in the MEKA programme had shown that this approach is conform to the current institutional framework of the second pillar of the CAP, which led to other Federal States implementing the PBR approach.

#### ENVIRONMENTAL

Extensive and species rich grassland is under high pressure from intensive land use systems in Lower Saxony and the area of permanent grassland has decreased substantially over the last few decades. The PBR approach has been implemented as a means to improve the environmental targeting and outcomes of AEMs.

### EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

The increase in uptake by farmers over the years suggests an increasing acceptance for the result-based sub-measure (Tietz et al., 2016).

The sub-measure has often a maintenance effect conserving existing qualities of species grassland. But in addition, there is evidence for an increase in the occurrence of indicator species on the supported grassland areas. The success of the sub-measure and grassland support payments could be further increased if more biodiversity and nature protection advisory services would be offered jointly with the AEMs (NLWKN, 2015).

### STRENGTHS/ WEAKNESSES

#### STRENGTHS

- Targeting of grassland with high ecological quality.
- Evidence of positive impacts on the ecological quality of grassland.
- Potential to combine environmental and economic interests, provision of private and public goods.
- Flexible land management approach.

#### WEAKNESSES

- Existing regulations and payment calculations limit the incentive character.



- Needs to be embedded in a more holistic result-based and cooperative approach to policy design and implementation.

#### REFERENCES (all in German)

NLWKN, Niedersächsischer Landesbetrieb für Wasserwirtschaft, Küsten- und Naturschutz (2015b). Wirkungen des Kooperationsprogramms Naturschutz und weiterer Niedersächsischer und Bremer Agrarumweltmaßnahmen auf die Biodiversität - Ergebnisse der Untersuchungen 2007 - 2014. 209 S., Hannover.

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## 24. Landcare Associations (GERMANY)

### CATEGORY

Mixed (policy+market)

### GEOGRAPHIC SCOPE

Local

### CLUSTER

7. Territorial-based farming practices

Landcare Associations develop projects for specific landscape types

### LEGISLATIVE REFERENCE/ NAME OF OWNER

German Association for Landcare (DVL) is the umbrella organization of 155 Landcare Associations (LCA) in Germany at the moment.

### OVERALL/ SPECIFIC OBJECTIVES

These regional non-governmental associations link nature conservation groups with local farmers and local communities. These three groups are equally represented in the association. The often opposing interest groups work together in LCAs voluntarily to care for the cultural landscape and traditional farming systems. The cultivation of land has led to diverse landscapes with mountain-meadows, poor soil pastures, hedgerows and orchards. By pooling interests and local forces LCAs implement integrated and sustainable land management practices in many rural areas in Germany to protect the adopted flora and fauna and to support sustainable development.

### LINK TO AGRO-ECOLOGY

The initiative is linked to different agro-ecological practice such as the extensive use of permanent meadows, agroforestry systems and the protection and integration of landscape mosaics and elements, and promotes a diverse cultural landscape and traditional farming systems with high biodiversity value. Projects implemented by LCAs combine traditional knowledge and new scientific results to foster sustainable land management practices which provide a viable income to farmers.



## TOOLS USED TO ACHIEVE OBJECTIVES

LCAs develop projects for specific landscape types including scientific measures, financial calculations and the implementation of agri-environmental measures. Local coordinators of LCAs apply for available funds on the state-level, supervise the implementation of activities, which is mainly done by local farmers, and monitor the project outcome. Key for the success of the projects is the close cooperation of farmers, local communities, conservation groups and government authorities. LCAs in Germany work with 20 000 farmers in total and appr. half of the communities in Germany. The turnover of the projects is 20 Mio €/year. Project coordinators also ensure the combination of traditional knowledge and new scientific results to foster farming practices which improve a sustainable income to farmers and conserve the diverse mosaic of landscapes including its services.

Another tool used is support for regional development and regional value chains. The LCAs initiate regional development by bringing together regional stakeholders in rural areas. This helps farmers to market their quality products like apple juice or lamb meat. Those products can be labelled “nature-conservation-products” because they were produced in an environment friendly and sustainable farming system. The initiation of regional marketing has increased the revenue of local farmers from sales on local markets.

## DRIVERS

### ENVIRONMENTAL

Extensive and species rich grassland mosaic rich landscape are under high pressure from intensive land use systems or are threatened by land abandonment. Many endangered species can be found there. The species rich grasslands and pastures also provide high quality fodder for animals.

### ECONOMIC

Land management of extensive systems has become economically unviable

From a broader rural economy perspective, the visual amenity of the traditional cultural landscapes maintained by the LCA projects as well as traditional villages attracts many tourists. This strengthens the rural economy and also gives a local identity to residents.

## EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

As mentioned above the number of implemented projects and participating actors has increased substantially over time. Local LCAs such as the LCABF in the Black Forest have been widely promoted as good practice examples for successful landscape stewardship.

The LCA projects generate economic benefit for farmers through the use of market approaches, encouraging people to buy locally from producers. There is evidence of increased revenue from sales on local markets. The benefit to the landowner is a more predictable market and, if local, lower costs in transportation and distribution.

## STRENGTHS/ WEAKNESSES

### STRENGTHS

- Cooperation of nature conservation groups with local farmers and local communities leads to solutions for a sustainable land use system and measures to conserve the landscape, which would otherwise not be economically viable.
- Effective and trusted partnership and networking to engage different actors in the land stewardship approach.
- Potential to combine environmental and economic interests, provision of private and public goods.



- Flexible land management approach.

#### WEAKNESSES

- Lack of motivation to participate can hamper successful outcomes.

#### REFERENCES

Basora, X., Mitchell, B., O'Neill, C. and Sabaté, X. (2013) Caring together for nature: A manual on land stewardship as a tool to promote social involvement with the natural environment in Europe. Report to the European Commission.  
[http://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=home.showFile&rep=file&fil=LANDLIFE\\_European\\_manual.pdf](http://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=home.showFile&rep=file&fil=LANDLIFE_European_manual.pdf)

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## 25. Agro\_2 Standards (Greece)

#### CATEGORY

Market

#### GEOGRAPHIC SCOPE

National

#### CLUSTER

3. Sustainable food standards

Quality certification

#### LEGISLATIVE REFERENCE/ NAME OF OWNER

AGRO 2-1 Management of Rural Environment – System of Integrated Management in Agricultural Production Part 1: Specification

AGRO 2-2 Management of Rural Environment – System of Integrated Management in Agricultural Production Part 2: Requirements for the application in crop production

Owner: Hellenic Agricultural Organisation “Demeter”

#### OVERALL/ SPECIFIC OBJECTIVES

Improved access to markets.

Co-ordination of the production process.

Continuous improvement of collective environmental performance of participant farmers.

#### LINK TO AGRO-ECOLOGY

Reducing the environmental impact of agricultural activities.

#### TOOLS USED TO ACHIEVE OBJECTIVES

Initiatives consists of a implementation of a co-ordinated production system:



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N° 773901.

-AGRO 2-1 based on ISO 14000, requires a set of standardised procedures for the management of the farm and monitoring-auditing of its environmental performance.

-AGRO2-2 sets the specific requirements for the implementation on crop production. It includes management plans for water use, nutrients, crop protection, traceability, workers' safety, biodiversity etc.

A set of tools procedures concerning the functions of the business is established.

An advisory system acting as monitors and internal auditors is established.

As far as the farming activities are concerned, guidelines are issued; advisory and technical assistance is provided.

External audits are performed by independent third parties-certification organisations.

### DRIVERS

#### ECONOMIC

Reduced production cost and access to markets.

#### SOCIAL

Satisfies the demand for safe quality products and on the other hand promotes co-operation among farmers and networking activities of their collective organisations.

#### TECHNOLOGICAL

Adoption of innovations is enhanced.

#### LEGISLATIVE

Facilitates compliance to workers' safety, environmental, food safety and animal welfare legislation.

#### ENVIRONMENTAL

Environmental protection due to rational use of agricultural inputs (e.g. water, fertilisers).

#### EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

More than 100.000 farmers and 260.000ha of cultivated area apply Agro 2 standards in Greece.

### STRENGTHS/ WEAKNESSES

#### STRENGTHS

Training of farmers and advice is an essential part of the system.

Encourages farmers to co-operate, controls and document their activities.

The production is labelled, identifiable.

#### WEAKNESSES

Not recognised internationally.

The certification is about the process, not the product.

### REFERENCES

<http://www.elgo.gr/index.php/el/elgo-demeter-activities/elgo-demeter-quality-assurance-of-agricultural-products> .



## 26. Global Gap Standards (GREECE)

### CATEGORY

Market

### GEOGRAPHIC SCOPE

National

### CLUSTER

3. Sustainable food standards

Business to Business - Quality certification scheme

### LEGISLATIVE REFERENCE/ NAME OF OWNER

Global G.A.P.

### OVERALL/ SPECIFIC OBJECTIVES

a. Access to markets

-A common framework agreed mainly by big retailers worldwide. It is prerequisite in order to gain access to Super Market retailers, in case of certain fresh products-exports, it is indispensable.

The objectives of the standard:

b. Food quality-safety assurance;

c. Natural resources, biodiversity protection;

d. Workers' safety and well-being.

### LINK TO AGRO-ECOLOGY

The standard promotes the rational management of natural resources and protection of biodiversity as well as food safety.

### TOOLS USED TO ACHIEVE OBJECTIVES

- Guidelines and check-lists are distributed to all participants.
- A third party certifies compliance of farmers to the standard.
- The third party-certifier is accredited by Global Gap.
- Product is accepted by the retailer.

### DRIVERS

#### POLITICAL

It is governed by a board with equal participation by large retailing companies and large suppliers.

#### ECONOMIC

Economic: Retailers demand it as a prerequisite in order to accept the products, hence it is a way to access big retailers' chains.

### EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

A large network of participants has been created. However, information specifically for Greece is not currently available.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N° 773901.



STRENGTHS/ WEAKNESSESSTRENGTHS

It is recognised by big retailers.

It is an end product certificate.

WEAKNESSES

It does not deal with the production per se, controls only the outcome.

Farmers are not encouraged to co-ordinate their work.

Consumers do not see any label, it is a B2B scheme.

Production is commodified, that is it is not possible for farmers to differentiate their produce and seek recognition for their efforts.

REFERENCES

[https://www.globalgap.org/uk\\_en/](https://www.globalgap.org/uk_en/)

## 27. Agri-environmental measure for a collective plant protection management (GREECE)

CATEGORY

Policy

GEOGRAPHIC SCOPE

Regional - Predefined zones of tree crops.

CLUSTER

2. Agri-environmental practices

Collective implementation of an environmental friendly pest management technique

LEGISLATIVE REFERENCE/ NAME OF OWNER

Submeasure 10.1.08 “Application of insect sexual confusion methods” of Measure 10 “Agri-environment-climate support” of the Greek RDP 2014-2020.

OVERALL/ SPECIFIC OBJECTIVES

The application of insects' confusion methods for pest control will gradually abolish the application of chemical insecticides contributing to increasing biodiversity of tree orchards.

LINK TO AGRO-ECOLOGY

Improving biodiversity, water quality and in general environmental protection.

TOOLS USED TO ACHIEVE OBJECTIVES

Financial support is given to farmers to compensate them for the cost and application of micro sprayers (dispensers) in orchards which release synthetic pheromones in order to control and disrupt the mating; thus reducing the number of harmful insects and improving the biodiversity of orchards.



The beneficiaries are obliged to design and follow an “Application Plan of the activity” that includes the design of the installation of micro sprayers and the monitoring pheromone traps.

#### DRIVERS

##### POLITICAL

Interest and will of local co-operatives.

##### ECONOMIC

Economic support to farmers who adopt the insect sexual confusion methods.

##### ENVIRONMENTAL

Improvement of biodiversity and water quality.

#### EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

More than 2,000 farmers and 5,500 ha of orchards are supported by the specific sub-measure.

#### STRENGTHS/ WEAKNESSES

##### STRENGTHS

Implemented in already existing collaboration substrate.

Bottom-up suggested, advocated and promoted by local producer groups and advisors.

##### WEAKNESSES

High dependence on a high participation rate in order to be effective.

Increased risk, a “difficult”, in terms of pest infection year may result to reverse result.

Public administration was reluctant to endorse it, hence, sceptical about the outcome.

#### REFERENCES

Greek RDP 2014-2020 (<http://www.agrotikianaptixi.gr/index.php>)

## 28. Landscape Protection Agri-Environmental Measure (Greece)

#### CATEGORY

Policy

#### GEOGRAPHIC SCOPE

Regional - Predefined zones of traditional vineyards

#### CLUSTER

7. Territorial-based farming practices

Zonal implementation of landscape protection schemes

#### LEGISLATIVE REFERENCE/ NAME OF OWNER



Submeasures 10.1.3 “Maintenance of the traditional agricultural practices associated with the vineyards on the island of Santorini” of Measure 10 “Agri-environment-climate support” of the Greek RDP

#### OVERALL/ SPECIFIC OBJECTIVES

Maintenance of the traditional pruning (an ancient system adapted to the environmental conditions) and propagation (self-propagation through layering) practices in the vineyards of Santorini.

Wildlife protection.

Soil protection.

#### LINK TO AGRO-ECOLOGY

Preservation of the unique biodiversity and ecosystems of the volcanic island, protection of soil from erosion, conservation of the indigenous vineyard varieties.

#### TOOLS USED TO ACHIEVE OBJECTIVES

The vineyard of Santorini is one of the most ancient in the world with a 3,500-year history. A specific pruning system exists that requires high skilled labour and cost. Financial support is given to farmers to compensate them for the increased cost as well as for the decreased productivity due to the maintenance of the traditional pruning system. Farmers are also obliged to maintain and repair stonewall terraces, using local stones within vineyards. It is also forbidden to use chemical weed control and preserve wildlife in the stone wall terraces and field margins.

#### DRIVERS

##### ECONOMIC

Economic support to farmers who maintain the traditional pruning practices.

##### ENVIRONMENTAL

Protection of landscape quality, biodiversity.

#### EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

The measure is implemented since 2005 and almost half of the total vineyards’ area in Santorini is supported.

#### STRENGTHS/ WEAKNESSES

##### STRENGTHS

Protection of a well known and recognisable agricultural landscape.

Synergies with tourism and quality wine.

##### WEAKNESSES

Pressures of the landscape have their origin to other than agricultural land use.

#### REFERENCES

Greek RDP 2014-2020 (<http://www.agrotikianaptixi.gr/index.php>)

## 29. Organic Action Plan for Hungary (Hungary)

#### CATEGORY



This project has received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement N° 773901.

Policy

GEOGRAPHIC SCOPE

National

CLUSTER

1. National food and farming plans

LEGISLATIVE REFERENCE / NAME OF OWNER

National Action Plan for the Development of Organic Farming (2014-2020). Ministry of Rural Development, Budapest, January 2014. Nemzeti Akcióterv az Ökológiai Gazdálkodás Fejlesztéséért

OVERALL / SPECIFIC OBJECTIVES

Further develop and enlarge the organic production in Hungary. At least double the organically cultivated area by 2020 from the 2014 level. Double the organic livestock farming. Establishment of slaughterhouses in each 40 kilometres area. Increase by 25% the organic apiary. The organic food consumption achieve 30% share of total food consumption in educational, social and health care institutions.

LINK TO AGRO-ECOLOGY

An integrated plan to encourage organic farming and the production, processing and supply of organic products to the market as well as stimulation of consumption of organic grown products by consumers.

TOOLS USED TO ACHIEVE OBJECTS

- improvement the regulation of the organic farming.
- enhancement of the production volume, maturity and sale regarding to the market demands.
- improvement of the training, research development and consultancy systems connected to organic farming.
- improvement of the unified and simple data collecting and information systems.
- promotion of organic products and emphasized product ranges, improvement of the consumer's awareness and trust.
- improvement of cooperation between the sector players, improvement of the whole product chain and short food chains.

DRIVERS

POLITICAL

The government wants the public sector to lead the way to greater organic production.

ECONOMIC

Increasing demand for organic production in Hungary, EU, internationally.

SOCIAL

Concern for healthy diet, food safety.

ENVIRONMENTAL

Concern for the quality of the environment and the impact of farming systems.



## EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

### STRENGTHS/ WEAKNESSES

#### STRENGTHS

- young farmers interested and motivated in sustainable agriculture.
- organic farming is not new case in the country (since 1995).
- no GMO in the country.
- active professional organisations and advocacy.
- research centres ready for research about organic farming.
- good foreign market, the foreign market's opinion about Hungarian organic products is very good..
- the country's geographically location is very advantageous for organic market.
- growing consumers' interest of organic products.
- organic farming fits well to other agricultural objectives.

#### WEAKNESSES

- disproportionate production structure.
- using of organic seeds is very low.
- malformed agro-environmental measures in the 2. Pillar.
- the sale to abroad market is too high it can cause vulnerability.
- maturity is low, usually the export is basic commodity.
- high control expenses.
- missing the product chain's coordination, product integration.
- many players of the sector misses capital and infrastructure.
- lack of communication to consumers.
- lack of research about organic farming mostly because of lack of sources.
- lack of suitable instructors of organic farming.
- the burden of administration is high.
- lack of knowledge and education about organic farming for farmers and consultants.
- lack of country-level organised organic farming consultant system.
- too high prices of organic products.

#### REFERENCES

[http://videkstrategia.kormany.hu/download/3/c8/90000/Nemzeti%20Akcióterv%20az%20Ökológiai%20Gazdálkodás%20Fejlesztéséért\\_vegleges.pdf](http://videkstrategia.kormany.hu/download/3/c8/90000/Nemzeti%20Akcióterv%20az%20Ökológiai%20Gazdálkodás%20Fejlesztéséért_vegleges.pdf)



## 30. National Park Product Brand (Hungary)

### CATEGORY

Market

### GEOGRAPHIC SCOPE

National, regional

### CLUSTER

5. Local food promotion

Quality certification, local food certification.

### LEGISLATIVE REFERENCE/ NAME OF OWNER

NPTF-172/4/2012 internal order of the Minister for Rural Development on the use of National Product Brand

Owner: Bükk National Park Directorate

Organization responsible for the overall coordination of the use of the brand: Ministry for Agriculture, State Secretariat responsible for nature conservation.

The National Park Product Brands (in the following: Brand) is aiming to popularize products/services originated from areas of nature conservation protected by national law or based on community interest (Natura 2000 areas). Farmers, craftsmen and service providers carrying out their activities in national parks and other areas under nature protection are eligible for applying for the use of the Brand. Applications must be submitted to the local National Park Directorate. Each National Park Directorate (10 in Hungary) sets up the National Park Product Brand Certification Committee from at least 3 members (including representatives of local farmers, service providers, NGOs) requested by the director of the NP. National Park Product Brand Certification Committee – with respect to the objectives and general rules of the usage of the Brand – creates its own set of working regulations, and develops the local selection criteria for the approval of brand use applications.

Applicants may request the brand for the following type of products/services:

- Food products;
- Handcraft products;
- Services and accommodation.

### OVERALL/ SPECIFIC OBJECTIVES

The aim of the Brand is to emphasise the importance of the agro-ecological farming systems, which support the maintenance of natural values in national parks. The Brand supports the farmers, entrepreneurs and service providers in widening market possibilities and increases the public appreciation of their products. The Brand contributes to the raising of environmental awareness, and supports the regional and sectoral (nature conservation, agriculture, rural development) cooperation.

### LINK TO AGRO-ECOLOGY

The Brand supports the following types of food products, which has links to maintain agro-ecological farming systems:

- Syrups and juices – traditional orchards;



- Jams and fruit cheeses;
- Honey;
- Meat products;
- Dairy products;
- Beverages;
- Tees and dry fruits;
- Oils and spices;
- Other food products.

Although farmers managing areas in national parks face significant challenges (management prescriptions, obligatory authority procedures, forbidden activities, etc.) concerning the common public interest of preserving biodiversity, only few approaches were taken to help them to maintain farming systems. The Brand supports the marketing of products, thus contributes to maintain these farming systems and enhance the public awareness of nature conservation efforts.

#### TOOLS USED TO ACHIEVE OBJECTIVES

To support the awareness of the products a webpage ([www.nemzetiparkitemek.hu](http://www.nemzetiparkitemek.hu)) has been developed, where continuous information flow is provided to the customers and future applicants of the Brand. Visitor centres of national parks supporting eco-tourism act as continuous information and selling points for branded food products. National park events provide selling possibilities for Brand users. Countrywide road shows were carried out to promote the system.

#### DRIVERS

##### ECONOMIC, SOCIAL

The use of the Brand forms a basis of local/territorial cooperation between private farmers and state organisations. By widening market possibilities Brand may encourage farmers to develop processed food products rather than selling products as raw material. This process may have impacts on the economic viability of AEFS and also can contribute to maintain rural population.

##### ENVIRONMENTAL

Potential raise of public environmental awareness. Increase of public interest on nature conservation actions and activities. Maintaining the exact management of natural areas.

#### EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

##### STRENGTHS/ WEAKNESSES

##### REFERENCES

[http://magyarnemzetiparkok.hu/wp-content/uploads/2014/06/MNP\\_termekek\\_eng.pdf](http://magyarnemzetiparkok.hu/wp-content/uploads/2014/06/MNP_termekek_eng.pdf)

Benedek, A. 2013: The potential role of a special branding system of National Park Products Brands based on customers view ([https://ageconsearch.umn.edu/record/199942/files/GAZDALKODAS\\_2013\\_04\\_Benedek\\_376\\_388.pdf](https://ageconsearch.umn.edu/record/199942/files/GAZDALKODAS_2013_04_Benedek_376_388.pdf))



## 31. Collection of Hungarikums (Hungary)

### CATEGORY

Market

### GEOGRAPHIC SCOPE

National, regional

### CLUSTER

5. Local food promotion

Quality certification. Hungarikum is a collective term indicating a value worthy of distinction and highlighting within a unified system of qualification, classification, and registry and which represents the high performance of Hungarian people thanks to its typically Hungarian attribute, uniqueness, specialty and quality.

### LEGISLATIVE REFERENCE/ NAME OF OWNER

Act XXX of 2012 on Hungarian national values and Hungarikums

Owner: Ministry of Agriculture

The institution of the Committee for Hungarikums was established on the 18th of October in 2012, by the Act XXX of 2012 on Hungarian national values and Hungarikums. The committee's main role is to protect, maintain and make widely popular the national- and outstanding national values, furthermore the Hungarikums. Members of the committee have to be delegated by the Hungarian Parliament, the Hungarian Standing Conference, the ministries of Hungary, the Hungarian Academy of Sciences, the Hungarian Academy of Arts, the chairman of the National Office for Intellectual Property. The chairman of the committee is the minister in charge of agriculture.

The Committee for Hungarikums' work is supported by professional, sectorial committees. The sectorial committees have a consultative, advisory and decision-supporting role. They can prejudge and suggest a recommended value to be submitted to the Collection of Hungarikums or the Repository of Hungarian Values by the Committee for Hungarikums, and have the right to bring the petitioner's attention to supplement or change the recommendation's content.

The sections of the Committee for Hungarikums' are as follows (in brackets the number of nationally approved Hungarikums):

1. Agriculture and Food Industry (24);
2. Health and Lifestyle (5);
3. Industrial and technological solutions (3);
4. Cultural Heritage (29);
5. Sport (1);
6. Natural environments (2);
7. Tourism and catering (5);
8. Built Environment (1).

Within the above described 8 sectors there are 6+1 sectorial committees:

1. Committee for Agriculture and Food Industry;





2. Committee for Health and Lifestyle;
3. Committee for Natural and Built Environment;
4. Committee for Industrial and Technological Solutions;
5. Committee for Cultural heritage;
6. Committee for Sport, Tourism and Hospitality;
7. +1 Committee for Hungarikum Trademark.

The sectorial committee has to have at least 10 members and their delegations are valid for 5 years. Professionals in the fields of public administration, museums and archives, mayors, professors, researchers, artists, culinary experts and sportsmen can be found in the committees.

#### OVERALL/ SPECIFIC OBJECTIVES

The Hungarian Parliament adopted the Act XXX of 2012 on Hungarian national values and Hungarikums with a consensus between the five major parties with the aim of establishing appropriate legal framework for the identification, collection and documentation of national values important for the Hungarian people and by this providing an opportunity for making them available to the widest possible audience and for their safeguarding and protection. The act wishes to establish a supportive legal framework for the “Hungarikum movement”, an extensive civil initiative already in place. According to the legal definition Hungarikum refers to a collective term denoting a value worthy of emphasis that represents the highest quality of Hungarian product.

#### LINK TO AGRO-ECOLOGY

The production and preservation of some of the values require maintenance of local landraces or use of old techniques therefore may foster – in an indirect way – the maintenance of some agro-ecological or low input farming practices.

Within the Agriculture and Food Industry Section the following Hungarikums were approved at a national scale, in the production of which the one in bold has strong and direct link to agro-ecology:

- |   |  |
|---|--|
| 1. Pálinka  | 13. Red onions from Makó                   |
| 2. Grape marc pálinka                                       | 14. Ground paprika from Szeged             |
| 3. Csabai sausage or Csabai thick sausage                   | 15. Hungarian grey cattle                  |
| 4. Tokaji aszú produced in the Tokaj wine region of Hungary | 16. UNICUM herbal liqueur                  |
| 5. Food products from fattened goose                        | 17. Debrecen double sausage                |
| 6. Gyulai sausage or Gyulai double sausage                  | 18. Spritzer                               |
| 7. Soda-water   | 19. Chamomile flowers from the Great Plain |
| 8. Ground paprika from Kalocsa                              | 20. Chimney cake                           |
| 9. PICK wintersalami  | 21. Piros Arany (Red Gold) and Erős Pista  |
| 10. Hungarian acacia, Black locust (Robinia pseudoacacia)   | 22. TÖRLEY Sparkling Wine                  |
| 11. Hungarian acacia honey                                  | 23. Egri Bikavér                           |
| 12. HERZ classic wintersalami                               | 24. Hungarian shepherd and hound dogs      |



The Act of Hungarikum makes possible to the county municipalities to establish a Committee for County Repository of Values, which shall organize the consolidation of the data of the municipal and regional collections of values identified within a county area and shall ensure the identification of national values available in the county area but not yet identified and shall set up the county collection of values and forward them to the Committee for Hungarikums. All of the 19 Hungarian County Municipalities have a Committee for County Repository of Values.

Of the County Repository of Values within the Agriculture and Food Industry Section the production of the following items have link to agro-ecology:

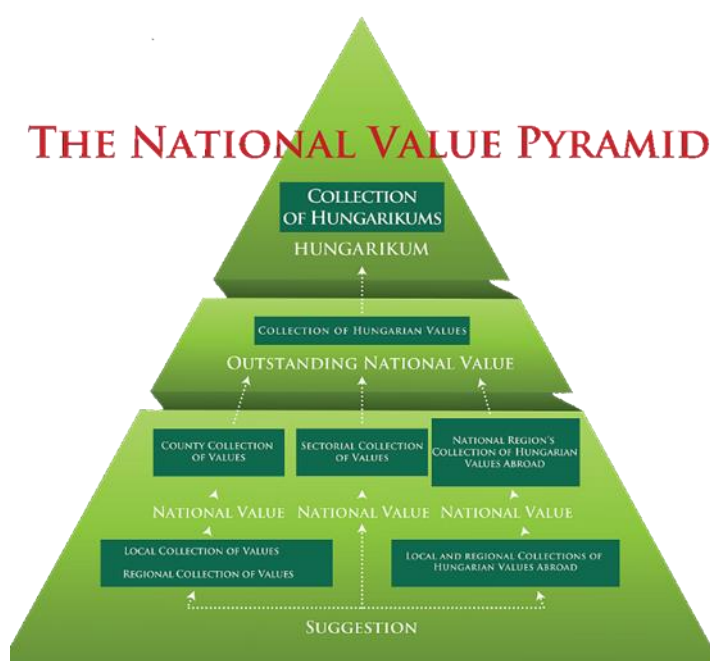
Bács Kiskun County Repository of Values	Mangalica pig products from Aranyegyháza
	Farm products (honey, jam, sirup) of Zoltán Bóna and wife
	Traditional wines of the Gedeon estate
	Sirup workshop of Rita – traditional orchards and fruit processing
	Great bustard ( <i>Otis tarda</i> )
Borsod-Abaúj-Zemplén County Repository of Values	None of the listed items are considered to have direct or indirect links with agro-ecology
Csongrád County Repository of Values	Maintenance of breed and gastronomy related to the indigenous Mangalica pig breed
	Farm Ranch “Tanya” school education programme: small scale old farming practices taught, how to set up a modern tanya using old wisdom.
Győr-Moson-Sopron County Repository of Values	None of the listed items are considered to have direct or indirect links with agro-ecology
Hajdú-Bihar County Repository of Values	Derecske Orchard: Responsible Fruit Gardening education programme, Greenovation prize winner
Heves County Repository of Values	None of the listed items are considered to have direct or indirect links with agro-ecology
Komárom-Esztergom County Repository of Values	None of the listed items are considered to have direct or indirect links with agro-ecology
Nógrád County Repository of Values	None of the listed items are considered to have direct or indirect links with agro-ecology
Pest County Repository of Values	None of the listed items are considered to have direct or indirect links with agro-ecology
Somogy County Repository of Values	Lime tree ( <i>Tilia</i> ) honey of Zselic
	Red walnut of Buzsák
	Wine district of South Balaton

Szabolcs-Szatmár-Bereg County Repository of Values	Floodplain orchards in the Upper Tisza region
	Woodland pastures in Szatmár-Bereg
Tolna County Repository of Values	Hungarian Mottled Cattle breed
Vas County Repository of Values	Pumpkin seed oil of Őrség
Zala County Repository of Values	Potato breeding program in Keszthely, genebank collection of breeds with particular resistance and quality features

### TOOLS USED TO ACHIEVE OBJECTIVES

Becoming Hungarikum is a multilevel, bottom-up building process (see figure on the National Value Pyramid), that can be started by anyone with filling out a standard form.

The first step is to make the value to be admitted as a national value to the collection of local values or Hungarian values abroad or departmental values. If there is a value that cannot be associated with a concrete village or region, it has to be admitted to one of the collections of departmental values run by the corresponding ministry.



If a value which is already admitted to the collection of local values and has county level significance, then it might be suggested further to the collection of regional values or to the collection of Hungarian values abroad.

The second step is to recommend the value further to the Collection of Hungarian Values by submitting the corresponding standard form to the Hungarikum Committee.

If a national value is admitted to the Collection of Hungarian Values and the petitioner wishes it to become a Hungarikum, then a recommendation has to be submitted to the Hungarikum Committee.

Only values that can be found in the Collection of Hungarian Values can become Hungarikums.

A national value can be recommended to the Collection of Hungarian Values only by the petitioner whose recommendation has already been admitted to the collection of regional, departmental or Hungarian values abroad.

A national value can be recommended to the collection of regional or Hungarian values abroad, if it has already been admitted to the collection of local values abroad or Hungarian values abroad. The Hungarikum trademark is not a real trademark, i.e. it does not in itself qualify the quality of the registered product or service for which the use was authorized. Under the law, this trademark is intended to represent the activity of the Hungaricum Committee and to promote the Hungaricum in the Hungaricum Collection.

If anyone would like to recommend a value to be submitted as national value and the local municipality does not run a Collection of Local Values, then there is a possibility to submit the recommendation to the given settlement's local municipality, which will forward it to the corresponding County Repository of Values.

Municipalities can set up local repository of values and they can establish a Committee for Local Repository of Values, which shall organize the identification of the national values located in the municipal area, establish the collection containing the data of national values available in the municipal area and shall forward them to the Local Repository of Values.

For the purpose of identification of municipal values, establishment and maintenance of the Local Repository of Values and forwarding of data to the County Repository of Values, Municipalities can appoint an institute, an organization, or an organizational unit run by the state, municipal, church or social organ operating in the municipal area and previously involved in the identification and management of national values, or any third-party area development or rural development organization active in municipal development.

The local governments of several neighbouring settlements located in the same county can also establish a Committee for Regional Repository of Values, which shall compile the Regional Repository of Values and shall forward its data to the County Repository of Values.

At present, there are more than 1000 Local and 8 Regional Repository of Values in Hungary.

DRIVER – POLITICAL/ LEADERSHIP, ECONOMIC, SOCIAL, TECHNOLOGICAL, LEGISLATIVE, ENVIRONMENTAL

EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

STRENGTHS/ WEAKNESSES

REFERENCES

<http://hungarikum.hu/hu>

<http://hungarikum.hu/en>

Websites of the County Repository Values

## 32. Cooperative Landscape Farming (Hungary)

CATEGORY



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N° 773901.

Policy

GEOGRAPHIC SCOPE

National

CLUSTER

2. Agri-environmental practices

Piloting landscape farming via the RDP cooperation measure M16.5

LEGISLATIVE REFERENCE/ NAME OF OWNER

Government of Hungary

<https://www.palyazat.gov.hu/node/56582>

OVERALL/ SPECIFIC OBJECTIVES

The measure aims to facilitate, by encouraging cooperation among farmers, the application of harmonised regional approaches for improving climate resilience in the countryside by *inter alia* improving water balance, reducing soil degradation, increasing carbon sequestration in soil and reducing GHG emissions. The measure is currently at a pilot phase, with the aim of integrating it into an agri-environment scheme in the next programming period.

Cooperation between farmers is encouraged through payments for 'landscape farming' practices in pilot areas defined by legislation. Their selection is centrally determined based on the environmental performance of farms against a green-point assessment. Beneficiaries include consortia of at least five members.

LINK TO AGRO-ECOLOGY

The measure is intended to encourage promotion of farming practices that are resource efficient, reduce negative impacts on the environment and increase the provision of non-commodity ecosystem services benefits.

TOOLS USED TO ACHIEVE OBJECTIVES

The landscape farming cooperation measure in Hungary has recently been launched to pilot a landscape wide results based approach to environmental management. The aim of the measure is to facilitate, by encouraging cooperation between farmers and supporting implementation, the application of harmonised regional approaches to improve climate resilience in the countryside by improving water balance, reducing soil degradation, increasing carbon sequestration in soil and reducing GHG emissions. Specifically, this is done by:

1. improving water balance through the water retention rehabilitation of water systems (the preservation and retention of water for periods of water scarcity so as to mitigate the damages caused by excess surface water and drought);
2. re-creating the close-to-natural spatial structure of the landscape, rehabilitation of ecological network features;
3. halting the fragmentation of habitats, thereby increasing biodiversity (creation, rehabilitation and enhancement of habitats);
4. improving the sustainability of natural resource management as a result of the use of renewable energy sources;
5. reducing soil degradation;
6. facilitating efforts to increase C sequestration and the reduction of greenhouse gas emissions.



In the target areas for 'landscape farming' payments are based on the environmental performance of farms, calculated by a green point assessment (points awarded for performance against different 'green' indicators). Mandatory actions include:

- Water retention for at least two weeks each year; and
- One of the following land uses after/outside the water retention period: wetland, grassland, cropland, plantation, forest and reeds.

Non-mandatory actions (depending on the type of land use) give rise to extra credit in the scoring system.

## DRIVERS

### ENVIRONMENTAL

To increase the efficiency and effectiveness of agri-environmental and climate actions by facilitating cooperative action at the landscape level and where benefits are most needed. For natural resources that are diffuse in nature, such as soil and water, achieving environmental improvements often requires coordinated action at a wider scale compared to the individual farm level, as the source of pollution or the degradation process may come from different locations across the landscape.

## EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

The action is to be implemented initially as a pilot, but in the upcoming period the intent is to mainstream the activity within the RDP.

## STRENGTHS/ WEAKNESSES

### STRENGTHS

It is increasingly recognised that the approaches to soil and water protection which coordinate the action of multiple rural actors across a particular geographic area, have benefits compared to what could be achieved individually by farmers with agreements dotted throughout the area. In particular, interventions aiming to achieve soil and water management objectives at a broader territorial, landscape or river basin scale may be best achieved in the form of cooperation and coordination between farmers and other actors. This can be set up either formally or informally.

### WEAKNESSES

A lack of administrative capacity may hinder full-scale implementation.

## REFERENCES

ENRD (2018) ENRD Thematic Group (TG) on sustainable management of water and soils Inventory of examples & case studies collected September 2018

[https://enrd.ec.europa.eu/sites/enrd/files/tg\\_water-soil\\_examples-inventory.pdf](https://enrd.ec.europa.eu/sites/enrd/files/tg_water-soil_examples-inventory.pdf)

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## 33. Results-based Agri-environmental Scheme: the Burren approach (Ireland)

### CATEGORY

Policy

### GEOGRAPHIC SCOPE

Local

### CLUSTER

7. Territorial-based farming practices

Result-based agri-environmental scheme

### LEGISLATIVE REFERENCE/ NAME OF OWNER

Ireland - Rural Development Programme (National)

<https://www.agriculture.gov.ie/media/migration/ruralenvironment/ruraldevelopment/ruraldevelopmentprogramme2014-2020/ApprovedFouthAmendment140818.pdf>

### OVERALL/ SPECIFIC OBJECTIVES

To maintain traditional extensive grazing on natural areas and to preserve high biodiversity.

### LINK TO AGRO-ECOLOGY

Maintenance of traditional extensive grazing practices on natural pasture to preserve high biodiversity.

### TOOLS USED TO ACHIEVE OBJECTIVES

To encourage maintenance of field biodiversity, each eligible field is assessed annually in the summer by a farm advisor using a 10-point scoring card. The scoring card is submitted to the local office for checking and verification. The farmer then receives a sheet showing all eligible fields, their area (ha), score (0-10) and payment (0-180 €/ha) as well as management recommendations on how the score/payment could be improved. The farmer and advisor also develop a Work Plan for farm works which should, in most cases, help to improve the field score. The farmer nominates the tasks (farmer-led approach), each one of which is 'priced' by the advisor and checked by the local team. Once approved, the farmer does the work and claims the payment due (all tasks are co-funded 25-75%).

The scoring system acts as the impact monitoring: every field has a score for every year and this score reflects the environmental health of the field. Scores can be compared year on year at a field, farm and programme level providing a very robust, real-time picture of the impact of the programme for the individual farmer or for the programme funder.

### DRIVERS

#### ECONOMIC

Maintenance of local traditional farming practices beyond subsistence levels to preserve traditional landscapes and encourage nature tourism.

#### SOCIAL

To maintain local traditional farming practices, heritage and community.





## ENVIRONMENTAL

To maintain traditional extensive grazing on natural areas and to preserve high biodiversity.

### EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

Traditional forms of grazing are being preserved in areas where support is provided, whereas areas no longer grazed become overgrown with shrubs and biodiversity declines.

### STRENGTHS/ WEAKNESSES

#### STRENGTHS

- Locally-targeted, farmer-centered, highly adaptable, results-based payments approach can be really effective in delivering environmental objectives, providing better value for money and greater farmer buy-in.
- Farmers are encouraged to retain traditional grazing practices to support high biodiversity, improve soil quality and in turn water regulation and to maintain the cultural landscapes for tourism.

#### WEAKNESSES

- It is challenging to accommodate a results-based programme into an EC Article designed for action-based AES including accommodating a field-based scoring system into a LPIS-based administration and reporting system and developing a fair penalty system for results-based payment scheme.
- Land eligibility is a contentious issue, as payments are made only on 'eligible' land which incentivizes farmers to clear the habitats that are targeted for protection.
- Insufficient flexibility in the design, development, administration and reporting of results-based programmes.
- Insufficient timeframe for results-based AES under existing RDP.
- The current parameters (income foregone, opportunity costs etc.) used for the justification of payment calculations as may not always be sufficient to reflect the true cost of ecosystem service delivery.

### REFERENCES

ENRD (2018). ENRD Thematic Group (TG) on sustainable management of water and soils

Inventory of examples & case studies collected Final version 05/07/2018.  
[https://enrd.ec.europa.eu/sites/enrd/files/tg\\_water-soil\\_report-multi-actor-approaches.pdf](https://enrd.ec.europa.eu/sites/enrd/files/tg_water-soil_report-multi-actor-approaches.pdf)

Moraine, M., Lumbroso, S. Poux, X. (2016). A comprehensive outlook on the diversity of agro-ecological initiatives in Europe. From Farming Systems to Dood Systems. IDDRI,

## 34. Sustainable farming model for the production of high-quality durum wheat (Italy)

### CATEGORY

Market

### GEOGRAPHIC SCOPE





National

CLUSTER

3. Sustainable food standards

Corporate Social Responsibility and certification scheme (EU Environmental Declaration Product n. 217)

Additional premium price for the adoption of sustainable farming practices

LEGISLATIVE REFERENCE/ NAME OF OWNER

Barilla Group with the help of:

- Horta (a spin-off company of the Catholic University of Piacenza specialised on agronomic advice);
- LCE (a life cycle engineering company).

OVERALL/ SPECIFIC OBJECTIVES

Since 2008, Barilla Group - a leading company in pasta market worldwide and one of the top Italian food companies - has begun to evaluate the environmental burdens of its products by adopting the life cycle assessment (LCA) methodology. The aim is to take into account the entire production chain and to reduce the impact of its products, starting from the durum wheat cultivation until the delivery of the finished product to main distribution platforms. The LCA study was conducted following the specific product rules published for the EPD System: "CPC code 2371 – Uncooked pasta, not stuffed or otherwise prepared". The EPD shows that the 60% of the Global Warming Potential of pasta is due to the cultivation of durum wheat.

More specifically, since 2010, Barilla has implemented a project that is aimed to increase both the environmental and economic sustainability of durum wheat production. The Barilla Sustainable Farming model introduced an integrated approach to wheat production, which mainly included an accurate planning of crop rotations and the use of a decision support system.

LINK TO AGRO-ECOLOGY

The Certification Scheme incentivises farmers to use farming practices that benefit the environment and support provision of non-commodity ecosystem services benefits, and reduce the impact of the durum wheat production in the entire production chain.

TOOLS USED TO ACHIEVE OBJECTIVES

Pursuing "Good for you, good for the planet" corporate goals, Barilla offers an additional premium per ton of durum wheat if contracted farmers adhered to the guidelines for sustainable agricultural practices as specified by the "Barilla's Handbook for the Sustainable Cultivation of Quality Durum Wheat" with special technical advice provided by Horta with a web-based decision support system (DSS). The DSS "GranoDuro.net" uses sophisticated technologies and methods for analysing data to produce simple and easy-to-understand decision supports.

The Handbook for Wheat Cultivation is a list of guiding principles (ten rules) for farmers who have to make complex decisions both strategic (long term) and tactical (in response to events) while taking into account a multiplicity of resources, constraints and objectives.

The ten rules are:

1. Crop rotation;
2. Till the soil with respect;
3. Use the most suitable variety;



4. Use only certified and treated seeds;
5. Sow at the right moment;
6. Use the right amount of seed;
7. Control weed species promptly;
8. Dose nitrogen in relation to plant needs;
9. Protect the plant from disease;
10. Extend sustainability to the farm system.

#### DRIVERS

##### ECONOMIC

To increase the economic viability of pasta products grown with durum wheat.

##### SOCIAL

To satisfy growing consumer demand for the use of environmentally sound approaches in the production of pasta products in the entire production chain.

##### ENVIRONMENTAL

To reduce the environmental impact of the production of durum wheat based products both at farm level and in the supply chain.

#### EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

Provisional results show that low input agronomic practices are environmentally friendly (-36% GHG) and increase net income of farmers (up to 30%). A decision support system contributes in reducing carbon footprint (-10%), and costs for pesticides and fertilizers (-10%).

In recognition of its efforts, Barilla won the European Corporate Social Responsibility Award in 2013.

#### STRENGTHS/ WEAKNESSES

##### STRENGTHS

- R&D projects finalized at designing specific tools to support farming decisions;
- Suppliers training days focused on DSS use;
- Farmers dissemination initiatives to improve their awareness about cultivation efficiency;
- Definition of a cultivation contract called “High quality durum wheat contract” that helps farmers to reduce price risk by ‘pre-selling’ a portion of the purchase quantity at the guaranteed price;
- The food processing company can reduce its total relevant cost by reducing its social cost (or by improving its brand value) associated with the farmer’s compliance.

##### WEAKNESSES

- Small scale farms cannot be able to adopt modern ICT practices due to structural barriers;
- Lack of aggregate supply due to limited diffusion of producers' consortia/cooperatives;
- Need a certification procedure (additional cost) to avoid potential cheat by the farmers about compliance requirements;

- Lack of site-specific data (especially on weather conditions) can reduce the effectiveness of the DSS results.

#### REFERENCES

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Blasi, E., Ruini, L., & Monotti, C. (2017). Technologies and new business models to increase sustainability in agro-food value chain. *Agro FOOD Industry Hi Tech*, 28, 6.

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## 35. The experience of Bio-districts (Italy)

#### CATEGORY

Mixed (policy+market)

#### GEOGRAPHICAL SCOPE

Local

#### CLUSTER

7. Territorial-based farming practices

Territorial organic label

#### LEGISLATIVE REFERENCE/ NAME OF OWNER

The AIAB (Italian Association for Organic Agriculture) developed a set of rules for biodistricts, together with a specific label.

#### OVERALL/ SPECIFIC OBJECTIVES

A bio-district is a geographical area where farmers, citizens, tourist operators, associations and public authorities enter into an agreement for the sustainable management of local resources, based on organic production and consumption (short food chains, purchasing groups, organic canteens in public offices and schools). In bio-districts, the promotion of organic produce is inextricably linked with the promotion of the land and its special characteristics so that it can fully realise its economic, social and cultural potential.

Biodistricts are implemented to facilitate and simplify environmental and territorial certification, to favour the development of the most adequate organic agricultural practices, to safeguard local cultural heritage and agricultural and natural biodiversity. In this way bio-districts may become a tool to develop organic agriculture on a territorial scale, proposing an organizational and administrative



model, providing technical services to the farmers, promoting valorisation paths for the local products and pursuing environmental goals.

#### LINK TO AGRO-ECOLOGY

Bio-districts aim at promoting organic agriculture in a territorial/holistic way, by strengthening the connection of farming with the rural development, mainly through tourism and valorisation of local resources.

#### TOOLS USED TO ACHIEVE OBJECTIVES

Biodistricts aim at implementing integrated strategies where multiple tools are activated at the same time for multiple objectives and by different stakeholders.

- Improving land access, by trying to include into the productive system also state-owned and uncultivated land.
- Fairer relations in the supply chain: establishing direct relations between producers and consumers, adopting alternative distribution channels such as the short supply chain and fair trade groups, and stimulating public authorities to buy more local produce for canteens in schools, hospitals and other public facilities.
- Food sovereignty: public forums are periodically organised to give farmers, other economic stakeholders, public authorities, and the local community the opportunity to meet as equals, and having the same decision-making power, to define ways of meeting food needs.
- Simplified organic produce certification system, making it less bureaucratic, more effective and inclusive, making use of “group certification” and “participatory guarantee systems”.
- Organic communication: bringing the communicators and recipients closer together to highlight the ethical, social, and environmental values of organic production.

#### DRIVERS

##### ECONOMIC

Strengthening the role of organic farmers in the supply chains, reinforce the linkages between the organic production with the rural development by increasing the tourism attractiveness of rural areas and by developing new relations with institutions (e.s. food procurement) and consumers (e.g. short supply chains).

##### SOCIAL

Strengthening the role of small farmers and improving the social capital.

##### ENVIRONMENTAL

Increasing the environmental sustainability of organic farming by adopting a landscape/collective approach.

#### EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

The Bio-districts experience, originated by AIAB Campania – Italian Association of Organic Agriculture - in Cilento (Province of Salerno, Italy), is today spreading across the country. At present 15 Bio-districts are operating in 10 Regions (Campania, Calabria, Latium, Marche, Tuscany, Liguria, Piedmont, Trentino Alto Adige, Lombardy, Sicily), while 3 more are starting in other Regions.

#### STRENGTHS/ WEAKNESSES

##### STRENGTHS



Promotion of organic farming practices at the territorial/collective level, with an involvement of farmers but also of other local stakeholders.

Since there is a high concentration of organic farms in bio-districts, control procedures are easier to implement, and often it is the whole community that helps to check and guarantee the proper application of organic production methods. Farmers, in turn, are given much more responsibility and are motivated by the public recognition of the important social role they play within the local community.

#### REFERENCES

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IN.N.E.R. International Network of Eco-Regions Regions. [www.ecoregion.info](http://www.ecoregion.info)

Basile S. (2017) *The experience of Bio-districts in Italy*, in "52 Profiles on Agro-ecology" FAO Agro-ecology Knowledge Hub, Rome.

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## 36. Agri-environmental collective agreements (Italy)

#### CATEGORY

Policy

#### GEOGRAPHICAL SCOPE

Local

#### CLUSTER

7. Territorial-based farming practices

Collective agreement under AES

#### LEGISLATIVE REFERENCE/ NAME OF OWNER

RDP Marche Region

#### OVERALL/ SPECIFIC OBJECTIVES

This approach has been developed in Marche Region, where the Managing Authority has settled a specific support to collective agri-environmental actions financed by a package of the regional Rural Development Programme.

The collective approach is promoted through Agri-environmental Agreements (AEAs), which may be defined as set of commitments for farmers in a limited area, supported through a mix of RDP measures, that can be activated to reach specific environmental goals. Based on a territorial approach and by involving public and private actors in the context of a shared project, AEAs are aimed at implementing collective and coordinated actions for the management and improvement of the environment.

Each AEA has its specific objective. To date (2018) three AEAs have been launched with the overall objective of improving water quality. In greater details the specific objectives are:



- AEA “Valle del Foglia”: Reduction of chemical inputs through the adoption of extensive methods (integrated and organic, local collective action).
- AEA “Media e bassa Valdaso”: reducing the use of chemical inputs through the promotion of advance integrated pest management at territorial scale;
- AEA “Piceno”: maintaining the areas cultivated with organic methods and stimulating the conversion of conventional farms towards integrated and /or organic farming methods.

#### LINK TO AGRO-ECOLOGY

Promotion of low-input/integrated and organic agriculture at territorial scale.

#### TOOLS USED TO ACHIEVE OBJECTIVES

Package of RDP measures: M1 (Knowledge transfer and information actions); M10 (Agri-environment-climate payments); M11 (Organic farming); M16 (Cooperation)

#### DRIVERS

##### POLITICAL/ LEADERSHIP

Interest of Managing Authority to develop integrated/collective projects and presence of coordinators/leaders at the local level that stimulated the adoption amongst farmers and collaborated with the Managing Authority to develop a coherent set of measures.

##### ECONOMIC

Higher payments for farmers, since the package of RDP measures allow farmers adhering to the AEAs to have a good level of remuneration for the adoption of sustainable practices.

##### SOCIAL

The need of increasing environmental awareness amongst farmers, improving their capacity to cooperate, including smaller and more marginal farmers into agri-environmental measures, reframing farmers’ behaviours, attitudes, and knowledge through a set of capacity-building initiatives and learning opportunities.

##### TECHNOLOGY

Some techniques promoted through the AEAs (e.g. IPM techniques and mating disruption) need some level of farm aggregation in order to be effective.

##### LEGISLATIVE

Possibility to activate multiple measures in combination to achieve the desired outcomes.

##### ENVIRONMENTAL

Importance of achieving improved environmental outcomes across a wider area.

#### EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

- AEA “Valle del Foglia”: 29 farms adhering to the AEA, 4 municipalities, VNZ 2.200 ha of NVZ; 390 ha with organic/integrated production;
- AEA “Media e Bassa Valdaso”: 103 farms adhering to the AEA, 19 municipalities, 5.000 ha of NVZ; 1.065 ha with organic/integrated production;
- AEA “Piceno”: 230 farms adhering to the AEA, 25 municipalities, VNZ 12.350 ha of NVZ; 2.585 ha with organic/integrated production

#### STRENGTHS/ WEAKNESSES



## STRENGTHS

AEAs by promoting a landscape/collective intervention may ensure (i) higher environmental effectiveness of RDP interventions; (ii) a pro-active engagement of farmers in the definition and implementation of the agri-environmental measures (iii) institutional support for the farmers' collective action; (iv) a positive effects on advisory, learning and networking, increasing the level of trust and reciprocity among farmers.

## WEAKNESSES

(i) high transaction costs, mostly for gathering AEAs coordinators and local farmers to deal with complex RDP administrative requirements; (ii) setting up the process: involvement of local farmers is a long and difficult process (iii) administrative tasks: usually AEAs require additional administrative and coordination activities (such as the signature of a contract by all farmers, in front of a notary).

## REFERENCES

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# 37. Conservation Agriculture in the Rural Development Plan of Veneto Region (Italy)

## CATEGORY

Policy

## GEOGRAPHICAL SCOPE

Regional

## CLUSTER

2. Agri-environmental practices

Agri-environmental Scheme

## LEGISLATIVE REFERENCE/ NAME OF OWNER

Measure 214.i (RDP 2007-2013) and Measure 10.1.1 - Farming practices at low environmental impact (RDP 2014-2020)

## OVERALL/ SPECIFIC OBJECTIVES

Increasing soil organic matter (SOM), improving soil biodiversity, preventing soil erosion, reducing greenhouse gas emissions and increasing carbon storage and sequestration in soils through the application of Conservation Agriculture (CA) principles

Conservation Agriculture techniques allow to obtain:





- i) a minimum disturbance to the ground;
- ii) diversified crop rotations and cover crops;
- iii) continuous coverage keeping the plant residues on the ground.

The interaction of these factors with the soil carbon allows to assure the quality of the soil in the long term and the productivity of the cropping systems. Conservation mechanical operations (no-tillage and direct seeding) allows to increase the soil organic carbon and the related environmental benefits.

#### LINK TO AGRO-ECOLOGY

The principles of Conservation Agriculture comprise some of the more promising practices for an effective transition to agro-ecology farming systems, at least in terms of better soil conditions, although the use of herbicides in absence of other effective alternative options can jeopardise the environmental results.

#### TOOLS USED TO ACHIEVE OBJECTIVES

Farmers applying for the measure have to comply with the following commitments:

1. A minimum of 20% of the farm cultivable land. They must maintain the commitment in the same land at least five years continuously.
2. It is prohibited to plough and to perform any kind of mechanical labour before and after seeding.
3. They must maintain crop residues of the primary culture (mulching) uniformly on site.
4. They must adopt rotation of different crops respecting a maximum period of 40 days between harvesting the crop and sowing the next.
5. They must adopt exclusively the sod seeding, consisting in the deposition of the seed in the ground without altering the existing structure, and close the seed furrow without overturning the soil (using a device called “beaver tail”).
6. Fertilization: distribute organic and inorganic fertilizers prior to the drying stage of the cover crop and distribute in order localized fertilizers on crop in hedging.
7. Harvesting: thresh with low-pressure tires, twin wheels or tracks, making sure that they do not originate furrows or compacting (the combine must be emptied frequently).
8. Scouting and control plant diseases, insect fauna, weeds:
  - a) preliminary scouting, at the end of the winter phase to evaluate the most appropriate conditions for development of the primary culture,
  - b) scouting continuous post seeding for evaluating the development of slugs underground and above-ground,
  - c) if there are too many slugs , in that case it’s permitted formulated used in organic farming.

No tillage introduction recognises 600 euro/ha for year for a period of five years.

No tillage maintenance recognises 530 euro/ha for year for a period of five years.

The RDP measure has been accompanied by a LIFE project (HELPSOIL) that seeks to achieve testing and demonstration of CA techniques combined with innovative management practices of agricultural soils, in order to assure the sustainable use of the soil and preserve its functions. The project actions concern the Po plain and the nearby Alpine and Apennine foothills and are applied in 20 demonstrative farms.

#### DRIVERS





## ECONOMIC

Farmers asked to introduce commitments on CA to try to reduce their farming costs while maintaining their production capacity for commodities in a context of decreasing CAP direct payments.

## SOCIAL

There is a relative reduction of labour due to the need for less tillage operations while there is an increase of the skills of the farm operators for better organisation.

## TECHNOLOGY

The advancement of the research on the field of new machineries and on the interactions between the crop and the soil can potentially increase the adoption of CA. The role of contractor services is crucial to favour the adoption of CA.

## ENVIRONMENTAL

The increase of SOC is an advantage in terms of soil biodiversity, erosion and carbon sequestration.

## EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

In 2016 there were 83 farmers in the second year of commitment, and the cost borne by the region was approximately €1.2m annually. The total land involved in the measure is approximately 2,400 ha.

Long-term evaluation of AEMs is sometimes required (e.g. organic farming). Nitrogen fertilizer management (reduced mineral N, change to organic N) is sometimes inefficient unless combined with others practices. Best strategies for N cycle improvement include: i) permanent soil cover; ii) minimum soil disturbance.

## STRENGTHS/ WEAKNESSES

### STRENGTHS

- The use of new machinery and conservation farming techniques lead to fewer mechanical operations. The result is a decrease of the operational expenses and fuel costs;
- The increase of SOC is an advantage in terms of soil biodiversity, erosion and carbon sequestration.

### WEAKNESSES

- Crop yield shrinks substantially: the reduction is particularly high if there is a lack of tillage of winter cereals and where irrigation is not assured in spring and summer;
- The use of herbicides is almost mandatory to weed control after the cover crop period;
- The new machinery for sod-seeding implies an high investment that many farmers cannot afford;
- It is necessary to follow the sowing and harvesting stages very carefully in order to reduce failed areas in sown crops and to avoid compaction on the soil;
- The mulching of residues with the tedder generates higher costs, since it is not generally carried out in the context of conventional tillage;
- The introduction of cover crops is a net cost to the farmer.

## REFERENCES

LIFE project: Helping enhanced soil functions and adaptation to climate change by sustainable conservation agriculture techniques (<http://www.lifehelpsoil.eu/>)



Camarotto, C., Dal Ferro, N., Piccoli, I., Polese, R., Furlan, L., Chiarini, F., & Morari, F. (2018). Conservation agriculture and cover crop practices to regulate water, carbon and nitrogen cycles in the low-lying Venetian plain. *Catena*, 167, 236-249.

Piccoli, I., Chiarini, F., Carletti, P., Furlan, L., Lazzaro, B., Nardi, S., ... & Morari, F. (2016). Disentangling the effects of conservation agriculture practices on the vertical distribution of soil organic carbon. Evidence of poor carbon sequestration in North-Eastern Italy. *Agriculture, Ecosystems & Environment*, 230, 68-78.

Piccoli, I., Camarotto, C., Lazzaro, B., Furlan, L., & Morari, F. (2017). Conservation Agriculture Had a Poor Impact on the Soil Porosity of Veneto Low-lying Plain Silty Soils after a 5-year Transition Period. *Land Degradation & Development*, 28(7), 2039-2050.

## 38. National Plan on The Protection and Promotion of Biodiversity for Food and Agriculture (ITALY)

### CATEGORY

Policy

### GEOGRAPHIC SCOPE

National

### CLUSTER

1. National food and farming plans

National strategy for biodiversity

### LEGISLATIVE REFERENCE/ NAME OF OWNER

Act No. 194/2015 on the protection and promotion of biodiversity for food and agriculture

### OVERALL/ SPECIFIC OBJECTIVES

The law lays down the principles for the establishment a National system of protection and enhancement of biodiversity for food and agriculture interests, aimed to the protection of genetic resources from extinction and genetic erosion.

Specific objectives and implementation tools are:

- Identifying all the genetic resources (vegetables, animals or microbials) of food and agricultural interest subject to risk of extinction or genetic erosion;
- Preserving the genetic resources of food and agricultural interest from local extinction or genetic erosion, through in situ conservation or as part of farm or ex situ, as well as to encourage the reintroduction or cultivation in other forms of exploitation;
- Funding the protection of biodiversity for food and agriculture interest by supporting the conservation activities of “custodian farmers” and breeders, as well as for the support of government agencies engaged involved in conservation projects.

Act No. 194/2015 also provides the possibility of creating “food communities”, agreements that aim, inter alia, toward strengthening a background of traditional knowledge directly linked to the crops and the food.

### LINK TO AGRO-ECOLOGY



Agricultural genetic resources are the result of farmers' careful selection of outstanding varieties of plants and animals, as well as co-adaptation among plants, animals and humans, under specific agro-ecological conditions. The conservation in situ of genetic resources for food and agriculture cannot be achieved outside farming systems and local human cultures in which these resources were developed.

#### TOOLS USED TO ACHIEVE OBJECTIVES

Specific implementation tools are:

- National biodiversity of agricultural and food Interest Registry;
- National Network of biodiversity of agricultural and food interests;
- National Portal of biodiversity of agricultural and food interest;
- Network of "custodians farmers".

Moreover, a fund for the protection of biodiversity for food and agriculture interest was established to support the actions of custodian farmers and breeders, as well as for the support of government agencies engaged solely to the purpose of multiplication in the production and preservation of conservation variety seeds at risk of genetic erosion or extinction.

#### DRIVERS

##### LEGISLATIVE

The importance of the Act no. 194/2015 and of the national protection system is related to its role in the implementation of the National Biodiversity Plan of agricultural interest as well as in harmonising the numerous regional regulations and local initiatives.

##### ENVIRONMENTAL

The networks established by the Act no. 194/2015 aims at preserving the genetic resources of food and agricultural interest from local extinction or genetic erosion, as well as encouraging the reintroduction or cultivation/breeding of such genetic resources.

#### EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

- Preservation of genetic resources for food and agricultural interest;
- Establishment of a system of interlinked databases for genetic resources.

#### STRENGTHS/ WEAKNESSES

##### STRENGTHS

Combining conservation agricultural biodiversity with the local development of the territory, by creating synergies between agrobiodiversity, environment, territory, protected areas, landscape, culture and local identities based on the model proposed by community of food and agricultural and food biodiversity.

##### WEAKNESSES

The economic sustainability of several preserved species and varieties is still dependent from public support (e.g. RDP measures).

#### REFERENCES

FAOLEX (2015) Act No. 194 on the protection and promotion of biodiversity for food and agriculture. <https://www.informea.org/en/legislation/act-no-194-protection-and-promotion-biodiversity-food-and-agriculture>

Servadei L., (2018). Agricoltura, biodiversità e cibo gli strumenti della legge n. 194/2015 e il modello innovativo delle Comunità del cibo e della biodiversità. RRN Magazine n. 5 anno 2018 “Cibo è agricoltura”, 21-22. <https://www.reterurale.it/flex/cm/pages/ServeBLOB.php/L/IT/IDPagina/18815>

## 39. National Food Quality Scheme - “Green and Bordeaux Spoon” (Latvia)

### CATEGORY

Market

### GEOGRAPHIC SCOPE

National

### CLUSTER

5. Local food promotion

Quality Certification/ Local Food Certification

### LEGISLATIVE REFERENCE/ NAME OF OWNER

National food quality scheme “Quality Product”

The scheme is implemented based on the 2014.08.12. Cabinet of Ministers Regulation Nr. 461 “Requirements for food quality systems implementation, operation, monitoring and control”.

The scheme is managed by the Latvia Food Producers Association who is responsible for the issuance of the label and for organizing marketing campaigns.

Quality control/ assurance is undertaken by the Food and Veterinarian Service through the issuance of a quality certification.

### OVERALL/ SPECIFIC OBJECTIVES

The goal of the National Food Quality Scheme “Quality Product” is to support the production of agricultural and food products grown and produced locally and to provide a guarantee to consumers that the products are of a high quality. The products must meet quality criteria (no GMO and no synthetic colour additives) that go beyond those specified by EU and Latvian regulation on general requirements for animal and plant products.

### LINK TO AGRO-ECOLOGY

The scheme promotes/ lends recognition to food products largely grown and produced locally in Latvia that have a higher quality than general national food standards. The scheme encourages the purchase by consumers of locally grown and produce and products, thus supporting local food producers and processors that meet higher quality standards. The label lends support to short supply chains.

### TOOLS USED TO ACHIEVE OBJECTIVES

Those products meeting specified quality criteria can obtain a product quality label to be used in advertising and marketing the product.

The scheme has two quality categories.

The “Green Spoon” is awarded to products that meet the additional quality criteria and the produce is entirely derived from Latvia (one EU country or region). Eligible products include honey and apiary



products, fresh vegetables, potatoes, fruit and berries, fresh meat, fish and eggs or at least 75% of constituents used in the production of the product are derived from Latvia (one EU country or region).

The “Bordeaux Spoon” is awarded to products that meet the additional quality criteria and whose entire production/ processing cycle takes place in Latvia (one EU country or region) although constituent products do not need to be sourced in Latvia.

The source country/ region of all constituents must be traceable and during all stages of the production and processing cycle. Quality control is undertaken by the national Food and Veterinarian Service.

The Latvia Food Producers Association, responsible marketing, organize the main campaign between September 10 and October 1 of each year with information being shared with consumers on television and radio, in the internet and also in the largest supermarket chains.

Producers/ products that have been awarded the quality label are:

- favoured in state and local procurement in accordance with guidelines “Application of environmental criteria for the procurement of food product supply and public canteen services in accordance with 2006.04.06. public procurement law and 2014.10.06. Cabinet of Ministers regulations Nr.673.” [http://www.zm.gov.lv/public/ck/files/PVD/Partikas\\_uzraudziba/ieteikumi\\_ZPI\\_piemerosana\\_01112016.pdf](http://www.zm.gov.lv/public/ck/files/PVD/Partikas_uzraudziba/ieteikumi_ZPI_piemerosana_01112016.pdf);
- are eligible for support from State Farm Support Service” for food quality schemes;
- 10% additional support from the Rural Development Service support measure "Investments in infrastructure”;
- Additional recognition amongst consumers through visible labeling;
- Increased export opportunities.

## DRIVERS

### ECONOMIC

To increase competitiveness/ market share of local food producers and processors in the local and export market.

### SOCIAL

Consumer demand for quality local produce and products.

### LEGISLATIVE

Availability of EU RDP support for quality schemes.

### ENVIRONMENTAL

Produce grown in Latvia is considered to be healthy and produced in an environmentally friendly manner.

## EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

Since the inception of the programme in the number of products and producers registering for the label has increased steadily. Presently, there are 145 producers and 650 products that are granted the quality labels. The “Green Spoon” has been issued to 125 producers and 485 products whereas the “Bordeaux Spoon” to 50 producers and 277 products.



The distribution of awarded labels between food sectors is as follows: flour-base products (bread) 30%, milk and milk-based products (24%), meat and meat-based products (14%), vegetables, fruit, berries (13%), beverages (8%) and others (11%).

The “Green Spoon” (90% recognition factor) and the “Bordeaux Spoon” (60% recognition factor) are the best recognized quality scheme labels in Latvia. 75% of consumers pay attention to product quality labelling schemes.

#### STRENGTHS/ WEAKNESSES

##### STRENGTHS

Encourages consumption of locally grown and produced products thus supporting local producers and products.

High recognition factor for the label amongst consumers.

High participation rates by producers.

##### WEAKNESSES

Environmental criteria associated with the label are not stringent, thus limited assurance that products are produced in an environmentally sound manner and are of the high quality. Up to 25% of the constituents of produced products can be derived from elsewhere outside of Latvia.

#### REFERENCES

<http://karotite.lv/sakums>

## 40. Latvian Milk and Fruit Scheme for Schools (LATVIA)

#### CATEGORY

Mixed (policy+market)

#### GEOGRAPHIC SCOPE

National

#### CLUSTER

6. Alternative food chains

Green procurement / Short supply chain

#### LEGISLATIVE REFERENCE/ NAME OF OWNER

Latvian Milk and Fruit Scheme for Schools - Milk and Fruit are my Friends

<http://piensaugliskolai.lv/lv/par-programmu/skoleniem-apetite-laba/>

Rural Support Service, 2018. Milk and fruit for schools. Programme rules and administration, 2018/2019 academic year.

<http://www.lad.gov.lv/lv/atbalsta-veidi/tirgus-pasakumi/tirgus-pasakumu-veidi/piens-un-augli-skolai-289>

#### OVERALL/ SPECIFIC OBJECTIVES



The objective of the scheme is to and encourage healthy eating habits in children at a young age, to stabilize local milk, fruit and vegetable markets, to encourage consumption of locally produced fruit and vegetable produce and milk, to foster production and consumption of local organic produce and products.

The milk programme has been operating since 2004, whereas the fruit and vegetable programme since 2010. Since 2017 the two programmes have been joined-up.

The scheme is jointly funded by EU (36%) and national (64%) funds.

#### LINK TO AGRO-ECOLOGY

The scheme promotes healthy diets among children through the provision of free milk, fruit and vegetables in pre-schools and schools. The scheme promotes locally and organic products. Suppliers are local farmers and producers – scheme supports short supply chains.

#### TOOLS USED TO ACHIEVE OBJECTIVES

Pre-school and school children from grades 1-9 attending schools that apply for the programme are provided with milk and fresh vegetable and fruit products three days every week. Milk is provided from October 1 to the end of the school or pre-school year, whereas fruit and vegetables are provided starting November 1.

The produce/ products that are provided as part of the scheme include: pasteurized milk, apples, pears, cranberries, carrots, cabbage, turnip, kale, pumpkin. Suppliers of certified organic products are paid a premium price.

Products supplied to schools must meet the requirements of the National Food Quality Scheme or that of the Organic product scheme. Products cannot be supplied farther than 300 km.

Educational and informative activities and materials are produced for schools and for the general public to publicize the scheme and to provide information regarding how schools can participate and how producers can become participants/ suppliers. A web-page has been created to serve as an information hub for the scheme. <http://piensaugliskolai.lv/lv/par-programmu/skoleniem-apetite-laba/>

The programme is very popular with pre-schools, schools, farmers, producers and suppliers. The participation rate has been increasing and now includes most pre-schools and schools in Latvia that are eligible. In 2017/2018 256 493 children were beneficiaries of the programme - for the fruit and vegetable programme 89.9% of all eligible children and for the milk programme 83.3% of all eligible children.

#### DRIVERS

##### ECONOMIC

Desire to support the local milk and fresh fruit and vegetable producers, processors and market.

Promotion of local organic production and products.

##### SOCIAL

Desire to promote healthier diets amongst children and their families including avoidance of obesity.

Desire to provide children from disadvantaged families with healthy produce and milk at school.

##### LEGISLATIVE

EU support for RDP

##### ENVIRONMENTAL



Desire for healthy diet and food produced in an environmentally friendly manner.

#### EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

The participation rate is high and has been increasing, and now includes most pre-schools and schools in Latvia that are eligible for the scheme. In 2017/2018, 256 493 children were beneficiaries of the programme - for the fruit and vegetable programme 89.9% of all eligible children and for the milk programme 83.3% of all eligible children.

#### STRENGTHS/ WEAKNESSES

##### STRENGTHS

Programme is open to all schools and pre-schools in Latvia.

An effective approach to promoting healthier eating habits among children and their families.

Provides nutritional support to children from disadvantaged families.

Promotes production of local produce and milk.

Stabilizes milk and produce market.

Fosters organic farming, production and processing.

#### REFERENCES

REGULATION (EU) No 1308/2013 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 17 December 2013 establishing a common organisation of the markets in agricultural products

COMMISSION DELEGATED REGULATION (EU) 2017/40 of 3 November 2016 supplementing Regulation (EU) No 1308/2013 of the European Parliament and of the Council with regard to Union aid for the supply of fruit and vegetables, bananas and milk in educational establishments and amending Commission Delegated Regulation (EU) No 907/2014

Cabinet of Ministers Regulation Nr. 485 16.08.2017. Procedure for securing support and the administration and monitoring of State and EU support for the provision of fruit, vegetables and milk to educational institutions.

Rural Support Service, 2018. Milk and fruit for schools. Programme rules and administration, 2018/2019 academic year <http://www.lad.gov.lv/lv/atbalsta-veidi/tirgus-pasakumi/tirgus-pasakumu-veidi/piens-un-augli-skolai-289>

Milk and Fruit Scheme for Schools <http://piensaugliskolai.lv/lv/par-programmu/skoleniem-apetite-laba/>

## 41. Latvian Organic Product Label Scheme (Latvia)

#### CATEGORY

Market

#### GEOGRAPHIC SCOPE

National

#### CLUSTER

4. Organic food promotion and certification

Quality Certification/ Local Food Certification





#### LEGISLATIVE REFERENCE/ NAME OF OWNER

The Association of Latvian Organic Agriculture is the owner of the organic product label scheme.

#### OVERALL/ SPECIFIC OBJECTIVES

The overall objective of the organic product label scheme is to provide consumers with clear information about the quality of the product (certified organic) and its place of origin/production (Latvia).

#### LINK TO AGRO-ECOLOGY

The labelling scheme promotes/ lends recognition to food products that are certified organic and that are sold in Latvia that have a higher quality than the general national food standard. The label encourages the purchase by consumers of locally grown and produced certified organic products, thus supporting local farmers and food producers and short supply chains.

#### TOOLS USED TO ACHIEVE OBJECTIVES

Products certified organic according to national legislation on organic products, including accredited by national accreditation institutions can apply for and receive a product quality label to be used in advertising and marketing organic product.

The scheme regulations specify which product groups are covered by the scheme and where the associated label can be used – as a product label and in advertisements and promotional material.

#### DRIVERS

##### ECONOMIC

To increase the visibility, competitiveness and market share of organic products produced in Latvia.

##### SOCIAL

Increasing consumer demand for healthy local organic products.

##### ENVIRONMENTAL

Increasing consumer demand for healthy local organic products produced in an environmentally friendly manner.

#### EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

The scheme logo has a limited recognition factor, due to other competing local schemes.

#### STRENGTHS/ WEAKNESSES

##### STRENGTHS

Encourages consumption of locally produced organic products thus supporting local producers and markets.

##### WEAKNESSES

Limited recognition factor for the label amongst consumers.

The scheme is competing in the Latvian market with other quality schemes that have less stringent environmental and product quality specifications (e.g. Green spoon label, Bordeaux spoon label).

Similarly, it is competing with the equivalent EU organic logo which has the same organic certification specifications.

#### REFERENCES

Association of Latvian Organic Agriculture biological product certification scheme.



<http://www.lbla.lv/latvijas-ekoprodukts>

## 42. Product Brand Symbol Of Protected Areas (Lithuania)

### CATEGORY

Market

### GEOGRAPHIC SCOPE

Regional. Applied in protected areas of Lithuania occupying 10 214 km<sup>2</sup> or 15,6% of total area.

### CLUSTER

5. Local food promotion

Local production and quality certification (to some degree). Various products or services in general, such as works of craftsmen but also agricultural products and food products.

### LEGISLATIVE REFERENCE/ NAME OF OWNER

Rules for the awarding of Aukštaitija National Park and Labanoras Regional Park product brand symbol. signed as an order No. 1-39, of director of Aukštaitija National Park and Labanoras Regional Park authority, 4th of July, 2012. Owner of the initiative: State Service for Protected Areas, under the Ministry of Environment. Initiated during the project “Encouragement of sustainable development of Lithuania’s protected areas”.

### OVERALL/ SPECIFIC OBJECTIVES

To encourage economic activity in the region and help gain marketing advantage for producers (can be farmers, locals collecting natural goods (e.g. berries) or craftsmen)/services whose activity is beneficial to biodiversity and natural/traditional/rural landscape, prosperity of local community, maintaining cultural heritage and helps to safeguard it.

### LINK TO AGRO-ECOLOGY

- Promotion of local produce.
- Promotion of local value chain.
- Promotion of socially responsible activities.
- Promotion of sustainable production in alignment with environmental and biodiversity protection in the protected area and the production has to adhere to the rules of the protected area.
- Promotion of relationship between producer and client (visitor).
- Promotion of understanding of reciprocal relationship between product and the protected .
- Encouragement of local business to improve.

### TOOLS USED TO ACHIEVE OBJECTIVES

The product brand symbol of protected areas instrument was created (rules, criteria, etc.) as a part of a project “Encouragement of sustainable development of Lithuania’s protected areas” in 2011. The activities included promotion of the instrument use for local producers through publicity and education and meetings in person with local producers. After the project, some promotion continued as incentives of national/regional parks.



Currently more means/tools (financial support, marketing, education and certification) to develop and to publicise the instrument are foreseen under a project “Optimizing the Management of Natura 2000 Network in Lithuania” and that have been started to implement.

#### DRIVERS

##### ECONOMIC, SOCIAL

The main drivers were socio-economic (a wish to improve socio-economic situation in the protected areas), but also with long-term environmental goals.

##### ENVIRONMENTAL

The main aim was to encourage the development of protected areas, not only from environmental but also socio-economic side and to promote tourism and other recreational activities.

##### LEGISLATIVE

No political leadership but rather an incentive of State Service for Protected Areas, protected areas and an environmental NGO.

#### EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

119 producers/services awarded the symbol up until now. Several comments from the providers that it helps to market their products/services. More detailed evaluation scheduled at the end of the year.

#### STRENGTHS/ WEAKNESSES

##### STRENGTHS

- Relevant to the local market.
- One of the few local (somewhat) brands oriented towards natural organic produce..
- Has strong socioeconomic side.
- Aimed to become governed centrally eventually.

##### WEAKNESSES

- Not very much known (currently).
- Currently the brand symbol is not promoted and market very actively.
- Does not prioritise Organic farming, that would already, but rather repeat some of its criteria.
- The criteria are too general and procedures not well defined yet.
- There has been not much improvement of the criteria.
- Not a weakness but rather an opportunity: to integrate local production with tourism, recreation and educational activities.

#### REFERENCES

- Description of the incentive with documents, i.e. rules/ description/ requirements below: [http://labanoras.am.lt/VI/article.php?article\\_id=147](http://labanoras.am.lt/VI/article.php?article_id=147)
- project “Encouragement of sustainable development of Lithuania’s protected areas”
- project “Optimizing the Management of Natura 2000 Network in Lithuania”

## 43. Mobile Farmers Markets (Lithuania)

### CATEGORY

Market

### GEOGRAPHIC SCOPE

National

### CLUSTER

6. Alternative food chains

Local production

### LEGISLATIVE REFERENCE/ NAME OF OWNER

Agricultural cooperative named “Lithuanian farm quality”

### OVERALL/ SPECIFIC OBJECTIVES

Main functions are to help small (and not only) farmers, processors and producers to sell their (own) products by uniting them and to organise markets in various locations in Lithuania, where their members can come with their mobile kiosks (or any other means) and to sell their produce.

Also, the cooperative is selling produce in special sections of large supermarkets (one brand of supermarkets). The cooperative has an organic certification as a processor/producer and also offers organic produce in the supermarkets.

### LINK TO AGRO-ECOLOGY

Agro-ecology is approached indirectly by this initiative:

- helps smaller farmers to sell their produce locally;
- also functions as processor/producer that buys up and processes quality raw material, manufactures products and sells in special sections of the supermarkets under a brand “greetings from the village” (improving availability (and likely a demand) of quality rural (local) produce or organic produce);
- initiative is socio-economically beneficial to smaller producers (some of which are organic).

### TOOLS USED TO ACHIEVE OBJECTIVES

Support for cooperative action by the Chamber of Agriculture, Ministry of Agriculture.

In the cooperative farmers that produce their own produce or processors/producers that are either certified organic, certified national heritage or “national quality products” are accepted. Farmers can use a brand symbol of the cooperative. Also cooperative works by selling produce in the supermarkets under a brand “Greetings from a village”

### DRIVERS

#### ECONOMIC, SOCIAL

Mainly socio-economical drivers. By 2008 the situation was that farmers did not practically have conditions for the production of their own products without middlemen, and as a result, there were few who were engaged in the processing of their own production, while the need for natural Lithuanian rural production was large, especially in big cities.

#### INSTITUTIONAL



The cooperative was developed with Chamber of Agriculture by the initiative of farmers and in cooperation with Ministry of agriculture, State veterinary service, National consumers federation and municipalities. (Institutions provided institutional support for cooperative action).

#### EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

Over 200 farmers united. 41 locations of “markets” in 4 major cities covering all days of week (except Monday). Produce is being sold in 9 large supermarkets in 4 cities.

#### STRENGTHS/ WEAKNESSES

##### STRENGTHS

- Helps to promote good quality local and sometimes certified organic produce.
- Markets may help to promote relationships between farmers and buyers.
- Improve socioeconomic situation of smaller farmers.
- Indirectly reduces environmental impacts (smaller farms typically have lower environmental impacts due to less intensive farming practices).

##### WEAKNESSES

- No actual focus to encourage agro-ecological practices or organic farming- Favourability of the organic produce is not emphasized by the cooperative. Organic producers could have separate sections in the market;
- Does not explicitly encourage consumer education and does not explicitly facilitate farmer-user network;
- Not all produce is of high quality;
- Regarding the production that is resold in the supermarkets - impossible to tell whether natural/rural produce is actually grown/produced without the use of plant protection products, excessive amounts of fertilisers or antibiotics used for farm animals, only except it is certified.

#### REFERENCES

Cooperative page - <http://beta.mobilusturgelis.lt/home/apie-mus/>

## 44. National quality agriculture and food products (Lithuania)

#### CATEGORY

Mixed (policy+market)

#### GEOGRAPHIC SCOPE

National

#### CLUSTER

5. Local food promotion

Quality certification (national product quality system)

#### LEGISLATIVE REFERENCE/ NAME OF OWNER

The Ministry of Agriculture of the Republic of Lithuania



- Order of the Minister of Agriculture of the Republic of Lithuania, No. 3D-524 On National Agricultural and Food Quality Systems, 2007 November 29.
- Order of the Minister of Agriculture of the Republic of Lithuania, No. 3D-292, On The Approval Of Rules Concerning The Authorization of the Certification by the National Agricultural and Food Quality System, 2008 May 22.
- Order of the Minister of Agriculture of the Republic of Lithuania, No. 3D-308, Concerning The Approval Of Specifications For Production Of National Agricultural And Food Quality Systems, 2008 June 04.
- Order of the Minister of Agriculture of the Republic of Lithuania, 3D-768, On the amendment of the 2008 August 27 order of Minister of Agriculture of the Republic of Lithuania, 3D-768 "On The Authorisation For Product Certification Produced According To National Agricultural And Food Quality Systems For Public Institution "Ekoagros"", 2015 September 13

#### OVERALL/ SPECIFIC OBJECTIVES

- Encourage the prevalence of local, good quality produce in the local markets, ensure continuation of local and traditional food production. (broad spectrum of products can be certified).
- To encourage production of products that have better qualities than the typical EU or national legislation requirements in terms of safety, food and veterinary, animal wellbeing or environmental or products that have some exceptional qualities due to the specific way they are produced.
- To provide opportunities for economic subjects (especially smaller ones) to improve the added value of their produce and find a niche in an oversaturated market.

#### LINK TO AGRO-ECOLOGY

- Producers of quality (could be quality as determined by agricultural practice) products can gain marketing advantages (and product added value) if certified.
- Production of national quality agricultural and food products (NKP) favours the use of more environmentally friendly technologies and reduction of pollution.

#### TOOLS USED TO ACHIEVE OBJECTIVES

- Possibility of direct support (RDP programme) for producers who want to apply for the quality system.
- Additional broad-scope aid or support is offered by state institutions for producers for popularising of these quality products (publicity) and marketing and even for participation in markets/fairs or organising events.

#### DRIVERS

##### ECONOMIC, SOCIAL

Mainly a socioeconomic driver – to help smaller farmers or food producers producing quality goods to stay on the market and become more visible, to encourage and to maintain a standard of quality production in Lithuania and to increase its' availability. Also a need to make national produce more visible in the local markets and to improve traceability of produce/raw material.

#### EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

Close to 400 certifications currently valid; certified produce available in supermarkets.



## STRENGTHS/ WEAKNESSES

### STRENGTHS

- Financial support can be provided for farmers.
- Can be seen as a step moving towards certified organic farming and beyond.
- Helps smaller producers to sell the production.
- Helps to shape farmers mind-set that quality produce (also from environmental point of view) is a value.
- Farms and produce are subject to control by certification body and State food and veterinary service. One of the actual purposes of this initiative is traceability of the produce.
- Encourages consumers to use local produce by making it more available in the market and sustaining its availability.
- Try to encourage some agro-ecological practices (e.g. crop rotation, agriculture with less chemical input (mineral fertiliser, pesticide, pharmaceuticals for animals).

### WEAKNESSES

- Pesticide use is not limited and still can be quite extensive.
- Fertiliser use somewhat limited, but still the initiative does not discourage its' use.
- There is a drive to improve value chain. Currently very few food processing farms (less than 5% of total certifications) are certified, most produce agricultural produce (raw material).
- Does not explicitly encourage use of broad spectrum of agro-ecological practices for agriculture, such as no-till farming, use of intermediate/cover crops, intercropping, etc.
- It is not oriented to organic farming, the criteria are somewhat inferior to organic.
- The sign is visually hardly noticeable and not too eye-catching.

## REFERENCES

Ministry of Agriculture

EKOagros certification body

Leaflet on promoting opportunities for producers to get support from the state  
[https://zum.lrv.lt/uploads/zum/documents/files/LT\\_versija/Veiklos\\_sritys/Maisto\\_sauga\\_ir\\_kokybe/Isskirtines\\_kokybes\\_produktaai/Parama%20kokybiskiemis%202018%2005%2007.pdf](https://zum.lrv.lt/uploads/zum/documents/files/LT_versija/Veiklos_sritys/Maisto_sauga_ir_kokybe/Isskirtines_kokybes_produktaai/Parama%20kokybiskiemis%202018%2005%2007.pdf)

## 45. Collective Agri-Environmental Measures (Netherlands)

### CATEGORY

Policy

### GEOGRAPHIC SCOPE

National

### CLUSTER



## 7. Territorial-based farming practices

RDP Agri-environmental collective measures

### LEGISLATIVE REFERENCE/ NAME OF OWNER

[https://enrd.ec.europa.eu/country/thenetherlands\\_en](https://enrd.ec.europa.eu/country/thenetherlands_en)

### OVERALL/ SPECIFIC OBJECTIVES

The long term objective is sustainable rural development with a vital agricultural sector. The immediate objective is to increase the production of non-commodity ecosystem services including improved biodiversity and water quality. Farmers have a key role to play which can be made more efficient and effective through collective action. The focus is on creating good habitat conditions for rare species and good water quality conditions regionally instead of meeting commitments at the farm level.

### LINK TO AGRO-ECOLOGY

Promotion of farming practices that are more resource efficient, reduce negative impacts on the environment and increase the provision of non-commodity ecosystem services benefits.

### TOOLS USED TO ACHIEVE OBJECTIVES

The Netherlands has developed a new voluntary regional approach for agri-environmental and climate measures based on a new role for the authorities: the collective approach. Farmers cooperate voluntarily to obtain goals for ecosystem services (biodiversity and water), by making use of collectives. The scheme deals with collective applications only - individual applications are no longer possible. In addition to a drastic scheme redesign, the existing farmers' agri-environment cooperatives had to drastically change their organisation and to professionalise their working methods.

The Netherlands has opted for a collective result-based scheme at landscape scale. This implies that beneficiaries are no longer the individual farmers, but a group of farmers and other land managers that jointly commit under a contract with the managing authority to undertake certain commitments and obligations. The measure includes two layers of commitments:

1. In line with the contract from the management authority, the collective has to establish a certain kind of habitat at landscape level. This habitat is defined as minimum/maximum hectares that are managed in a specific way by the group of farmers; and
2. The second layer of commitments ensures that the sum of all management activities per hectare is equal or less than the maximum sums for these activities, according to the calculation of management costs for these activities.

This collective scheme is based on the so-called 'front door – back door principle' according to which the government signs a 6-year contract with regional cooperatives. It also sets agri-environment targets and describe the types of conservation activities that will be used to achieve the targets. The agreement establishes a results-based obligation for specific habitats over a specified area at a budget per habitat based on the average payments per hectare for the different activities. 40 certified cooperatives are accepted as beneficiaries of AECM support and are in charge of making the contracts with individual land users. They also submit payment claims and check that the relevant management is carried out by members of the collective and apply sanctions for noncompliance where necessary.

The new scheme creates a shift in implementation from the government to the cooperatives. The cooperatives' implementation costs are set at (on average) 15% of the total budget granted.





## DRIVERS

### ECONOMIC

Greater efficiency of agri-environmental and climate actions if implemented collectively at the landscape level by cooperatives.

### SOCIAL

Cooperatives fit in a long Dutch tradition of agricultural producer groups, but they are now aiming at public services instead of primary produce. The number of cooperatives has been growing to 160 over the last 20 years. They function as producer cooperatives for public goods and have become a trusted partner for farmers as well as governments. This means that the social structure for the new scheme design and the experience with its application was already present; it only had to be professionalised and extended to the entire countryside.

### ENVIRONMENTAL

Greater efficiency and effectiveness of agri-environmental and climate actions if implemented collectively at the landscape level by cooperatives.

## EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

In the context of a debate on agri-environment schemes, it was felt that to address the decline in farmland biodiversity required a cross-farm approach and regional cooperation.

1. The need to increase flexibility in terms of the content of conservation activities, their exact location and their financial compensation. Making cooperatives the final beneficiaries of agri-environment support allows for a simpler scheme design, with room for local fine-tuning of activities and payments;
2. The previous individual, agri-environment-climate scheme had a relatively high error rate. The collective scheme is associated with simpler administrative processes and improved compliance.

From 2011 to 2014, the new approach was successfully tested in four pilot regions and by 2015 all 40 cooperatives (covering the whole of the Netherlands) were established as legal entities and certified as conservation organisations.

## STRENGTHS/ WEAKNESSES

### STRENGTHS

- Enhances effectiveness.
- Improves efficiency.
- Improves knowledge-skills.
- Makes better use of local skills and energy.
- Cooperative decision-making improves acceptance of measures/ interventions.
- Trust with responsibility.
- Improves policy monitoring: goals vs commitments.

Cooperation, in particular in marginal and less favoured areas, is increasingly seen as the most effective way to turn natural or economical restraints into valued public services. In addition, cooperation was seen as a means to improve the dialogue with other local interest groups and, more generally, the connection between farming and civil society. Cooperatives also discovered that they could play a substantial role in policy development and implementation as a group of farmers and actors (instead of as a single farmer).



Making cooperatives the final beneficiaries of agri-environment support allows for a simpler scheme design with room for local fine-tuning of activities and payments. Instead of extending the national list of approved conservation activities, an emphasis on conservation targets in combination with local fine-tuning by the cooperative and real-time notification of the actual conservation operations is expected to enhance entrepreneurship and ecological innovation. This substantially increases the flexibility in terms of the design and location of conservation activities and provides room for environmental innovation, for making optimal use of local knowledge and for adjusting activities to the actual situation in the field (e.g. as a result of weather conditions). Regional governments and cooperatives meet every year to evaluate and (if necessary) adjust the management.

#### WEAKNESSES

Presently, largely based on fixed measures – transition to result-based approaches based on 'achievement indicators' would help enhance collective approaches.

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## 46. Marketing of organic fruit and vegetables in the Carpathian (Poland)

#### CATEGORY

Mixed (policy+market)

#### GEOGRAPHIC SCOPE

Local

#### CLUSTER

4. Organic food promotion and certification



Creation of a producer group for processing and marketing local products for export

#### LEGISLATIVE REFERENCE/ NAME OF OWNER

The farmers established the organic farm association "Truskawka" (Strawberry) in 1998. Based on the early experience and encouraged by a food processing firm, in 2005 the producer group "Bio-Food Roztocze" was formed, dealing in the purchase and sales of organic produce, especially soft fruit and several types of vegetables. The Polish Rural Development Plan supported an investment of around 2 million EUR in 2012, under a measure aimed to support establishment of producer groups or cooperatives.

#### OVERALL/ SPECIFIC OBJECTIVES

To increase farm income (raised added value of organic production and higher prices of organic products as compared to conventional counterparts);

To increase job opportunities in rural areas (with intensive production there is a need for higher number of workers, organic farming facilitates the development of agritourism and educational and organic tourism);

To care of the environment, biodiversity and landscape (the use of local species of plants and animals, positive impact on soil and water protection, preservation of traditional rural landscape by the use of natural production processes);

To develop local food chains (diversified sales channels: direct sales, local bazaars, supply to local restaurants, school diners, etc.).

#### LINK TO AGRO-ECOLOGY

The agricultural biodiversity is protected by the practice of using some old local varieties. Organic farming has seen as a viable option for hills and small farm structure.

#### TOOLS USED TO ACHIEVE OBJECTIVES

Development of organic farming caused many family farms to professionalise and increase the crop area devoted to raspberry, other soft fruit and a range of vegetables. The farmers from that area managed to achieve almost equal harvest from organic production as from the conventional mode. As the labour costs are the same, the purchase price for the organic fruits is about 50% higher, there is a steadiness and unchanging volume of demand guaranteed by the producer group, the production's added value is high. The price of organic fruit has remained stable. Practically, the whole production of the group is exported, which is the consequence of very limited domestic organic food market.

Apart from the functions related to organising and securing the demand for the members' produce, the producer group serves educational functions - together with a farming school - organising in the winter time trainings (around seven a year) and prepares publications for its members and farmers from the other parts of the country.

#### DRIVERS

##### POLITICAL/ LEADERSHIP

An important role has to be assigned to dynamic local leaders that supports the development of organic farming in the area.

##### ECONOMIC

Good opportunities to increase farm income in small scale farms.

##### SOCIAL



Increased knowledge of local residents regarding the organic production and entrepreneurship skills.

TECHNOLOGY

LEGISLATIVE

ENVIRONMENTAL

Organic food production in itself has positive impact on the environment.

#### EVIDENCE OF ACHIEVEMENTS/OUTCOMES

In the 4 districts (powiat) where Bio-food Roztocze operates there are around 750 organic farms. At local level there are areas where over 90% of arable land is dedicated to organic farming. However, the farmers who decided to join the producer group are fluctuating. At start, the group was comprised of 60 farms, which grew to 100 in 2013 and fell to 88 in 2014. A number of farmers are interested in becoming the group's member, but due to organisational and communication issues some farmers were not willing to follow all the rules imposed by the producer group (such as selling all the produced commodities to the Group), so further growth has been temporarily stopped.

#### STRENGTHS/ WEAKNESSES

##### STRENGTHS

Increasing the raspberry crop area in family farms and the conversion to market organic farming contribute to assign new values to traditional resources. The cooperation in the local community can guarantee sufficiently high quantities of high-quality products from farms. For organic farming to be market-efficient, it is crucial to use a wide range of scientific and managerial knowledge as well as local knowledge.

##### WEAKNESSES

The development of marketing initiatives requires a wide range of changes in policies to be implemented, starting with those relating to financial instruments (such as the demand to produce for the market) through additional incentives for farmer integration and the support of local government bodies.

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## 47. Holistic community supported agro-ecological approach (Portugal)

#### CATEGORY

Market

#### GEOGRAPHIC SCOPE

Local

#### CLUSTER

7. Territorial-based farming practices



Successfully established holistic community supported agro-ecological approach in Portugal.

#### LEGISLATIVE REFERENCE/ NAME OF OWNER

Cooperativa de Usuários do Freixo do Meio (Cooperative of Users of Freixo do Meio, in English). Organic farming since 1997, agro-ecology since always. Located in the agroforestry and pastureland landscape area of Freixo do Meio, about 100 km to the East of Lisbon.

It is a cooperative of producers and co-producers who interact with the agroforestry and pastureland farming system area (dehesa in Spanish, montado in Portuguese), obtaining and commercializing a wide variety of products from organic farming (agriculture and livestock), as well as offering ecotourism services and producing 50% of the energy they consume through solar farms.

#### OVERALL/ SPECIFIC OBJECTIVES

The main objective of this initiative is the construction of a democratic, inclusive, transparent, autonomous and resilient community, around the dehesa/montado of Freixo do Meio. This community aims to achieve a constant improvement in the relationship with natural resources and the personal development of all its members. The community works apart from the hegemony of the market and the maximization of immediate results, and has a social economy project that seeks economic sustainability together with the effective practice of adequate policies at a social and environmental level.

#### LINK TO AGRO-ECOLOGY

Since a new generation took over the management of the dehesa/montado in 1990, agro-ecology became the work ethic and the way to approach the present of the farming system and to build the future. The management principles are transparency, democratic participation, knowledge and innovation. They bet on the real efficiency in the use of natural resources, as well as in the minimization of waste and the ecological footprint, trying to improve day by day its relationship with water, soil, biodiversity, energy, science and culture. All products, which come from organic farming practices in agriculture and livestock production, are processed and commercialized based on the philosophy of Community Supported Agriculture (CSA).

#### TOOLS USED TO ACHIEVE OBJECTIVES

- CSA program based on the mutual commitment between producers and co-producers (who are those consumers linked to the program) to make the practice of agro-ecology viable, treating food as a common asset and putting in value personal relationships. This program assumes a series of commitments and principles by producers and co-producers.
- Transformation of the organic farming products in the cooperative itself.
- Direct relationship with consumers through the website and visits to the dehesa/montado.
- Use of the website and blog to disseminate topics related to agro-ecology and the work developed by the cooperative.
- Training programs on topics related to agro-ecology.
- Ecotourism activities to bring agro-ecology closer to a public that is generally far from the reality of the rural world.

#### DRIVERS

##### ECONOMIC

Economic sustainability based on social and solidarity economy.

##### SOCIAL



Social impact through a model based on democratic participation and social and solidarity economy. Approaching the rural world to consumers through the CSA program, where consumers know the producers, connect with their work and share the risks that farming production implicitly involves (co-producers).

#### TECHNOLOGY

Development of micro-industries for the transformation of the organic products (agriculture and livestock based) of the dehesa/montado and use of solar energy.

#### ENVIRONMENTAL

Positive environmental impact in all areas: agricultural and livestock production, waste management, production and consumption of renewable energy and responsible water consumption.

#### EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

- Approximately 500 ha managed by the cooperative.
- 30 co-producers who are part of the CSA program.
- Production and marketing of more than 200 products from organic agriculture and livestock, including veal meat, pork and lamb, flour, juices, vegetables, wine, vinegar, olive oil, bread, precooked products, fruits, cereals, legumes, and aromatic plants.
- Besides the sale of products through the CSA program, they manage an online store and two physical stores.
- Seven micro-industries have been developed:
  - Bakery;
  - Meat processing;
  - Bird slaughter room;
  - Transformation of fruits and vegetables;
  - Kitchen;
  - Olive oil press;
  - Specialized butchery.
- Building a restaurant and cafeteria where they serve their products.
- Development of the activities of eco-hostel and eco-camping.
- Library and training rooms inside the cooperative where classes and courses related to agro-ecology are taught.
- Use of solar energy to supply 50% of the energy consumed in the various activities that take place in the dehesa/montado.

#### STRENGTHS/ WEAKNESSES

##### STRENGTHS

- Agro-ecological approach at all levels: production, transformation, commercialization and marketing, training, and relationship with consumers.
- Strong conviction and involvement of all the agents involved.
- Good tools for dissemination and promotion of both their products and the different aspects of agro-ecology.



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## 48. National legislation for organic farming / Ecological Certification (Romania)

CATEGORY

Policy

GEOGRAPHIC SCOPE

National

CLUSTER

1. National food and farming plans

National legislation for organic farming / Ecological Certification (AE)

LEGISLATIVE REFERENCE/ NAME OF OWNER

The legal basis for organizing the production and sale of organic products was laid down by Government Emergency Ordinance (O.U.G.) no. 34/2000 for organic food products, approved by Law no. 38/2001 and by Government Decision 917/2001, which establishes the methodological norms for the application of OUG provisions. no. 34/2000

Order of the Ministry of Agriculture, Forests and Rural Development no. 527/2003 for organic certification system

Order of the Ministry of Agriculture, Food and Forestry no.110 / 2002, The labelling of organic food products

National legislation for organic certification system (Law no.513/2006, Order of Ministry of Agriculture no. 65/2010 for the approval of the rules regarding the organization of the inspection and certification system, Minister of Agriculture Order No. 252/2010, Minister Forests and Rural Development Order no. 219/2007 for the approval of rules on the registration of operators in organic farming, Government Decision no. 590/2011 on incentives to improve the quality of agricultural products in the organic farming sector).

Legislation for the labelling of products obtained from organic farming established by EC no. nr. 834/2007 on organic production and labelling of organic products and EC no. 889/2008. In Romania, the control and certification of organic products is currently ensured by private inspection and certification bodies.

OVERALL/ SPECIFIC OBJECTIVES

The overall objective is to create an operational framework for organic farming in Romania

Specific Objectives:

- To financially help farmers with the transition from conventional agriculture to organic farming;
- To support organic agriculture;
- Create an operational framework for organic certification of agri-food products;





- Promote organic certification for agricultural products;
- Support the production and sale of organic products through National Rural Development Program;
- To foster collective initiatives.

#### LINK TO AGRO-ECOLOGY

An Operational framework to encourage organic farming and the production, processing and supply of organic products to the market, as well as stimulation of consumption of organic grown products by consumers.

#### TOOLS USED TO ACHIEVE OBJECTIVES

- Financial support (subsidizes) for traditional practices/ organic farming under NRDP (National Rural Development Program). Measure 10 - agro-environment and climate (the measure encourages sustainable farming practices in the relevant areas, especially in High Natural Value Areas and Natura 2000 areas) for the purpose of preserving biodiversity in agricultural land, water and soil protection and reducing greenhouse gas emissions. Measure 11 – Ecological Agriculture (The measure promotes organic farming practices by providing financial support for both, conversion to organic farming methods and the maintenance of organic farming practices).
- Financial support for foster collective initiatives under NRDP.
- LEADER is an important tool for Romania to increase the economic and social development of rural areas, reduce disparities between urban and rural areas and promote social inclusion.
- In Romania the implementation of LEADER started in the period 2007-2013 through the NRDP by creating Action Local Groups at local level. LEADER will contribute to the development of rural areas, including small towns with a population of up to 20,000 inhabitants and will facilitate the implementation of projects with a multisectoral and transversal innovative approach to support the needs of the population and to meet the objectives of the Europe 2020 Strategy.

#### DRIVERS

##### POLITICAL/LEADERSHIP

Except from measure 11 under NRDP that promotes the application of organic farming practices, our Government is not concerned to encourage the promotion of organic farming as part of sustainable development in Romania.

##### ECONOMIC

Agro-ecology as an alternative to conventional farming. Organic farming has a major contribution to the sustainable development of agriculture, the growth of economic activities with significant added value and the increasing interest in rural development.

The "ae" logo, owned by M.A.D.R, guarantees that the product labelled comes from organic farming and is certified by an approved inspection and certification body. The rules for the use of the "ae" logo are contained in Annex no. 1 to the Order of the Minister of Agriculture, Forests and Rural Development no. 317/2006 and the President of the National Authority for Consumer Protection no.190 / 2006 approving the Specific Rules on the labelling of organic food products.

##### SOCIAL

- LEADER is an important tool for promoting social inclusion.





- Concern for healthy diet, food safety.

#### LEGISLATIVE

Availability of EU NRDP support for quality schemes.

#### ENVIRONMENTAL

Ecological certified products are considered to be healthy and produced in an environmentally friendly manner.

#### EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

Operators and surface dynamics in organic farming, below:

Indicator	2010	2011	2012	2013	2014	2015	2016	2017
Total numbers of operators certified in organic farming	3,155	9,703	15,544	15,194	14,470	12,231	10,562	8,434
Total area in organic farming (ha)	182,706	229,946	288,261	301,148	289,252	245,924	226,309	258,471

Source: Communications Inspection and Certification Bodies

\* Eurostat classification

#### STRENGTHS/ WEAKNESSES

##### STRENGTHS

As part of the campaign to promote organic farming in the European Union, at the initiative of the European Commission's Directorate General for Agriculture and Rural Development, the website [www.ec.europa.eu/agriculture/organic/home\\_ro](http://www.ec.europa.eu/agriculture/organic/home_ro) has been created for informing the general public about the organic farming system, as well as a starting point for promotional campaigns in different Member States.

In order to promote organic products, the European Commission provides up to 50% support to the information and promotion programs, proposed by the professional and interprofessional organizations in the sector, which participate at least 20% of the actual cost of the initiative, the co-financing being provided by the national budget in accordance with the provisions of Regulation (EC) No. (EC) No 3/2008 on information provision and promotion measures for agricultural products on the internal market and in third countries and Regulation (EC) (EC) No 501/2008 for the application of Council Regulation (EC) 3/2008.

##### WEAKNESSES

There is a decline in certified organic areas and operators in the field, according with FIBL study. The conclusions of the FIBL report, using statistical data from 2016, show that the area is growing at a lower than other regions in Europa in terms of the environmental sector, with developments being marked by lower consumption and export-oriented on raw materials rather than processed products under their own brand.

The data from website of the Ministry of Agriculture shows that in 2016 the number of operators certified in organic farming in Romania was 10,562 down from 2015 when it was 12,231. In 2016, the

area of organic farming amounted to 226,309 hectares, compared to 245,924 hectares in the previous year.

According to Eurostat, the number of organic farms in Romania increased by almost 300% between 2010 and 2015 reaching 11,869 organic farms in 2015, from 2,989 of these farms in 2010.

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## 49. Results-Based Payments for Biodiversity (Romania)

### CATEGORY

Policy

### GEOGRAPHIC SCOPE

Regional

### CLUSTER

2. Agri-environmental practices

Agri-environmental scheme

### LEGISLATIVE REFERENCE/ NAME OF OWNER

RBAPS - Results-Based Payments for Biodiversity: A New Pilot Agri-Environment Scheme for 2 Bio-geographical regions (the Târnava Mare and Pogány Havas Regions).

This pilot scheme is being managed by Fundatia ADEPT and Pogany Havas Association in collaboration with the Romanian Government

### OVERALL/ SPECIFIC OBJECTIVES

The overall objective is to test the suitability and practicality of results-based agri-environment schemes to maintain the broad range of species and habitats in two Bio-geographical regions (the Târnava Mare and Pogány Havas Regions) in Romania's extensive High Nature Value farmed landscapes. This "results-based" agri-environment scheme aims to reward practical management that produces good quality hay as well as protecting wild species. Instead of paying according to management prescriptions, it pays for the "result" of species-rich meadows, which is measured using certain plant species as indicators.

Specific Objectives:

- to test design, development and use of result-based remuneration schemes;
- to conserve and enhance biodiversity;
- to increase the understanding of factors that contribute to the success or failure of such schemes;



- to identify opportunities and conditions for increasing the use of such schemes in Romania and in the EU more widely, especially in future Rural Development programmes of the CAP;
- to demonstrate the potential of these schemes to achieve ecological targets, using monitoring of indicators in pilot measure participant and control grasslands;
- to increase the understanding of the benefits of results-based remuneration schemes within the rural community;
- to promote results-based remuneration schemes within the MECC and MARD, based on results achieved.

#### LINK TO AGRO-ECOLOGY

The results-based agri-environment scheme (pilot scheme) is targeted at High Nature Value hay meadows. The project uses a total of 30 species as indicators of HNV meadows and engages 76 farmers in Tarnava Mare and Pogany Havas. Farmers can manage their meadows according to local conditions and weather.

Mix between integrated landscape approaches and Biodiversity

#### TOOLS USED TO ACHIEVE OBJECTIVES

30 species or species groups have been selected as indicators of meadows of High Nature Value in the pilot scheme regions. They have been selected because they only grow in hay meadows managed at low intensity, and are associated with high plant and animal species richness as well as good quality hay.

Payments in RBAPS pilot.

There are three levels of payment in this scheme:

1. Package 1: €213 per ha per year for a minimum of 5 indicator species from the lists and recorded that year following the transect method appropriate for the size of the parcel;
2. Package 2: €229 per ha per year for a minimum of 8 indicator species from the list and recorded that year following the transect method appropriate for the size of the parcel;
3. Package 3: €259 per ha per year for a minimum of 10 indicator species from the list and recorded that year following the transect method appropriate for the size of the parcel.

Payment varies between €140 – 180 per ha according to the number of species. Additional payments will be available for manual mowing, €100 per hectare, and mowing with light machinery. €21 per hectare.

The farmer must:

- record each year these species from the list that he finds on his meadow every year, along a straight line (transect).
- mow the meadows at least once a year, first cut is after the 10th of June in order to allow controls to take place. The RBAPS scheme offers the farmer flexibility in mowing dates, to account for annual variations in the time the hay is ready. However, if the farmer mows before the indicator species are fully in flower and beginning to set seed, (s)he risks reducing the number of indicator species, and possibly losing his payments, in subsequent years. Later mowing also allows animals such as meadow-nesting birds to rear their young before the cover of the long grass disappears.

- Using mowing methods: on steep slopes, mowing by hand or by light machine with a cutting bar, will enhance species richness. Rotary mowing is more damaging to plant and animal diversity.
- Ensure that the meadow is not grazed during the hay vegetative period, either by his animals or abusively by others, because this will increase the risk of the indicator species not flowering, and the loss of payment for that year.

### DRIVERS

#### POLITICAL/LEADERSHIP.

The scheme is in cooperation with the Romanian Government. That increase the chances of wider application of this scheme in Romania in the future. The experiences with this pilot results-based scheme will be shared with the Ministry of Agriculture & Rural Development and Ministry of Environment, Waters & Forests. The pilot programme, if popular with farmers and practical for payments control agencies, may be available over the whole country in the future.

#### ECONOMIC

The Budget for the scheme is 415.000 Euro, funded by DG Environment and Deutsche Bundesstiftung Umwelt (DBU). There are three levels of payment in this scheme:

1. Package 1: €213 per ha per year for a minimum of 5 indicator species from the lists and recorded that year following the transect method appropriate for the size of the parcel;
2. Package 2: €229 per ha per year for a minimum of 8 indicator species from the list and recorded that year following the transect method appropriate for the size of the parcel;
3. Package 3: €259 per ha per year for a minimum of 10 indicator species from the list and recorded that year following the transect method appropriate for the size of the parcel.

Payment varies between €140 – 180 per ha according to the number of species. Addition payments will be available for manual mowing, €100 per hectare, and mowing with light machinery. €21 per hectare.

#### SOCIAL

These meadows have often been traditionally managed over generations, and are an important part of local cultural heritage. They support many plant and animal species and are important for source of fodder for animals, nectar for honey bees, medicinal and other useful plants and local incomes from nature tourism.

Farmers appreciated been engaged and directly involved in the control system.

#### ENVIRONMENTAL

The objective of the scheme is to maintain the broad range of species and habitats, to conserve and enhance biodiversity.

### EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

By mid-December 2016 they made all the first year payments: 73 small farmers managing 171 hectares of land received an additional €37,224 in 2016 and will further be paid by end of October in 2018.

### STRENGTHS/ WEAKNESSES



## STRENGTHS

The scheme rewards practical management that produces good quality hay and protects wild species. Instead of paying according to management prescriptions as in typical agri-environment schemes, the scheme pays for the “result”: species-rich meadows, which is measured using certain plant species as indicators. This means that farmers have the freedom to manage their meadows according to local conditions and weather, instead of having to follow precise mowing dates and other rules which do not take account of local conditions, and differences in weather from year to year.

These meadows provide hay for livestock, nectar for honeybees, medicinal plants, and extra income from nature tourism and local products through HNV marketing.

Schemes like this are already carried out in France, Germany and Switzerland. Farmers prefer using the results-based scheme because their expertise is recognised, they have the freedom to manage their meadows according to the local conditions and weather, and they are directly rewarded for the service they provide for nature, which is recognised by society.

## WEAKNESSES:

The scheme is being run as a test in these two areas just for 3 years from 2016-2018.

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# 50. Romanian Milk and Fruit Scheme for Schools (Romania)

## CATEGORY

Mixed (policy+market)

## GEOGRAPHIC SCOPE

National

## CLUSTER



## 6. Alternative food chains

Short supply chain/traditional products

### LEGISLATIVE REFERENCE/ NAME OF OWNER

Rural Support Service, 2018. Milk and fruit for schools. Programme rules and administration, 2018/2019 academic year.

Government Ordinance no.13/2017 Romania participation in EU Schools Programme.

<https://www.news.ro/social/guvernul-a-aprobat-programul-pentru-scoli-in-anul-scolar-2018-2019-cu-un-buget-de-572-milioane-lei-prin-care-elevii-primesc-gratuit-fructe-legume-si-lapte-1922403212322018071818236966>

Hotărârea nr. 640/2017 pentru aprobarea Programului pentru școli al României în perioada 2017-2023 și pentru stabilirea bugetului pentru implementarea acestuia în anul școlar 2017-2018.

### OVERALL/ SPECIFIC OBJECTIVES

For “Milk and Fruit Scheme for Schools” the objective of the scheme is to and encourage healthy eating habits in children at a young age, to stabilize local milk, fruit and vegetable markets, to encourage consumption of locally produced fruit and vegetable produce and milk, to foster production and consumption of local organic produce and products.

The bread roll and milk programme has been operating since 2002, whereas the fruit and vegetable programme since 2010. Since 2017 the two programmes have been joined-up.

The scheme is jointly funded by EU (30%) Euro and the national funds (70%).

### LINK TO AGRO-ECOLOGY

The scheme promotes healthy diets among children through the provision of free milk, fruit and vegetables in pre-schools and schools. The scheme promotes locally and organic products.

### TOOLS USED TO ACHIEVE OBJECTIVES

In 2018/2019 the scheme will be addressed to an estimated number of 2,184,462 children ( pre-schools and school children from primary and secondary schools) and provide 3 days/ week milk and 2 days/week vegetables and fruits.

In 2016/2017 over 12.2 million children from 79,000 schools participated in the “Milk and Fruit Scheme for Schools”.

The weekly distribution will consist in two portions of fruit and / or vegetables, two portions of milk, one portion of dairy products and five portions of bakery products.

According to the Health Ministry's recommendations, for a supply of food and fibre, minerals or vitamins, the bakery products (horn, stick, simple pretzels or dry biscuits) should be prepared from whole flour without added sugar, sweeteners or other food additives, with the possibility of adding mixtures of seeds (sunflower, pumpkin, etc).

In addition to fruit, vegetables and milk/dairy products, Romanian children will receive, starting next year, a honey per month, but this program will be financed entirely by the Romanian state.

### DRIVERS

#### ECONOMIC

Desire to support the local milk and fresh fruit and vegetable producers, processors and market.

Promotion of local organic production and products.



## SOCIAL

Desire to promote healthier diets amongst children and their families including avoidance of obesity.

Desire to provide children from disadvantaged families with healthy produce and milk at school.

## LEGISLATIVE

EU support for RDP.

National funds.

## ENVIRONMENTAL

Desire for healthy diet and food produced in an environmentally friendly manner.

## EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

In 2016/2017 over 12.2 million children from 79,000 schools participated in the “Milk and Fruit Scheme for Schools”.

## STRENGTHS/ WEAKNESSES

### STRENGTHS

Milk and Fruit Scheme for Schools is promoting healthy food. This program includes the distribution of fruit, vegetables and milk products as well as educational programs to teach students about the importance of healthy eating and the origin of food.

Products are chosen on the basis of health and environmental, seasonal, variety and availability criteria. According to EU, Member States can encourage local or regional procurement, organic products, short supply chains, environmental benefits and quality farming systems.

### WEAKNESSES

- Program is implemented by County Councils.
- The disadvantage of small producers and local products by choosing at public procurement the "lowest price" criteria, according with National Public Procurement legislation. Without a "positive discrimination" of local producers, classic public procurement procedures can not lead to the achievement of the agricultural and public health policy objective of bringing to consumers fresh, seasonal and local products.

## REFERENCES

COMMISSION DELEGATED REGULATION (EU) 2017/40 of 3 November 2016 supplementing Regulation (EU) No 1308/2013 of the European Parliament and of the Council with regard to Union aid for the supply of fruit and vegetables, bananas and milk in educational establishments and amending Commission Delegated Regulation (EU) No 907/2014

[http://www.madr.ro/docs/agricultura/program-scoli-2018/OG\\_13\\_2017-modificata.pdf](http://www.madr.ro/docs/agricultura/program-scoli-2018/OG_13_2017-modificata.pdf)

<http://www.madr.ro/docs/minister/programul-pentru-scoli-consultativ.pdf>

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## 51. Payment for protection of the three priority bird species (Romania)

### CATEGORY

Policy

### GEOGRAPHIC SCOPE

National

### CLUSTER

2. Agri-environmental practices

A pilot measure for protection of the three priority bird species (Crex crex, Lanius minor and Falco vespertinus) under Agri-Environmental and Climate Scheme

### LEGISLATIVE REFERENCE/ NAME OF OWNER

- Government Ordinance no.3/2015 for the approval of the payment schemes in agriculture in the period 2015-2020.
- Government Ordinance no. 226/2015 General framework for the implementation of the measures of the national rural development program co-financed by the European Agricultural Fund for Rural Development and the national budget, as subsequently amended and supplemented.
- MADR Order no. 619/2015 for the approval of the eligibility criteria, the specific conditions and the way of implementation of the payment schemes provided for in art. (2) and (3) of Government Emergency Ordinance no. 3/2015.

### OVERALL/ SPECIFIC OBJECTIVES

- To conserve three bird species (Crex crex, Lanius Minor and Falco vespertinus) and also contributing to Birds Directive target by including in the eligible areas the most representative SPAs for priority species.
- Conserve the permanent grasslands (meadow) for those three species.

### LINK TO AGRO-ECOLOGY

Agri-environment and climate payments are a key element for integrating environmental issues into the Common Agricultural Policy. In Romania, this measure aims at encouraging farmers (farm land users) to adopt on a voluntary basis agricultural practices that ensure the maintenance of the environmental value of rural areas, also maintain of specific habitats for priority species, sustainable use of natural resources and preservation of traditional landscapes.

### TOOLS USED TO ACHIEVE OBJECTIVES

Package 3 - Important meadows for birds ((Crex crex, Lanius Minor and Falco vespertinus)

Sub-package 3.1 Crex crex:

- mowing can only take place after July 31 (Mowing will be done from the inside of the plot to the outside of it);
- Grazing will be carried out with a maximum of 0.7 UVM per hectare;
- Works with mechanized machinery are not permitted, except for those with animal forces, or work can be done with low - capacity machinery;





- It's forbidden to use heavy equipment.

Sub-package 3.2 - *Lanius minor* and *Falco vespertinus*:

- mowing must be carried out at the latest by 1st of July;
- Grazing will be carried out with a maximum of 1 UVM per hectare;
- Works with mechanized machinery are not permitted, except for those with animal forces , or work can be done with low - capacity machinery;
- It's forbidden to use heavy equipment.

For both sub-package:

- The use of chemical fertilizers and pesticides is prohibited;
- Traditional use of manure is allowed up to a maximum of 40 kg N s.a./ha (1 UVM / ha);

### DRIVERS

#### ECONOMIC

Package 3 - Important meadows for birds.

#### Sub-package 3.1 *Crex crex*:

3.1.1 manual works 310 € / ha / year.

3.1.2 low - capacity machinery 231 € / ha / year.

#### Sub-package 3.2 - *Lanius minor* and *Falco vespertinus*:

3.2.1 manual works 159 € / ha / year.

3.2.2 low - capacity machinery 80 € / ha / year.

#### SOCIAL

These meadows have often been traditionally managed over generations, and are an important part of local cultural heritage. They support many plant and animal species and are important for source of fodder for animals, nectar for honey bees, medicinal and other useful plants and local incomes from nature tourism.

#### LEGISLATIVE

EU RDP support.

#### ENVIRONMENTAL

The package covered an eligible area of approx. 260,000 ha of meadows from areas identified as Important Bird Areas (IBAs). The eligible area covered 13 designated IBAs (Important Bird Areas) where populations of the three priority species were well represented. At the same time, the eligible area will contribute to the achievement of the conservation objectives set for priority species and important habitats located in 28,02% of the total area of SCIs designated in Romania and approx. 32.95% of Natura 2000 sites designated in Romania.

### EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

The agri-environment and climate measure started in 2007-2013 programming and continue during the 2014-2020 period in order to protect the environment and the sustainable development of rural areas, provided by agri-environment payments.



Extensive management of important meadows for birds was provided on an area of approx. 10.400 ha/year for *Crex crex* and approx. 28.000 ha/year for *Lanius minor* and *Falco Vespertinus*) with a number of beneficiaries per year of approx. 807 farmers, respectively approx. 512.

#### STRENGTHS/ WEAKNESSES

##### STRENGTHS

The scheme rewards responsible management and protects wild species.

##### WEAKNESSES

Intensification of agriculture in selected areas and a possible conversion of High Nature Value land or important grasslands for birds or butterflies in arable land.

#### REFERENCES

[http://www.madr.ro/docs/dezvoltare-rurala/agro-mediu/6.\\_Ghid\\_MMC\\_C.2017\\_v.3.pdf](http://www.madr.ro/docs/dezvoltare-rurala/agro-mediu/6._Ghid_MMC_C.2017_v.3.pdf)

<http://www.apia.org.ro/ro/masura-10-agro-mediu-si-clima>

## 52. Urban Beekeeping supporting biodiversity and food self-sufficiency in Ljubljana (Slovenia)

#### CATEGORY

Mixed (policy+market)

#### GEOGRAPHIC SCOPE

Local

#### CLUSTER

6. Alternative food chains

Commodity production supporting ecosystem services provision; protected geographical indication products; short supply chain; urban organic agriculture.

#### LEGISLATIVE REFERENCE/ NAME OF OWNER

The Bee Path

<https://www.ljubljana.si/en/ljubljana-for-you/environmental-protection/the-bee-path/>

City of Ljubljana Environmental Action Programme 2014-2020 <https://www.ljubljana.si/en/ljubljana-for-you/environmental-protection/>

#### OVERALL/ SPECIFIC OBJECTIVES

Ljubljana received the European Green Capital Award in 2016. The Vision 2025 for Ljubljana is to be a sustainable city - a city living in harmony with its natural environment.

The Environmental Action Programme 2014–2020 for the City of Ljubljana includes the following objectives:

- Protection of the natural environment in the City of Ljubljana by conserving and improving the state of biodiversity;



- Urban gardening and local self-sufficiency by increasing the amount of land suitable for agricultural production and improving its quality; developing an efficient urban gardening network; encouraging and promoting the consumption of organic food.
- To preserve urban biodiversity, to increase pollination ecosystem services and support urban food self-sufficiency the City of Ljubljana by promoting urban beekeeping through the initiative The Bee Path.
- Presently, there are 4500 beehives in the City of Ljubljana. 3% of all Slovenian beekeepers are active in the area of the City of Ljubljana. The beekeeping tradition in Ljubljana has a long history dating back many centuries. Honey produced in the area of the City of Ljubljana is of very high quality. Beekeepers are organised into four beekeeping societies (Barje, Ljubljana Moste-Polje, Tacen and Ljubljana Center).

#### LINK TO AGRO-ECOLOGY

Urban beekeeping promotes biodiversity, provides multiple ecosystem services and resilience, and multiple benefits (environmental, economic, social).

#### TOOLS USED TO ACHIEVE OBJECTIVES

The Bee Path uses the following approaches to promote urban beekeeping:

- education of beekeepers, providing support in developing activities, co-financing of the operation of beekeeping societies,
- development of beekeeping in the urban centre (safety, awareness-raising and education of citizens about beekeeping rules in urban space),
- new tourist products presenting natural and cultural heritage related to beekeeping in the city,
- development of new urban apiaries and bee yards,
- development of pedagogical programmes (University Botanic Gardens Ljubljana, Biotechnical Education Centre Ljubljana, Eneja Institute, Urban Beekeeper Society, Plecnik House Apiary),
- planting of perennials by the city in public gardens and promotion of the planting of perennials with honey plants by residents in flower boxes on windowsills and balconies,
- Ljubljana honey (forest, chestnut, flower honet) is a city protocol gift and it carries the label *Slovenian honey* with protected geographical indication,
- every year in May, Honey Day is organized when beekeepers showcase their production to residents including many varieties of honey, bee products from pollen, honey wine and honey champagne,
- the Faculty of Architecture at the University of Ljubljana design beehives that are adapted to the specificity of urban spaces.

#### DRIVERS

##### POLITICAL/ LEADERSHIP

Ljubljana prides itself as being a green, inclusive, sustainable city that respects its natural and cultural heritage.

##### ECONOMIC

Direct and indirect benefits of beekeeping to the economy of Ljubljana which has defined organic food production and food sufficiency as a goal.



## SOCIAL

The beekeeping tradition in Ljubljana has a long history dating back many centuries.

## LEGISLATIVE

Development of municipal regulations supporting urban beekeeping.

## ENVIRONMENTAL

Ljubljana has defined environmental sustainability as a goal. Residents have a long tradition of connecting with nature,

## EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

The number of beekeepers and beehives is increasing. The economic value of beekeeping products and services increasing. Local short supply chains are increasing. Healthy eating habits are being promoted in schools. Apitourism is growing in popularity. The value of pollination services are being recognized by other agricultural sectors.

## STRENGTHS/ WEAKNESSES

### STRENGTHS

Good support for beekeeping in society in general.

Strong tradition of beekeeping in Slovenia and Ljubljana.

Strong cross-sectoral cooperation by municipal institutions, beekeepers and civil society stakeholders.

Transferability of urban beekeeping good practice by Ljubljana to other towns and cities in Europe.

## REFERENCES

City of Ljubljana Environmental Action Programme 2014-2020 <https://www.ljubljana.si/en/ljubljana-for-you/environmental-protection/>

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The Bee Path

<https://www.ljubljana.si/en/ljubljana-for-you/environmental-protection/the-bee-path/>

## 53. Development of agro-ecology in the municipality of Orduña/Urduña (Spain)

### CATEGORY

Policy

### GEOGRAPHIC SCOPE

Local

### CLUSTER

6. Alternative food chains



Local strategy for agro-ecology

LEGISLATIVE REFERENCE/ NAME OF OWNER

The City Council of Orduña/Urduña (Basque Country, Spain). The initiative is carried out mainly in the municipality of Orduña/Urduña (Basque Country, Spain), and it also covers a number of surrounding municipalities. It is located in the province of Biscay, in the region of the Basque Country (Spain).

OVERALL/ SPECIFIC OBJECTIVES

The main objective is to develop a local food system, based on food sovereignty and agro-ecology. Also, to invigorate the primary sector, promoting agriculture and livestock linked to land and to ecology in the municipality of Orduña/Urduña and its surroundings.

Specific objectives:

- Improving the profitability of farms by reducing production costs and supporting the commercialization of local producers.
- Promoting agrarian practices linked to the land.
- Offering the necessary support and technical assistance for the conversion of farms, especially for young people who settle in agriculture.
- Creating local references through participatory experimentation for the selection of a set of local indicators of farm sustainability.
- Bringing agriculture closer to the school environment to educate and raise awareness in sustainable production systems.
- Bringing agriculture closer to the urban environment.
- Integrating agriculture in projects and actions developed from the tourism area.
- Encouraging relations between producers, small businesses and the hotel industry.
- Introducing local products in the collective consumption.
- Disseminating activities carried out in the field of agriculture, to boost the exchange between producers and consumers.

LINK TO AGRO-ECOLOGY

Integrated plan that encourages organic farming and the production, processing and supply of organic products to the market, as well as the stimulation of consumption of organic products by consumers and groups. The initiative also favours citizen participation, creating spaces for collective exchange and learning.

TOOLS USED TO ACHIEVE OBJECTIVES

- Development of the local food system, and creation of the local food council and its coordination group.
- Regulations and ordinances in the use of rural properties with a vision of economic promotion, opportunities for young people, and organic production.
- Counselling and training service, and activities in the field of promotion, marketing and consumer groups.
- Awareness of food sovereignty and biodiversity, and raising awareness to the school community.



- Promotion of a monthly market of producers, traditional markets, special fairs, self-consumption vegetable gardens, agro-ecology related events and forums.
- Actions on farms, with emphasis in the self-sufficiency of farms and improvement of marketing.
- Creation of a municipal kitchen that serves the school and the residence for the elderly.
- Research and identification of local fruit genetic material.

#### DRIVERS

The initiative has been driven by the City Council of Orduña/Urduña (Basque Country, Spain), together with public companies of the area related to the employment and economic promotion.

#### ECONOMIC

The promotion of the consumption of local food and its commercialization in different short channels (e.g. traditional markets, points of local sale), show the economic enhancement that the initiative has brought. Farmers of the area have been able to maintain, transform and improve their farms.

#### SOCIAL

The initiative is very transversal since it involves actors at a municipal level, farmers, local traders, workers (e.g. teachers, cooks), consumers and citizens. Citizen participation in all the processes of the local food development project in Orduña/Urduña has been a key element and one of the cornerstones of the project.

#### LEGISLATIVE

recently the Regulatory Ordinance for the use of heritage assets of rustic nature has been renewed. People from the farming sector, technicians and political leaders of the municipality have participated in this process. The main criteria that govern the new ordinance are economic promotion, organic production, and the opportunity for new facilities.

#### ENVIRONMENTAL

The transformation of 17 farms of the area to organic production produces environmental benefits for water and soil, animal welfare, and for the ecosystems as a whole.

#### EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

- Transformation of 17 farms on the area to organic production.
- 78 agro-ecology forums.
- 82 traditional markets and space for local product sales.
- Constitution of the association of artisan producers and processors of Orduña/Urduña “Urdunako zaporeak”.
- Participation in local product promotion events.
- Green public purchase.
- Creation and functioning of municipal kitchen that serves the school and residence for the elderly.
- Creation of a fruit garden of reference.
- Renewal of ordinances for the use of public land, with the introduction of criteria for economic promotion, organic production and new facilities.

- Municipal declaration in favor of food sovereignty and biodiversity.
- Constitution of a local food council and dynamic group.
- Participatory research group.
- Start of Life Project Regen Farming, to demonstrate, under different agroclimatic and livestock systems conditions, the viability of an innovative pasture management system based on the regenerative agriculture principles and its environmental effectiveness.
- Creation of the communication tool “Going back to the future”.

#### STRENGTHS/ WEAKNESSES

##### STRENGTHS

- Great local acceptance of the initiative, which is already consolidated and rooted in the territory.
- Promotion of agro-ecology in an integral way, from the production of food, through citizen participation, the involvement of the population, and local public and private consumption.
- Model that can be extrapolated to other municipalities of the area that share similar characteristics to Orduña/Urduña.

##### WEAKNESSES

- Political initiative, which could change depending on the interests of the ruling party, based on the electoral results that occur every 4 years. It should be noted that in Orduña/Urduña the initiative has been supported by different ruling parties over the years.

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[http://www.premioconama.org/premios11/premios/proyectos\\_popup.php?id=56](http://www.premioconama.org/premios11/premios/proyectos_popup.php?id=56)

<http://regenfarming.eu/wp-content/uploads/2015/07/Agricultura-Ecologica-3-14.pdf>

<http://regenfarming.eu/>

<http://www.urduna.com/esES/Noticias/Paginas/Lacocinamunicipalarrancahoysuandadura.aspx>

<http://regresandoalfuturo.org/>

## 54. Improvement of farming model for the production of high-quality vegetables and fruits (Spain)

#### CATEGORY

Market

#### GEOGRAPHIC SCOPE

National

#### CLUSTER



### 3. Sustainable food standards

Corporate Social Responsibility and quality certification

#### LEGISLATIVE REFERENCE/ NAME OF OWNER

Florette Group is a brand of French origin that produces and distributes its products on an international level in different countries of Europe. In Spain the group works under the name Florette Ibérica, where it has become the leading company in the manufacture and marketing of fresh vegetables, selected, chopped, washed and ready for consumption. Florette Ibérica has 5 production centres in Spain and fields of crops distributed throughout the national territory. The brand entered the market in Spain in 2001 when Florette Group purchased the back then well-known national company Vega Mayor. Since then Florette has been expanding its infrastructure in Spain with the acquisition of different companies of the sector, and it has established itself as a leading company in the Spanish and Portuguese markets. At an international level, in recent years Florette Group has experienced a continuous growth, expanding in many countries across Europe.

#### OVERALL/ SPECIFIC OBJECTIVES

The main objective of Florette Ibérica in regards to environmental sustainability is developing its own environmental management system based on ISO 14001, and reaching the LEAF ("Linking environment and Farming") certification in all the crops coming from farms that work with the company.

#### LINK TO AGRO-ECOLOGY

Minimizing the environmental impact by promoting a more sustainable agriculture. In Spain, Florette Ibérica searches to satisfy the increasing consumers' demand of producing high quality products by reducing energy consumption and nutrient management policy; minimizing the use of inorganic fertilizers and pesticides; technical improvements in drip irrigation, sprinkler systems and irrigation programming; minimizing of waste generation and employee sensitivity campaigns.

#### TOOLS USED TO ACHIEVE OBJECTIVES

- Promotion of sustainable agriculture, with a reduction in energy consumption and nutrient management policy.
- Minimization of the use of inorganic fertilizers and inorganic pesticides, through a specific policy of crop protection.
- Promotion of biodiversity.
- Annual water management plans and policy, and minimization of water consumption through the installation of drip irrigation, sprinkler systems, irrigation programmers, and humidity sensors, among other techniques.
- Thermal blankets and protective plastics.
- Actions and objectives to reduce the consumption of energy and natural resources.
- Minimization of the generation of waste, ensuring its proper segregation and management.
- Sensitivity campaigns to the employees.
- Collaboration of regional and national reference centres (such as the Cluster Food +i Association, which brings together several agri-food companies from the Ebro Valley, the National Center for Food Technology and Safety or the Center for Applied Edaphology and Biology of Segura).





- Multidisciplinary team including farmers, technicians, culinary advisors, product development managers, marketing and operations managers who work closely with leading centres in innovation and food security projects.

## DRIVERS

### ECONOMIC

Improvement of competitiveness and economic viability of the company through the implementation of initiatives that protect the environment, since such initiatives have a positive impact on the company's image in relation to current consumers demands.

### SOCIAL

Satisfying growing consumer demand for the use of environmental approaches in the production of vegetables and fruits in the entire production chain.

### TECHNOLOGY

Improving the efficiency through research and technological innovation. The use of the latest technology such as climate control systems (temperature, wind and rain) or control systems of cultivation parameters (such as humidity sensors in the ground), as well as the use of modern machinery.

### ENVIRONMENTAL

Reducing the direct impact of agricultural production on the environment (air, water, soil and biodiversity), through its own environmental management system.

## EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

- Economic growth of Florette Ibérica in the last years that reflects the company's adaptation to the consumers' demands.
- To allocate, in specific years, 70% of planned investments to new projects related to agricultural production, new farming systems, new crop varieties and new products as well as innovative production and packaging processes.
- Awards for innovation and sustainability.
- Recent implementation of an innovative internal management system mainly focused on better control of the management of the farm.
- Contracts with farmers under organic production.
- Recognition by regional certification bodies as Florette Ibérica being an operator of organic products.

## STRENGTHS/ WEAKNESSES

### STRENGTHS

- The implementation of measures that promote the improvement of sustainability in a big multinational company like Florette has a great and positive impact on the environment due to its large volume of production.
- The company is able to adapt to the current demands of the market, offering products that come from a more sustainable production system.

### WEAKNESSES



- The transition pathway to agro-ecology is based on increasing resource use efficiency and substitution of inputs, rather than aiming to enhance ecosystem services with a redesign of the farming system.
- Risk of using the area of organic production as an advertising claim, despite being a very small proportion in relation to the total production of the company.

#### REFERENCES

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<https://www.eleconomista.es/economia/noticias/8902072/01/18/Economia-Florette-invertira-10-millones-en-2018-de-los-cuales-el-70-ira-destinado-a-impulsar-la-innovacion.html>

## 55. Network of Cities for Agro-ecology (Spain)

#### CATEGORY

Policy

#### GEOGRAPHIC SCOPE

National

#### CLUSTER

6. Alternative food chains

Network for the promotion of agro-ecology in urban spheres

#### LEGISLATIVE REFERENCE/ NAME OF OWNER

The network is an association formed by local entities from Spain. Currently 20 cities participate: large cities such as Madrid, Barcelona, Valencia and Zaragoza, various regional capitals (Pamplona, Palma de Mallorca, Murcia), and other smaller cities. The Network of Cities for Agro-ecology is currently formed by the different city councils of the municipalities that integrate it. The project was initially promoted in 2017 by the Zaragoza City Council, allied with the Entretantos Foundation and with the support of four municipal governments. Within a year, other interested entities have gradually joined the initiative. Since the network was created, it has also had the support and the financial contribution of Daniel and Nina Carasso Foundation.

#### OVERALL/ SPECIFIC OBJECTIVES

The main objective is to support and facilitate the exchange of knowledge and initiatives between a broad set of interconnected cities, all of which are committed to the recovery and building of sustainable, inclusive, resilient, safe and diversified food-systems in order to ensure healthy food for the population, and boost local employment in line with the principles of agro-ecology and food sovereignty.

Specific objectives:

- Exchanging and supporting the work of cities that choose to promote and implement sustainable and territorialized systems of production, marketing and local consumption of food.



- Facilitating better access to sustainable, local, fair and healthy food for the population, by articulating in a participatory framework local stakeholders (social and economic) and the administration.
- Redefining the food system perspective taking into account fields and cities, shortening distances between the production and consumption processes, and organizing local networks for the distribution of food.
- Promoting viable entrepreneurship models around organic farming.
- Strengthening the political commitment and the development of a legal framework in order to improve the competencies of the network members' in terms of food systems.
- Providing a meeting place between technical staff, municipal managers, social movements and producers.
- Being a reference space for the promotion of innovative local policies for local sustainability.
- Encouraging the implementation of agri-food policies that contribute to satisfy the demand for organic, healthy, fair and sustainable food at a local level.
- Increasing information and awareness about the importance of a sustainable model of food production and distribution, based on agro-ecological practices for the municipalities and the territory as a whole.

#### LINK TO AGRO-ECOLOGY

Conceptual LINK TO AGRO-ECOLOGY, by: sharing experiences of sustainable urban food policies on agro-ecology; going a step further than organic farming and approaching a model of food justice; and fostering participatory governance processes, that give a direction to these policies and to local civil and economic organizations.

#### TOOLS USED TO ACHIEVE OBJECTIVES

- Activities related to political incidence, with the support of members of this and other networks, towards higher territorial scales (including the European scale), in order to transmit the need to develop food policies by adapting the current legal and administrative framework.
- At least one annual meeting where all the network members participate.
- Monthly meetings of the Driving Group, which is composed by representatives of 6 city councils that belong to the network.
- Areas for exchange of experiences, debate and co-construction of new knowledge and innovative proposals for action, with topics such as:
- Food governance and participatory processes.
- Advice and support for productive agro ecological initiatives and land access to farmers.
- Local distribution networks and promotion of short marketing circuits.
- Face to face and online seminars in order to know innovative initiatives from both national and international scopes and to explore new lines of work.
- Working groups, which are created by the request of any member of the network who wants to develop a specific task. These working groups can become in working commissions if prolonged over time.
- Meetings to provide strategic visions and to make progress in other issues related to the objectives of the network.



- Connections with other networks at a national and international level to allow the exchange of experiences.

### DRIVERS

#### POLITICAL/LEADERSHIP

Becoming a member of the network is promoted by the local government of each municipality. City councils are the members of the network, in collaboration with other social actors of the territory, all of them showing a firm commitment to local food policies with an agro-ecological approach.

#### SOCIAL

The network has a strong support from social movements, as well as technical and research staff, and they participate in several of the activities or process organized. The network also receives financial support from two private foundations.

#### ENVIRONMENTAL

Promotion of organic farming and sustainable and territorialized systems of food production, marketing and local consumption, all of which supports environmental sustainability.

### EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

- Since it was created in 2017, 20 cities have become members of the network. The participating cities represent more than 20% of the population of Spain.
- Currently a number of cities are in process of incorporation to the network.
- 2 general assemblies, the last one with special attention to the formalization and structuring of the network.
- Training seminars and workshops in different member cities related to agro-ecology.
- Creation of technical working groups, joint communication actions and preparation of a preliminary report on state of local food policies in Spain.
- Technical work and learning and exchange experiences carried out within the thematic groups.
- Preparation of an Action Plan for 2018-2019 that focuses on external communication and raising awareness among the population and political incidence.
- Establishment of connections with other national and international networks and exchange of experiences.

### STRENGTHS/ WEAKNESSES

#### STRENGTHS

- Public commitment with the agro-ecological development and promotion of local food systems.
- Networking from different urban realities that can be very positive to share knowledge and promote political initiatives.
- The network fills up the emptiness that Spanish entities had in matters like:
- Working dynamics among entities that work on sustainable food policies development.
- Lack of budget and specialized experts on issues related to local food policies in the different administrations.
- Mechanisms of relationship between local governments and the civil society.

#### WEAKNESSES



- Recent initiative that needs to be consolidated.
- Political initiative, which means that municipalities could join or leave the network depending on the interests of the ruling party, based on the electoral results that occur every 4 years.

#### REFERENCES

<http://www.ciudadesagro-ecologicas.eu/>

<https://www.zaragoza.es/>

<https://ajuntament.barcelona.cat/es/>

[https://www.ruaf.org/sites/default/files/RUAF-UAM%2033\\_WEB\\_55-57.pdf](https://www.ruaf.org/sites/default/files/RUAF-UAM%2033_WEB_55-57.pdf)

## 56. Promoting sustainable management of public catering and commercial food services (Spain)

#### CATEGORY

Market

#### GEOGRAPHIC SCOPE

National

#### CLUSTER

6. Alternative food chains

Promotion and counselling of the sustainable management of public and commercial food services from the environmental, economic and social point of view.

#### LEGISLATIVE REFERENCE/ NAME OF OWNER

The company Te lo sirvo verde (I serve it green to you, in English) Restauración sostenible is a consultancy dedicated to advise any person or company at national level to manage a business in a sustainable manner, covering the collective catering (school canteens, hospitals, nursing homes, hotels, and more) and commercial restaurants in Spain. The private company was founded in 2015, it is the only consultancy with a portal dedicated to sustainable management of public catering and commercial food services in Spain.

#### OVERALL/ SPECIFIC OBJECTIVES

The main objective is to advise public catering and commercial food services to generate changes that promote a sustainable management, reducing their environmental impact, improving their social behaviour, and at the same time reducing their operating costs, demonstrating that sustainable management does not need to impact negatively on economic viability.

Specific objectives:

- Multiplying the positive impact of responsible and sustainable consumption by implementing it in public catering and commercial food services.
- Introducing sustainability criteria in restaurants, without reducing the economic benefit, or even increasing it.



- Promoting sustainable purchasing through the acquisition of local, organic and seasonal products that guarantee animal welfare and sustainable fishing, and that meet the criteria of fair trade.
- Implementing waste prevention and management strategies, water and energy saving and the use of renewable energies.
- Generating a social impact by promoting sustainable management of public catering and commercial food services, fair treatment to both producers and workers and by developing projects that also involve a social dimension.
- Developing projects to fight against food waste.
- Training workers in the restoration sector to internalize the principles of sustainability applied to their work.

#### LINK TO AGRO-ECOLOGY

The link with agro-ecology goes beyond the promotion of organic food, since it covers all areas of sustainability. That is to say, advice is given in energy saving, water saving, management and prevention of waste and food waste. Importance is given to the dissemination and communication of the achievements of the company's clients in these areas. The social dimension is also included in all the projects which includes the promotion of fair trade and the training of workers in sustainability issues.

#### TOOLS USED TO ACHIEVE OBJECTIVES

- Complete offer of services and information to help clients make a transition towards a sustainable management.
- Online publication of free guides with ideas about how to make a restaurant more sustainable or how to reduce food waste.
- Communication activities on the achievements of restaurants on the road towards sustainable management and promotion of the consumption of agro-ecological products.
- Website to promote different aspects related to agro-ecology, blog with information on sustainable food, food waste, energy efficiency, water management and waste management.

#### DRIVERS

##### ECONOMIC

The services of Te lo sirvo verde aim to lead restoration businesses towards sustainability, maintaining or even improving their economic results, since sustainability is currently a market demand.

##### SOCIAL

It aims to have a social impact through the promotion of sustainable management that implies fair treatment for both workers in the sector and producers, through the consumption of local, organic, seasonal and fair trade products.

##### TECHNOLOGY

It aims to promote technological improvements through the implementation of energy saving strategies, consumption of renewable energy and management and saving of water and waste.

##### ENVIRONMENTAL



It multiplies the positive impact that responsible and sustainable consumption habits have on the environment. It promotes the consumption of food produced in a sustainable way, the reduction of food waste, waste generation, and water consumption, and the energy saving. All the actions contribute to minimize the negative impact that businesses have on the environment.

#### EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

- Since its creation in 2015, it has worked with numerous clients, some of which are relevant, such as Inditex, Danone or Greenpeace, and for different food related associations as well as schools, universities and other centres where collective catering is being carried out.
- Collaboration with the Basque Culinary Center, a pioneer academic institution worldwide, which goal is research, innovation and promotion of gastronomy and food.
- The company is part of the collectives Hola Eco<sup>1</sup> and Barcelona sostenible<sup>2</sup>.
- Carrying out training and awareness programs for working teams in the catering sector.
- Design of customized educational programs for restaurants.
- Very active initiative in social networks, with very positive reviews given by customers and partners.

#### STRENGTHS/ WEAKNESSES

##### STRENGTHS

- It covers all aspects of sustainability, without downplaying economic performance.
- It occupies an existing void in the market, since it is the only consulting company in Spain dedicated to advising on sustainable management of public catering and commercial food services.
- It brings agro-ecological consumption to a wide variety of citizens, particularly interesting being citizens in large cities, because they are in principle the group of people most unlinked to producers, and numerous populations make their consume practices have a big impact.
- There is a niche market where customers are increasingly valuing more sustainable management practices, which may favour this private initiative.
- Multidisciplinary team, indispensable to deal with the magnitude of the challenges it faces.

##### WEAKNESSES

- Relatively young initiative, running since 2015.

#### REFERENCES

<http://telosirverde.com/>

<https://www.linkedin.com/in/isabelcoderch/>

<https://www.facebook.com/telosirverde>

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<sup>1</sup> Collective that brings together bloggers from Spain and the Americas who work in different areas of environmental sustainability.

<sup>2</sup> Association formed by all types of sustainable initiatives of Barcelona (shops, services, tourism, companies, cultural initiatives, information related and environmental education).

## 57. Promotion and transmission of knowledge on agro-ecology (SPAIN)

### CATEGORY

Market

### GEOGRAPHIC SCOPE

National

### CLUSTER

8. Research and capacity-building

Promotion and transmission of knowledge on agro-ecology, the rural world and local development.

### LEGISLATIVE REFERENCE/ NAME OF OWNER

The Association of Rural University of Paulo Freire (URPF acronym in Spanish) has various centres and groups spread throughout Spain. This association was conceived by organizations related to social movements during the III Forum for a Living Rural World in 2001. Since 2006 it was formalized as an association. At the beginning its activity was very focused on the dissemination of agro-ecology and had a great acceptance by the general public, but today its work on this topic is residual.

### OVERALL/ SPECIFIC OBJECTIVES

The main objective of URPF was to promote rural development in agrarian terms through a pedagogical project inspired by the methodologies of Popular Education, the Farmers' Schools and Paulo Freire's legacy. Thus, URPF wanted to recover the farm culture and promote the balance between rural development and environment oriented from an agro-ecological approach.

Specific objectives at the peak of the association were:

- To deepen the historical identity as a source of teaching and learning taking the territory as an educational space.
- To develop academic research through relating popular and scientific knowledge.
- To keep rural villages alive through traditional farming activities fighting against the agroindustrial model.
- To raise awareness about the importance of conservation of the ecosystems linked to farming activities.
- To promote the rural culture.

### LINK TO AGRO-ECOLOGY

Theoretical approach and research activities on agro-ecology, and promotion of new knowledge about this concept based on the theoretical principles. These principles are the concepts and methods from Popular Education (Paulo Freire and Oscar Jara) and Participatory Research (Orlando Fals Norda).

### TOOLS USED TO ACHIEVE OBJECTIVES

- Interterritorial cooperation project between URPF and Local Action Groups thanks to Leader-Prader European funds.





- Different training modalities, such as courses, workshops, seminars, conferences and meetings.
- Work developed in different fields: research on farmer knowledge, sustainable rural economy, social revitalization, observatory of rural reality.
- Feminist working group, to relate agro-ecology to gender issues.
- Studies on territorial management, sustainable construction, management and maintenance of biodiversity, seeds and local varieties, ecological agriculture, agro-ecology in steppe farming systems and rural development.

### DRIVERS

#### SOCIAL

Initiative that came from the social and popular movements, training centres linked to the activism and personal and social commitment of different groups.

#### ENVIRONMENTAL

Practical training and workshops that promoted the sustainable development of rural areas, which had an impact on the environment.

### EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

- Magazine “Entre nosotros” (“Between us”).
- Theoretical courses on different areas of rural, local and agro-ecological development.
- Practical workshops about traditional rural knowledge: cooking, medicinal plants, seeds, ceramics and traditional games.
- Guidance and advice to implement the use of alternative energies and to encourage participation systems.
- Conferences open to all citizens.
- Promotion of retirement centres, women's associations and agricultural cooperatives.
- Campaigns on volunteer awareness.
- Actions on defence of territorial identity.

### STRENGTHS/ WEAKNESSES

#### STRENGTHS

- Theoretical contributions to agro-ecology and knowledge exchange.
- Interterritorial association, which was nourished by the experiences and knowledge of people from different places, with practical and real experience of each context.

#### WEAKNESSES

- Very strong movement until 2009, but currently not very active.

### REFERENCES

<http://www.universidadruralpf.org/>

<http://almanatura.com/2018/03/universidad-rural-paulo-freire/>



## 58. Sustainable grazing-based livestock production (Spain)

### CATEGORY

Market

### GEOGRAPHIC SCOPE

National

### CLUSTER

7. Territorial-based farming practices

National network for the sustainable grazing-based livestock production.

### LEGISLATIVE REFERENCE/ NAME OF OWNER

The private company: De Yerba, La Carne de Pasto. Producers and end users spread throughout the national territory.

### OVERALL/ SPECIFIC OBJECTIVES

The main objective is to develop a livestock activity that ensures grazing as a basis for livestock feeding, promotes animal welfare, provides nutritious food, and benefits the environment, all of this while at the same time trying to revitalize the rural world and the local economy.

### LINK TO AGRO-ECOLOGY

All the producers must comply with an internal protocol which ensures certain agro-ecological practices, including:

- Pasture grass as the basis of livestock feed: all animals have continuous access to a good state grassland, rotating every few days to new grass plots.
- Sustainable management of plots: imitating the natural behavior of animals so that the impact on the land is positive, instead of causing an impoverishment of the pastures by overgrazing on specific herbaceous species.
- Minimization of tillage practices: largely based on decreasing the amount of cereals (typically grown through tillage) consumed by livestock.
- Ruminant species (cows, sheep and goats) 100% grass fed: due to their physiognomy, these species benefit enormously from a diet based on grass, fodder, and natural milk.
- Low impact inputs: the non-use of nitrogen fertilizers, pesticides, fungicides or herbicides in pastures or crops. The fertilization of the lands is carried out with green manures, and minerals to restore the balance of the damaged lands.
- Some producers work under certified organic production practices.
- No use of genetically modified organisms in animals' feeding.

All the producers follow the policy of open doors. The producers commit themselves to answer the questions that the consumers have about their production methods, and they periodically open the doors of their farms to the general public. This also promotes direct contact with the farmer, giving more security to the consumer.



Revitalization of rural areas, by producing food in a dignified way, with quality of life, creating jobs and keeping villages alive. All of this helping to make food production a profitable, respected and desirable profession.

Favouring the local economy. The direct contact between producer and consumer and proximity purchase are essential to create a fair trade system, and allows increasing the decision margin of producers to set their own conditions and prices.

#### TOOLS USED TO ACHIEVE OBJECTIVES

- De Yerba internal protocol, which includes agro-ecological production practices that all producers commit to comply with.
- Transparency policy through the commitment of open doors to the consumer, so that clients knows exactly how the production is managed.
- Collaboration with interested restaurants and consumer groups.
- Diffusion and communication with the final consumer through its web page, with detailed information about the producers, restaurants and consumer groups they collaborate with, as well as a blog with varied information, including recipes and methods to cook meat of grazing origin.
- Putting resources at the disposal of those farmers who want to be part of the network, to learn how to make the transition to a grazing system.
- Putting resources at the disposal of those farmers who want to be trained in pasture breeding and the holistic and rational management of livestock.
- Collaboration with the Association of Producers of Livestock Raised in Pastures to consolidate the production of grass-based meat in Spain, and to develop productive protocols.
- Collaboration with other organizations, such as the Iberian network of Regenerative Agriculture, and Big Brother Bio Farming (BBBFarming).

#### DRIVERS

Favouring the local economy with a direct link between the producer and the consumer, and with the increase of the producers' decision margin to set their own conditions and prices.

#### SOCIAL

Intention to present an alternative to consumers who consider stopping eating food of animal origin (shocked by the low animal welfare conditions of most conventional meat offered in the market), by offering another way of raising animals that respects their own habits and behaviour of each species. De Yerba also contributes to the revitalization of the rural environment, creating a sustainable social activity. It also commercializes nutritious and healthy food, free of toxic substances.

#### ENVIRONMENTAL

An adequate livestock management that contributes to animal welfare, to the maintenance of pastures, to a greater carbon capture, to the regeneration of the soil's fertility, and to lower the risk of fires.

#### EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

- 14 producers included in the network and distributed throughout the national territory. The objective of the network is to have at least one producer in each Spanish region, to support local consumption.



- Diversification of animal species and the type of meat and products offered, with producers who have cows, sheep, goats, chickens, pigs, rabbits and ducks.
- Collaboration with other organizations, such as the Association of Producers of Livestock Raised in Pastures, the Iberian network of Regenerative Agriculture and BBBFarming.
- Working together with a restaurant and a group of consumers.
- Online agenda, with updated sales information and information on scheduled visits to the different farms.
- Web page operating for three years, with updated information about the producers, including contact data, production system, and professional and personal vision of each farmer.

#### STRENGTHS/ WEAKNESSES

##### STRENGTHS

- Agro-ecological approach at different levels, from the production to the marketing stage.
- The personal conviction of producers on their farm model.
- Transparency about the production practices, gives creates confidence to consumers.

##### WEAKNESSES

- Given the current geographic scope of producers, the final consumer does not have access to a diversified local offer, and would have to make up for the lack of supply by buying food in complementary places.

#### REFERENCES

<https://www.lacarnedepasto.com/>

## 59. Information campaign from Swedish NGO (Sweden)

#### CATEGORY

Market

#### GEOGRAPHIC SCOPE

National

#### CLUSTER

4. Organic food promotion and certification

Information campaign about organic food from the Swedish Society for Nature Conservation

#### LEGISLATIVE REFERENCE/ NAME OF OWNER

Swedish Society for Nature Conservation (SSNC), the largest environmental NGO in Sweden with around 226,000 members. The SSNC has the following priority areas: climate change, seas and fishing, forests, agriculture and environmental toxins, and they work both nationally and globally.

#### OVERALL/ SPECIFIC OBJECTIVES



The SSNC describes its aims as regards agriculture as follows (SSNC, 2018):

“Industrial farming is leading to pollution, land degradation and depletion of the habitats of many species. With an expanding global population and the threat of climate change, the need for sustainable farming methods is acute all over the world. The Swedish environmental targets – a rich cultivated landscape, no eutrophication, a stable climate and a toxic-free environment – require greater action than is being taken today if they are to be achieved.

We want:

- Cultivated landscapes with rich natural and historical attributes to be preserved and protected;
- Active farming with grazing animals to be carried out throughout all of Sweden;
- Production of food that is free from pollutants and of a high quality;
- The use of chemical pesticides to decrease;
- The proportion of organic farming to increase.”

For many years the SSNC has worked actively with promoting and campaigning organic agriculture in Sweden.

#### LINK TO AGRO-ECOLOGY

The goals listed above all have clear connections to agro-ecological principles of farming. A global version of the campaign was also initiated in collaboration with environmental NGOs in the global south, Global Green Action Week – please see <https://greenactionweek.org/>

#### TOOLS USED TO ACHIEVE OBJECTIVES

A range of initiatives are included in the campaign:

- Several marketing/information campaigns in press, on trains, in social media etc.;
- Development of educational material and initiation of seminars and workshops;
- Involvement in research and development projects on organic production;
- Strategic policy work on national and international level to promote organic farming;
- Education and training of local groups of the SSNC. The members will thereafter do local campaigning.

The SSNC has a national head office from which the work is initiated and coordinated but highly important are also local municipality based groups within the SSNC with volunteers that organise seminars and work with influencing local authorities and shops.





Figure 1. Example of information material. “Five important foods for which you should turn to organic”.

## DRIVERS

### POLITICAL

Concern for the formation of appropriate legal instruments and their implementation.

### SOCIAL

Concern for farmers/local communities in terms of fair pay and exposure to pesticides (and food safety).

### ENVIRONMENTAL

Concern for the quality of the environment and the impact of farming systems.

## EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

The campaigning work of the SSNC has been influential in raising the demand for organic foods from Swedish consumers during the last 10 years from only a few percent of total food sales to 9.3 percent in 2017 (Ekoweb, 2018). It has also influenced local authorities – many of these have established high goals to terms procurement of organic foods (40-100 percent) and national policy regarding agriculture.

## STRENGTHS/ WEAKNESSES

### STRENGTHS

- A “neutral” part campaigning for organic production creates trust.
- Highly professional campaigning targeted at the conscious consumers who seeks to “do the right thing”;

## REFERENCES

Ekoweb. 2018. <http://www.ekoweb.nu/attachments/67/37.pdf>

SSNC. 2018. <https://www.naturskyddsforeningen.se/in-english/about-us>

## 60. Action Plan for Organic Food and Farming (Sweden)

### CATEGORY

Policy

### GEOGRAPHIC SCOPE

National

### CLUSTER

1. National food and farming plans

National strategy for organic farming

### LEGISLATIVE REFERENCE/ NAME OF OWNER

Action Plan for Organic Foods.

Swedish Board of Agriculture (SBA, 2018)

The Swedish Government decided in 2018 to invest in a three-year (2017-2019) action plan for the increase of organic production in Sweden (The Swedish Government, 2018). The work is administered by the Swedish Board of Agriculture (SBA).

### OVERALL/ SPECIFIC OBJECTIVES

Further develop and enlarge the organic production in Sweden.

The specific targets are:

- That 30% of the Swedish agricultural land will consist of certified organic farmland by 2030;
- That 60% of public food consumption will consist of certified organic products by 2030.

### LINK TO AGRO-ECOLOGY

An integrated plan to encourage organic farming and the production, processing and supply of organic products to the market, as well as stimulation of consumption of organic grown products by consumers.

### TOOLS USED TO ACHIEVE OBJECTIVES

The action plan is administered by the SBA but the work has been distributed among many organisations, including farmer organisations, certification bodies, NGOs, private companies and academia.

The following initiatives will be sponsored with in total 2.6 million Euro (SBA, 2018):

- Campaign to raise awareness of organic food in the restaurant sector;
- Knowledge-enhancing education program for organic food for the public sector;
- Market information and benchmarking in the public sector;
- National guidelines for organic production;
- Market analyses of organic production from a farmer's perspective;



- Web portal for organic production and organic food;
- Information campaign on organic food;
- Market information on organic foods.

#### DRIVERS

##### POLITICAL

The government wants the public sector to lead the way to greater organic production.

##### ECONOMIC

Increasing demand for organic production in Sweden, EU, internationally.

##### SOCIAL

Rural development and job creation.

##### ENVIRONMENTAL

Concern for the quality of the environment and the impact of farming systems.

#### EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

Too early to evaluate outcomes of this initiative.

#### STRENGTHS/ WEAKNESSES

##### STRENGTHS

- An integrated policy for organic production and products.
- Supports demand for organic products through information campaigns.

#### REFERENCES

The Swedish Government. 2018. <https://www.regeringen.se/pressmeddelanden/2017/06/satsning-pa-ekologiska-livsmedel/>

SBA. 2018. <http://www.jordbruksverket.se/4.4e9a8c7a160cb216910c6a37.html#/pressreleases/nya-projekt-faar-26-miljoner-kronor-av-jordbruksverket-foer-att-hoeja-kunskapen-om-ekologiska-livsmedel-2741681>

## 61. The KRAV organisation for promotion of organic farming and products (Sweden)

#### CATEGORY

Market

#### GEOGRAPHIC SCOPE

National

#### CLUSTER

##### 4. Organic food promotion and certification

A multi-actor organisation, KRAV (Swedish word for “requirement”) aimed at developing rules for organic farming in Sweden and to promote organic products.





#### LEGISLATIVE REFERENCE/ NAME OF OWNER

KRAV is organised as an incorporated association with, at present, 27 members. They represent farmers, processors, retailers and also consumer, environmental and animal welfare interests that all work together to develop and promote organic farming in Sweden.

#### OVERALL/ SPECIFIC OBJECTIVES

KRAV has as its overarching goal that (KRAV, 2018):

*“All food production is economically, ecologically and socially sustainable and meets today's needs without jeopardizing the potential of future generations to meet their needs.”*

More specifically it has developed the brand KRAV, which is a label for organic products in Sweden based on the principle of organic farming. The KRAV label is very well known to consumers (more than the EU-organic label). KRAV does not perform the actual certification – that is handled by stand-alone organisations.



#### LINK TO AGRO-ECOLOGY

See above.

#### TOOLS USED TO ACHIEVE OBJECTIVES

The KRAV organisation works with the following strategies to promote organic production:

- Develops rules for KRAV-certified production.
- Spreads information about and markets KRAV-labeled food;
- Creates opinion and participates in the debate;
- Collaborates internationally with similar organizations;
- Educates KRAV-certified organizations and companies.

#### DRIVERS

##### POLITICAL

Concern for the formation of appropriate legal instruments and their implementation.

##### ECONOMIC

Maintain and increase profitability for the member companies and certified farmers.

##### SOCIAL

Concern for farmers/local communities in terms of fair pay and exposure to pesticides (and food safety).

##### ENVIRONMENTAL

Concern for the quality of the environment and the impact of farming systems.



### EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

The work of KRAV is deemed as a success factor behind the high market share of organic products in Sweden. Through its multi-actor approach and early market orientation aimed at getting organic products out in large scale, it managed to get organic products into ordinary retailers instead of being niche products sold in small volumes in specialised stores. It has also been successful in lobbying for investments in organic agriculture from the government. The KRAV label is very well known among Swedish consumers.

### STRENGTHS/ WEAKNESSES

#### STRENGTHS

- KRAV is unique as it includes both producers, food industry, retailers and NGOs that work together for a common goal.
- Stand-alone from the actual certification process.

### REFERENCES

KRAV, 2018. <http://www.krav.se/om-krav/organisationen-krav/vision-och-varfor/>

## 62. Sustainable Supply Chain for Food (Sweden)

### CATEGORY

Market

### GEOGRAPHIC SCOPE

National

### CLUSTER

4. Organic food promotion and certification

Cross-sector initiative for increasing sustainability in the Swedish food chain.

### LEGISLATIVE REFERENCE/ NAME OF OWNER

The initiative is coordinated by WWF Sweden and it has in total 15 members, including the three largest retailers in Sweden and major food companies like Arla and Orkla.

### OVERALL/ SPECIFIC OBJECTIVES

Quote from the webpage <https://hallbarlivsmedelskedja.se/>:

*“No single company in its own has all the solutions - the key to the future is increased cooperation in the value chain. It is a shared responsibility to ensure that food supply for a growing population can take place within the planetary boundaries.*

*Consensus on the key issues and concrete tools for developing a more sustainable food chain has been created by the initiative.*




*In the Sustainable Supply Chain for Food, we are currently working on developing a Roadmap for 2030, investigating how we will reduce food waste and define how each product category can become more sustainable.”*

### LINK TO AGRO-ECOLOGY



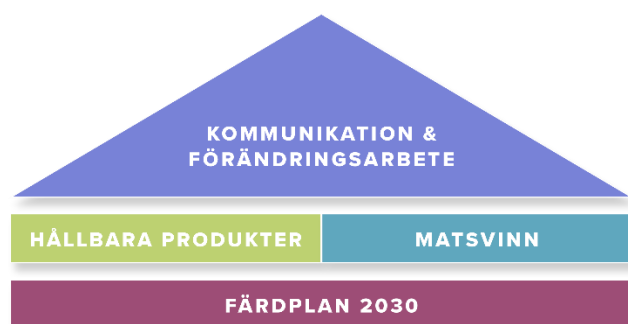
For a range of food groups, the project has defined classified different product practices/systems into three groups according to a traffic light system. The products in the green category are products that should be promoted by industry and retailers and the ones in the red category should be phased out. See example below for cereals. In many of the food groups, organic products are within the green group. Hence, if industry and retailers implement this – it could have real benefits for promoting organic foods.

### **Cereals Sustainability agenda**

PRIORITIES	MOTIVE	
 <b>Expanding the top</b> = increase the share	<p>KRAV* certified products</p> <p>EU organic products</p> <p>Climate certified products according to the "Sigill" quality system</p> <p>Other credible sustainability initiatives that:</p> <ul style="list-style-type: none"><li>• Clearly address significant sustainability aspects (relevance)</li><li>• Third-party verification (credibility)</li><li>• Externally communicated criteria (transparency)</li></ul> <p><i>Must be identified.</i></p>	<p>Well-known product labeling that addresses important environmental and social sustainability aspects.</p> <p>Well-known product labeling that addresses ecological sustainability aspects.</p> <p>Well-known product labeling of Swedish products. Reduces climate impact in production.</p> <p>Provides an opportunity to deploy business concepts that address important social and/or environmental sustainability aspects.</p>
		
 <b>Raising the bottom</b> = minimize	<p>Cereals cultivated with growth regulation agents.</p> <p>Cereals with excessive cadmium levels. Max value:</p> <ul style="list-style-type: none"><li>• For winter wheat, rye, barley or oats: 0.08 mg/kg wet weight;</li><li>• For spring wheat: 0.1 mg/kg wet weight.</li></ul> <p>Wet weight = 12 % water content after drying</p> <p>Products from production units that use agents found on the list of banned substances stipulated by the WHO 1A+B as well as the Stockholm and Rotterdam conventions.</p>	<p>Reduces the residue of chemicals in the environment and in food.</p> <p>Reduces the cadmium intake. Cereals are a common source of cadmium.</p> <p>Reduces the negative environmental and human impact in addition to securing foods.</p>

### TOOLS USED TO ACHIEVE OBJECTIVES

The initiatives have two primary focuses; reduced food waste and sustainable products (Figure 1).



**Figure 1:** Structure of the Sustainable Supply Chain for Food initiative. Kommunikation & förändringsarbete = Communication & change, Hållbara produkter = Sustainable Product, Matsvinn = Food waste, Färdplan 2030 = Roadmap 2030

In Sustainable Products a range of common food groups (cereals, dairy, meat, wild and farmed seafood, fruit and vegetables, vegetable oils, sugar and coffee, tea and cocoa) were analyzed with regards to what the companies in the food supply chain need to address to improve the sustainability performance of their products. Products were split into three groups, red, yellow and green, going from less to more sustainable. The products in the green category are those that should be expanded, framed as “Expanding the top” while products in the red category should be phased out, framed “Raising the bottom”. Companies are hence guided on what needs to be done to improve

sustainability performance in terms of the products they produce and stock. The full list of products can be found here:

[https://hallbarlivsmedelskedja.se/wp-content/uploads/2018/10/WWF\\_Sustainable-Products-v-1.1-w-logo.pdf](https://hallbarlivsmedelskedja.se/wp-content/uploads/2018/10/WWF_Sustainable-Products-v-1.1-w-logo.pdf)

The next step is for companies to agree on a roadmap to 2030 in which this is put into action.

#### DRIVERS

##### ECONOMIC

##### SOCIAL

Corporate responsibility.

##### ENVIRONMENTAL

Concern for the quality of the environment and the impact of farming systems.

#### EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

The 15 members, a mix of retailers and industry, including some competing ones, have proven that they can build consensus around what products that can be considered more or less sustainable based on scientific evidence. Next step is to see if companies will act on this in an effective way using the roadmap that is now being developed.

#### STRENGTHS/ WEAKNESSES

##### STRENGTHS

- Building a consensus in retail and industry of what is considered more or less sustainable products -> clear, operationalised list that all can act on.
- Transparent, science-based process.

##### WEAKNESSES

- Needs large scale implementation – this is yet to be seen.

## 63. Food and Drink: Good Food Nation Policy (UK-Scotland)

#### CATEGORY

Mixed (policy+market)

#### GEOGRAPHIC SCOPE

National

#### CLUSTER

5. Local food promotion

Scottish Food and Drink Policy

#### LEGISLATIVE REFERENCE/ NAME OF OWNER

Food and Drink: Good Food Nation Policy (2014). From Cabinet Secretary for the Rural Economy and Minister for Business, Fair Work and Skills, Scottish Government



### OVERALL/ SPECIFIC OBJECTIVES

The national food and drink policy encompasses the impact of food and drink on health, the environment, social justice, education and the economy in Scotland and aims to build a 'Good Food Nation' where people benefit from and take pride and pleasure in the food they produce, buy, serve and eat.

### LINK TO AGRO-ECOLOGY

The policy has an integrated vision for food and drink to be environmentally sustainable by supporting the industry with the ambition to championing fresh, seasonal, local and sustainable produce.

### TOOLS USED TO ACHIEVE OBJECTIVES

The government supports suppliers and producers to contribute to the government's overall vision for food and drink through:

- Food processing, marketing and co-operation grants;
- Support for the protection of food names on a geographical/traditional recipe basis under EU Protected Food Name Scheme;
- Collaboration with industry leadership group Scotland Food and Drink to develop industry-led food and drink growth strategy for Scotland;
- Fund a Connect Local food marketing advisory service in partnership with European Maritime and Fisheries Fund;
- Funding of Scotland Food and Drink Partnership export plan;
- Fund the Dairy Hub to provide free advice to dairy farmers;
- Delivering the Beef Efficiency Scheme to make beef production more sustainable.

The government want the young people of Scotland to know where their food comes from and how it affects their health, the environment and the economy. The initiatives are designed to educate young people on all aspects of food and drink, from production to consumption, by:

- Raising awareness by funding the Royal Highland Education Trust for farm visits by schoolchildren, and Crofting Connections to encourage young people in crofting communities to continue the practice;
- Funding Education Scotland to support effective teaching about food and drink in the curriculum and to support food projects that link schools and industry with Food for Thought Education Fund;
- Providing funding for Food and the Environment teaching programmes for schools in the international Eco-Schools programme;
- Providing guidance on improving school food and food education;
- Providing guidance for partnerships between schools and the food and drink industry;
- Funding the Chefs@School project;
- Funding for the Soil Association's Food for Life catering mark programme to encourage school caterers to improve the quality of their food;
- Schools (Health Promotion and Nutrition) Act 2007 sets high nutritional standards for food and drink provided in schools.



The government promotes sustainable production and procurement. Producing food and drink sustainably means farming and manufacturing it in a way that helps to preserve and protect the environment for future generations. Procuring it sustainably means buying it from producers who minimise their impact on the environment, for example, by reducing their carbon emissions, and support the longevity of the industry. Implemented by:

- Development of an Organic Action Plan that outlines actions for growing the organic food and drink supply chain.
- Funding through Organic Ambitions Fund for an applicant(s) capable of developing existing relationship within the organic supply chain, identifying and addressing critical gaps, and demonstrating a proven track record of successful projects.
- Creating a Grow Your Own Working Group
- Passing the Community Empowerment (Scotland) Bill that simplifies the legislation on allotments, making it easier for people to grow their own food.
- Outlining how sustainable procurement should be included in the public sector in Scottish Sustainable Procurement Action Plan.

#### DRIVER

Political – government wants Scotland to become a Good Food Nation.

Economic – increase growth in the food and drink industry.

Social – government want everyone in Scotland to have access to healthy and nutritious food.

Technology

Legislative - Food and Drink Policy – Good Food Nation (2014).

Environmental – the government wants that food producers ensure that they produce increasingly environmentally sound food.

#### EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

Scottish Government created its Food Commission to provide evidence-based advice on what measures should be taken to achieve the vision of Good Food Nation by 2025.

#### STRENGTHS/ WEAKNESSES

Strengths:

- Integrated policy including food production and its supply chain as well as human health.
- Supports the demand for healthy and sustainable food and drink.
- Supports the production of sustainable food and drink.
- Supports procurement of sustainable food and drink.

Weaknesses:

- Sustainable and environmentally sound food is not clearly defined in the context of agro-ecological practices/transition.

#### REFERENCES

Policy Food and Drink - <https://beta.gov.scot/policies/food-and-drink/>



## 64. Climate Change (UK-Scotland)

### CATEGORY

Mixed (policy+market)

### GEOGRAPHIC SCOPE

National

### CLUSTER

5. Local food promotion

Scottish Climate Change Policy

### LEGISLATIVE REFERENCE/ NAME OF OWNER

Climate Change (Scotland) Act (2009), Climate Change Plan, new Climate Change Bill (at stage 1 – introduced 23 May 2018), Cabinet Secretary for the Environment, Climate Change and Land Reform, Roseanna Cunningham MSP

### OVERALL/ SPECIFIC OBJECTIVES

A transition to a low carbon Scotland for the benefit of our environment, our people, and our prosperity. The [Climate Change Plan](#) sets out how we will move towards a low carbon economy that will help to deliver sustainable economic growth and create a greener, fairer and healthier Scotland by 2032.

The [Paris Agreement](#) will support a worldwide market for low carbon goods and services, as other countries have committed to reducing their carbon footprint. It will also enhance the long term international competitiveness of low carbon business in Scotland by ensuring that more eco-friendly business practices are adopted elsewhere. Most of the low carbon economic activity in Scotland so far has been associated with the provision of renewables and low carbon electricity, but there is significant economic turnover for some other sectors, including provision of energy efficiency products and low carbon services. Low carbon investments may provide an opportunity for more balanced regional development within Scotland. Beyond the opportunities presented by renewable technology, smaller businesses across Scotland will also benefit from engaging in climate change mitigation through energy efficiency and low carbon heat and by promoting sustainable practices.

By increasing our long-term targets to reduce greenhouse gas emissions by at least 90% by 2050, the new Climate Change Bill will continue to provide the necessary certainty and impetus to markets, businesses and industries to shift towards low-carbon technologies and practices. The Climate Change Bill has been introduced to Parliament but is still at Stage 1, and it is possible that ambition of the 90% target could be increased as the Bill passes through Parliament.

### LINK TO AGRO-ECOLOGY

Transition towards more sustainable practices and reducing the dependence on external inputs to reduce the carbon footprint. Developing a closer link to local food and food production.

### TOOLS USED TO ACHIEVE OBJECTIVES

- Introduction of the Climate Change Bill.
- Encouraging individuals to move towards low carbon living through the creation of information platform (Greener Scotland) that provides the public information about going green by reducing food waste from farm to fork, and eating greener with seasonal and local food. <http://www.greenerscotland.org/>



- Engagement with businesses and industry on decarbonisation through Environmental Placement Programme (EPP) which support businesses to recruit graduates to work on environmental projects. Interns are supported throughout their placement and gain valuable work experience in the sector, while helping their host company to reduce emissions and improve their green credentials.
- Climate Challenge Fund which encourages communities across Scotland to take action on climate change. The fund supports community-led projects which lead to realistic and measurable reduction of carbon emissions, and which are designed to leave a long-standing legacy of low-carbon behaviour. Themes include: providing energy efficiency advice to households; improving community-owned properties to make them more energy efficient; reducing or eliminating carbon emissions through 'greener' travel; reducing waste and increasing recycling; growing food locally and in tune with the seasons.

In addition to reducing carbon emissions, the Climate Challenge Fund offers a range of social and health-related benefits to communities. These include: increased community cohesion, which helps combat social isolation; help with saving money and escaping fuel poverty; opportunities for employment and training; opportunities for individuals to work and learn together; opportunities for physical exercise; promotion of healthy eating.

- **VIBES** is an awards scheme developed to celebrate businesses in Scotland that are taking steps to improve or reduce their impact on the environment.
- ZeroWaste Scotland is funded by the Scottish Government to influence and enable change – from gathering evidence and informing policy, to motivating practical behaviour change in individuals and organisations through programmes and **brands**. They also make direct interventions to effect change, commonly in the form of finance, business support, technical advice, training and competence development or communications support.  
<https://www.zerowastescotland.org.uk/>

#### DRIVER

Political – meeting international agreement on Climate Change.

Economic – to provide economic opportunities by being at the forefront of a low carbon transition.

Social – change the attitude to food and return to seasonal and local food.

Technology – to provide economic opportunities by being at the forefront of a low carbon transition.

Legislative – Climate Change (Scotland) Act 2009; Climate Change Bill (2018 – still at stage 1 in Parliament).

Environmental – develop towards low carbon living through reducing greenhouse gas emissions.

#### EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

Scotland has met its statutory annual climate change target for the third year running, after achieving a 49% reduction in greenhouse gas emissions. Figures from 2018, calculated against a 1990 baseline, show that Scotland will exceed its current 2020 climate change target and continues to outperform the UK as a whole. In western Europe, amongst the EU-15 member states, Scotland is second only to Sweden (51%) and ahead of Finland (42%), Germany (25%) and Denmark (23%) in terms of emissions reduction. Carbon dioxide emissions have fallen by more than 50%. (<https://news.gov.scot/news/strong-progress-on-climate-change>)

#### STRENGTHS/ WEAKNESSES

Strengths: Strong legislative targets with progress reviewed annually.





Weaknesses: Most of the “easiest” emission reduction actions are taken early, leaving the more difficult ones for later.

#### REFERENCES

[http://www.legislation.gov.uk/asp/2009/12/pdfs/asp\\_20090012\\_en.pdf](http://www.legislation.gov.uk/asp/2009/12/pdfs/asp_20090012_en.pdf)

<https://news.gov.scot/news/strong-progress-on-climate-change>

<http://www.parliament.scot/parliamentarybusiness/Bills/108483.aspx>

## 65. Land Reform (UK-Scotland)

### CATEGORY

Policy

### GEOGRAPHIC SCOPE

National

### CLUSTER

7. Territorial-based farming practices

Scottish Land Reform Policy

### LEGISLATIVE REFERENCE/ NAME OF OWNER

Land Reform (Scotland) Act (2016), Cabinet Secretary for Environment Climate Change and Land Reform.

### OVERALL/ SPECIFIC OBJECTIVES

Improving Scotland's system of land ownership, use, rights and responsibilities, so that our land may contribute to a fair and just society while balancing public and private interests.

Scotland's system of land ownership, use, rights and responsibilities has evolved over time in a way that does not always enable everyone to benefit. It was decided to review how land is owned, used and managed in Scotland to ensure that everyone in Scotland can benefit from it.

### LINK TO AGRO-ECOLOGY

The policy changes the relationships of rural communities to the land that allows communities to control a sustainable future, which can include diversification and include conservation of traditional land use and related biodiversity.

### TOOLS USED TO ACHIEVE OBJECTIVES

- Introduction of the Community Empowerment (Scotland) Bill 2014.
- Introduction of the Land Reform (Scotland) Bill 2015.
- Community right to buy allows communities in Scotland to apply to register an interest in land and the opportunity to buy that land when it comes up for sale.
- Enactment of the Land Reform (Scotland) Act 2016.
- Introduction of the Land Reform (Scotland) Act 2003 gives crofting communities the right to acquire and control the croft land where they live and work, and to acquire the interest of the tenant in tenanted land (interposed lease). Crofting community right to buy is a right that can be exercised at any time. This distinguishes it from community right to buy, as land can

be acquired without the consent of the owner. This means that a successful crofting community right to buy application can force the selling of land, which likens it to a compulsory purchase.

#### DRIVER

Political – Community and crofter empowerment.

Economic –

Social – Right of communities (particularly, but not restricted to) crofters to purchase land from large land owners.

Technology -

Legislative - Land Reform (Scotland) Act (2003); Land Reform (Scotland) Act (2016).

Environmental – Revitalise derelict land; secure tenure / ownership for farmers / crofters / land managers to improve land stewardship.

#### EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

The Scottish Land Commission and SEPA launched an innovative partnership and taskforce to transform Scotland's approach to vacant and derelict land (September, 2018).

#### STRENGTHS/ WEAKNESSES

#### REFERENCES

<http://www.legislation.gov.uk/asp/2016/18/contents/enacted>

<https://landcommission.gov.scot/tag/land-reform/>

## 66. Environmental Co-operation Action Fund (UK-Scotland)

#### CATEGORY

Policy

#### GEOGRAPHIC SCOPE

National

#### CLUSTER

7. Territorial-based farming practices

Cooperation measure (M16.5) in the Scottish RDP

#### LEGISLATIVE REFERENCE/ NAME OF OWNER

Scottish Rural Development Programme

<https://www2.gov.scot/Topics/farmingrural/SRDP>

Environmental Cooperation Action Fund

<https://www.ruralnetwork.scot/news-and-events/news/environmental-cooperation-action-fund-opens-applications>

#### OVERALL/ SPECIFIC OBJECTIVES



To support collaborative projects aimed at increasing biodiversity, improving water quality and managing flooding – measures that will not only protect the environment, but help it thrive and flourish. Since the agriculture and land use sector accounts for a fifth of Scotland's greenhouse gas emissions, this scheme will also contribute to Scotland's climate change targets as part of the Common Agricultural Policy.

#### LINK TO AGRO-ECOLOGY

Supports measures in agricultural areas that enhance biodiversity, improve water quality and manage water surplus.

#### TOOLS USED TO ACHIEVE OBJECTIVES

The Environmental Cooperation Action Fund (ECAF) is jointly funded by the Scottish Government and European Union under the Scottish Rural Development Programme 2014-2020.

The Environmental Co-operation Action Fund (ECAF) promotes the delivery of landscape-scale environmental projects by groups of farmers, foresters and other land managers.

It provides funding to support the costs of planning, facilitating and overseeing cooperative projects, principally by the funding the activities of a facilitator. It supports collaborative projects aimed at increasing biodiversity, improving water quality and managing flooding.

Funding is targeted to deliver the following priorities, which are most effectively addressed at a landscape scale and contribute to meeting Scotland's targets for biodiversity, climate change and water environment:

- Habitat and degraded ecosystem restoration;
- Conservation of vulnerable priority species;
- Control of invasive non-native plant species;
- Deer management;
- Catchment management for water quality;
- Physical restoration of water bodies;
- Natural flood management.

Once the cooperative group has been established and the landscape scale action has been planned, applications can be made to the Agri-Environment Climate Scheme and/or Forestry Grant Scheme, or an alternative source of funding to support the costs of on-the-ground management to implement these environmental projects.

#### DRIVER

##### ECONOMIC

As the rural economy of Scotland is dependent on good stewardship of the landscape by land managers, support for the management of public goods needs to be facilitated.

##### ENVIRONMENTAL

It is recognized that Scotland's targets for biodiversity, climate change and water environment can be most effectively addressed at a landscape scale through cooperative measures.

#### EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

The first call closed in 2016.

#### STRENGTHS/ WEAKNESSES



## STRENGTHS

- It provides funding to support the costs of planning, facilitating and overseeing cooperative projects, principally by the funding the activities of a facilitator, thus serve as a mechanism to fostering cooperative actions at the landscape scale.

## REFERENCES

ENRD (2018). Thematic Group (TG) on sustainable management of water and soils.

Working Document Background briefing: Collective approaches.

[https://enrd.ec.europa.eu/sites/enrd/files/tg2\\_water-soil\\_briefing\\_collective-approaches.pdf](https://enrd.ec.europa.eu/sites/enrd/files/tg2_water-soil_briefing_collective-approaches.pdf)

# 67. Ecological Performance Record - ÖLN (Switzerland)

## CATEGORY

Policy

## GEOGRAPHIC SCOPE

National

## CLUSTER

2. Agri-environmental practices

Agri-environmental scheme

## LEGISLATIVE REFERENCE/ NAME OF OWNER

Direktzahlungsverordnung (Direct Payment Regulation; DZV; 910.13), Art. 11: Ökologischer Leistungsnachweis ÖLN

## OVERALL/ SPECIFIC OBJECTIVES

The ÖLN codifies the conditions related to environmental performance and animal welfare that have to be fulfilled on a farm to be able to receive direct payments. More specifically, these are the following (in German, plus translation to English):

1. Livestock husbandry according to the animal protection law of Switzerland („die Haltung der Nutztiere nach der Tierschutzgesetzgebung“) (DZV Art. 12);
2. A balanced fertilisation balance („eine ausgeglichene Düngerbilanz“) (DZV Art. 13);
3. A suitable share of biodiversity support areas („einen angemessenen Anteil an Biodiversitätsförderflächen“) (DZV Art. 14);
4. The management of objects in the inventory of national significance according to the laws („die vorschriftsgemässe Bewirtschaftung von Objekten in Inventaren von nationaler Bedeutung“) (Art.15);
5. Decent crop rotations („eine geregelte Fruchtfolge“) (DZV Art. 16);
6. Suitable soil protection („einen geeigneten Bodenschutz“) (DZV Art. 17);
7. Targeted choice and application of plant protection products („die gezielte Auswahl und Anwendung der Pflanzenschutzmittel“) (DZV Art. 18);
8. Following the prescriptions regarding seeds and seedlings („Vorgaben betreffend Saat- und Pflanzgut“) (DZV Art. 19);



9. Following the prescriptions regarding horticultures (“betreffend Spezialkulturen”) (Art. 20);
10. Following the prescriptions regarding distances to waterbodies, habitats, etc. (“Vorgaben betreffend Pufferstreifen”) (Art. 21).

#### LINK TO AGRO-ECOLOGY

The term ‘agro-ecology’ is not specifically used, but the ÖLN addresses aspects that are central to agro-ecological production systems and implements them on all farms in Switzerland as a condition to receive direct payments. Thus, all farms in Switzerland that receive direct payments follow minimal requirements regarding these aspects and thus achieve a certain performance regarding agro-ecological criteria that tends to be higher than the EU average, for example.

#### TOOLS USED TO ACHIEVE OBJECTIVES

The main tools to support objectives of the scheme:

- Conditioning any direct payments to the farms on fulfilling the conditions as set out in the ÖLN.

#### DRIVERS

##### POLITICAL/ LEADERSHIP

It has been established in 1996 in the course of the reform of the federal agricultural law, where environmental aspects played an increasingly important role besides mere production support. As one of the first countries in Europe, Switzerland initiated decoupled payment, i.e. payments which do not support prices of certain products any more. Switzerland had a leading position in initiating area-based payments focusing on environmental aspects.

##### ECONOMIC

The income generating effect of the direct payments is a central driver for fulfilling the requirements of the ÖLN as for most farms direct payments are a central source of income.

##### LEGISLATIVE

The legal situation regarding ÖLN is clear, due to the corresponding laws and regulations being established. Monitoring and enforcement is however partly a problem (cf. below “weaknesses”).

##### ENVIRONMENTAL

Environmental benefits for soils, biodiversity, ecosystems and water and animal welfare benefits.

#### EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

Performance is mixed, while areas for biodiversity support have been increased, performance regarding nutrient surplus and plant protection products is inadequate. This is mainly due to lack of monitoring and enforcement and some faults in the design of underlying calculations (nutrient balances). In terms of application, the ÖLN has been very successful as it is implemented by the vast majority of Swiss farmers.

#### STRENGTHS/ WEAKNESSES

##### STRENGTHS

- The ÖLN establishes a relatively ambitious level of environmental and animal welfare performance with respect to a number of central environmental indicators. If corrected where underlying calculations are flawed and if fully enforced, it has big potential to lead to considerable improvements as it basically covers all farms, due to the tie to direct payments.

##### WEAKNESSES



- For some indicators, the rules are such that no real impact is achieved, as e.g. too many aspects can be covered with default values instead of farm measurements, or as there are gaps in the aspects covered, etc. – An example is the balanced nitrogen balance, which is required by the ÖLN but which does not cover all significant sources of N. In consequence, the balance as calculated according to the ÖLN fulfils the requirements while at the same time the average N surplus per ha in Switzerland is about 85-90kgN/ha, which is far from balanced.
- Furthermore, the monitoring and enforcement of the compliance with the ÖLN is not always done as required, e.g. regarding pesticides applications, where according to the ÖLN usually certain thresholds of damages to cultures have to be transgressed before being allowed to use the pesticides; due to lack of monitoring and enforcement, these thresholds are however not effective in practice and pesticides are used more frequently than warranted by them.

#### REFERENCES

<https://www.blw.admin.ch/blw/de/home/instrumente/direktzahlungen/oekologischer-leistungsnachweis.html>

## 68. Knowledge Support for Organic Cattle Husbandry - PROVIEH (Switzerland)

#### CATEGORY

Market

#### GEOGRAPHIC SCOPE

National

#### CLUSTER

8. Research and capacity-building

#### LEGISLATIVE REFERENCE/ NAME OF OWNER

The programme has been running since 2014 and was developed the Swiss association of organic farmers (Bio Suisse) in collaboration with cantonal advisory services, research (FiBL) and regional organic farmers associations.

#### OVERALL/ SPECIFIC OBJECTIVES

Exchange of knowledge and experience among farmers (peer-to-peer) on organic cattle husbandry.

#### LINK TO AGRO-ECOLOGY

PROVIEH (a possible English translation should be "ProCattle") is a platform for knowledge and experience exchange, which was initiated by the Swiss organic farmers association. The platform follows the principles of peer-to-peer learning which means that the farmers themselves shape the sessions and define the contents. The format includes stable visits and working circles.

The sessions focus on organic cattle husbandry. Concrete topics are animal health, including reduction of antibiotics and the use of natural medicine, animal welfare, site-specific breeds, as well as fodder, including namely grassland-based fodder regimes.

#### TOOLS USED TO ACHIEVE OBJECTIVES



- Working circles;
- Stable visits;
- Demonstration events.

#### DRIVERS

##### ECONOMIC

Demand for organic products and increase in organic farms.

##### SOCIAL

Pressure from society to reduce use of antibiotics, to improve animal welfare as well as water quality.

##### TECHNOLOGY

Need for exchange on new technologies and approaches among organic farmers.

##### ENVIRONMENTAL

Important environmental impacts of cattle husbandry (incl. impacts from organic cattle husbandry).

#### EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

PROVIEH consists of decentral farmers' working groups of limited size (about 10 members) and similarly decentral stable visits of slightly larger groups of farmers who meet at one farm, accompanied by some input from advisers and/or researchers. PROVIEH participants are farmers with livestock farms or mixed farms. So far, more than 2100 farmers have participated in 83 information events and stable visits throughout Switzerland. PROVIEH stable visits offer an insight into interesting farms and an exchange of experience in organic livestock husbandry among colleagues as well as with veterinarians and consultants.

#### STRENGTHS/ WEAKNESSES

##### STRENGTHS

- Site- and farm-specification of the contents.
- Participative approach fostering engagement by individual farmers.
- Protected learning environment.

##### WEAKNESSES

- Small scope: focus on organic agriculture and on cattle husbandry.
- Attended mainly by engaged farmers.

#### REFERENCES

- <https://www.bio-suisse.ch/de/provieh.php>
- Frick, R. (2018, unpublished). Case Study: CH2 PROVIEH. Work Package 5 Report for the PLAID project.

## 69. Biodiversity Payments (SWITZERLAND)

#### CATEGORY

Policy



GEOGRAPHIC SCOPE

National

CLUSTER

2. Agri-environmental practices

Agri-environmental scheme

LEGISLATIVE REFERENCE/ NAME OF OWNER

Direktzahlungsverordnung (Direct Payment Regulation; DZV; 910.13) and respective directives

OVERALL/ SPECIFIC OBJECTIVES

Overall Objective: Contribute to the achievement of the Swiss environmental goals for agriculture (Umweltziele Landwirtschaft) counter loss in priority species and valuable ecosystems.

Specific Objective for the Level 2 Payments: 40% of all biodiversity support areas achieve Quality Level 2 by 2017.

LINK TO AGRO-ECOLOGY

The biodiversity payments are an agri-environmental scheme, including area payments supporting biodiversity with two different quality levels and payments for projects aiming at connecting ecosystems above farm level. The second quality level are payments for advanced areas in terms of biodiversity support and are assigned to:

- Low intensity meadows and extensively used meadows;
- Extensively used pastures;
- Wetlands;
- Hedges, field- and waterside-shrubs;
- High stem orchards;
- Vineyards with natural species diversity;
- Species-rich grass- and wetlands in Alpine areas.

The quality 2 payments include result-oriented indicators such as grassland plant species, as well as bushes and trees. Result-oriented payments leave farmers the freedom and flexibility to decide themselves how to achieve the predefined goals. They therefore can decide what measures suits best to their specific farm situation.

TOOLS USED TO ACHIEVE OBJECTIVES

- Voluntary payments system for farmers engaged in supporting biodiversity;
- Monitoring at cantonal level on participating farms;
- Advisory services at cantonal level.

DRIVERSPOLITICAL/ LEADERSHIP

Introduced as part of the agricultural policy reform for 2014 (originally planned for 2014-2017, but still ongoing in current policy regime). Replacement of prior biodiversity payments aiming at improving quality level of biodiversity support areas.

ECONOMIC



The income generating effect of the direct payments is a central driver for participating in the voluntary biodiversity support programme as for most farms direct payments are a central source of income.

#### SOCIAL

Pressure from society to better achieve environmental goals for agriculture set in 2008.

#### ENVIRONMENTAL

Environmental benefits for biodiversity.

#### EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

In 2017, 15% of the paid direct payments were payments for biodiversity (interconnection and both area quality levels). The objective that 40% of the biodiversity support areas should be of quality 2 level in 2017 was reached. It is however difficult to say, to what level these payments have improved the state of biodiversity on these areas.

#### STRENGTHS/ WEAKNESSES

##### STRENGTHS

- The biodiversity payments (all quality levels) include a large variety of focus areas and management options, which give the farmers flexibility with regard to what to implement and partially also how to implement them.

##### WEAKNESSES

- The biodiversity payments are designed at national level and paid by the federal government which leaves little space for regional (cantonal) adaptation of the measures.
- The level of implementation varies strongly between different agricultural branches. Biodiversity areas in arable farming are very low and could not be raised with the reformed payment scheme.

#### REFERENCES

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## 70. RDP Measure 3 - Quality schemes for agricultural products and foodstuffs (European Union)

#### CATEGORY

Mix – policy and market

#### GEOGRAPHIC SCOPE

EU Member States

#### CLUSTER

Local food, quality certification, short supply chain.

#### LEGISLATIVE REFERENCE/ NAME OF OWNER



Article 16 of Regulation (EU) No 1305/2013

REGULATION (EU) No 1151/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 21 November 2012 on quality schemes for agricultural products and foodstuffs.

#### OVERALL/ SPECIFIC OBJECTIVES

EU quality schemes in the context of the common agriculture policy (CAP) provides tools to help highlight the qualities and tradition associated with registered products and to assure consumers that these are the genuine products, not imitations seeking to benefit from the good name and reputation of the original. These schemes and their logos help producers/groups of producers market their products better, while providing them legal protection from misuse or falsification of a product name.

Geographical indications are an approach to food production and marketing systems that place social, cultural and environment considerations at the heart of the value chain. Geographical indications (GIs) refer to products with specific characteristics, qualities or reputations resulting from their geographical origin.

#### LINK TO AGRO-ECOLOGY

The schemes promote food products largely grown and produced in specific geographic locations that have a high and/or distinct quality. The scheme encourages the purchase by consumers of locally grown and produced products, thus supporting local food producers and processors that market foods with a distinct quality. The quality label in many cases is supportive of short supply chains.

#### TOOLS USED TO ACHIEVE OBJECTIVES

EU Protected Designation of Origin - PDO

Protected Designation of Origin identifies products that are produced, processed and prepared in a specific geographical area, using the recognised know-how of local producers and ingredients from the region concerned. These are products whose characteristics are linked to their geographical origin.

Protected Geographical Indication -PGI

Protected Geographical Indication -PGI- identifies products whose quality or reputation is linked to the place or region where it is produced, processed or prepared, although the ingredients used need not necessarily come from that geographical area.

Traditional Speciality Guaranteed – TSG

Traditional Speciality Guaranteed identifies products of a traditional character, either in the composition or means of production, without a specific link to a particular geographical area.

Registration of a Geographical Indication label follows the laws and regulations defined by the EU. Internationally, the labels are regulated and protected under the TRIPs (Agreement on Trade-Related Aspects of Intellectual Property Rights) Agreement, a multilateral agreement on intellectual property rights that is recognized by all the members of the World Trade Organization.

A PDO and PGI shall comply with a specification including evidence that the product originates in the defined geographical area based on an application for registration. Registration can be opposed if duly substantiated. Registered names shall be protected. Verification of compliance with a product specification is by a competent authority. Generic terms cannot be registered as protected designations of origin.



For a name to be registered as a TSG, it should have been traditionally used to refer to the specific product; or identify the traditional character or specific character of the product. A traditional speciality guaranteed shall comply with a specification. Registration can be opposed if duly substantiated. Registered names are protected. Verification of compliance with product specification is by a competent authority.

#### DRIVERS

##### ECONOMIC

Increase the recognition and market value of a product with a traditional character or from a specific geographic location.

##### SOCIAL

To support local rural development by promoting unique local traditions and products.

##### ENVIRONMENTAL

To support sustainable environmental development by promoting unique local traditions and products produced based on sound environmental and natural resource conservation practices.

#### EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

The European quality schemes for designations of origin, geographical indications and traditional specialities cover more than 3 000 products: wines, cheeses, cold meats, fruit and vegetables, liqueurs, etc. Under these schemes, products bear quality marks that enhance their prestige. Consumers can easily recognise these products by their logos, while their names are protected from imitation, faking or fraud.

#### STRENGTHS/ WEAKNESSES

##### STRENGTHS

The unique linkages of these products with their natural and cultural resources in local areas can make them a useful tool in the advancement of local sustainability, including preserving food heritage, contributing to community development and sustainable or agro-ecological farming.

GIs can be drivers for rural transformation leading to more sustainable development, first because economic sustainability is an important step towards environmental and social sustainability, and second because the specifications can directly influence environmental sustainability depending on the requirements that are considered (local species or breed, specific agricultural practices, etc.).

##### WEAKNESSES

GI specifications can lack requirements regarding environmental and natural resource protection, and uncontrolled economic development may lead to overexploitation of the natural resources involved in production. Assessments of the economic, social and environmental impacts of the GI process are suggested.

#### REFERENCES

REGULATION (EU) No 1305/2013 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 17 December 2013 on support for rural development by the European Agricultural Fund for Rural Development (EAFRD) and repealing Council Regulation (EC) No 1698/2005

REGULATION (EU) No 1151/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 21 November 2012 on quality schemes for agricultural products and foodstuffs. <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R1151>



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## 71. RDP Measure 10 - Agri-environment-climate (European Union)

### CATEGORY

Policy

### GEOGRAPHIC SCOPE

European Union Member states

### CLUSTER

EU policy initiative supporting agricultural practices that make a positive contribution to the environment and climate

### LEGISLATIVE REFERENCE/ NAME OF OWNER

Article 28 of Regulation (EU) No 1305/2013

### LINK TO AGRO-ECOLOGY

Undertaking agricultural practices that benefit ecological systems and the climate.

### OVERALL/ SPECIFIC OBJECTIVES

The initiative aims to preserve and promote the necessary changes to agricultural practices that make a positive contribution to the environment and climate thus contributing to a better provision of both commodity and non-commodity ecosystem services.

### TOOLS USED TO ACHIEVE OBJECTIVES

- Inclusion of agri-environment-climate measures in rural development programmes is compulsory at national and/or regional level. Implementation of measures by land managers is voluntary.
- Agri-environment-climate payments are granted to farmers, groups of farmers or groups of farmers and other land-managers who undertake, on a voluntary basis, to carry out operations consisting of one or more agri-environment-climate commitments on agricultural land.
- Agri-environment-climate payments cover commitments going beyond the relevant mandatory standards (cross-compliance), and relevant minimum requirements for fertiliser and plant protection products use as well as other relevant mandatory requirements established by national law.
- Persons undertaking operations under this measure must be provided with the knowledge and information required to implement such operations.
- Commitments under this measure shall be undertaken for a period of five to seven years.



- Payments compensate beneficiaries for all or part of the additional costs and income foregone resulting from the commitments made. Transaction costs up to a value of 20 % of the premium paid for the agri-environment-climate commitments can be covered. For groups of farmers or groups of farmers and other land managers, the maximum level for transaction costs can be 30 %.
- Support may be provided for the conservation and for the sustainable use and development of genetic resources in agriculture for operations.

#### DRIVERS

##### ENVIRONMENTAL

Increasing concern by the public regarding the adverse impacts of intensive conventional farming on the long-term productivity of agricultural land and the deterioration of non-commodity ecosystem services.

#### EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

The impact of voluntary agri-environmental-climate measures have not been sufficiently effective to maintain biodiversity and surface water quality.

#### STRENGTHS/ WEAKNESSES

##### STRENGTHS

Encourages environmentally beneficial farming practices and production of non-commodity ecosystem services.

##### WEAKNESSES

Agri-environmental-climate measures are voluntary and payments are mainly based on prescribed management practices and less so on result-based practices/ payments. Implementation of cooperative measures between land managers is a limited practice reducing the effectiveness and efficiency of implementation.

#### REFERENCES

REGULATION (EU) No 1305/2013 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 17 december 2013 on support for rural development by the European Agricultural Fund for Rural Development (EAFRD) and repealing Council Regulation (EC) No 1698/2005

COMMISSION IMPLEMENTING REGULATION (EU) No 808/2014 of 17 July 2014

laying down rules for the application of Regulation (EU) No 1305/2013 of the European Parliament and of the Council on support for rural development by the European Agricultural Fund for Rural Development (EAFRD)

## 72. RDP Measure 11 - Organic Farming (European Union)

#### CATEGORY

Mix – policy and market

#### GEOGRAPHIC SCOPE

European Union Member states



CLUSTER

EU policy initiative supporting organic farming and food production

LEGISLATIVE REFERENCE/ NAME OF OWNER

Article 29 of Regulation (EU) No 1305/2013

LINK TO AGRO-ECOLOGY

Design and management of farming processes based on ecological systems using natural resources which are internal to the system.

OVERALL/ SPECIFIC OBJECTIVES

Establish a sustainable management system for agriculture that:

- respects nature's systems and cycles and sustains and enhances the health of soil, water, plants and animals and the balance between them;
- contributes to a high level of biological diversity;
- makes responsible use of energy and the natural resources, such as water, soil, organic matter and air;
- respects high animal welfare standards and in particular meets animals' species-specific behavioural needs;
- aim at producing products of high quality;
- aims at producing a wide variety of foods and other agricultural products that respond to consumers' demand for goods produced by the use of processes that do not harm the environment, human health, plant health or animal health and welfare.

TOOLS USED TO ACHIEVE OBJECTIVES

- Support to convert to organic farming practices and methods.
- Support to maintain organic farming practices and methods. Certification of organic farming practices, production of processed organic food and processed organic feed.

Organic farming is required to adhere to specified practices:

- appropriate design and management of biological processes based on ecological systems using natural resources which are internal to the system by methods that:
  - use living organisms and mechanical production methods;
  - practice land-related crop cultivation and livestock production or practice aquaculture which complies with the principle of sustainable exploitation of fisheries;
  - exclude the use of GMOs and products produced from or by GMOs with the exception of veterinary medicinal products;
  - are based on risk assessment, and the use of precautionary and preventive measures, when appropriate;
- restriction of the use of external inputs, except:
  - inputs from organic production;
  - natural or naturally-derived substances;
  - low solubility mineral fertilisers;



- the strict limitation of the use of chemically synthesised inputs.

The production of processed organic food is required to adhere the following practices:

- the production of organic food from organic agricultural ingredients, except where an ingredient is not available on the market in organic form;
- the restriction of the use of food additives, of non organic ingredients with mainly technological and sensory functions and of micronutrients and processing aids, so that they are used to a minimum extent and only in case of essential technological need or for particular nutritional purposes.

The production of processed organic feed are required to adhere the following practices:

- the production of organic feed from organic feed materials, except where a feed material is not available on the market in organic form;
- the restriction of the use of feed additives and processing aids to a minimum extent and only in case of essential technological or zootechnical needs or for particular nutritional purposes;
- the exclusion of substances and processing methods that might be misleading as to the true nature of the product;
- the processing of feed with care, preferably with the use of biological, mechanical and physical methods.

## DRIVERS

### SOCIAL

Organic food has become a way of living. Some people see these products as being tastier or healthier than those coming from conventional agriculture.

### ENVIRONMENTAL

Increasing support for good practices towards the environment.

## EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

The organic sector in the EU has been rapidly developing during the past years. According to Eurostat data, the EU-28 had in 2015 a total area of 11.1 million hectares cultivated as organic, up from 5.0 million in 2002. During the last decade, organic area in the EU increased by about 500 000 hectares per year. This is a big increase, but the whole organic area represents only 6.2% of total utilised agricultural area in Europe.

## STRENGTHS/ WEAKNESSES

### STRENGTHS

Restricts the use of external fertilizer inputs, thus promoting the use of local organic fertilizer. Encourages environmentally beneficial farming practices and production of non-commodity ecosystem services.

### WEAKNESSES

Does not necessarily result in a reduction of fertilizer inputs nor a reduction in inputs of plant protection products.

## REFERENCES



REGULATION (EU) No 1305/2013 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 17 december 2013 on support for rural development by the European Agricultural Fund for Rural Development (EAFRD) and repealing Council Regulation (EC) No 1698/2005

Council Regulation (EC) No 834/2007 of 28 June 2007 on organic production and labelling of organic products and repealing Regulation (EEC) No 2092/91.

## 73. RDP Measure 16 - Cooperation (European Union)

### CATEGORY

Policy

### GEOGRAPHIC SCOPE

European Union Member States

### CLUSTER

EU policy initiative supporting cooperation involving at least two entities in the agricultural value chain.

### LEGISLATIVE REFERENCE/ NAME OF OWNER

Article 28 of Regulation (EU) No 1305/2013

### LINK TO AGRO-ECOLOGY

Promotion of cooperation in the agricultural value chain is intended to increase agricultural productivity and sustainability and benefit ecological systems.

### OVERALL/ SPECIFIC OBJECTIVES

Promotion of cooperation among different actors in the agriculture sector, forestry sector and food chain and other actors that contribute to achieving the objectives and priorities of rural development policy, including producer groups, cooperatives and inter-branch organisations.

The promotion of cooperation is intended to increase agricultural productivity and sustainability, benefit ecological systems, the climate and local community (economic, social) development.

### TOOLS USED TO ACHIEVE OBJECTIVES

- Support for the establishment and operation of operational groups of the European Innovation Partnership (EIP) for agricultural productivity and sustainability.
- Support for pilot projects and for the development of new products, practices, processes and technologies.
- Cooperation among small operators in organising joint work processes and sharing facilities and resources, and for developing and marketing tourism.
- Support for horizontal and vertical cooperation among supply chain actors for the establishment and development of short supply chains and local markets and for promotion activities in a local context relating to the development of short supply chains and local markets.
- Support for joint action undertaken with a view to mitigating or adapting to climate change and for joint approaches to environmental projects and ongoing environmental practices.





- Support for cooperation among supply chain actors for sustainable provision of biomass for use in food and energy production and industrial processes.
- Support for non-community-led local development (CLLD) strategies.
- Support for drawing up of forest management plans or equivalent instruments.
- Support for diversification of farming activities into activities concerning health care, social integration, community-supported agriculture and education about the environment and food.

#### DRIVERS

##### ECONOMIC

Concern for marginalization of rural areas by promoting sustainable farming practices.

##### SOCIAL

Concern for declining rural communities by encouraging diversifying farming activities.

##### ENVIRONMENTAL

Increasing concern regarding the adverse impacts of intensive conventional farming on the long-term productivity of agricultural land and the deterioration of non-commodity ecosystem services.

#### EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

##### STRENGTHS/ WEAKNESSES

##### STRENGTHS

Encourages innovation in sustainable farming practices and production of non-commodity ecosystem services.

Supports social and economic development of less developed regions through creation of alternative food supply chains and markets, new products and processing, increased social inclusiveness and local capacity building.

##### WEAKNESSES

Level of support insufficient to encourage uptake of measure.

#### REFERENCES

REGULATION (EU) No 1305/2013 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 17 December 2013 on support for rural development by the European Agricultural Fund for Rural Development (EAFRD) and repealing Council Regulation (EC) No 1698/2005

COMMISSION IMPLEMENTING REGULATION (EU) No 808/2014 of 17 July 2014

laying down rules for the application of Regulation (EU) No 1305/2013 of the European Parliament and of the Council on support for rural development by the European Agricultural Fund for Rural Development (EAFRD)

## 74. Agroforestry in the Common Agricultural Policy (European Union)

#### CATEGORY



Mix – policy and market

#### GEOGRAPHIC SCOPE

European Union Member states

#### CLUSTER

Common Agricultural Policy (CAP) Pillar I and Pillar II supporting agroforestry in agro-ecology

#### LEGISLATIVE REFERENCE/ NAME OF OWNER

REGULATION (EU) No 1305/2013 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 17 December 2013 on support for rural development by the European Agricultural Fund for Rural Development (EAFRD).

Agroforestry in the context of the EU Common Agricultural Policy (CAP): REGULATION (EU) No 1306/2013 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 17 December 2013 on the financing, management and monitoring of the common agricultural policy.

REGULATION (EU) No 1307/2013 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 17 December 2013 establishing rules for direct payments to farmers under support schemes within the framework of the common agricultural policy.

REGULATION (EU) No 1308/2013 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 17 December 2013 establishing a common organisation of the markets in agricultural products.

#### OVERALL/ SPECIFIC OBJECTIVES

To define the role of agroforestry activities in supporting the objectives of the Common Agriculture Policy - Pillar I and II.

#### LINK TO AGRO-ECOLOGY

Agroforestry is one of the practices (crop spatial distribution) directly supporting agro-ecological farming.

The European Commission in the sub-measure fiche (EU 2014) describing Measure 8.2 (Article 23 Regulation 1305/2013) on the establishment of agroforestry, defines agroforestry on agricultural land as *“land-use systems and practices where woody perennials are deliberately integrated with crops and/or animals on the same parcel of land management unit without the intention to establish a remaining forest stand. The trees may be arranged as single stems, in rows or in groups, while grazing may also take place inside parcels (silvoarable agroforestry, silvopastoralism, grazed or intercropped orchards) or on the limits between parcels (hedges, tree lines)”*.

The dominant type of agroforestry in the EU is silvopasture agroforestry combining woody perennials with forage and animal production (Mosquera-Losada et al. 2016; den Herder et al. 2017). The current area of agroforestry is estimated to be the equivalent of 8.8% of the utilised agricultural area (den Herder et al. 2017) in the EU.

#### TOOLS USED TO ACHIEVE OBJECTIVES

##### **CAP Cross-compliance**

Farmers receiving direct payments through Pillar I and environmental payments in Pillar II have to comply with 13 Statutory Management Requirements (SMR) and standards for maintaining the land in Good Agricultural and Environmental Condition (GAEC) known as cross-compliance. GAEC condition 7 calls for *“the retention of landscape features, including where appropriate, hedges, ponds, ditches, trees in line, in group or isolated, field margins and terraces, and including a ban on cutting hedges and trees during the bird breeding and rearing season and, as an option, measures for*



*avoiding invasive plant species*" (Annex 11 in regulation 1306/2013). Within cross-compliance, there is clear recognition that integrating woody vegetation can make agriculture more sustainable. Landscape features preservation linked to GAEC condition 7 aims to protect, amongst other features, scarce woody vegetation in some European agricultural landscapes.

### **CAP Pillar I - Direct payment eligibility for agroforestry on agricultural land**

There are three main categories of agricultural land use when determining direct payments:

- arable;
- permanent pasture or permanent grassland (including herbaceous species other than grass, also browsable shrubs and trees); and
- permanent crops (i.e. nurseries, multi-annual crops and short rotation coppice).

The main agroforestry types on arable land include silvoarable agroforestry and the use of hedgerows, windbreaks and riparian buffer strips. Agroforestry on permanent grassland includes silvopastoral practices, such as those used in dehesa, montado, wood pasture, and hedgerows, windbreaks, and riparian buffer strips. Areas of permanent crops can be grazed (a form of silvopasture) or intercropped (a form of silvoarable agroforestry).

#### **Agroforestry on arable land**

Regulation 1307/2013 Article 4(f) defines "arable land" as *"land cultivated for crop production or areas available for crop production but lying fallow..."* EU delegated regulation 640/2014 Article 9 explains that *"an agricultural parcel that contains scattered trees shall be considered as eligible area provided that the following conditions are fulfilled: (a) agricultural activities can be carried out in a similar way as on parcels without trees in the same area; and (b) the number of trees per hectare does not exceed a maximum density"*. It also states that this maximum density *"shall be defined by Member States and notified on the basis of traditional cropping practices, natural conditions and environmental reasons. It shall not exceed 100 trees per hectare. However, that limit shall not apply in relation to the measures referred to in Articles 28 [i.e. an agri-environment-climate measure] and 30 [i.e. a Natura 2000 and Water Framework Directive measure] of Regulation (EU) No 1305/2013"*. However despite the above wording, many farmers incorporating trees (that are not classified as permanent crops) on arable land find that their direct payments are reduced.

#### **Agroforestry on permanent grassland**

Regulation 1307/2013 Article 4(h) defines "permanent grassland" as *"land used to grow grasses or other herbaceous forage naturally (self-seeded) or through cultivation (sown) and that has not been included in the crop rotation of the holding for five years or more; it may include other species such as shrubs and/or trees which can be grazed provided that the grasses and other herbaceous forage remain predominant, as well as, where Member States so decide, land which can be grazed and which forms part of established local practices where grasses and other herbaceous forage are traditionally not predominant in grazing areas"*.

#### **Grazing and intercropping of permanent crops**

Regulation 1307/2013 Article 4(g) defines "permanent crops" as *"non-rotational crops other than permanent grassland and permanent pasture that occupy the land for five years or more and yield repeated harvests, including nurseries and short rotation coppice"*. Hence "permanent crops" include short rotation coppice and apple and olive trees, among others.

#### **Greening payments**

Regulation 1307/2013 paragraph 37 explains that Pillar I includes mandatory greening payments which *"support agricultural practices beneficial for the climate and the environment"*. These are



effectively a release of 30% of the basic payment which is held back unless the farmer can demonstrate practices *“that go beyond cross-compliance and that are linked to agriculture, such as crop diversification, the maintenance of permanent grassland, including traditional orchards where fruit trees are grown in low density on grassland, and the establishment of ecological focus areas.”*

Any farmer with more than 15 ha of (non-organic) arable land is expected to show that an area equivalent to 5% of the owned arable land is recorded as an Ecological Focus Area (EFA). The inclusion of landscape features and agroforestry as part of the Ecological Focus Area (EFA) is intended to further protect the woody component by providing some funds for the ecosystem services they deliver. However, in most Member States, greening is more commonly linked to options other than agroforestry or landscape features. In the case of the agroforestry option for EFA, only those agroforestry plots planted under Measure 8.2 can be designated as part of the EFA. However, implementation of Measure 8.2 is linked to a whole plot and not only to 5% of the plot, which is the maximum amount of land allowed for the EFA payments.

### **CAP Pillar II - Agroforestry in the Rural Development Regulations**

Mosquera-Losada et al. (2016) identified 27 measures within the 2014-2020 Rural Development Regulations, including Measure 8.2, that could support the deliberate integration of woody vegetation with farming. However, the segregation of measures also makes it really difficult to have a comprehensive overview of the promotion of the different agroforestry practices through Pillar II of the CAP.

Much of Pillar II focuses on the delivery of environmental benefits. The lack of an adequate link between Pillar I and Pillar II prevents farmers from adopting and implementing Measure 8.2. New agroforestry practices promoted by Pillar II (CAP 2014-2020) often have an initial tree density of more than 100 trees per hectare, which currently prevents the land being eligible for direct payments from Pillar I. This loss of payments from Pillar I has probably deterred farmers from implementing this form of agroforestry. Although the funding available for the maintenance of new agroforestry systems is 5 years in the 2014-2020 RDP, this is still less than that available for afforestation. The current difference between the maintenance payments of afforested/reforested lands (10 years) and agroforestry (5 years) has also probably reduced the adoption of agroforestry Measure 8.2.

### **Agroforestry measures in agricultural land**

In the 2014-2020 rural development programmes, there are two measures specifically supporting tree planting on agricultural land. Measure 8.1 supports afforestation/reforestation and Measure 8.2 supports the establishment and maintenance of agroforestry practices. The agroforestry measure is applied only to agroforestry areas comprising a payment for establishment and maintenance (5 years payment related to an assumed reduction in the net financial return from the land). The number of years for maintenance payments under Measure 8.1 is 10, which makes farmers currently more likely to use measure Measure 8.1 than Measure 8.2. No specific funds are allocated to improve the management and restoration of already existing agroforestry lands in a clear way.

### DRIVERS

#### **ECONOMIC**

Need to improve the economic viability and sustainability of agriculture and forestry in the EU.

#### **SOCIAL**

Need to improve opportunities for livelihoods and community development in rural areas of the EU.

#### **LEGISLATIVE**



Agroforestry contributes to the three objectives of CAP: “a) viable food production, with a focus on agricultural income, agricultural productivity and price stability; b) sustainable management of natural resources and climate action, with a focus on greenhouse gas emissions, biodiversity, soil and water, and c) balanced territorial development, with a focus on rural employment, growth and poverty in rural areas” (Regulation 1306/2013).

## ENVIRONMENTAL

Need to improve the provision of non-commodity ecosystem services from agriculture and forestry in the EU.

## EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

The present impact of agroforestry measures in the CAP is limited. As the current area of agroforestry is estimated to be the equivalent of 8.8% of the utilised agricultural area (den Herder et al. 2017), there is substantial scope for expansion, a potential area of at least 90% in the respective land covers (arable lands, permanent pasture and permanent grasslands) (Mosquera-Losada et al. 2016).

## STRENGTHS/ WEAKNESSES

### STRENGTHS

Much Pillar I CAP regulation takes place at a plot level, but Pillar II can be implemented at farm level. Agroforestry can contribute to landscape- and catchment-level goals such as the improvement of biodiversity and water quality. In some situations, it can be useful to distinguish between agroforestry at a plot, farm and landscape-scale.

Pillar I: Agroforestry on farms (e.g. silvopasture, silvoarable and hedgerow, windbreak and riparian buffer strips) to deliver ecosystem services (e.g. carbon sequestration and biodiversity enhancement) positively addresses the objectives of the CAP. It can be promoted in a simple and straightforward way. Agroforestry with permanent crops is already directly eligible for basic payments. Agroforestry should also be fully eligible for basic payments in the Pillar I agricultural lands layers of arable and permanent grassland when linked to an appropriate management plan. Agroforestry areas should also directly receive the payments linked to greening because of the benefits of agroforestry for the climate and the environment if linked to a management plan.

Pillar II of the CAP should promote agroforestry through payments to enhance agroforestry practices (silvopasture, silvoarable, hedgerows, windbreaks and riparian buffer strips) on agricultural land and in forests (forest farming and silvopasture). It is also important to improve farm management (LCA and carbon footprint).

Rural promotion through agroforestry enhancement could also be achieved through the establishment of cooperation to act at landscape and value chain level, increasing the sustainability of farms at different levels (carbon footprint and LCA but also market and labelling). Education at different levels is a key aspect to foster agroforestry and enhanced through activities like those developed under the EIP-Agri framework.

### WEAKNESSES

CAP has complicated rules for agroforestry implementation and often this has the perverse effect of simplifying the farmed landscape. Even though there is a clear recognition of the positive role of woody vegetation in delivering ecosystem services, it is unclear how this vegetation fits in the whole CAP (with many rules for the landscape features linked to cross-compliance, but also to greening and Pillar II).

The administrative difficulty for both farmers and administrators in identifying and monitoring landscape features, including woody vegetation, has made landscape features protection difficult. Moreover, the current activities only focus on the preservation of landscape features, but not in their promotion.

Agroforestry measures in forest land - Agroforestry practices such as forest farming and silvo pasture specifically linked to forest lands are not funded by Pillar I. Forest farming is the farming, in a forest environment, of non-timber products such as medicinal plants and mushrooms. Forest farming is currently a poorly recognized activity across Europe and some extraction methods can undermine production and biodiversity.

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## 75. Participatory Guarantee System National Technical Standard (Bolivia)

### CATEGORY

Mixed – policy and market

### GEOGRAPHIC SCOPE

National

### CLUSTER

local food certification, quality certification, agro-ecological procurement, support to short supply chain

### LEGISLATIVE REFERENCE/ NAME OF OWNER

Bolivia Participatory Guarantee System (PGS) National Technical Standard, 2006.

Bolivia Law N° 3525, 2006.

### OVERALL/ SPECIFIC OBJECTIVES

With Law Nr. 3525, the Bolivian Government has prioritized ecological production of food and created and supported projects and development plans at national and regional level to consolidate ecological production throughout the country, in response to the demand of farmers and small producers. Chapter V of article 23 explains that the recognition of certification is divided between export or international trade and local or national trade. Accordingly, alternative Guarantee Systems (including PGS) are recognized at a national level in Bolivia under the supervision and regulation of the competent authority, named CNAPE (National System of Ecological Production Control/ Consejo Nacional de Producción Ecológica).

Food sovereignty is included in the constitution of Bolivia (McKay et al. 2014) which forms the rationale for Participatory Guarantee Systems. The PGS National Technical Standard (2006) establishes PGS as a certification system, an alternative to third party certification, locally adapted, economically viable and ecologically acceptable, which recognizes and guarantees the quality of ecological products, gives access to market channels and favours cultural traditions.

### LINK TO AGRO-ECOLOGY

PGS are locally focused quality assurance systems for organic or agro-ecological production. They certify producers based on active participation of stakeholders and are built on a foundation of trust, social networks and knowledge exchange. Similar to conventional organic certification systems, PGSs relies on the basic norms and standards of organic agriculture. The difference lies that PGS aims to adapt such standards to the local farmer's reality, taking into account weather conditions, livelihoods, access to financial support and accessible prices for the local market.

### TOOLS USED TO ACHIEVE OBJECTIVES

The PGS National Technical Standard promotes ecological production, processing and consumption; consumption of local and national products; community consolidation; the protection and sustainable use of natural resources; genetic equity; strengthening of local economies; and inclusion and participation of families in markets where they can sell and exchange their products for a fair price and where their labour is appreciated.

Agro-ecological practices promoted by National Technical Standard include:



- No use of agrochemicals;
- Agro-ecological management of soils, no irrigation with polluted waters and classification of soils by ecological zones;
- Use of local plant varieties to prevent pests and diseases;
- Ecological management of pests (cultural and biological control);
- Biodiversity management. Conservation and respect for protected fauna and flora;
- Sustainable harvesting and use of selected products;
- Selection of crops, local varieties and adapted varieties. Management diversifies genetic resource and conservation of traditional seeds;
- Use of compost and natural fertilization. Producers have to plan ecological management of soils;
- No use of genetically modified organisms;
- Animal protection. Sustainable management of animals for production and to close production cycle;
- Respect for traditional and local knowledge;
- Food sovereignty;
- Gender equity;
- Fairtrade.

#### DRIVERS

##### POLITICAL/ LEADERSHIP

President Evo Morales, first indigenous president, has championed indigenous rights, rights of rural labourers and farmers.

##### ECONOMIC

To ensure fair compensation to producers of quality products and guarantee of quality for consumers in locally managed short supply chain.

##### SOCIAL

The quest for food sovereignty - the right of the people to be in charge of their own production and consumption without outside dependencies. Provision of healthy, ecologic, local food to schools as part of procurement programmes.

##### LEGISLATIVE

Strong national legislation on the protection of nature (the rights of mother earth), the protection of indigenous and tribal people, national organic law, regulations on agro-ecological practices.

##### ENVIRONMENTAL

Nature friendly production.

#### EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

- More consumers are buying agro-ecological products and are interested in agro-ecological practices at ecofairs and in speciality shops.





- The involvement of consumers in markets has increased the diversity of products requested and producers have gradually been able to adapt their production to this new demand.
- More producers are involved in the market channels available for agro-ecological products.
- Besides the classic market channels such as on-farm sales, ecofairs and the public procurement market are two of the new market channels that have opened up to promote agro-ecological products.
- The participation of more consumers and the diverse products offered have generated an increase in sales for producers and intermediaries, a subsequent increase in incomes and better living conditions.

### STRENGTHS/ WEAKNESSES

#### STRENGTHS

PGS systems can have positive impacts on the social, political and economic situation of small scale farmers and can improve the nutrition of the local population. Yet, an overall socio-ecological transformation on a larger scale would be necessary to ensure the 'good living' for everyone. A publicly recognized PGS provides a trustworthy mechanism for public procurement. Opportunities for external support for product diversification and greater visibility for agro-ecological products.

#### WEAKNESSES

Prices paid in the public procurement schemes do not adequately value the agro-ecological quality of products.

Lack of information for intermediaries and consumers about agro-ecological products and production practices.

PGS markets are frequented mainly by upper-middle class urban population.

A more active engagement of the consumers is necessary.

The current rise in organic consumption does not automatically give way for a more just and environmentally friendly mode of production.

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## 76. The State Policy for Agro-ecology and Organic Production (Brazil)

### CATEGORY

Policy and Market Incentives

### GEOGRAPHICAL SCOPE

National

### CLUSTER

National strategy for agro-ecological and organic farming and food

### LEGISLATIVE REFERENCE/ NAME OF OWNER

Law No. 5801/2017 creating the State Policy for Agro-ecology and Organic Production (PDAPO).

Lei n. 5801/2017 - Institui a Política Distrital de Agro-ecologia e Produção Orgânica - PDAPO e dá outras providências

### OVERALL/ SPECIFIC OBJECTIVES

The PDAPO aims at integrating, articulating and adapting plans, programmes and actions to promote organic and agro-ecological production. The Policy aims to promote the sovereignty and food and nutritional security as well as the human right to adequate and healthy food.

The objectives of the PDAPO are comprehensive:

- promoting the acquisition of products from family farms by public agencies;
- encouraging the consumption of healthy, sustainable and value-added local and regional food crops;
- strengthening the production, processing and consumption of organic and agro-ecological transition products, with emphasis on local and regional markets;
- promoting and consolidating access, use and conservation of natural assets by farmers;
- creating and implementing regulatory, fiscal, credit, incentive and payment instruments for environmental services to protect and valorise traditional practices for the use and conservation of agro-biodiversity and for the expansion of organic and agro-ecological transition;
- increasing the capacity of generation and socialization of knowledge in organic production and agro-ecological transition through the enhancement of local knowledge and agro-ecological approach in educational and research institutions;
- strengthening state-based and non-state participatory research programs in the field, based on agro-ecology, etc.

### LINK TO AGRO-ECOLOGY

An integrated approach to the promotion of organic and agro-ecological production promoting food sovereignty and nutritional security as well as the human right to adequate and healthy food.

### TOOLS USED TO ACHIEVE OBJECTIVES

**Ensuring markets for products, supporting short chain markets**



- promoting the acquisition of products from family farms by public agencies;
- encouraging the consumption of healthy, sustainable and value-added local and regional food crops;
- strengthening the production, processing and consumption of organic and agro-ecological transition products, with emphasis on local and regional markets.

**Financial support for traditional practices/ agrobiodiversity/ organic farming/ agro-ecology**

Creating and implementing regulatory, fiscal, credit, incentive and payment instruments for environmental services to protect and valorize traditional practices for the use and conservation of agro-biodiversity and for the expansion of organic and agro-ecological transition - promoting and consolidating access, use and conservation of natural assets by farmers

**Support for local knowledge, agro-ecology education, research**

Increasing capacity for the generation and socialization of knowledge in organic production and agro-ecological transition through the enhancement of local knowledge and agro-ecological approaches in educational and research institutions; Strengthen state-based and non-state participatory research programs on the field, based on agro-ecology, etc.

DRIVERS**ECONOMIC, ENVIRONMENTAL**

Agro-ecology grew as an alternative to the crisis of industrial agriculture.

**SOCIAL**

The agro-ecological agenda was an emerging, grassroots process linked to the social movement that had historically struggled to put an end to the enormous agrarian injustices in Brazil where 1.6 percent of landowners possess 47 percent of the land and where 3 percent of the rural population owns 66 percent of the arable land.

In Brazil, agro-ecology started gaining ground in academia as an alternative vision of agriculture in the 1980s. Researchers and non-governmental organisations (NGOs) such as Assessoria e Servicos a Projetos em Agricultura (AS-PTA) first started disseminating information on the agro-ecology alternative. This became central to farmer-to-farmer cooperation and knowledge sharing. Under the Ministry of Science and Technology (MCT), the National Council for Scientific and Technological Development (CNPq) incorporated agro-ecology into its research initiatives, as did the Coordination of Improvement of Higher Education Personnel (CAPES) under the Ministry of Education. This played a major role in the institutionalisation process of agro-ecology into research and implementation processes in both academic and independent research institutions, governmental departments and, ultimately, on the farm.

The Brazilian Association of Agro-ecology (ABA), comprised of small farmers, researchers and NGOs, was instrumental in the institutionalisation and implementation of agro-ecology in Brazil. The ABA works in conjunction with the Latin American Scientific Society of Agro-ecology (SOCLA), a regional network of researchers, professors, experts etc. which promotes agro-ecology as an alternative to the crisis of industrial agriculture. In 2002, the National Articulation of Agro-ecology (ANA) emerged as an arena for movements, networks and civil society organisations to promote and share experiences of agro-ecology systems in practice.

EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

- 100, 000 agro-ecology-based family farmers.
- 100%–300% average yield increases.



- Resolved issues of soil management, fertilisation, pest controls, traditional variety seed production and improvement, agroforestry.
- Traditional crop varieties recovered: beans, corn, potatoes, rice, wheat, manioc.
- Agro-ecological participatory development approaches, which also include research and farmer organisations' capacity-building costs, have been proven to be ten times more efficient than government extension agency services.

### STRENGTHS AND WEAKNESSES

#### STRENGTHS

The agro-ecological agenda was an emerging, grassroots process. Agro-ecology allowed the establishment of connections with other agendas, gradually getting several segments of society to adopt this program, and thus introducing it in public policies on many fronts, be it the environmental and technological agenda, public health, education, or research. Synergies between issues of food and nutrition security, and other topics were cultivated – such as the fight against hunger and misery, food culture, healthy eating, strengthening of family farming and peasant agriculture.

The Participatory Farmer Network has been central to fostering and supporting agro-ecology-based family farmers through a 4 step process:

1. Engage with local farmer organisations about alternative food systems.
2. Identify main problems and potentials of farmers' agro-ecosystems.
3. Analyse problematic causes using a participatory rural appraisal (PRA), engaging farmers, scientists, technicians, academics etc.
4. Broadcast the results of the PRA on local radio, televisions, community boards.

Under The Ministry of Agrarian Development (MDA), the National Programme for the Strengthening of Family Farming (PRONAF) provides access to low-interest credit for family farmers.

The Technical Assistance and Rural Extension (ATER) programme provided technical support and extension for 2.3 million families in 2010. ATER provides technical support for crop-diversification techniques and irrigation systems and aims to strengthen productive organisation and stimulate agro-ecology-based productive systems. ATER also has a sectoral policy which specifically focuses on support for women, which was established under the National Technical Assistance and Rural Extension Programme (PRONATER) in 2004.

Brazil's Food Acquisition Programme (PAA) was launched in 2003 to ensure the public purchase of family farming products to meet the needs of populations facing food and nutrition insecurity. Family farmers receive a fair price from the federal government based on a regional market value average. These products are then donated to people facing food insecurity through schools, day care centres, shelters, hostels, nursing homes, hospitals and NGOs.

To further strengthen family farmers' market access, the School Meal Law of the National School Meal Programme (PNAE) was established and passed in 2009, which determines that at least 30 per cent of school meal funds transferred by the National Education Development Fund (FNDE) must be purchased from family farms.

Although these programmes exclusively support family farms, they do not exclusively support agro-ecology. However, they exemplify how agricultural policies can be designed with a dual-track approach of supporting (family farm) production and social protection for poor people. Brazil has now successfully established the institutional capacity to effectively implement such a strategy, and with a few changes of increased incentives, support and protection specifically for agro-ecological

practices within the existing framework, the country could further transform its family farm agriculture into one based on agro-ecological practices.

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## 77. The Organic Standard and Certification Scheme (Tunisia)

#### CATEGORY

Policy

#### GEOGRAPHIC SCOPE

National

#### CLUSTER

National organic standard and certification scheme

#### LEGISLATIVE REFERENCE/ NAME OF OWNER

Loi 99-30 du 5 avril 1999, relative à l'agriculture biologique Tunisia.

#### OVERALL/ SPECIFIC OBJECTIVES

Promotion of organic farming by adopting/ adopting an internationally recognized organic farming certification scheme in order to add value to export products and diversify organic production.

The IFOAM (and EU and French) standards were used as the basis for the Tunisian organic certification scheme. The key motivating factor was the belief that these represented best practice in organic standards, and that working from these models would help Tunisian organic legislation to be considered credible and become internationally recognised. Working from internationally recognised standards helped Tunisia to gain and maintain access to international markets. Some aspects differ to better respond to national priorities to protect the rights of Tunisian organic producers and operators.

In 1999, the Government set up a Commission to explore organic agriculture. This resulted in the adoption of the *Loi 99-30 du 5 Avril 1999, relative à l'agriculture biologique*. Several government departments were involved in the more than six months of consultation leading up to the introduction of the legislation (Ministry of Commerce, Ministry of Industry, Ministry of Health, Ministry of Environment, Ministry of Finance, Ministry of Customs and National Agency for Agricultural Investment), and their continued involvement today, in many ways, demonstrates the extent of the consultative, strategic and inclusive approach the government has undertaken to organic certification.

The Ministry of Agriculture and Hydraulic Resources was the lead ministry, responsible for the development, implementation and reform of organic agriculture legislation. It also chairs the National Commission of Organic Agriculture. Within the Ministry also sits the National Bureau of



Organic Agriculture, responsible for developing and monitoring organic certification. It manages a database on organic certifiers, certificates, product traceability, crops, volumes, markets, and exports. The Bureau contributes to the International Task Force on Harmonization and Equivalency in Organic Agriculture and the Mediterranean Organic Agricultural Network. Organic certification bodies are registered and approved by the National Commission of Organic Agriculture, Ministry of Agriculture.

In the Ministry the Technical Centre of Organic Agriculture (CTAB) is responsible for applied research to support organic farming such as, for example, experiments in crop rotations, composting, or the rearing of insects for biological control. Its role is to adapt research results to local and regional farming conditions present across Tunisia's organic production areas. The CTAB also provides training, education and information to farmers and other researchers. Further training and technical advice is also offered through a regional network of 24 Departments (provinces) using trained organic engineers that are out-posted liaison CTAB officers.

#### LINK TO AGRO-ECOLOGY

An integrated policy approach including certification scheme to support organic production, processing and supply chains.

#### TOOLS USED TO ACHIEVE OBJECTIVES

The Tunisian Government supports organic agriculture through a package of tax breaks and financial incentives, which combined can cover up to 70% of the costs of certification. Tax breaks and financial incentives that are provided include:

- Tax deductions for all investment income and benefits during the first ten years;
- Tax deductions on income and benefits reinvested as part of the initial capital investment in an organic agriculture company or as an increase in such investment, including invested benefits to the company;
- Exemption from custom duties and suspension of value added tax (VAT) for imported equipment that does not have a locally manufactured equivalent;
- Suspension of VAT for locally produced equipment;
- Reimbursement of contract fees incurred as a result of investing in agricultural land;
- Subsidies related to project study fees;
- Investment subsidies fixed at 30% of the value of equipment and tools specific to organic projects;
- Annual subsidies for five years to cover inspection and certification fees, equivalent to 70% of the cost, provided that the overall value of the subsidies does not exceed 5,000 Tunisian Dinars;
- Presidential prize for the best organic farm.

Additionally, there are incentives for agricultural projects that are entirely export-oriented:

- Exemption from custom duties and suspension of VAT for the acquisition of equipment and supplies necessary for production;
- Possibility of assistance for local marketing at the rate of 30% of the production value;
- Normally all foreign experts working in Tunisia must be government approved. For organic agriculture, the government allows export-oriented projects to recruit up to four foreign experts without prior written agreement from the government to help save time and money.



## DRIVERS

### POLITICAL/ LEADERSHIP

Both the President of Tunisia and the Minister of Agriculture were convinced of the merit of organic agriculture. Their support provided the necessary political will to spur the country's engagement with organics.

### ECONOMIC

Organic agriculture began in Tunisia in the mid-1980s, when 5-6 farmers began producing dates using organic methods, though not undergoing certification. A European buyer suggested that if they became certified they could command a price premium for their dates. Acting on this advice, they became the first certified organic farmers in Tunisia. Individuals from the Ministry of Agriculture and Hydraulic Resources, professors from the Agricultural College in Sousse and government representatives attending international meetings recognized the potential benefits of organic agriculture and organic food in Tunisia's export markets.

### SOCIAL

The Tunisian government strongly believed that organic farming would help improve environmental management practices in agriculture, and to deliver on social policy objectives in rural areas.

### LEGISLATIVE

Organic agriculture appealed to the Tunisian Government because it believed organic farming clearly supported its own policy objectives as laid out in "The National Strategy of Agriculture" including, food security, export promotion, the preservation of natural resources, and improving the revenue of farmers. Since the few existing farmers already followed many organic practices the government considered it would require relatively few changes for these farmers to obtain organic certification. Organic certification would add value to traditional crops like olives and dates that linked indigenous knowledge with national pride, and supported rural farm incomes.

### ENVIRONMENTAL

The Tunisian government strongly believed that organic farming would help improve environmental management practices in agriculture, and to deliver on social policy objectives in rural areas.

## EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

Tunisia's organic legislation has resulted in several positive impacts in the areas of trade, environment, conventional farming, applied research, academic and professional training. Tunisia has the largest area of certified organic land in Africa covering some 220,475 hectare. The number of certified organic farms has grown from 10 in 1997 to 862 in 2006. Referring to international standards has helped Tunisia access new markets. Tunisia's organic exports have grown from Euro 7,3 million (3018 tons in 2003/2004) to Euro 34 million<sup>28</sup> (9000 tons in 2006/2007) showing a 21% increase in export value over five years. Furthermore, over the past few years the demand for Tunisian olive oil has increased in markets previously held by EU producers, such as the US, Canada and Japan in the last few years.

The yields and quality of organic olives, Tunisia's main agricultural export, have increased through the beneficial effects of organic farming practices. Due to the adoption of the organic certification scheme, Tunisia's organic agricultural sector has significantly expanded and improved the commercial and trade performance of Tunisia's organic sector. Most of the organic production is for export largely because of the price premia it can command. For example, organic olive farmers who sell for export receive a price premium ranging from 10% to 20% compared to olive farmers selling on the domestic market.





The uptake of organic farming, coupled with government support, have helped drive diversification in the crops produced for export. Tunisia has recently started to produce concentrated fruit syrups and aromatic plants for export such as thyme, basil, sage, rosemary, mint, marjoram and camomile in fresh, dried and oil forms.

From an environmental perspective, several improvements have been observed. Most importantly, the health of olive groves, as indicated by the quality of the olives, the yields obtained and their increased resistance to disease have also been achieved through, for example, promoting the breeding of beneficial predator insects (e.g. *Coccinellidae*). The application of compost and manure both recycles low cost local materials and has increased the olive yield of different organic olive farms from 14% to 40%.

### STRENGTHS/ WEAKNESSES

#### STRENGTHS

Accrued benefits can be traced back to the strong investment in agronomic and organic research in Tunisia, underpinned by the government's supportive policy environment. In order to effectively deliver on its policy objectives for organic agriculture, the Ministry is the Technical Centre of Organic Agriculture co-operates with all the Agronomical Institutes of the Academic and Research Institution and in particular, with the Agronomical Institute of Sousse. Modules in organic agriculture are being offered to students (agricultural technicians and engineers), and there are plans to introduce a specialisation in Integrated Pest Management for Engineers. Two Masters of Science level Programmes are being offered in sustainable agriculture and organic agriculture.

Coherent and comprehensive policy framework underpins Tunisia's success. Tunisia's national organic legislation, subsequent orders and decrees, as well as its research institutions and technical support to farmers, subsidies and fiscal incentives have provided a coherent and comprehensive policy framework with which to organise and develop Tunisia's organic agricultural sector: *"Each stakeholder group is specified in the official legislative texts, to guide its development and protect others. Because Tunisia established a national strategy that was well designed and coordinated it is a real success story. If you compare Tunisia's experience with other countries who started at the same time to introduce organic agriculture but have taken a more piecemeal approach Tunisia is much further ahead"*.

Clearly defined management roles are key when several structures are involved in delivering the policy strategy. Alongside the policy framework, clearly defined management roles for the large range of Ministry of Agriculture departments involved in delivering the organic farming policy has been essential. Research, training and communication were made a high priority not only aimed at farmers, but also at the regional organic departmental networks and their technical experts, to help outreach to farmers, increase their awareness and uptake of organics.

Referring to international standards does not prevent national adaptations. By basing its national legislation for organic agriculture on the IFOAM Basic Standard, and EU and French legislation, Tunisia believes it took the best elements from internationally defined and well-recognised standards, but still was able to adapt these to the specific needs of Tunisia's farmers and government policies. That standards be defined at international level, and yet allow for national or indeed local adaptation is both a sign of their credibility and of their respect of international trade law aimed at preventing barriers to trade.

Organic certification can provide a basis for broader economic development strategies. The Ministry of Agriculture is proposing to identify and zone large areas as organic production areas, and to develop these within a regional strategy that integrates other key foreign export earning sectors such as agri-tourism, artisanal and wine production. This initiative includes exploring the French notion of 'terroir' and the *Appellation d'Origine Contrôlée* (AOC) system in partnership with organics.





Once one standard is successfully used, using more makes sense. The Ministry of Agriculture's successful uptake of organic standards is now well proven, and leading to other ministries looking into whether working with international standards may also be appropriate for their policy objectives. The Ministry of the Environment, for example, has proposed a new policy using voluntary eco-labelling standards, rather than developing its own. It has selected Germany's Blue Angel and the EU's Ecolabel certification and labelling systems.

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Case Study 9: Tunisia's Organic Standard

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## 78. Los Angeles Good Food Purchasing Policy (United States)

#### CATEGORY

Mixed – policy and market

#### GEOGRAPHIC SCOPE

City – Los Angeles

#### CLUSTER

local green food procurement, support to short supply chain, animal welfare, healthy food

#### LEGISLATIVE REFERENCE/ NAME OF OWNER

Los Angeles Food Policy Council Good Food Purchasing Policy

<http://goodfoodla.org/policymaking/good-food-procurement/>

[goodfoodpurchasing.org](http://goodfoodpurchasing.org); [goodfoodcities.org](http://goodfoodcities.org)

#### OVERALL/ SPECIFIC OBJECTIVES

The Good Food Purchasing Program was developed to encourage public institutions to procure food produced through values-driven purchasing standards to foster provision and consumption of healthy, affordable, fair and sustainable food in Los Angeles by food services in the public sector including schools. Improving healthy food access is intended to contribute toward reducing student long-term risk of diabetes, heart diseases, and other conditions that disproportionately impact low-income communities and people of color.

In 2009, on the initiative of the mayor of Los Angeles, a Food Policy Task Force was established and charged with developing a Good Food policy agenda for Los Angeles - food that is healthy, affordable, fair and sustainable. In July 2010, the Task Force released a report called the Good Food for All Agenda (GFAA). The Los Angeles Food Policy Council (LAFPC) was subsequently created in response to one of the recommendations of the report. At the centre of the food policy subsequently adopted by the City of Los Angeles is support for the local economy, sustainable production, a valued workforce, animal welfare, and nutrition.

The Los Angeles food policy addresses the rights of farm and food workers. The rights of local food workers/ laborers are specifically incorporated into food procurement policy which also supports strong environmental sustainability practices by farmers/producers and small local farmers as such.



Similarly, food nutrition is included as a key criteria of the procurement policy. The Good Food Purchasing Pledge (GFPP) adopted by the city pledges to procure food from local and regional producers and processors, to ensure that food is produced in a sustainable manner:

- avoiding the use of synthetic fertilizers and pesticides, antibiotics and hormones;
- avoiding genetic engineering, protecting biodiversity and conserving resources, reducing emissions of greenhouse gases;
- ensuring safe and healthy working conditions and fair compensation for workers in the food supply chain;
- ensuring humane and healthy conditions for livestock;
- promoting healthy, nutritious and balanced diets eliminating unnecessary artificial additives, fats, sugar, salt.

#### LINK TO AGRO-ECOLOGY

The food procurement policy of Los Angeles supports multiple aspects of agro-ecology including environmental protection through the elimination of synthetic fertilizers and pesticides, preservation of biodiversity, conservation of natural resources. The policy supports local markets and short supply chains by prioritizing local producers and processors, thus supporting local/rural economies. Fair, equitable wages and incomes are promoted for workers throughout the supply chain. Humane treatment of livestock is promoted. Nutritious diets based on healthy products are supported.

#### TOOLS USED TO ACHIEVE OBJECTIVES

The key tool to promote and implement the Good Food Purchasing Policy are specific criteria or guidelines for procurement. The Good Food Purchasing Guidelines emphasize five key values: (1) Local Economies, (2) Environmental Sustainability, (3) Valued Workforce, (4) Animal Welfare and (5) Nutrition. Participating institutions must meet the baseline purchasing criteria described in the “Good Food Purchasing Guidelines” document. A tiered, points-based scoring system allows participants to choose which level of commitment best suits the Good Food goals of their organization. Participants are then awarded one to five stars based on their total score.

Cornerstone of the Good Food Purchasing Policy - procurement by the Los Angeles Unified School District School Board of \$125 million of food annually to feed 650,000 K-12 students 76 percent of whom are eligible for the federal free and reduced price meal program. The City of Los Angeles requires that all departments that annually spend more than \$10,000 on food participate in the Good Food Purchasing Program.

#### DRIVERS

##### POLITICAL/ LEADERSHIP

Political leadership shown by city mayor by establishing Food Policy Task Force that led to the establishment of the Food Policy Council and the formulation of the Good Food Purchasing Policy for the city.

##### SOCIAL

Los Angeles as a leader in the U.S. labour movement and reputation for progressive public policy was committed to ensuring that any food policy recognized food labour issues of local farm and food production sector workers.

Concern about the nutrition of students especially from low income families.

##### LEGISLATIVE



Federal policy and administrative procurement changes leading to local and healthy sustainable food procurement policies being adopted across the country. Major national food service companies, responding to consumer demands, were rapidly developing their own internal food purchasing guidelines.

## ENVIRONMENTAL

Local to global environmental issues have a high relevance among decision-makers and residents.

## EVIDENCE OF ACHIEVEMENTS/ OUTCOMES

Those working with food policy in Los Angeles have dramatically expanded their understanding of labour issues and broadened acceptance that the treatment of workers is a fundamental component of “good food”. Local purchasers and their suppliers are beginning to understand the tools to operationalize the food procurement guidelines/ criteria. The labour movement is beginning to play an active role in developing holistic food policy solutions that embrace good jobs, a healthy environment and a thriving community.

Gold Star Foods, which is a major supplier of produce and bread to public canteens in Los Angeles has created about 65 full-time jobs as a direct result of the new procurement rules. Wheat that is procured is sustainably grown.

The University of Wisconsin is helping develop an evaluation system to measure its impact.

## STRENGTHS/ WEAKNESSES

### STRENGTHS

- Cross-sector collaboration within city administration to advance holistic food system change.
- Multiple criteria defined to guide achievement cross-sectoral food policy.
- Voluntary approach that allows participants to participate and increase their performance in relation to the city food procurement policy based on a progressive 5 star scoring system.

By harnessing public institutions’ buying power, the policy has already led to tremendous shifts in local purchasing and spurred health and economic benefits to students, food suppliers, growers, entrepreneurs, and distributors alike.

- Overall the Good Food Purchasing Campaign encourages large institutions to direct their buying power toward five core values – local economies, environmental sustainability, valued workforce, animal welfare and nutrition. There are key features that are critical to a campaign’s success:
- **Multi-Sector Coalitions** that reflect the five values and build local ownership and long-term relationships with institutions and regional suppliers to ensure local accountability and commitment;
- **Supportive Administrators** who are eager to measure and communicate the impact of their food purchases and committed to making even greater change;
- **Local Political Champions** committed to using the public contracting process to ensure Good Food is a right and not a privilege for all of their constituents, and that food suppliers reflect an institution’s social and environmental values.

## REFERENCES

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