



Short Communication

Greening, new frontiers for research and employment in the agro-food sector

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HIGHLIGHTS

- Greening of the CAP is mainly driven by the increased demand for sustainably produced food.
- All stakeholders along the food value chain are responsible for the sustainability of food.
- Farmers will have to network with food suppliers to communicate sustainable practices to consumers.
- It is important to train and support farmers for the management of greening measures.
- Collaboration across several disciplines is needed for the successful implementation of greening measures.

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ABSTRACT

The “greening” of the European Union’s (EU) Common Agricultural Policy (CAP) is meant to protect and enhance biodiversity as well as to make food production more sustainable by encouraging, for example, the responsible use of natural resources. The “greening” process seems to be driven by, first of all, the policy push through various policy and regulatory measures. Farmers have to invest time and resources in maintaining permanent grasslands, practice crop diversification and manage ecological focus areas for which they will receive compensation from the EU. “Greening” is also driven by the consumer or market pull generated by preferences for more sustainably produced food and sustainability initiatives along the agro-food chain. EU investments in research and development activities are required for the successful implementation of greening practices. Professionals from different disciplines are called upon to provide, in the next few years, solutions for all the new requirements in order to realize a sustainable and socially and economically healthy agricultural system. Besides this, farmers need support to implement and manage greening measures, but also to reap the benefits of their investments by networking and engaging with stakeholders higher in the agro-food chain, such as retailers and supermarkets. This is not only to assure sustainability at processing, packaging and storage, but also to increase visibility of farmers’ practices to consumers through communication that may help influencing consumers’ choices. These factors are currently not given the importance they need by the EU, but are crucial for a successful “greening”.

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1. Introduction to the “greening” of the Common Agricultural Policy

The European Common Agricultural Policy (CAP) was established in 1962 and has changed continuously depending on the developments of the sector, the challenges it faces and also the public opinion. The main objectives of the CAP are to realize a viable food production, to sustainably manage natural resources and to support the development of rural areas. In 2011, around 40% of the European Union’s (EU) budget, equivalent to €58 billion, was spent on the CAP. The expenditures cover:

income support for farmers and subsidies related to sustainable agricultural practices (70%); market support measures (10%) and; rural development (20%) (EC, 2013a).

In Europe, more than 35 % of the land is cultivated with crops. Farmers manage around 50 % of Europe’s lands including grasslands (De Castro, 2010). Despite its cultural and socio-economic value, agriculture is often considered to contribute to the deterioration of the environment. Poor soil management practices are reported to increase the likelihood of soil erosion causing permanent loss of arable land, while excessive use of fresh water resources for irrigation is said to reduce the availability of water for other sectors (EEA, 2010a,b, 2012; Hobbs, 2007). Crop monocultures are described to cause a decline in the biodiversity of agro-environments and reduce natural habitat for

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birds, pollinators and other beneficial insects (Kennedy et al., 2013). All these activities impact the European ecosystems and in the long term may affect the socio-economic viability of European agriculture.

Scientists and politicians propose changes in land and water management practices to improve European agro-environments. This feeds the public debate on the importance of sustainable crop production and thus shapes the overall understanding Europeans have of the agricultural sector (EC, 2011a). Due to the constraints and challenges identified for the future of the agricultural activity, and the general public concerns, the EU is determined to bring change in its agricultural policy to reward sustainability (EC, 2013a). While agri-environmental measures stress the importance of the sustainable use of natural resources, the “greening” of the CAP mainly focuses on protecting and enhancing the biodiversity in Europe’s rural landscapes through the promotion of specific agricultural measures (EC, 2013a,b; Euractiv, 2011; PBL, 2011). This is largely driven by scientists’ and also public concerns with regard to the loss of biodiversity (EC, 2006). Safeguarding biodiversity is also part of “the Europe 2020 strategy”: when assessing the necessity of a smart, sustainable and inclusive growth, goals are also established for biodiversity as well as for a better use of natural resources (EC, 2011b).

Mandatory greening practices included in the CAP reform are: maintaining permanent grasslands, practice crop diversification and managing ecological focus areas, e.g. land left fallow, terraces, characteristic landscape features, buffer strips and afforested land (EC, 2013a). In addition to these mandatory greening practices, the CAP through (now a better targeted) rural development component will continue to compensate farmers for the implementation of voluntary agri-environmental measures, for example, the sustainable management of arable soils, water (including irrigation) and crops, the management of wildlife and the preservation of historical landscape elements (Buckwell et al., 2012) or other measures that go beyond the current regulatory requirements in terms of environmental benefits.

The CAP reform will shape the EU’s agricultural sector and its rural landscape and influence the overall capacity of the EU to meet its objectives in areas such as biodiversity, bio-fuels and the development of a bio-based economy, but also to make agriculture more competitive and rural areas economically vibrant (De Castro, 2010).

European agriculture faces several socio-economic challenges next to the environmental challenges. The competitiveness of European agriculture in certain categories of products like protein crops, certain fruits and vegetables, poultry, eggs and beef (EP, 2009, 2010, 2011, 2013) is still lagging behind other regions of the world and the continuous liberalization of global trade puts European products into a difficult position both on the internal market, and on the global market (Hermans et al., 2010; Pilorge et al., 2009). Moreover, European farmers are suffering from the current economic crisis on top of the various internal market crises registered lately (i.e. milk, pork or vegetable market crisis).

The use of natural resources for food production is also very much under question because the EU has a negative balance in trading with resources used for food production, namely in “virtual land”. On an annual basis around 35 million ha of land (approximately the size of Germany) outside of the EU is used to produce food and fiber for EU citizens. This represents the negative net balance of the virtually imported and exported land used for the production of the traded agricultural and food products. If an increased land surface will be dedicated to extensive production systems, there will be a further increase in the “virtual net import of land” adding another 10 million ha of land dedicated to the production of food for the EU (Von Witzke and Noleppa, 2010). This is one of the reasons why it should be evaluated whether the EU’s CAP is still delivering in terms of sustainability and global food security objectives, since the extra surfaces used for food production are mainly located in the less developed regions of the world, like in Africa and Latin America, and the production there takes place with little concern for environmental standards.

The most important question is how and to what extent EU-regulations and the agricultural policy need to: address the sustainability of agriculture; bring environmental balance in food production, and; consider the socio-economic challenges. Sustainable agriculture is equally reliant on meeting economic and social objectives. All these objectives, including the greening measures, need to be addressed in equilibrium so that the EU does not repeat the mistakes made in the past when one single aspect monopolized the agenda and dictated the course of the agricultural policy (e.g. food security in the 1950s and 1960s or market issues in its crises years especially during the 1980s).

Currently, all stakeholder groups are actively involved in shaping the new CAP. Besides the EU decision-making bodies and EU Member States, these groups include farmers, the food manufacturing, processing and wholesale industry, trade unions, land-owner organizations, environmental organizations, universities and other organizations and groups involved in public consultations (Klavert and Keijzer, 2012). The involvement of numerous stakeholders underlines the importance of the reform process and makes the greening of the CAP one of the most discussed topics during inter-institutional negotiations (Council–European Parliament–European Commission) concerning the reform of the legislative package.

Successful “greening” of European agriculture, including the implementation of agri-environmental measures, and at the same time enhancing the competitiveness of European food products on the international food markets, requires cooperation across different professional disciplines to identify ecological focus areas, introduce greening practices on the farm and support the management of rural landscapes.

This paper elaborates on: the increased demand for professionals to dedicate their knowledge and time to the realization of the European agricultural reform, and; the implementation of “greening” measures, which includes training farmers and delivering them the needed support for the management of greening measures and to help them engage with stakeholders higher in the food-value chain. These elements are important in order to realize a sustainable and socially and economically healthy agricultural sector.

2. Direct payments for “green” practices

The reform of the CAP in 2003 indicated already the shift in emphasis to a more sustainable way of production in the agricultural sector, and the new CAP after 2013 will continue in this direction. Through the current and planned changes in its CAP, the EU will continue its financial support to European farmers albeit in a different way. With the greening, 30% of the available budget for direct payments and another 30% of the budget for rural development are likely to be dedicated to practices benefiting the rural environment (EC, 2013a; Bureau et al., 2012).

The three key greening measures proposed as requirements for the farmer in order to benefit from the direct payments are defined as follows:

1. 5% of the agricultural land needs to be dedicated to ecological focus areas (see Table 1) for farms that are larger than 15 ha. This figure will be increased to 7% by 2017 following an analysis by the European Commission.
2. Implementation of crop diversification: minimum 2 crops for farms larger than 10 ha and 3 crops for farms larger than 30 ha.
3. Preservation of permanent grassland. (EC, 2013a).

3. “Greening actions”: opportunities and challenges

The “greening” process for European agriculture seems to be driven by two categories of factors: first, the policy push through the various policy measures or regulatory requirements and; second, the consumer or market pull generated by consumer preferences for more sustainable products and several sustainability initiatives commenced by stakeholders along the agro-food chain.

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