

Assessing environmental integration in EU agriculture policy

Farming has a strong impact on the environment in the European Union (EU), both in a negative and a positive sense. The common agricultural policy (CAP) is a major driver of the agricultural sector, and can therefore positively influence environmental management by farmers. This briefing investigates whether relevant policy measures are well-targeted from a biodiversity perspective. It builds on the results of a project on agri-environmental indicators for monitoring the integration of environmental concerns into EU agriculture policy (the IRENA operation ⁽¹⁾). Progressively, the CAP has incorporated a broad range of agri-environmental policy instruments. However, their impact generally depends on how effective implementation is at national level. Geographic analysis shows that the overlap between Natura 2000 areas and agri-environment schemes could be improved to achieve important environmental objectives. At this stage, more efforts in data collection and policy evaluation are required to fully assess the environmental effect of the CAP.

Agriculture and environment in the EU-15

The IRENA project describes the interface between agriculture and environment in the EU-15 on the basis of 35 agri-environment indicators. It shows that farming has a significant impact on soil and water resources. For example, agriculture is responsible for about 50 % of water use in southern Europe and contributes about 50 % of total nitrogen pollution in the rivers of the EU-15. It is also responsible for around 10 % of total greenhouse gas emissions

and 94 % of ammonia emissions in the EU-15. On the other hand, agriculture can also represent a source of renewable energy, e.g. through the production of biogas or biodiesel. Furthermore, farming is very important for the maintenance of biodiversity and landscapes in Europe. Although intensive agriculture damages biodiversity, extensive farming practices can actually help to maintain biodiversity in Europe. This is evident from analysis of land use in the Natura 2000 protected area network in the EU-15 (see Figure 1). A significant share of habitats in these conservation sites, particularly

in the Mediterranean and mountainous areas, depend on extensive farming practices. To maintain extensive farming systems in such areas, targeted policy support is often called for.

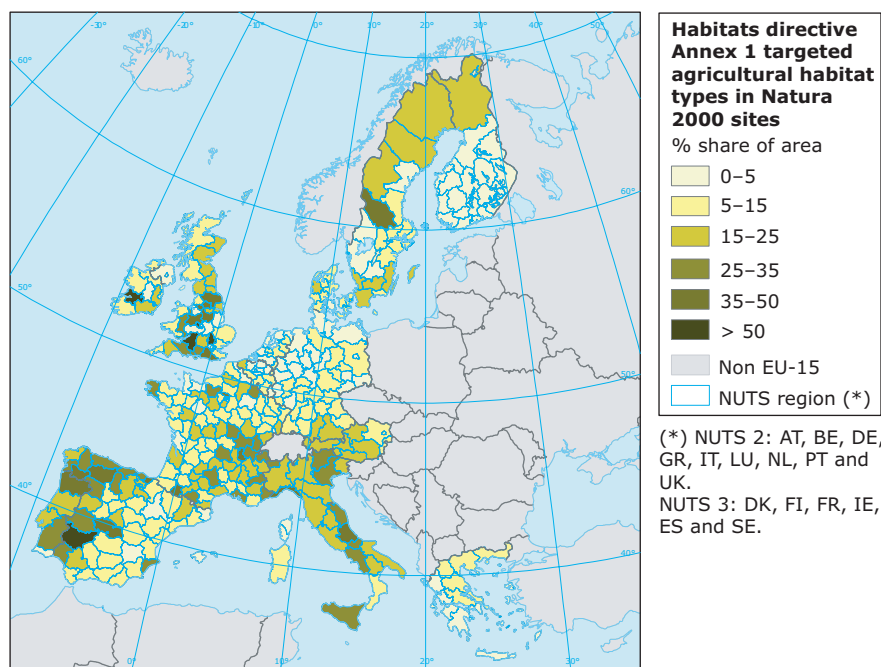
Agriculture policy and environmental integration

The successful integration of environmental objectives into sectoral policy depends on three different aspects: careful design of the policy framework, proper implementation of the policy, as well as monitoring

⁽¹⁾ The IRENA operation developed 35 agri-environment indicators at EU-15 level in a joint exercise between several Directorates-General of the European Commission (DG Agriculture and Rural Development, DG Environment, Eurostat and DG Joint Research Centre) and the European Environment Agency who coordinated the project. Further information on IRENA reports and results is available at: <http://webpubs.eea.eu.int/content/irena/index.htm>.



Figure 1 Share of habitats within Natura 2000 sites that depend on extensive farming practices (Snapshot July 2004)



NUTS = Nomenclature of territorial units for statistics.
 © EuroGeographics Association for the administrative boundaries.

Source: Natura 2000 data, European Topic Centre on Nature Protection and Biodiversity.

and policy evaluation. These three aspects are briefly analysed in the following sections:

The CAP policy framework

Significant progress has been made in integrating environmental policy concerns (e.g. protecting water, soil or biodiversity) into the CAP over the last decades. Relevant policy instruments in the CAP market policy include environmental conditions for income support ('cross-compliance'), set-aside and the energy crop premium. Most important environmental policy measures are found, however, in the rural development section of the CAP. They include agri-environment schemes (where farmers are compensated for better

environmental management), support for environmental investment, payments to farmers in Natura 2000 areas and environmental training. Overall, the CAP policy framework contains a promising range of measures. However, their final effect depends on the focus of budgetary resources and implementation at national level.

Implementation of selected agri-environmental policy instruments

The IRENA assessment report 'Integration of environment into EU agriculture policy', analyses the implementation of agri-environment schemes from two perspectives: the geographic targeting of this policy instrument on areas of highest biodiversity concern

(Natura 2000 areas), and positive examples of their implementation.

Figure 2 shows how the targeting of agri-environment schemes was analysed on the basis of selected agri-environment indicators. The indicators for which data are currently available at regional level include: 'share of agricultural habitats in Natura 2000', 'area under agri-environment schemes' and 'area under organic farming'. Statistical analysis shows how well agri-environment schemes and organic farming overlap with regions where the share of agricultural habitats in Natura 2000 area is very high. If there is good statistical overlap then good targeting of the policy instrument can be assumed.

Statistical analysis indicates that there is a poor geographic match between the key indicators. This implies the need for better targeting of the policy analysed (agri-environment schemes and organic farming) in regions of highest biodiversity concern in the EU-15. Greater attention needs to be paid to this issue in future to ensure that farmland habitats in the Natura 2000 network are appropriately managed.

The effectiveness of agri-environment schemes (and of other policy measures) depends not only on appropriate geographic targeting but also on effective scheme design and implementation. The case studies examined by the EEA provide positive examples. However, other

studies show that the effect of existing agri-environment schemes on biodiversity can be very uneven (Kleijn and Sutherland, 2003). Therefore, it is important to support the sharing of best practice between EU Member States in this regard.

Monitoring and policy evaluation

The effect of the CAP agri-environmental policy framework and its implementation needs to be evaluated by monitoring agricultural and environmental trends. Almost one third of IRENA indicators are underpinned by regional data that show the type and regional distribution of agri-environmental issues across the EU-15. This allows some limited analysis of the likely success of policy integration, as shown above.

However, many of the IRENA agri-environment indicators on agricultural pressures, environmental state or the implementation of policy instruments are insufficiently underpinned by data, especially at regional geographical level. This means that analysis of the likely effect of agri-environmental policy on other environmental issues,

such as nutrient pollution or soil erosion, is currently not feasible at EU-15 level.

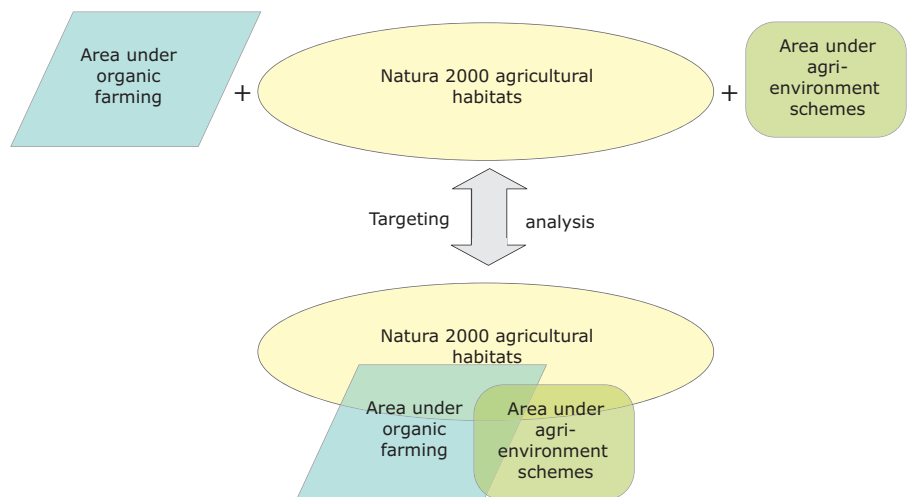
Implications for policy making

The EU common agricultural policy provides an important opportunity for improving environmental management in the agriculture sector as farming income depends to a considerable degree on CAP support. However, this opportunity only becomes reality when relevant policy measures are geographically well-targeted, sufficiently

resourced and effectively implemented. If that is the case, then the CAP can also contribute to achieving other Community environmental objectives, such as the protection of biodiversity via the Natura 2000 network.

A well-targeted and cost-effective approach to environmental integration in the CAP is not automatically guaranteed. Any approach to using agricultural policy for environmental protection needs to be underpinned by comprehensive environmental monitoring and effective policy evaluation. Only then can policy decisions be taken that

Figure 2 Outline and results of the targeting analysis for biodiversity



How to analyse policy integration?

Measuring policy integration is a complex exercise. Firstly, environmentally relevant trends in agriculture are driven not just by the CAP policy framework, but also by market, socio-economic and technological factors. Thus, agricultural or environmental policy cannot easily influence all the farm sector trends that impact on the environment. Secondly, environmental integration at policy level is a complex process. It depends not only on the policy framework or the implementation of measures, but also on a suitable culture of cooperation between administrative bodies, appropriate policy evaluation procedures and other factors (EEA, 2005a). Many of these issues could not be addressed in the IRENA integration analysis.

provide most environmental return from the significant public resources available in the CAP. Further investment in environmental monitoring and policy evaluation is still necessary for policy makers to take better-informed decisions.

Conclusions

A number of conclusions can be drawn from the EEA report, 'Integration of environment into EU agriculture policy', which link to policy design, policy implementation and policy evaluation:

- 1) EU agriculture policy provides an important opportunity to improve environmental management in the farming sector. As a public resource it should be used effectively to maximise environmental gain.
- 2) The design of the CAP now includes a broad range of agri-environmental policy instruments that can support the implementation of wider environmental policies, such as Natura 2000. Agri-environment schemes, for example, can help maintain extensive farming practices in Natura 2000 areas. Such practices are often essential for maintaining the ecological quality of farmland habitats in these areas.
- 3) The effectiveness of agri-environment schemes in particular depends on national level implementation and geographic targeting. Analysis of budgetary spending in different regions of the EU-15 shows that the targeting of agri-environment schemes on areas of high nature value farmland, in particular those in Natura 2000 sites, could be improved.
- 4) Current data and indicators are insufficient to properly assess the environmental effect of the CAP. An adequate resource investment in data collection and policy evaluation is necessary to assess whether policies supporting environmental integration are effective or efficient. Such evaluation exercises are essential for ensuring a better return from the budget allocated to major (agri-environmental) policy measures.

References

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