## ASSESSING ENVIRONMENTAL INTEGRATION IN EU AGRICULTURE **POLICY**

## EVALUAREA PROCESULUI DE INTEGRARE A FACTORILOR DE MEDIU ÎN POLITICA AGRICOLĂ A UNIUNII EUROPENE

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Abstract: Four policy instruments will be presented Rezumat: În această secțiune vor fi prezentate 4 in this section: agri-environment schemes, good instrumente în crearea politicilor: scheme agricole farming practice (GFP), cross-compliance and less și de mediu, practici eficiente în cultivarea favoured area payments. The first three are most pământului (GFP), instrumentul de conformare și clearly designed for improving environmental management whereas for LFA allowances this appears to be a side benefit of their principal objective of ensuring the continuation of farming in marginal areas of the EU. The exception is the measure for areas with environmental restrictions. Agri-environment schemes and LFAs provide incentive or compensation payments while GFP and cross-compliance introduce minimum standards reprezintă sume stimulatoare sau compensatorii în farmers have to comply with to be eligible for timp ce practicile eficiente de cultivare a different types of subsidies. Evidence for improved pământului și instrumentul de conformare introduc environmental management by farmers as a result standarde minime pe care fermierii vor trebui să le of the application of a policy instrument is strongest respecte pentru a primi diferite tipuri de subvenții. for agri-environment schemes, but even in this case Dovezile îmbunătățirii managementului mediului monitoring and evaluation procedures have to be de către fermieri în urma aplicării unui instrument improved.

plățile acordate pentru zonele dezavantajate. Primele 3 sunt foarte clar create pentru îmbunătătirea managementului mediului în timp ce plățile pentru zonele defavorizate apar ca un beneficiu secundar al obiectivului principal de asigurare a continuării lucrării pământului din zonele mărginașe ale Uniunii Europene. Schemele agricole și de mediu precum și aceste plăți al acestei politici sunt mai clare în cazul schemelor agricole și de mediu, dar chiar și în acest caz procedurile de monitorizare și evaluare trebuiesc îmbunătățite.

Key words: policy, evaluation, indicators, breeds, Regulation, target, law, environmental protection Cuvinte cheie: politica, evaluare, indicatori, rase, Regulament, țintă, lege, protejarea mediului

#### INTRODUCTION

There is a wide range of environmental legislation and CAP policy instruments with the potential to meet environmental objectives and targets established at EU and national level. Understanding how these policy instruments have been implemented at Member State level, and farmers' responses to them, is critical to evaluating the overall progress towards environmental integration in EU agriculture policy.

The first part of this paper describes the implementation of various policy instruments at Member State level showing different implementation patterns. Information on the implementation of policy instruments at Member State level has been drawn from a wide range of sources, such as the IRENA indicators themselves, Member State reports, and published evaluations and studies. The policy instruments considered in this chapter are, firstly, those for which IRENA "response" indicators exist: Agri-environment schemes and Good farming practice. Secondly, other relevant CAP instruments are considered to give a fuller reflection of how the evolved CAP framework provides further opportunities for integrating environmental concerns. These include cross compliance and less favoured areas. Where possible, data on the geographical implementation of each measure in all EU-15 Member States is presented. It has not been possible however to find information covering all EU-15 Member States for all measures. Furthermore, it was not possible to gather information on the national (or regional) design and environmental impact of the different policy instruments analysed.

The second part of this paper presents two case studies: nutrient management and the conservation of farmland biodiversity. An assessment of progress towards policy integration in relation to these issues is made drawing on the IRENA indicators and information on implementation patterns. Case studies draw out lessons for the appropriate design and mix of agrienvironmental policy instruments.

# MATERIALS AND METHOD 1. ASSESSMENT OF IRENA INDICATORS 1.1 AGRI-ENVIRONMENT SCHEMES

IRENA No. 1 shows that the importance of agrienvironment measures has increased over time. In 2000 approximately 20 percent (25.2 million hectares) of the utilised agricultural area (UAA) of the EU-27 was covered by management contracts. This had risen to 24 percent (30.2 million hectares) in 2007. A wide range of uptake levels in different Member States contributes to this average. Coverage goes beyond 75% in Finland, Luxembourg, Sweden and Austria. However, it reaches less than 10% in Greece, Spain and the Netherlands. A range of factors, including national budgetary resources, contributes to these differences. The Community expenditure on agri-environment measures has increased significantly from less than 50 million EUR in 1993 to reach nearly 3 912 million EUR in 2007.

In terms of overall funding, many Member States spend significant proportions of the Community contribution to rural development on agrienvironment schemes (about 40 % under EAGGF Guarantee). The compensatory allowances for LFAs are the second largest measure, taking up about 20 %. The total EU rural development budget includes the EAGGF-Guidance fund, which does not co-finance these two measures. In terms of the total EU rural development budget agrienvironment schemes and LFAs have a share of 30% and 11%, respectively. However, IRENA No. 1 shows that at EU-27 level the average annual agrienvironment expenditure is 16 EUR per ha UAA from the Community budget. The national co-financing has to be added to this figure. From 1992 to 2007, the EU budget financed up to 70% (in regions outside Objective 1) or 85% (within Objective 1 regions) of the total expenditure.

The level of the agri-environment expenditure varies considerably between (and within) Member States. Eight Member States (Austria, Finland, Sweden, Luxembourg, Ireland, Italy, Germany and Portugal) show annual agri-environment expenditure per ha UAA above the EU-27 average, often to a large degree. It ranges from 20 EUR/ha UAA in Portugal to 90 EUR/ha UAA in Austria. The other seven Member States only reach a maximum of 8 EUR/ha UAA expenditure per year, ranging from 3 EUR/ha UAA in Greece to 8 EUR/ha UAA in Belgium. The issues that agri-environment schemes most frequently address are:

- reduction of inputs, including support for integrated production, and extensification of farming (11.4 million hectare, 40 % of the total agri-environment area across the EU-27);
  - support for conversion to and continuation of organic farming (2 million ha, 7 %);
- management aiming at the protection or enhancement of biodiversity and landscapes, including conversion from arable land to permanent grassland (8.1 million ha, 30% of area covered);

• support for maintenance and increase in numbers of rare breeds of livestock, and less frequently traditional crop varieties.

In some countries and regions measures to prevent soil erosion and reduce water use are addressed via agri-environment programmes. Uptake and expenditure levels do not give any indication of the environmental effects of the programmes, but do indicate the general level of attention to agri-environment values or problems in the Member States or regions concerned. The effective targeting of the measures is likely to be a critical factor for their success. However, data on the spatial distribution of different types of schemes and geographic targeting of environmental issues is lacking, making further assessment difficult. Greater attention to the monitoring and evaluation of the environmental effects of agri-environment schemes is needed overall. The conclusions from IRENA No. 1 are that the great diversity of implementation shows that agri-environmental measures can be adapted well to the very diverse agricultural conditions across the EU and are targeting the main environmental issues of concern. The compulsory nature of the measure has also helped to ensure a wide application throughout the EU agricultural area. However, a substantial effort is needed to improve data collection on agri-environment schemes, particularly concerning their spatial distribution and environmental focus, and the monitoring and evaluation of their environmental effects.

#### 1.2 Good farming practice

IRENA No. 2 aimed to understand the extent to which codes of Good farming practice cover the most important 'driving forces' of environmental concerns. The key messages from this indicator are as follows:

- Member States have chosen a variety of approaches to defining codes of good farming practice (GFP) ranging from a fairly limited selection of requirements to a broad coverage of categories of agricultural practices. In most Member States, mandatory standards of GFP consist of existing EU, national and/or regional legal obligations. Only a few countries define standards at farm level going beyond legislation, or covering issues such as biodiversity and landscape. The codes of Greece, Portugal and the United Kingdom are the most comprehensive with a high coverage of agricultural practices considered as having particular relevance for the environment. France, Luxembourg, the Netherlands, Sweden and Finland have the most targeted codes for certain agri-environmental issues covering less than half of the total number of agricultural practices.
- Most Member States have defined standards in the field of fertilisation and pesticide management. However, there is a clear emphasis on these aspects in Austria, Denmark, Germany, Italy, the Netherlands and Luxembourg. All the countries include requirements for plant protection while these are particularly detailed and strict in Germany and Ireland.
- Many standards for soil management have been included in the codes of Portugal and Greece. Good farming practices in relation to irrigation methods and equipment are addressed in the codes of all Mediterranean countries. The United Kingdom and Ireland place high emphasis on practices relative to pasture management, field boundaries, biodiversity conservation and landscape elements. Limits on stocking density to avoid overgrazing and undergrazing are also set out in Spain, Portugal, Greece and France. Moreover, some recommendations for maintaining uncultivated strips in field boundaries and hedgerows are provided in Portugal, Greece and Luxembourg.
- Greece and Portugal have followed an advisory approach in drafting their codes, with half of the good farming practices not being legally binding. On the other hand, the codes of some of the Member States where the whole territory is designated as zones vulnerable to nitrate pollution (Austria, Denmark, Finland, Germany, Luxembourg and the Netherlands) mainly consist of legally binding standards. In Sweden and the Flanders region of Belgium,

existing legislation has also been chosen as the basis for GFP. Italy (region Emilia-Romagna), Spain, France, Ireland and Germany have chosen a mixed regulatory/ advisory approach and their codes also include standards going beyond legislation (in the form of recommendations or verifiable standards).

The different approaches for drafting the codes of GFP show how Member States have taken advantage of the flexibility offered to them and developed GFP appropriate to national/regional situations. They suggest that Member States have used this measure in a targeted way in as much as standards are being set for specific environmental issues, which focus on those of concern. Overall, the codes of GFP are considered to be of value in guiding farm environmental management and the development of agri-environment measures. However, information on the choice of GFP standards does not suffice to understand environmental outcomes due to a lack of data regarding change at farm level and the geographic targeting of different standards.

#### 2. OTHER POLICY INSTRUMENTS

#### 2.1 ENVIRONMENTAL REQUIREMENTS FOR MARKET SUPPORT

The information presented below is based on the national implementation of environmental requirements in accordance with Article 3 of the 'Horizontal Regulation' (direct support schemes). Article 3 required Member States to take appropriate measures to ensure that agricultural activity within the scope of the 'Common Rules Regulation' was compatible with "environmental protection requirements". A review of the application of Article 3 for the period 2004–2008 (European Commission, 2004b) shows that most Member States introduced (limited) cross-compliance conditions for farmers to comply with environmental protection requirements as a condition for benefiting from market support. These were mostly conditions attached to arable/set-aside payments and, to a lesser extent, livestock payments, with few countries defining general mandatory environmental requirements.

Additional implementation patterns include the following:

- Two countries (Germany and Sweden) chose the option of establishing general mandatory environmental requirements. These Member States have applied sanctions in case of infringements proportionate to the seriousness of the environmental consequences. However, the granting of support has not been linked to the respect of the environmental provisions.
- The remaining Member States chose the option of setting out specific environmental requirements (standards to be applied by farmers) as a condition for direct payments.
- Austria, the Netherlands and France set up environmental requirements for arable crops and/ or set-aside areas. France implemented standards for irrigated arable crops.
- Denmark, Spain, Italy, the United Kingdom, Ireland and Finland introduced requirements for crops and livestock. Ireland and Finland have laid down requirements aiming at biodiversity protection. Ireland is the only country having provisions on landscape (protection of features of historical/archaeological interest and maintenance of the visual appearance of the farm) and animal welfare.

The uneven implementation of the cross-compliance option of article 3 among Member States was one of the factors that led to the establishment of compulsory cross-compliance in the 2003 CAP reform.

By the end of 2007, some countries had used Article 3 to address specific environmental problems, e.g. irrigation in France, control of overgrazing in the United Kingdom, limits on pesticide use on maize in the Netherlands, but this has not been the case in all Member States.

# 2.2. LESS FAVOURED AREAS COMPENSATORY ALLOWANCES IN LESS FAVOURED AREAS

(LFAs) is an optional measure within the rural development regulation (RDR) used by all Member States except for Belgium. However, in Denmark and the Netherlands it is an insignificant element of expenditure. This wide range of implementation can be expected as a result of variation in the factors affecting soils, altitude and climate. It also reflects differing national priorities for the use of RDR funds. More than half of the UAA in the EU-27 is designated as LFA, but there is great variation between countries, from 1% in Denmark to 98% in Luxembourg. Nine countries (Sweden, Finland, Austria, Portugal, Luxembourg, Italy, Ireland, Spain and Greece) have more than 50 % of their total UAA designated as LFA.

In general, LFA support is used more in the northern countries and less in the Mediterranean area, where investment in farm structures and improvement of productivity appear to be the priority objectives. Member States define the objectives of their LFA policy within the framework of their national RDP, but there are differences of emphasis. In Austria, where maintenance of mountain farming is vital for the rural economy and also the tourist industry, there is a clear objective to reward farmers for the public goods they produce. In France, the LFA allowances aim at maintaining farming in each region and favouring smaller farms. Flexibility applied to the varying objectives and budget priorities in different Member States has resulted in a very wide range of implementation models.

Member States apply the criteria for defining LFAs set up in the RDP within their own territory. For land at risk of abandonment (which represents nearly two thirds of the EU-27 total LFA area) the criteria are poor land productivity, poor economic performance and a low or dwindling population dependent on agriculture. However, these indicators need only be compared to other agricultural areas within the Member States, not with EU standards. The area designated as LFA has grown steadily since 1975 and the European Court of Auditors has called for an improved targeting of the LFA measure by Member States (European Court of Auditors, 2003). It was implemented only in some regions of Germany, Italy and Spain covering a total of 58 000 hectares on 4 156 holdings (95 % of these were in Germany). Delays in designating the Natura 2000 sites and the related management plans may have played a certain role in the limited take-up of this measure.

#### RESULTS AND DISCUSSION

- a) Environmentally relevant trends in agriculture are driven at least as much by market, socioeconomic and technological factors as by the CAP policy framework (IEEP, 2007). This has to be taken into account in any policy integration assessment.
- b) Soil erosion remains a significant concern in the EU-27 and appears to be concentrated in the Mediterranean region. Soil organic carbon content varies significantly across the EU-27 and is crucial for a series of important soil functions. In addition, it is an important factor for determining whether agricultural soils act as a sink or source of CO2. Insufficient information is currently available to determine which trend is more important.
- c) Due to decreased livestock numbers and mineral fertiliser consumption, greenhouse gas and ammonia emissions from agriculture have declined by about 9% since 1990. According to current projections (which discount the 2003 CAP reform) a continuation of these trends will not be enough to meet 2010 ammonia emission reduction targets.

#### CONCLUSIONS

a) The approach taken in this report for assessing progress with environmental integration in the CAP built on the IRENA agri-environment indicator results. Information on the geographic distribution of agri-environmental issues assess policy targeting as a proxy

measure for policy integration. This was combined with an analysis of the implementation of some agrienvironmental policy measures by Member States.

- b) The targeting analysis as well as the presentation of positive case studies in policy mix and implementation focused on the areas of biodiversity protection and nutrient management.
- c) The data available indicate the need for a better targeting of key policy responses (agrienvironment schemes, organic farming) at areas of highest biodiversity concern in the EU-27. Attention needs to be paid to this issue in the future to ensure that the Natura 2000 network and other important farmland habitats remain under appropriate management.
- d) The effectiveness of agri-environment schemes (and of other policy measures) depends not only on geographic targeting but also on appropriate scheme design and successful implementation. The case studies provide positive examples, but literature studies show that the effect of existing agri-environment schemes on biodiversity can be very uneven.

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