

European Commission
EUROSTAT

Doc. AE/WG/014/04.2 (2002)
Original in EN
Point 4.2 of the agenda

**Agri-environmental indicator development
in a policy assessment perspective**

–

Draft paper

Jan-Erik Petersen - European Environment Agency

Meeting of the
Sub-Group “Agriculture and Environment”
of the Agricultural Statistics Committee
and of the Working Group “Environment and Sustainable Development”
Theme “Agri-Environmental Indicators”
Joint Eurostat/EFTA Group
Meeting of 3 and 4 December 2002
BECH building – Room Quetelet

Introduction:

This paper is a first step in addressing the issue of developing an indicator framework for agri-environmental policy assessment. Options and issues for the development of agri-environmental integration indicators are discussed. Some additional points on the development of indicators of agri-environmental policy integration can also be found in my paper for the ARIADNE conference on Crete¹.

Agri-environmental policy integration is a key theme of the IRENA operation (Indicator Reporting on the Integration of Environmental Concerns into Agriculture Policy). The IRENA grant agreement specifies as one key output the production of an 'indicator based assessment on the integration of environmental concerns into agriculture policy'. This report shall provide an 'assessment of environmental status in relation to the main policy issues and targets and their interlinkages making use of the IRENA indicators'. The IRENA operation and a related Memorandum of Understanding between DG Agriculture, DG Environment, DG Eurostat, DG JRC and the EEA are embedded in the Cardiff process on the integration of environmental concerns into sectoral policies. The importance of this policy goal has been described in various documents from different EU bodies (e.g. CEC, 1999; CEC, 2000; CEC, 2001a; EEA, 1999; European Council, 1999).

The IRENA agreement sets out four different fields for evaluating agri-environmental policy integration: institutional integration, market integration, management integration, monitoring/reporting progress. This paper briefly reviews three probably complementary approaches for developing policy integration indicators in this context. The first approach is to develop proposals for such indicators in the framework of a specific environmental issue, in this case agricultural water use (see table 1). The second approach is an evaluation of the 35 IRENA indicators from COM(2000) 20 and COM(2001) 144 in the context of policy integration. This is elaborated in more detail below. The final approach is to identify policy instruments in Agenda 2000 that are considered key tools for policy integration in relevant strategy papers of the Commission (e.g. CEC, 1999; CEC 2001b).

¹ J-E Petersen (2002): Developing indicators of agri-environmental policy integration. Paper submitted to ARIADNE conference on 'Agricultural Statistics in the new Millennium', Chania, 13-15 November 2002; www.ariadne2002.gr

Example of possible indicators of policy integration related to water use

Table 1 below lists important questions for analysing the effectiveness or depth of policy integration in the framework of agricultural water use. This shows the kind of questions necessary for policy integration analysis but is not yet linked to the relevant indicators in the IRENA indicator set.

Table 1: Proposals for policy integration indicators in relation to agricultural water use

<i>Question on policy integration</i>	<i>Proposed indicator(s)</i>
<i>Institutional integration:</i>	
Are environmental <u>targets</u> (e.g. on eco-efficiency) and <u>timetables</u> agreed?	Presence/absence of environmental targets and timetables
Is there effective <u>horizontal integration</u> between the sector and environmental as well as other key authorities, e.g. health?	Presence/absence of explicit consultation procedures, or need for project approval by environmental authority
<i>Market integration:</i>	
Have <u>environmental costs been internalised</u> into market prices through market based instruments?	(relative) Price of water for irrigation
Have <u>revenues</u> from these market-based instruments been directly <u>recycled to maximise behaviour change</u> ?	Presence/absence of targeted fund for environmental training or investment in relation to water use
Have ‘environmentally damaging’ subsidies and tax exemptions been withdrawn or refocused?	Presence/absence of such subsidies or tax exemptions
Have <u>incentives</u> been introduced which encourage <u>environmental benefits</u> ?	Presence/absence of relevant agri-environment schemes, or financial support for environmental investments
<i>Management integration:</i>	
Have environmental management systems (EMS) been adopted?	Rate of adoption of EMS by agricultural water users or user cooperatives
Is there adequate <u>environmental impact assessment (EIA)</u> of projects before implementation?	Presence/absence of such EIA procedures for irrigation / water abstraction related projects
<i>Monitoring/reporting integration:</i>	
Is there an adequate <u>sector/environment reporting mechanism</u> that tracks progress with the above objectives, targets and tools?	Presence/absence of such reporting mechanisms
Is the <u>effectiveness</u> of the policies and tools for achieving integration evaluated and reported, and the results applied?	Presence/absence of evaluation mechanisms, and evidence of resulting action

Evaluating the IRENA indicators from a policy integration perspective

Within the DPSIR framework policy integration indicators are concentrated in the policy response area, given that environmental integration is part of the policy response. However, the driving force and pressure indicators help us to understand where the policy response should be targeted. The policy response should contribute to changing relevant driving forces in an environmentally beneficial way and thus help to reduce negative pressures on the environment. State and impact indicators tell us whether the changes brought about by the policy response had the desired environmental effect (if the causal chain is sufficiently clear).

An analysis of the IRENA indicator list in the context of policy integration questions leads to the following result. Institutional integration is partially covered, in particular through the indicator of 'environmental targets' (No. 3) although this needs to be more clearly defined. The question of policy integration is not tackled although it can be argued that the IRENA operation and related MoU are typical policy integration exercises, at least in terms of arriving at a thorough environmental analysis.

Market integration is covered by the following indicators 1) agri-environment schemes, 5) organic farming incomes, and 7) share of organic farming. However, instruments for the internalisation of external costs (such as taxes on certain inputs and resulting eco-funds, or the withdrawal of environmentally damaging subsidies) are not dealt with at all. This deficiency needs to be addressed.

Indicators on management integration are covered by the following indicators: 2) Good Farming Practice, 3) Environmental Targets, 4) Nature protection, 6) Holders' training levels and 14) Management practices. However, environmental management at policy level, e.g. through EIA or SEA procedures, is not included in the list at all although one could argue that the planned sustainability impact assessment for Commission proposals or elements of the mid-term evaluation of rural development programmes would fulfil such criteria.

Lastly, issues of monitoring/reporting progress are tackled by Indicator No 3 Environmental Targets though this indicator still needs to be more clearly defined and should not be overloaded with too many different functions. However, the IRENA operation is in itself an exercise in monitoring and reporting on progress - so would it have to evaluate itself?

In conclusion, several aspects of policy integration cannot be fully covered by relying on the current list of IRENA indicators. To develop indicators corresponding to currently unanswered integration questions one would need more information on often complex policy processes. Further thought has to go into the building of a rigorous framework for the development of such indicators if that will be possible at all.

Policy integration indicators in the context of Agenda 2000

Given that the IRENA policy integration report should build on an 'assessment of environmental status in relation to the main policy issues and targets' it also appears worthwhile to compare IRENA indicators against the main environmental policy instruments established with the Agenda 2000 CAP reform. Key policy documents, such as the Agriculture Council Cardiff Integration Strategy and the Biodiversity Action Plan for Agriculture also build on Agenda 2000 policy instruments for achieving environmental objectives. Thus, it appears important to analyse these in the context of an agri-environmental policy integration assessment.

Possible agri-environmental policy instruments to be investigated include cross-compliance, modulation, and the definition of Good Farming Practice under the common rules regulation (1259/21999²). Key measures under the rural development regulation (1257/1999) include the use made of agri-environment schemes, the two types of Less Favoured Area schemes, training and investments in environmental protection under Article 33. Three IRENA indicators provide some insight into the implementation of the above Agenda 2000 policy options by Member States: 1) Agri-environment schemes, 2) Good Farming Practice and 6) Holders' training levels. This leaves out cross-compliance, modulation, Less Favoured Areas schemes and investments into environmental protection. Thus, reporting on environmental policy integration on the basis of the current IRENA indicators alone would not cover several key policy instruments under Agenda 2000 that could be used for achieving environmental objectives within agriculture policy.

Conclusions

In summary, it is clear that the conceptual framework for the assessment of agri-environmental policy integration within the IRENA operation requires further development. A comprehensive approach to developing policy integration questions needs to be combined with pragmatism in choosing appropriate and relevant indicators. Most likely a certain degree of expert judgement and a rigorous framework for policy assessment will be important elements of the final approach taken. Further consultation between policy makers, environmental specialists and academics working in agri-environmental policy and policy evaluation is necessary to advance this framework. In so doing it appears advisable to take into account the implementation of agri-environmental policy options within Agenda 2000 by Member States, as they form the core body of policy integration opportunities within the present CAP.

² Council Regulation (EC) No 1259/1999 of 17.5.99 establishing common rules for direct support schemes under the Common Agricultural Policy. OJ L 160, 26.06.1999, p113.

References:

- Commission of the European Communities - CEC (1999), *Directions towards sustainable agriculture*. COM(1999) 22 final. Communication from the Commission to the Council; the European Parliament; the Economic and Social Committee and the Committee of the Regions.
- Commission of the European Communities - CEC (2000), *Indicators for the integration of environmental concerns into the Common Agricultural Policy*. COM(2000) 20 final. Communication from the Commission to the Council and the European Parliament.
- Commission of the European Communities - CEC (2001a), *Statistical information needed for indicators to monitor the integration of environmental concerns into the Common Agricultural Policy*. COM(2001) 144 final. Communication from the Commission to the Council and the European Parliament.
- Commission of the European Communities - CEC (2001b), *Biodiversity Action Plan for Agriculture*. COM (2001) 162 final. Communication from the Commission to the Council and the European Parliament.
- Council of the European Union (1999) *Report: agriculture and environment. Council strategy on the environmental integration and sustainable development in the common agricultural policy established by the Agricultural Council*. Document 13078/99. CEC, Brussels.
- European Environment Agency (1999) *Environment in the European Union at the turn of the century*. EEA, Copenhagen.