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The potential of SEA in fostering sustainable rural development

Carlo Rega, Agata Spaziante and Chiara Murano

*Inter University Department for Territorial Studies and Planning
Politecnico e Università di Torino
Viale Mattioli 39 – 10125 Turin (Italy)*

1- Introduction

As a major user of the soil, agriculture shapes the rural territory which is the outcome of the interplay between the environment and socio-economic variables. From an environmental perspective, agriculture has always contributed to the creation and the safeguarding of a great variety of semi-natural habitat. Agriculture therefore plays a fundamental role in preserving the equilibrium of the territory but the existing ties between the wealth of the natural environment and agricultural practice are complex.

Agricultural practice can also negatively affect natural resources, particularly when is practiced in residual territories which have 'escaped' from the devouring impetuosity of the urban sprawl: in these sites the soil is inevitably impoverished and needs much greater use of fertilizers and pesticides and a greater quantity of water, to increase its productive ability. The consequence of failure in this regard is irreversible damage to atmosphere, water, biodiversity and landscape.

In this paper we reflect on the interplay between agriculture and environment by discussing the role of Strategic Environmental Assessment (SEA) in contributing to more sustainable agriculture. We do that by presenting the case study of the SEA of the Rural Development Program of the Piedmont Region, Italy. In section 2 we provide an overview of the European Union's agricultural policy; in section 3 we present the case study and highlight two issues seen as particularly interesting in relation to the role and potential of SEA; in section 4 main conclusions are drawn and future research perspectives are put forward.

2- Agricultural policy of the European Union: resources and strategies for a sustainable rural development

The Common Agricultural Policy (CAP) is one of the main policies of the European Union (EU). It stresses the importance of agriculture as a driver to improve the environmental and socio-economic development of rural areas. The EU Rural Development Regulation provides Member States with a framework to target funding from the European Agricultural Fund for Rural Development, through the elaboration of specific programs - Rural Development Programs (RDP) - for the period 2007 to 2013.

RDP are articulated in three main axes:

- Axis 1: Improving the competitiveness of the agriculture and forestry sectors;
- Axis 2: Improving the environment and countryside;
- Axis 3: Rural quality of life and diversification of the rural economy.

Axis 2 provides measures to protect and enhance natural resources, as well as preserving high-value natural areas and cultural landscapes. To this end, the European Commission's (EC) strategic guidelines for rural development suggest that the resources devoted to axis 2 contribute to three EU-

level priority areas: biodiversity and the preservation of areas of high natural value; water; and climate change.

According to EU regulations, RDPs are subjected to an ex ante evaluation which incorporates an SEA. The EC also provides an EU-wide common framework for monitoring the effects and the implementation of the RDP, by outlining a set of socio-economic and environmental indicators - the so-called Common Monitoring Evaluation Framework (CMEF).

3- The SEA of the Piedmont Region's RDP. Key emerging issues with regard to the role and potential of SEA

Piedmont is a Region in north-west Italy, with an area of 25.402 km², a population of 4.453.000 and a total agricultural area of 10.683 km².

The RDP 2007-2013 underwent the formal SEA process within the broader ex- ante evaluation. The Management Authority (MA) decided that an updated version of the Environmental Report would be elaborated as part of the broader mid-term evaluation report, despite this was not required by EU regulations,. The mid-term SEA was therefore given the task of extending the objective of the mid-term evaluation to cover environmental aspects as well.

On the basis of the specific needs of the MA, two main issues emerged as critical and were addressed within the SEA and the broader mid-term evaluation:

- (i) fostering capacity building and ownership within the MA through learning;
- (ii) focusing on the links between agricultural practice and some environmental aspects not fully covered by the CMEF, such as soil loss and landscape preservation.

3.1 Fostering capacity building and ownership within the Management Authority (MA) through learning

In recent years, increasing attention has been given by the SEA community to the role that SEA can play in contributing to individual and organizational learning (Jha-Thakur et al, 2009; Argyrys & Schon, 1978). According to these authors, learning is the process of improving the integration of environmental considerations in the RDP, both directly, through changes to the program, and indirectly, through longer-term assimilation of environmental understanding into individual and organizational norms, practices and skills.

In the case of the RDP, the MA and the evaluators had to face a relatively low awareness of the significance and role of SEA among the civil servants in charge of the implementation of the RDP. A participative approach was therefore chosen for the elaboration of the ER, using a mixed methodology comprising (i) three general focus groups (FG) for each axis of the RDP and (ii) specific semi-structured interviews.

The FGs were animated by a team of professionals skilled in communication techniques and were aimed at identifying and discussing the main problems concerning the effective implementation of the different measures envisaged in the RDP. They included all the key persons in the MA involved in the program implementation, plus the staff in charge of the elaboration of the mid-term evaluation report and the SEA consultants. The FGs thus constituted a way to foster inter-organizational communication and exchange of information and knowledge.

These semi-structured interviews were organized in the following way. The SEA team prepared a first assessment matrix matching the specific actions envisaged by the measure with a set of identified environmental components. The matrix was then sent to civil servants some days before the scheduled meeting and during the interviews the effects of the actions on the selected environmental components were discussed, as well as other aspects such as the relation with other plans and programs and identification of relevant stakeholders. This meant that the environmental

assessment was based on the technical expertise of the SEA team and civil servants, covering a wide variety of environmental issues.

A focus was put on possible ways to obtain a better quantification of the environmental effects identified during the ex ante and the ongoing SEA. This was a specific need of the MA in response to the increasing demand of the EC for measuring the value for money of agro-environmental measures. During the semi-structured interviews, ideas emerged for feasible innovations in the data collection system concerning the application for funding by potential beneficiaries and were part of the final recommendations included in the ER.

3.2 Agriculture, soil loss and landscape preservation

Soil loss is a major phenomenon of resource depletion at the European level (EEA, 2006). Traditionally, rural areas at the fringe of the rural-urban interface are under pressure from urbanization demands. In this context, RDP plays a double role: in general terms, by providing financial support to farmers, it helps to preserve rural activity and, therefore, rural land; on the other hand, some actions of the program finance the construction of new buildings and facilities which contribute to soil loss. Although the overall effect can be assessed as positive, the need to monitor this aspect by explicitly developing an indicator of soil loss was one of the proposals contained in the ER.

In this context, the assessment revealed a gap between farm-scale actions and regional policy objectives: preventing soil loss is in fact a major objective of the land management policy of the Piedmont Region. Since no specific provision is contained in the RDP, however, farmers do not consider it as a major issue, and no particular attention is paid to the problem when they lodge applications for projects aimed at improving their competitiveness, such as construction or enlargement of agricultural facilities. This was thus identified by the SEA as a requisite major improvement to the RDP: to this end, changes in the system of data management and collection of information requested by the applicants were needed.

Rural landscape in Piedmont has been subject to transformation over the last decades, not only because of changes in the agricultural sector but also as a result of the trend towards urbanization. It is difficult now, in several areas of the region, to demarcate urban and rural landscapes clearly; the regional countryside has often been “de-ruralized” and several mixed landscapes emerged, featuring both rural and urban characteristics (Spaziante & Murano, 2009).

Despite several measures of the RDP which pursue environmental preservation and enhancement, no specific reference is made to landscape in the CMEF. This is partially explained by the fact that the CMEF is devised to deliver straightforward quantifiable indicators, which is not in line with the complex landscape issue. In this respect, one of the outcomes of the mid-term SEA was the identification of all the actions that, directly or indirectly, may have effects on landscape. It emerged that a large number of measures and actions may affect landscape, both positively and negatively, often as a result of indirect or unintended effects.

Again, a certain detachment between farm-scale actions and national/regional policies was detected in relation to landscape: on the one hand, environmental enhancement measures are often considered as mere income integration by farmers; on the other hand, the general regional policy has aimed, so far, to reach the greatest number of possible beneficiaries instead of concentrating actions in specific regional areas according to strict ecological principles. As a result, these measures are applied in a scattered way, whereas a full landscape and ecological perspective would call for greater coordination and a more holistic approach. The identification and future implementation of landscape indicators is thus one of the main suggestions of the SEA, in line with recent developments in European research on landscape indicators following the coming into force of the European Landscape Convention (COE, 2000).

4- Conclusions

In this paper we have discussed the role of SEA in pursuing the environmental objectives of the new EU Common Agricultural Policy, by presenting an Italian case study and focusing on two issues: the learning dimension; and the role of agriculture in relation to soil loss and landscape preservation.

The learning dimension of the assessment exercise was twofold: civil servants of the RDP Management Authority learned about SEA (its role and function) and both civil servants and SEA consultants learned through SEA. Learning occurred at two levels: individual, through semi-structured interviews, and organizational, through focus groups. The interactions between civil servants and the SEA team led to the identification of possible innovations in the way the measures of the RDP are managed which, if applied, could help to change established routines, though the actual effect in relation to this aspect may be evaluated only in the mid-to-long term.

As regards soil loss and landscape preservation, a gap between the farm-scale actions and objectives established by national and regional policies emerged owing to the lack of clear provisions and weak integration with other relevant plans and programs at the regional level. In this case the role of the SEA was to identify possible changes and improvements in the way calls for application for funding are managed and information requested from beneficiaries, in order to obtain data allowing more accurate assessment.

5- References

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