Efficacy of European Policies on Rural Landscape: the Case Study of Sardinia (ITALY)

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EFFICACY OF EUROPEAN POLICIES ON RURAL LANDSCAPE: THE CASE STUDY OF SARDINIA (ITALY)

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Abstract
Over the last decades, a large number of developed countries have explicitly recognized the importance of benefits generated from agricultural and rural landscape into their legislation. Since the early '90, preservation and enhancing of rural landscape has played an increasing role also into the Common Agricultural Policy (CAP) promoted by the European Union (EU). More generally, the whole European rural development policy seems to recognize an important role to the keeping of agricultural and rural landscape. The present work is a part of a wider research aimed to identify rational instruments for guidance policies on rural landscape. The specific purpose of this paper is to evaluate efficacy of Sardinian (Italy) regional policies on rural landscape. In particular, the analysis aims to assess "functionality" of policies on rural landscape in programming policy. Results arisen from analysis of Rural Development of this first evaluation are controversial.

Keywords: rural landscape, rural and environmental policies, structural polices, efficacy policies evaluation, Sardinia
J.E.L. Q18; Q28; R59

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1. Introduction

Multifunctional agriculture is based on the concept that agriculture produces also non-commodity outputs in addition to food and fibres. Some of these outputs such as wildlife habitats, open spaces, protection of natural resources, aesthetic scenery and cultural preservation exhibit the characteristics of externalities and public goods (OECD, 2001a). Among the other goods, agricultural land has been recognized as providing landscape amenities. It is a fact that agriculture plays a role in shaping the quality of landscape because of, in many realities, farming is the major user of land. With or without intention, farmers produce or maintain a specific landscape, described by its components such as orchards, open fields, and hedges. It means that agricultural and rural landscapes are the visible outcomes from the interaction among farming, natural resources and environment (Lankoski and Ollikainen, 2003).

The value of an agricultural (or rural) landscape reflects the benefits derived from the scenic beauty generated by a specific landscape, but also the *use* and *non-use* value society places on it, such as recreational, cultural, heritage and historical value. On the other hand, rural landscape value cannot be measured trough balancing between demand for and supply of landscape (Drake, 1992). As such other amenities arising from agricultural activity, landscape is undoubtedly a public good. It means that there is no "right" or "correct" level for the supply of agricultural and rural landscape. Landscape is a "product" of agriculture, but farmers are not paid specifically for this externality. So they tend to undersupply – with respect to the demand - landscape because of their substantial unwillingness to bear the cost connected with landscape conservation. In other terms, once landscape has been produced, farmers are generally unable to charge for its provision due the additional costs for its maintenance and enhancement. On the contrary, by the demand side, the desirable level of landscape for consumer is usually high due to the social cost of additional landscape consumers is really low.

It follows that design of effective policies turned to adjust the market imperfection and to preserve quality of landscape are required (Slangen, 1991; Pruckner, 1995; Fleischer and Tsur, 2000). As

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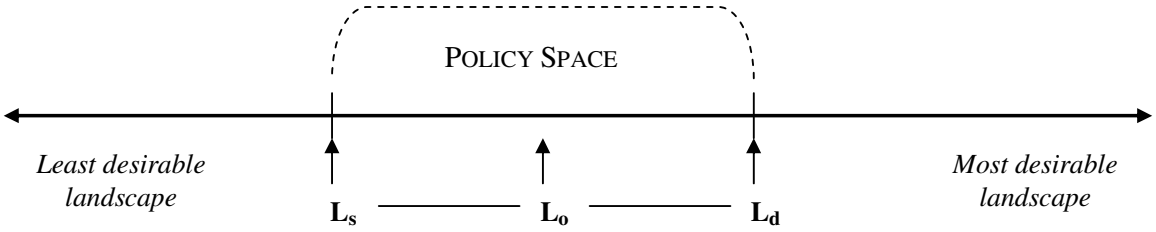
underlined by OECD (2001b), the difficulty for policy makers is to individuate the precise rules that indicate the optimal provision for landscape. Some questions relative to efficacy of policies on landscape are: how much is the optimal level of supply? Which landscape features does society value? To what extent do changes in policies and policy mixes affect landscape?

As illustrated by Bromley (1997) and OECD (2001b), the policy space for optimal landscape (and other amenities) provision is between the level of landscape desired by non-farming interests (L_d) and the level that most farmers consider they should provide in the absence of any legal restriction and/or remuneration (L_s). (see Fig. 1).



Source: Bromley (1997); OECD (2001b)

Fig. 1 – The policy space for agricultural and rural landscape values

Leaving aside situation in which farmers voluntarily operate taking into account maintenance and restoration of landscape irrespective of remuneration, the political process aimed to resolve inefficiency in allocation of landscape should be confined between the points L_s and L_d. The point L_o (that oscillates between the two extreme points) indicates the current situation, defined as the momentary assessment of the attributes of the landscape. Role of the policymakers is to seek operational measures and instruments turned to guarantee a landscape provision around to the L_o level.

Since the early '90 various international institutions have involved landscape into their agreements. In 1993 UNESCO inscribed cultural landscape on the World Heritage List, whether successively landscape features were recognized relevant into the International Convention on Biological Diversity, The Ramsar Convention relative to wetlands, and the UN Framework Convention on Climate Change. Regards to Europe, in October 2000, 27 European countries signed in Florence the European Landscape Convention that aims to promote efficacy and rational policies to safeguard the European landscape - included the agricultural and rural landscape - and to facilitate cooperation among the countries for this finality (Council of Europe, 2000).

Over the last decades, a large number of developed countries have just explicitly recognized importance of benefits generated from agricultural and rural landscape into their legislation. Indeed, several countries have provided normative measures aimed to preservation, restoration and enhancing of rural landscape. These policies in favour of rural landscape can be classified as follows [more exhaustive information about the several policy measures are illustrated in OECD (2001b)]:-

Economic incentives. Farmers receive financial subsidies from local governments. Incentives are furnished in order to compensate restrictions on certain farming practices and to maintenance of key landscape features. Management of this policy is based on individual agreements between farmers and political authorities. It is, for example, the way adopted by the European Union within the *agri-environmental measures*.

Regulatory measures (command and control). This sort of policy consists in designation of areas with elevated landscape value (*e.g.*, natural parks, national parks and reserves). Certain restrictions and minimum standards are imposed in these areas in order to preserve landscape.

Community and voluntary based systems. These policies are based on devolving responsibilities and management of rural landscape to local communities (farm families, rural population, etc.) and institutions (local governments, associations, cooperatives, etc.). Some countries such as Australia and New Zealand has been implemented a *governance* approach for landscape based on these instruments.

Since the early '90, preservation and enhancing of rural landscape has played an increasing role also into the Common Agricultural Policy (CAP) promoted by the European Union (EU) (Lankoski and Ollikainen, 2003). The MacSharry Reform in 1992 included agricultural and rural landscape among the environmental amenities that should be safeguarded. Especially, specific measures turned to rural landscape conservation has been introduced into the *agri-environmental measure*" originally promoted with the EEC Regulation 2078/92 (Colson e Stenger-Letheux, 1996; Bullock e Kay, 1999). These include a financial aid programme aimed to force adoption of "extensive" cultivation systems in order to minimize negative externalities on rural landscape.

The Agenda 2000 Reform has enforced the safeguard of landscape into the Rural Development policy of the CAP. For example, EC Regulation 1257/99 - that reforms the European Rural Development policy – explicitly settles that the "agri-environmental" economic support should contribute, among the others, to promote «*ways of using agricultural land which are compatible with the protection and improvement of the environment, the landscape…*» and «*the upkeep of the landscape and historical features on agricultural land*» (article 22).

More generally, the whole Rural Development policy seems to recognize an important role to the keeping of agricultural and rural landscape.

The present work is a part of a wider research aimed to identify rational instruments for policies guidance on rural landscape. The specific purpose of this paper is to evaluate efficacy of Sardinian (Italy) regional policies on rural landscape.

There are little doubts that rural landscape is an important feature in Sardinia because of the significant room placed by the agricultural and rural lands in the regional area. However, Sardinian legislators have historically put scarce consideration to this theme. Especially in the recent years when the institution of European Programming and Rural Development policies have - as underlined above – enforced policies in favour of safeguard and valorisation of rural landscape. Instead, contrary to other Italian and European realities, some Rural Development measures or programmes expressly turned to rural landscape preservation have not been promoted by Sardinia (*e.g.* the measure D of Italian agri-environmental programme).

On the other hand, it does not mean that Sardinian government have not introduced certain measures with policy actions oriented, among the other things, to rural landscape keeping. It simply implies that measures on rural landscape have not fitted into an organic legal framework on this theme. In other words, Sardinian policy for the rural areas seems to be lacking of an explicit view for the conservation and enhancing of rural landscape

Because of the importance of the theme for Sardinia and because of the lack of an express policy, the evaluation of the regional measures that take into account rural landscape should furnish some useful information regard to efficacy of Sardinian policies. Specifically, the analysis conduct in this paper aims to assess "functionality" of policies on rural landscape in policy programming, leaving aside the lack of an organic view. It is the first attempt aimed to evaluate efficacy of policies on rural landscape in Sardinia.

The main acts and documents involving Rural Development and Structural Funds policies arising from the EU framework were analysed in order to detect the regional measures in favour of rural landscape. Efficacy policies evaluation was conduct with respect the following analytical points:-

Analysis of coherence. The aim is to verify if the several measures that take into account the rural landscape keeping are coherent with respect to their own proposed objectives (*internal coherence*) and with respect to each others (*external coherence*).

Analysis of the financial endowment and spending. The aim is to evaluate the total public funding available for "rural landscape" measures and their implementation degree on the basis of spending.

Analysis of the expected effects of programming on rural landscape. The aim is to furnish some indication about the potential effects and impacts on rural landscape of the whole regional programming framework. These information were mainly drawn through the analysis of the "Mid-term Evaluation Reports (MERs)" of the regional documents.

Section 2 describes briefly the programming policy for the rural areas in Sardinia, with particular reference to the acts that promote the Rural Development policy. Section 3 illustrates the methodological approach adopted for assessing coherence and efficacy of the Sardinian programming measures that provide actions for rural landscape. Findings of the analysis are reported in section 4, whether some conclusive consideration are furnished in the section 5.

2. The rural landscape into the Sardinian programming framework

The Agenda 2000 Reform has introduced relevant modifies in programming policy instruments and procedures. Regarding the rural areas, the more innovative elements have been the unification of the all Rural Development policy measures under a single legislative document (the EC Regulation 1257/99 on Rural Development) and an enforcing of the integration process between Structural Funds Programming and Rural Development Policies.

In some European realities such as Sardinia and the other Italian Objective 1 regions, this integration process seems particularly accented. Italy has opted for a regional management of community programmes for rural areas. The non-Objective 1 Regions have included all the Rural Development measures into an unique act, the Rural Development Plan (RDP). These measures are co-financed by the EAGGF-Guarantee section. The Structural Funds measures are part of an other act, the Unique Programming Document (DocUP). On the contrary, Objective 1 regions have provided a different programming system. Every regional RDP implemented by the objective 1 regions contains only the accompanying measures (ex EEC Regulations 2078/92, 2079/92 and 2080/92) and the financial support for the Less-Favourite Areas disciplined by the EC Regulation 1257/99. Either these measures are supported by the EAGGF-Guarantee section. The residual Rural Development measures – co-financed by the EAGGF-Guidance section - are fully integrated with the Structural Funds measures into a programming act called Regional Operational Plan (ROP) (Monteleone and Storti, 2004). It follows that Sardinia programming for the rural areas is mainly carried on by the RDP for that regards accompanying measures and Less-Favoured Areas, and by the ROP for the other Rural Development measures. On the other hand, it does not mean that the whole programming for the rural areas is provided by these measures. Firstly, because other measures contained in the ROP could produce significant effects on rural areas (*e.g.* enforcing of infrastructures or valorisation of environmental protected areas) and, secondly, because the Communitary Initiative LEADER+, designed by European Union the to help rural actors, is an additional and specific programming instrument for the Sardinian rural areas (Regional LEADER+ Programme, RLP). Finally, also an other Initiative, the INTERREG III (IR-III) that aims to encourage cooperation among European regions, provides some measures with linked benefits for rural areas.

The first step of this study was to individuate the programming measures involved into the Sardinian ROP, RDP, RLP and IR-III that "expressly" provide some actions turned to the regional rural landscape. The selection concerns both regulatory and incentivizing landscape measures. Table 1 shows the selected measures for which we focused our critical analysis. The second step was to verify the internal and external coherence, the degree of spending and the level of expected effects on rural landscape of each measures.

3. Methodological framework

A global evaluation of the effects of programming and development policies on the rural landscape could be difficult due to the complexity of the problem. In order to simplify this problem, it has been broken down into different themes. The multiple responses to these themes are then reunited in few principal aspects for evaluation.

Three main objectives were selected:-

a) verify if the measures that take into account the landscape keeping in the regional programming are coherent with respect to their own proposed objects and with respect to each others.

b) evaluate how well these measures work, irrespective of their coherence,

c) evaluate the potential effects on rural landscape of the whole regional programming and planning framework.

The achievement of the results of these evaluations needs a careful and detailed examination both of the single programme, which may effect the conservation of the rural landscape and giving added value to it, and the limiting regional and national norms established to protect it.

Table 1 – List of Sardinian Programming Measures that involved policy actions for rural landscape

Programme	Document	Measure	Description	Sort of policy	Operational approach
Regional Operational Plan (ROP)	EU Decision C (2000) 2359 August 2000	1.3	"Safeguard of the Soil"	Regulatory measure: landscape restoration actions	Top-Down
		1.5	"Regional Ecological Network"	Regulatory measure: institution of an ecological network	Bottom-Up
		2.1	"…restoration of historical abandoned sites for finality linked to cultural tourism development"	Economic incentives to rural community;	Bottom-Up
		4.12	"Diversification of agricultural activities and activities close to agriculture" (art. 33 of the EC Reg. 1257/99)	Economic incentives to farmers	Calls for projects
		4.14	"Renovation and development of villages and protection and conservation of rural heritage" (art. 33 of the EC Reg. 1257/99)	Economic incentives to local administrations	Calls for projects
		4.16	"Protection of the environment in connection with agriculture, forestry and landscape conservation as well as with the improvement of animal welfare" (art. 33 of the EC Reg. 1257/99)	Economic incentives to farmers and to local administrations	Calls for projects
		6.1	"Enforcing of transport network from and to Sardinia"	Economic incentives to local administrations	Top-Down
Rural Development Plan (RDP)	EU Decision C (2001) 4630 December 2001	E	"Less-Favoured Areas and Areas with Environmental Restrictions" (art. 13 of the EC Reg. 1257/99	Economic incentives to farmers	Fulfil of requested farm criteria
		H	"Forestry" (art. 29 of the EC Reg. 1257/99)	Economic incentives to farmers	Fulfil of requested farm criteria
LEADER+	EU Decision C (2002) 248 February 2002	1.3	"Valorisation of natural and cultural resources"	Economic incentives to farmers, to rural community and to local administrations	Bottom-Up
INTERREG III – A		2.2	"Development and tourist promotion of the border crossing areas"	Economic incentives to local administrations	Bottom-Up

A critical analysis of the relationships between objectives and effects of the programmes, which can be identified from specific indicators, is also necessary, as well as of the synergy between the various measures and norms.

The instruments used for the analysis form part of the group of canonical indicators usually employed for monitoring and evaluating the use of EU Structural Funds in community Rural Development policies (Mantino et al., 2000). The same indicators are also used for MERs of regional plans in operation.

The work was carried out in three logically connected phases which corresponded to the achievement of the previously cited single objectives.

3.1 First Phase: Confirm of the existence of coherent regional programming lines for the rural landscape

An underlying principle when evaluating any type of programmed actions is establishing their coherence, both in the ambit of each program itself (*internal coherence*) and as part of the different development programs (*external coherence*). The latter also involves the compatibility with the regional and national norms about the specific object, in the case in question, about the landscape.

A possible objection could be made that the respect for coherence should be presumed in programmes before being put into operation. Nonetheless this analysis is considered opportune because conflicting factors may be identified, given that the evaluation of coherence in this work is not based on the general terms of the programme but rather refers to the particular aspects inherent in a specific object, i.e. the landscape.

Evaluation of *internal (vertical) coherence* was carried out by examining for each programme the relationship between the global objectives for the landscape declared in each single programming act priority axis and the specific objectives of the individual measures which refer explicitly to the landscape. For this purpose, "cascade" was then used to examine the correspondence between the specific objectives and the operative objectives of these measures, the planned actions and the types of initiatives which could be financed.

Analysis of the *internal coherence* also concerns: the *pertinence* of the needs in the context of the programme and the formulation of objectives at all levels; the *congruity* between indicated objectives and the planned financing, both for each global objective and every specific measure taken; the *level of realism* in the declared objectives of the programmes; and the *coherence* among the several measures into a same programme.

To evaluate the *internal coherence* an attempt was made to identify certain weak links in the chain of connections between each action to be done and their own general objective, with particular reference to the last links. Indeed, one must bear in mind that *internal coherence* may be negatively conditioned at different levels by: a method which does not conform to the particular situation of programming necessary to harmonise the global objectives with the needs of the territory; a definition of the specific objectives which is not sufficiently clear or which is not perfectly aligned to the global objectives; an operative content in the planned actions which is not explicit or flimsy with those declared to be the specific objectives; an allocation of resources which is not adequate for the planned actions.

To evaluate the *external (horizontal) coherence* of the measures that take into account the landscape in different programmes, were taken into consideration: firstly no conflict between specific objectives, then the level of connection, and the possibility of reciprocal integration both in the operative contents and the possibility of financing. Integration of the actions is a way of evaluating the level of coherence. This may be higher depending on the degree of synergy, while it may be called into question by overlapping among specific objectives of different measures and by planned actions of these measures. This should be related to the above mentioned non-precise definitions.

External coherence also involves examining the possible effects of norms on the landscape, in order to identify the possible synergetic actions or the disharmony between the actions encouraged by the programming and those limited by the planning. Thus an ideal policy, at least at local level, should be capable of consciously alternatively braking or encouraging actions. These braking and encouragement actions should be used contextually in relationship to the needs of each specific area.

In this way they can support and not obstruct actions, depending on the objectives, with respect to the structural and/or functional aspects, and/or with relation to the values of the landscape. To make a complete evaluation of present policies one must therefore identify those limitations and incentives which are found simultaneously in the same territory. It follows that, such a type of analysis could be too difficult to carry out with the data presently available, given the multiplicity of different Sardinian areas characterized by dissimilar landscape amenities.

3.2 Second Phase: Examination of the functioning of the present regional programming lines for the landscape

Once the level of coherence of the measures and norms for the landscape has been verified, then how these measures work can be analysed.

For this purpose, the first element which must be evaluated is the state of activation of the different measures regarding the landscape and the efficiency in using of the available resources. Then these measures in operation were investigated to identify, as far as possible, the partial results obtained analysing their interaction with the rural landscape (with reference to the first phase 2000-2003 of the present programming).

Level of activation of the measures and the efficiency of the use of the available resources. Verify of the state of activation of the different landscape measures served to establish how many and which ones had been put into operation until 2003. Then the assigned resources for each measures were compared with those actually involved. An analysis of the efficiency of use of these resources was made in the case of the measures which had been activated. Evaluation of efficiency was principally based on the use of allocated financial resources, as it was difficult to quantify the use of human or organisational resources.

As well as the efficiency of use of assigned financial resources *(efficiency of spending*), the level of progress and the speed with which they were used was also analysed, using the following customary indicators: *use capacity* (ratio of the commitments taken to the financial endowments available), *payment capacity* (ratio of the payments that liquidate the commitments to the total commitments taken), and mainly the *spending capacity* (ratio of the financial endowments distributed by payments to those allocated). To do this data taken from the MERs of the programmes, and their enclosed documents were used.

Efficacy Analysis. The *efficacy* of the measures in operation should be evaluated by using *achievement of outcomes*, *results* and *impact* indicators. It is clear that as at present the programmes are far from completion, long term *global impacts* cannot be evaluated. This is because the aggregate effects (even if direct) cannot be examined at axes level, or induced effects or even *spillover*. Nor is it possible to make an evaluation of Mid-term specific impacts, which refers more directly to actions designed to satisfy the objectives of the single measures. This is because of the difficulty of identifying the effects which influence the objectives which exclusively concern the landscape. With respect to the results and the achievements obtained so far, there is a lack of data on *physical indicators of achievement of outcomes and results* (referring for example to the hectares involved in the actions, the number of beneficiaries, the type of planted species, the number and type of agricultural building created, and the number of additional tourists), and even more on the *financial indicators of the results*, which only in a few cases are identifiable at the present state of the ongoing programmes.

Thus evaluation remains basically anchored to the only certain information - *viz.* the above mentioned spending indicators - from which one may attempt to extract the presumed effects of the actions, albeit with a certain degree of difficulty. This is due to the analysis being hindered by the fact that the landscape objectives are never separate in the various actions, but always form part of the aggregate of multiple objectives.

The complexity of analysis is also connected to the fact that the rural landscape is a particular type of landscape which, in turn, may be disaggregated into more specific different types. These have different attributes, for each of which it would be of interest to verify the interaction of the different actions taken. Despite the above cited difficulty an attempt was made to evaluate, at least by a qualitative point of view, the type of impact on the landscape of the following different actions: direct or indirect, positive or negative, and when it can be drawn the (high, medium or low) level of impact.

The aim was to distinguish the types of effects of the actions themselves and, where there were sufficient elements, to verify their weight, using certain physical indicators of the achievement of outcomes and/or results, as well as financial spending indicators**.**

It urges to put in evidence some methodological problems linked to this phase of evaluation. Firstly, it was difficult to isolate the specific effects of these actions on the different types and/or different attributes of the rural landscape itself. Secondly, it was arduous to verify how much the landscape objective of a particular measure - which may be conservation or promotion, or exploitation (for example by increasing agro-tourism) - can generate positive effects on either agricultural and forestry landscapes. Thirdly, a consequent problem was to understand how and how much a certain objective has an impact on the visible structures, on the economic functions, and on the social values of a particular type of landscape, by acting, among the others, on the *contextual coherence*, or *differentiation*, or *cultural identity* (see the EC STAR Documents for a definition of these three aspects).

3.3 Third Phase: Evaluation of the relevance of the whole regional programming to the landscape

To evaluate the impact of the regional programming framework in favours' of the landscape, also the measures which make no specific reference to landscape objectives were examined. The purpose of this phase was to identify all the presumable (or already evident) impacts on the landscape of the single programming measures, leaving aside their express regardless to the rural landscape. This evaluation was carried out verifying some information such as the nature of the impacts, their effects (positive or negative), and their presumed intensity.

This approach was utilized in order to verify some hypotheses about the relevance degree and the orientation (positive or negative) of the Sardinian programming with reference to the possible benefits on rural landscape. Indeed, it is a fact that different situations in the global framework may interact in different ways with the programming lines turned to the landscape. These lines, in their turn, may be coherent or not, and at the same time working or not, depending on the level of activation of the measures. For example, the effect on the landscape of various measures of the total program, if mainly positive, may indicate a higher level of sensitivity with respect to landscape objectives, even though this is not specifically stated in these measures. In other terms, our reference is to a general awareness of the problem, which has been largely stimulated by or is directly due to the EU Environmental and Rural Development policies. In case of positive impact on the landscape of the global programming framework, this could provide a solid base of support to the measures specifically turned to the landscape. Such a situation could result in synergic effects occurring and would in any case exclude conflicts between actions aimed to the landscape keeping and other types of interventions. The support could be more or less influential and encouraging depending on the characteristics of the programming lines designed for the landscape and their value in terms of coherence and functionality. The effects achieved may be of different intensity depending on whether the programming for the landscape is a specific policy or, instead, is a simple collection of actions, as the case of Sardinia is.

In any case the global program framework, if positively relevant, beneficially integrates the collection of measures aimed to the landscape. On the other hand, when the above cited program framework does not give prominence to the landscape then it has no positive effects and has no influence on the landscape. Even worse, when the programming has more negative than positive effects, then it may even result in actions which act against and are in conflict with the measures taken to protect the landscape. Thus eventually it may obstruct even coherent and efficient specific policies or programming lines turned to the landscape.

4. The evaluation of the policies regarding the rural landscape

The results of the analysis bring to confirm the first impression that the landscape themes play a marginal role, even with disjointed purposes, compared to many others priorities. Very often when the landscape is mentioned on (both general and specific) objectives is for vague statements of principle and in even less cases are defined the actual terms and aspects involved.

4.1 Analysis of the coherence of the actions on the landscape

The first phase of the analysis is the evaluation of the coherence among measures of the development programmes in Sardinia. In this step our attention was focused on only those measures where the landscape is explicitly mentioned (listed in Table 1) both among the objectives or guidelines drawn up from the official documents and further information picked up from the MERs (Agriconsulting 2003a, b; ISRI, 2003; Economia Sviluppo Ambiente, 2003).

The framework of the current analysis about each development programme is based on the screening of the mentioned measures (as described in section 3.1) in order to verify the *internal coherence* (*within* measures and objectives as well as *among* the different measures). Regard to the *external coherence* among the measures of different programmes, this has been checked with reference to the respective field of pertinence, as shown in Table 2.

It is opportune to point out that all communitarian programmes in Sardinia, ROP included, was approved by EU after checking the compatibility with national and communitarian policies regarding the three main priorities indicated by EU for all programmes (environment, gender equality and employment) and with the principles of integration and concentration of measures. However, the ubiquitous nature of the landscape allow to not exclude, at least in principle, the presence of conflictly elements among various sectors of intervenction. Anyway, on the basis of the evaluations carried out in the present work, one can assert that the whole regional programming in Sardinia prove to be essentially coherent in both internal and external meanings.

In particular, the analysis of the coherence shows some focal points about the definition of the regional programmes. The first consideration descends from the intersectorial nature of the rural development policies based on EAGGF resources. The objective of this policy include promoting competitiveness of local economies as well as social cohesion. Following on this view, the examined measures embody a wide typologies of activities so there could be the possibility to overlap with extra-rural measures, especially in the fields of environment, tourism and cultural services.

Furthermore – above all with reference to the ROP - the analysis of coherence shows a widespread lack of accuracy in the programmatic goal and measures technical guidelines. In particular a short definition of the typologies of activities admitted to financing has been noticed, simply deferring to the call for projects and following screening phases. As a result, the already verified coherence between objectives of different measures could be partially invalidate when projects are carried out. Therefore this shortcoming, showed especially by EAGGF measures, raises the venture of weakening the positive effects of integration with other ESF and ERDF measures.

Following on the evaluation of the *internal coherence*, the analysis of *pertinence* shows that in all programmes the landscape-oriented objectives are not inadequate regarding the general indications for the regional context found on their respective programmes. In facts, in these documents much more attention is paid on environmental themes in general than on their singular components, including the landscape itself. Regarding the next step of checking the *congruity* between operational objectives and financial endowments, this is unfeasible due to the great number and variety of the objectives involved and, above all, to the immaterial nature of the landscape. In particular, it is impossible to share out the measures funds so as to attribute a money amount devoted only to the measures affecting to the rural landscape elements.

Regard to the *horizontal coherence* among different measures in and among programmes, there are favourable examples of interconnection for some of them although pertaining to different fields. In truth, the common rationale of all programmes is the improvement and promotion of local resources with explicit regard to tourist activities as a way to achieve a real economic development and to protect the environment. Furthermore, the coherence analysis become simpler for development programmes but the ROP, given the less complex structure a smaller number of measures involved.

Finally, the analysis of *external coherence* was conducted in a 'bottom-up' way involving each singular measure and relating guidelines instead of main objectives as the previous phase. Table 2 shows an outline of the operative fields involved by each measure, so as to highlight the potential overlapping and to put in evidence the synergies among different programmes. As indicated in the legend, an univocal EU categorization (EC Regulation 438/2001) provided to facilitate the programmes monitoring has been used.

The analysis evidences that the common trait connecting the various measures inquired is based on diversification of activities in rural context in order to assure a steady and lively permanence of the

local communities. This is because that actions could be considered as a prerequisite for a tourist exploitation and facilitate by an active social body. Moreover, the underlying strategy of all the regional programmes is the tourist specialization as a way to enhance the great variety of local contexts. Indeed, this strategy is favourable respect to the environment protection because goes without heavy infrastructures or investments.

Table 2 - Summary of the external coherence among development programmes' measures.

Plan	Meas.	Sector					
		12 Forestry	13 rural areas	17 tourism	31 transport	35 Planning rehabilitation	No of categories
	1.3					353	1
	1.5			171-2		353	3
	2.1					354	1
ROP	4.12		1307				1
	4.14		1306				1
	4.16		1312				1
	6.1				312-8		2
***RDP*(*)**	E		1312				1
	H	121-5					2
RLP	1.3		1306-12	171-2		353-4	6
IR III - A	2.2		1310	171-2-3		354	5
No of measures	*11*	*1*	*6*	*3*	*1*	*5*	=

(*) RDP categories ascribed by the authors according to their main subject.

Sector	Fields of intervention
12 – Forestry	121 Investments in forest holdings 125 Restoring forestry production potential damaged by natural disasters and introducing prevention instruments
13 – Adaptation and development of rural areas	1306 Renovation and development of villages and protection and conservation of the rural heritage 1307 Diversification of agricultural activities and activities close to agriculture, to provide multiple activities or alternative incomes 1310 Encouragement for tourist activities 1312 Protection of the environment in connection with land, forestry and landscape conservation as well as with the improvement of animal welfare
17 – Tourism	171 Physical investment (information centres, tourist accommodation, catering, facilities) 172 Non-physical investments (development and provision of tourist services, sporting, cultural and leisure activities, heritage) 173 Shared services for the tourism industry (including promotional activities, networking, conferences and trade fairs)
31 – Transport infrastructure	312 Roads 318 Multimodal Transport
35 – Planning and rehabilitation	353 Protection, improvement and regeneration of the natural environment 354 Maintenance and restoration of the cultural heritage

Legend source: Commission Regulation (EC) No 438/2001 of 2 March 2001 (OJEC 3.3.2001 L 63/21)

In conclusion, the coherence of the analysed measures is based mainly on a univocal interpretation of the landscape meaning, that is for its (tourist) productive potential. This particular view intent to enhance the functional aspect has been found in both conservation and valorisation measure typologies. For that matter, however, this approach is consistent with the role of the development programmes, that have to conform to the regulation rather than stand in for 'command and control' norms. Unfortunately, a real Regional planning concerning landscape is away to be achieved so far. In addition, it is to point out that in all programmes the importance of the structural components (i.e., preservation of typical elements or principle of visual harmonization) of the landscape is widespread underestimated, so this could affect the desired accomplishment of the policies.

4.2 Analysis of functioning of landscape oriented measures

The current section examines the functioning of the landscape oriented measures - as described above - checking the activation degree, the financial intensity and the spending advancement. The first step of this stage concerns the *state of activation* of each examined measures as a whole (considered the best available proxy to the awareness devoted to the landscape), given the lack of information about specific actions addressed to this topic. Table 3 shows a picture of the activation of the landscape oriented measures, included additional information about the operative approach and the projects selection procedures established by the regional planner.

The first element found is the difference in pace and number of phases of the various measures procedure. In fact, two ROP measures that have had a quicker activation in 2000 through supporting some so called 'ROP consistent projects' that are already scheduled actions (outside the Programme) without specific funding allocation. About the rural policy context, two entire measures (ROP 4.14 and 4.16) were not activated during the first half programming cycle, even though those one are supported by specific funds. At the opposite, both the RDP measures have been going ahead earlier since the Plan approval in 2002. It is to remark that although both examples pertain to CAP strategy, the former pertain to structural fund (Guidance section) and the latter the Guarantee section of the EAGGF. In this regard is important to point out those measures based on a *top-down* approach have generally shown a remarkable advantage in the first period of the programming accomplishment. That is also because various measures came after analogous actions on the previous programming cycle. Indeed, for measures based on a *bottom-up* approach there is a disadvantage on initial stages given the greater plurality and variety of actors involved.

The second element concerns the relative pre-eminence of certain topics into the current regional programming period. It is precise to remind that in this framework all programmes co-financed by the EU structural funds are subjected to the ROP procedures and guidelines, as well as other national and regional resources even in case of private participation. For this reason, a major attention have been paid in this work to ROP policies (that represent over 30% of total regional budget) by consulting the document and the related MER. Within this latest report there is a survey of all the above mentioned development strategies and resources. Thereby, financial resources volumes of each measure were compared with the total budget of regional economic programme as shared out among the different policy fields. In this regard, a place of pre-eminence is occupied by the environmental measures (ROP 1.3 and 1.5) which amount is equal to the 85% of total spending in this field. Other heavyweight are the measures on cultural resources enhancement and road infrastructure with a share respectively of 29% and 10% within their own policies. Following an overall glance on the funds allocation it emerges that, among the observed measures, those directly linked to the landscape functionality suffer a lack of attention by the regional planner. In addiction, this remark follows the previously noted fact that some of those measures have been penalized in their execution (even two not activated measures). So, it should be right to presume that landscape oriented measures are not on the frontline of political priorities.

When considering the financial intensity of all programmes actions (table 3), among the rural measures the most backed are the RDP aid to the farmer. Also the RLP and IR-IIIA measures are notably supported if one consider that are localized in specific parts of the region (respectively eight rural areas the former and the North-Western natural protected areas). In actual fact also the E measure of RDP is devoted only to Less-Favourite Areas.

Regarding the analysis of the *implementation degree* reached by the measures at the Mid-term point of communitarian programming, both the *use capacity* (6th column) and the *spending capacity* (7th column) have reached low percent ratios. This is due principally to the former figures, so the latter ones show a similar final ranking. Once more the pre-eminence of the ROP 'consistent projects' played a crucial role in the spending capacity. In truth, the only two measures got over 1/3 of budget (ROP 1.5 and 6.1) have heavily recourse to that kind of projects. Among other programmes, just one action has overcome the threshold of 50% (RDP H), but it is to point out that that financial amount is due to the fulfilment to the previous programming cycle measure (EEC Regulation 2080/92).

Table 3 - State of activation of the landscape oriented measures

Programme	Measure	Year of activation	Typology of implementation	Fund allocation (% public)	Commitments (% on allocation)	Payments (% on allocation)
ROP	1.3	2000	Region through direct or co-ordined actions	275.606 (90%)	83.634 (30,3%)	54.500 (19,8%)
	1.5	2001	Region through direct or co-ordined actions	41.327 (90%)	17.222 (41,7%)	13.999 (33,9%)
	2.1	2001	Region through direct or co-ordined actions	177.045 (90%)	22.342 (12,6%)	16.202 (9,2%)
	4.12	2003	Co-ordined actions by Region (IP)*	24.000 (100%)	0	0
	4.14	Not activated	Call for projects (change expected)	10.655 (100%)	0	0
	4.16	Not activated	Call for projects (change expected)	10.655 (100%)	0	0
	6.1	2000	Convention with ANAS (national roads)	167.055 (100%)	216.409 (129,5%)	100.383 (60,1%)
PSR	E	2002	Direct subsidies to farmers	55.860 (100%)	N.a.	1.802 (3,2%)
	H	2002	Direct subsidies to farmers	61.490 (90%)	N.a.	33.888 (55,1%)
RLP	1.3	2003	Local agreements (LDP)	13.278 (71%)	N.a.	N.a.
IR-III A	2.2	2002	Provinces through direct or co-ordined actions	10.646 (98%)	N.a.	<686 (6,5%)

Source: MERs of POR, PSR, RLP and IR-IIIA; (*) IP: Integrate Programming.

4.3 Evaluation of the expected effects of programming on rural landscape

The third phase of the programmes' analysis consisted in the evaluation of direct and indirect effects of all programmes action regarding the landscape. The aim is to verify if the programmes outline is favourable to the landscape using it as a proxy index of the significance of the overall impacts. It is important to point out that, at the moment, an accurate evaluation cannot be pursuit due to two kind of reasons. Firstly, most projects are still in progress and, secondly, there is a lack of information about landscape aspects for the finished actions. This is despite the EU explicitly requires an evaluation section for the environmental aspects of the programmes, which has been disregarded at this point. Anyway, the analysis was conducted on available information found on programming documents and on MERs about the assumed magnitude of impacts. In this way it was feasible to have an idea about capability of the policies to affect the previous landscape's structure evolution.

Although the mentioned limitation, our evaluation shows that only three ROP measures (all of them were considered except those included in urban and industrial context) are linked with a potential negative effect, mostly for their widespread action and financial supporting. Those measures concern the fields of energy, tourism and main roads. A special attention it must be paid to the ROP actions on renewable energy production and distribution due to the lack of any mention to the minimization of visual impacts. The other two affect the rural landscape structure in different ways. The tourist actions could be either impactless or impactful depending on the context (tourist sites are mainly located in the

coastline and not in rural areas) and on the prescription among the selection criteria. A further cause of concern is the financial dimension of this action (about €200 million) that require a great awareness to potential impacts and a careful monitoring stage by stage albeit there is little mention of that aspect in the guidelines. Finally, the road construction regards - by definition - rural areas although the major works is broadening of existing roads. In truth, in the measure guidelines relevance on the visual mitigation of the landscape's impacts has been given.

Among the rural policies it can be noticed positive impacts amenable to visual aspects of the countryside. In particular the measure ROP 4.17 aims to restore the damages caused by natural calamities. Furthermore, other two measures act on landscape structure through land consolidation and rural roads enhancement.

As to the RDP actions, it is important to underline the absence of a specific action devoted to the landscape amenities although that measure was provided for in the EC Regulation 1257/99. Nevertheless both activated measures have a positive meaning on landscape for maintaining traditional activities. Moreover, the H measure on afforestation, that is the continuation of analogous measures on previous programme, has a positive impact on thousands of hectares where typical broad-leaved tree have been planted. On the opposite side, only two measures of RLP and any of IR-IIIA are related to widespread or remarkable impacts to the landscape. In particular, the two typologies involved are addressed to promote local traditions and culture and the enhancement of the accommodation capacity mainly by using and restoring existing building.

In general, among the programmes actions a restrictive vision of rural meaning appears to be prevalent so to exclude natural areas. Moreover, this vision complement the approach addressed mainly to the landscape functionality rather than to its structure.

In conclusion, the present work notices the awareness of a landscape kindly-oriented regional programming. That is, its general outline recognizes the importance of the landscape-related topics since inside most measures (even not all of them) a sort of landscape or environmental compatibility is included. Thus, the programming framework appears to be favourable to landscape oriented projects, or at least not conflicts with them, even if an organic regional landscape-policy did not stand out.

Some considerations need to be done in order to underline the main findings of the present evaluation.

Firstly, there are various measures in which the landscape resources are included, but there are no measures specifically aimed to the landscape. This is not a small defect, because it is the result of not activating the measures suggested by EU guidelines. These have already been adopted by other countries and even some Italian regions. In addition it makes evident that Sardinia lacks a specific and definite "landscape" policy for rural and natural areas.

Secondly, it is clear that the measures regarding the landscape in general -despite the fact that it was not possible to identify them as constituent parts of a precise mosaic - respect the principle of internal and external coherence. In other words there is no substantial conflict between the kind of actions and the proposed objectives on the various measures. However, it must be said that in some cases both the specific and the operative objectives are not expressed with sufficient clarity. In addition, there is less synergy among the measures than there it should be. To be precise, little importance seems to have been given to the interactions between limiting regulations and incentivizing actions. These deficiencies are mainly due to the weak efficacy of the regional instruments for countryside planning.

Thirdly, the low level of activation of landscape-oriented measures is particularly worrying. It was found that certain measures have been going ahead very slowly, in addition to the not activated ones. It is clear that this procedural delays should cause a re-dimensioning of the expected effects on the landscape at the end of the programming period. At the same time the evident inefficiency in the observed measures may be caused by the troubles on a bottom-up approach of programming that in Sardinia should be preferably carried out by the Integrated Territorial Plans (ITP). In this sense one must welcome the recent agreements approval of ITP procedure and the next ROP remodelling, as these should generate an acceleration of programmed actions for the landscape.

Fourthly, analysis of the information from MER showed that the programming instruments as a whole have a favourable and significant effect on the landscape. Although we only dealt with potential effects, one can state that the few measures that the planner has recognised valuable for the landscape

are nonetheless connected with the landscape programming and regulations framework. These results provide an indirect indication that there was not greater recognition of the importance of the landscape during the programming process.

Fifthly, it has been established that the landscape is considered more as an intermediate objective of the programming rather than a final one. In other words, the programming instruments for Sardinia look at the landscape more as an asset to safeguard and promote to, in order to achieve larger objectives (development of tourism, maintaining the population of rural areas, etc.) rather than as an actual objective of programming. It is to be hoped that in the future the objectives such as the protection and management of the landscape may be put among the final objectives of the regional programmes.

5. Conclusions

Results of this first evaluation were controversial. The analyses carried out found some strongness as well as some weakness.

Firstly, the analysis of the internal and external coherence suggests that "rural landscape" measures are generally coherent relative to their proposed objectives and with each others, although they are not fitted into an organic framework.

Regarding the second analytical goal, it has point out that the level of financial endowment for these measures is sufficiently adequate. However, the implementation degree results largely unsatisfying. Particularly disheartening is the state of the measures that, most of the others, are turned to the rural landscape. The lack of activation of the measures regarding the rural landscape may be due to the will of Sardinian planner to give priority to other types of actions, such as investments in farms measures and rural development enhancing. It is not by chance that in a relatively poor region included in EU Objective 1, priority is given to actions designed to directly increase revenues, which probably respond to the desires of the population. One must also bear in mind that the abundance of natural resources and landscape on the island may result in – in terms of marginal utility - the importance of their conservation being underestimated. At the same time part of the evident inefficiency in the "landscape" measures could be due to the marked failure in the start-up of the ITP, as a preferred way of bottom-up programming, while in other cases the actions to be taken are not clearly defined.

On the other hand, the third analysis suggests that impacts on rural landscape generated by the whole regional programming are potentially significant. In the light of MERs findings, several measures – not only the ones explicitly oriented to the landscape – should generate positive effects on rural landscape after the 2000-2006 programming period.

Concluding, it must be clear that the findings arising from this work are only indicative about efficacy of Sardinian policies on rural landscape. More empirical research needs to be done in order to improve information on the theme.

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