RDP AND QUALITY OF LIFE IN RURAL AREAS: EVALUATION OF THE POSSIBLE EFFECTS IN PIEDMONT

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Abstract

The research starts from the necessity to create specific tools for evaluating the impacts of rural development policies on fragile areas. The objective of this study is to exploit a synthetic measure of marginality, obtained through a specific tool set by IRES Piemonte (Institute of Socio Economic Research) as a proxy of quality of life indicators. The aim of this tool is to evaluate the potential effects of the measures programmed in axes 3 and 4 of Rural Development Programmes, in terms of changes in quality of life in rural areas. In the evaluation field, this methodology is applicated for the first time to Piedmont's Rural Development Programme.

Key words: marginality, rural development, evaluation, territory, quality of life.

JEL classification: O180

1. Introduction

The research starts from the necessity to create specific tools for evaluating the impacts of rural development policies on fragile areas. The objective of this study is the definition of a synthetic measure of marginality, as a proxy of quality of life indicators, in order to work out an evaluation of potential effects of the measures programmed in axes 3 and 4 of Rural Development Programmes (RDPs) in terms of changes in quality of life level. However, an overall evaluation of socio economic marginality is hard to realize, because carrying out a comprehensive indicator involves a loss of the information brought by each component indicators. A solution might be found with the condensation in a synthetic measurement of selected variables and, at the same time, the minimisation of the information loss risk and the influence of correlation.

In the first part of the paper, general information about Rural Development evaluation for the period 2007- 2013 and some key concepts are provided. In the second part, a specific tool set by IRES Piemonte (Institute of Socio Economic Research) to quantify marginality is considered. The methodology is based on standardized data used to compose homogeneous aggregate starting by empirically observed variables, and it offers some advantages estimating aggregate indicators. The information used to build the indicators come mostly from secondary sources, while territorial data details refer to municipal level (LAU 2). The third part of the work aims to provide a qualitative evaluation of the capability of RDP's actions to affect the marginality estimated by the IRES' methodology and the aggregated indicators concerning essential analytical dimensions. This kind of analysis deals with the needs highlighted in the Program and of the connected interventions, and aims to contribute to the final evaluation.

2. The Rural Development programming at EU and national level

Rural development and a reconsideration of rural economy and rural landscape from a more holistic point of view represents the core of policy development for agriculture and food production in Europe and for the future direction of the Common Agricultural Policy (CAP). The essential rules governing rural development policy for the period 2007 to 2013, as well as the policy measures available to Member States and Regions, are set out mainly in two regulations: the Regulation (EC) N. 1290/2005 and the Regulation (EC) N. 1698/2005. The first one sets specific requirements and rules on the financing of the CAP by means of the creation of two funds: the European Agricultural Guarantee Fund (EAGF) and the European Agricultural Fund for Rural Development (EAFRD). The second Regulation focuses directly on the support for rural development provided by the EAFRD. It introduces two major changes in RD *acquis* as compared to the 2000-06 period: firstly, the simplification of delivery structures, and secondly, the strategic approach. Focusing on the latter, the strategic guidelines setting out the EU priorities for the period 2007-2013 are integrated in National Strategy Plans (NSP), that also ensure the complementarity with the cohesion policy. Each Member State (or Region) must then set out its own Rural Development Programme. It is made up of four "thematic axes" that correspond to the core objectives for rural development: (i) improving the competitiveness of the agricultural and forestry sector; (ii) improving the environment and the countryside; (iii) improving the quality of life in rural areas and encouraging diversification of the rural economy; (iv) implementing the LEADER[1] approach (local development in rural areas). Each rural development strategy can then be developed in the light of European objectives and strategic priorities and, after the analysis of their own situation, Member States can choose which measures are the most appropriate ones to implement each specific strategy. Rural Development

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[1] Acronym of "*Liaison Entre Actions de Développement de l'Économie Ru*rale", meaning 'Links between the rural economy and development actions'. The LEADER approach involves projects designed and executed by local partnerships to address specific local problems and constitutes a methodological and transversal fourth thematic axis, because it can integrate other measures from the axis 1, 2 and, in particular, 3.

Programmes allow to translate the strategy into action through the implementation of these measures, which are foreseen in the four thematic axes (European Commission, 2006). To secure a balanced approach to policy, in every RPD the total amount of the rural development funding must be spread between all the thematic axes, within a regulatory minimum funding limit for each one; moreover the resources allocation among axes and measures should have taken into account the need highlighted by the SWOT analysis (Monteleone, 2005).

The methodology adopted in the NSP (and implemented in the Piedmont RDP) to distinguee rural areas refers to the OECD classification. However, this classification was considered not fully suitable for the Italian context: intra-provincial features indeed failed to be adequately appreciated. Hence, the methodology was revised in the NSP. 36 area types were finally obtained (plus one for the provincial capitals), which, on the basis of their common characteristics, were aggregated in 4 wider typologies (Table 1).

In the details, the territories classified as C and D in Piedmont include more than 1 million inhabitants (25% of regional population) and approximately 520.000 hectares of UAA (48% of regional UAA). The allocation for axes 3 and 4 represents roughly 10% of total RDP's public expenditure (after Health Check and Recovery Plan), with an amount of 133 millions of euro.

Table 1. OECD and NSP classification of urban and rural areas

OECD classification	NSP classification
Predominantly Urban (PU)	Urban Poles (A)
Intermediate Region (IR)	Rural Areas with Specialised Intensive Agriculture (B)
	Intermediate Rural Areas (C)
Predominantly Rural (PR)	Rural Areas with Comprehensive Development Problems (D)

Source: Ministry of Agriculture (Mipaaf) – Italian National Strategic Plan, 2006

3. The Common Monitoring and Evaluation Framework (CMEF)

As for all structural funds, an increased emphasis, has been placed on the monitoring of the RD programmes, that aims to correct any deviation from operational objectives and to improve programme performance. The same emphasis is dedicated to the evaluation of the programmes, to achieve an improved management and to ensure accountability.

The Commission has so drawn up, in agreement with the Member States, a series of common indicators for monitoring rural development programming for the period 2007-2013 (European Commission, 2006). Evaluation has also been strengthened in the ongoing period, with the requirement for an ex-ante, a mid-term and an ex-post evaluation of each programme. These evaluation studies are designed to provide a basis for sound programming, improving and adjusting programmes at every stage, helping to plan an appropriate follow-up and to inform the public or the budgetary authorities about the effects and the value of the programme (Bolli et al., 2008).

A key-tool of evaluation is the reconstruction of the so-called "intervention logic", which establishes the causal chain from the budgetary input, via the output and the results of measures, until their impact. Thus, the intervention logic guides the consecutive assessment of a measure's contribution to achieving its objectives. The intervention logic starts from the (perceived) needs of rural areas, which describe the socio-economic or environmental requirements to which the programme and the measures should respond. The policy response is developed through a "hierarchy of objectives", representing the break down from the overall objective, via more specific objectives, to operational objectives, in harmony with general

development aims expressed at EU and Member States' level. To synthesize, the strategy of RDPs, composed by activities and measures meeting the needs of rural areas, is built on the "hierarchy of objectives". This "hierarchy of objectives" is in turn matched by a "hierarchy of indicators" which reflect the different elements of the intervention logic of a measure.

The reference document is represented by the Common Monitoring and Evaluation Framework (CMEF), adopted in September 2006. The CMEF contains the guidelines to monitor and evaluate RDPs, providing a set of specific evaluation questions related to each measure and establishing five types of indicators in line with the general approach to programming. These indicators correspond to the hierarchy of objectives which is defined implicitly in the Regulation (EC) 1698/2005 and they are: (i) financial indicators, to measure expenditures; (ii) baseline indicators, to define the ex ante situation; (iii) output indicators, to measure the realisations; (iv) result indicators, to measure immediate effects of interventions; (v) impact indicators, to measure direct and indirect general effects.

The intervention logic concern especially the last three indicators, following the scheme shown in Figure 1.
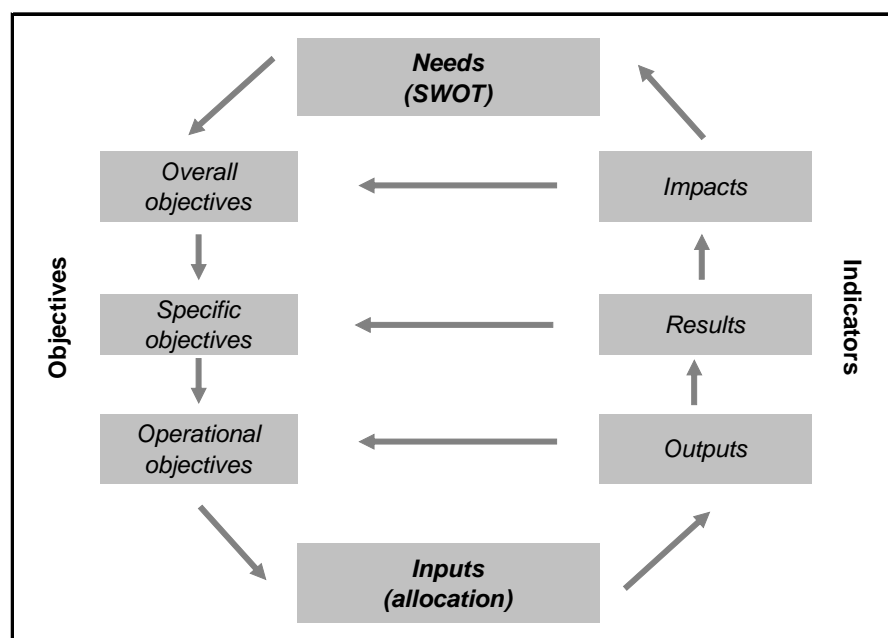

Figure 1. The intervention logic – Relations between objectives and impacts in the programming cycle

Following the causal chain of the "intervention logic", the "hierarchy of indicators" starts from the inputs, i.e. the financial and/or administrative resources which will generate the outputs of programme activities pursuing operational or measures-related objectives. The subsequent results are the immediate effects of interventions, which should contribute to the achievement of the specific objectives. Impacts should contribute to reaching the overall objectives of the programme which, in a well designed programme, must correspond to the previously identified needs. It is also clear how evaluation has to take into account the programme and his context under several point of views.

However, CMEF makes only brief reference to the specificities of assessing the impacts of the LEADER methodological approach and of measures to improve the quality of life within RDPs (axis 3 measures, included those activated by the LEADER approach of axis 4). In relation to quality of life, each axis 3 measure fiche contains a specific evaluation question regarding the extent of the contribution of the measure, support, supported investments, activities or services provided to improving the quality of life in rural areas. However no definition of quality of life is proposed, as well as no evaluation methodology.

4. Quality of life and marginality: a theoretical background

4.1 Quality of life in the rural development evaluation field

Currently, there is a great deal of interest in exploring policies and practices that enhance wellbeing rather than economic growth. The Gross Domestic Product (GDP) as indicator of wellbeing has been criticised by many. Some authors (Stiglitz, Sen, Fitoussi 2009) argue that 'conventional, market-based measures of income, wealth and consumption are insufficient to assess human wellbeing. They need to be complemented by nonmonetary indicators of quality of life.' Quality of life (or QoL) is similar to wellbeing concept and is a function of people's life circumstances, which of course have an economic dimension, but also includes their social networks, their health and their sense of worth and the sustainably of the environment on which they depend. Under this point of view, it is clear that the targeted actions of RDP's Axes 3 and 4 do provide means to contribute to a rather broader notion of QoL. There are different ways of exploring quality of life, but anyway there is no simple and easy way to measure it; it clearly needs a range of indicators.

Some authors view the QoL in terms of subjective wellbeing, others argue that it is represented by a 'capability to flourish' based on people's ability to pursue the goals they value. A third point of view is based on allocating the non-market goods and services fairly across different groups. Yet, some authors (Stiglitz 2009, Jackson 2005) underline that QoL can only be maintained if the resource set is sustainably used; so there must be an environmental component. Despite of the relation between quality of life and wellbeing, also the latter is interpreted in various ways: it is generally viewed as a description of the state of people's life situation (McGillivray and Clarke, 2006), but the theme is still evolving.

The cited recent studies have at least permitted to identify three principal and integrated dimensions of quality of life: a socio-cultural, an environmental and an economic one. However, the concept remains ambiguous and difficult to translate in operational terms, lacking an universally and acceptable definition and often facing with competing interpretations. Currently, it is possible to underline a strong overlap between the three dimensions of quality of life with the various concepts of wellbeing and especially in the case we look at studies where people directly participate to the survey (Council of Europe, 2008).

Applying this division to rural areas, the three dimensions are composed as follows:
- the **socio-cultural and services** dimension includes both "soft" factors such as community life, traditions, social infrastructure, cohesion and "hard" factors, as buildings or other infrastructures.
- the **environmental** dimension encompasses the human wellbeing arising due to the conservation and upgrading of environment and rural heritage. In this sense, the concept of environment includes not only biophysical factors and their interactions, but also the built environment and the interactions between different systems.
- the **economic** dimension implies an adequacy and security of income, in the absence of major disparity with incomes of others in society (Wilkinson and Pickett, 2009).

It is also important to remind that the concept of quality of life includes the two milestones of 'liveability' (services, environmental quality and social networks that make rural areas places in which people want to live) and 'livelihoods' (how people get their source of revenue and diversify their land-based and other activities to sustain those livelihoods, also in capitals point of view) (Van der Ploeg, Long, 1994; Europen Evaluation Network for Rural Development, 2010).

It is clear that also in the RD context, QoL consists of several aspects, i.e. economic welfare through diversification activities, provision of basic living conditions, a social network of relationships and associations as well as the cultural environment that makes life enjoyable and satisfying. The composition and content of RD measures in the programmes dictates which logical framework (objective levels vis-à-vis outputs, results, impacts) forms the basis for identifying quality of life indicators in axes 3 and 4. During the structuring phase of the evaluation process, clarifications on the existence and completeness of such a logical framework need to be obtained.

For this reason, a specific document has been established in 2010 by the Europen Evaluation Network for Rural Development, even if still in a draft version. It concerns the capturing impacts of LEADER approach and measures to improve quality of life in rural areas, and suggest a common approach and framework for assessing the impact on QoL of both axis 3 measures and LEADER approach, since the CMEF doesn't provide any reference to the methodological approach.
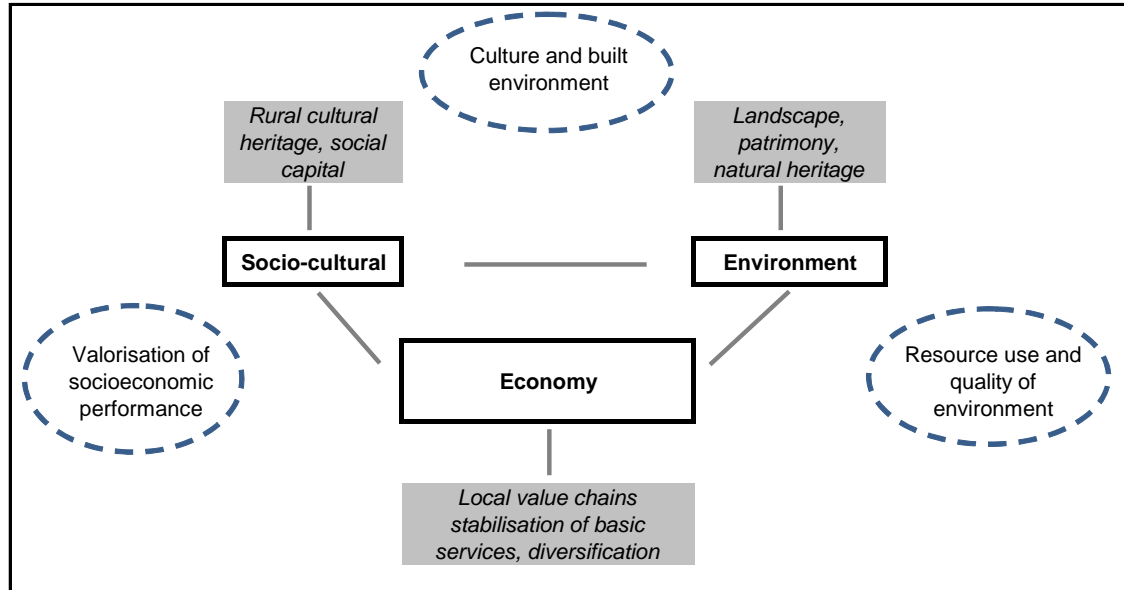

Figure 2. Aspects and linkages of Quality of Life in Rural Areas

4.2 The definition of marginality in rural development field

Socio- economic marginality (Buran et al., 1998) can be defined as a structural weakening of the reaction capability in a local system. The debate on socio-economic marginality is focused on the understanding that the resources available to develop local systems do not operate everywhere with the same intensity (Crescimanno et al., 2009). The prerequisites of development (i.e. facilities, activities, resources, knowledge and so on) are not present in all areas in the same proportion; they are geographically distributed in an irregular manner. Where one or more features of development are significantly lacking, it is easy to verify the risk of social and economic marginalization. Moreover, the lack of economic opportunities, social isolation and difficulties in delivering services easily generate a self-reinforcing process definable as "downward spiral", difficult to reverse without a sufficient population endowment (critical mass) or in the absence of specific factors and resources. Marginality is then a concept typically addressed by regional studies and, in particular, by those investigating the development gap. However, in the detection of situations of socio-economic marginalization, there is no single model. There are several studies that have addressed this issue, but the methods used, especially the selection of variables, depend on the design of development assumptions underlying the analysis: for economists, development is mainly seen as economic growth; for environmentalists, it corresponds to ecosystem respect. Here we assume that the development gap is determined and fed mainly by social and economic conditions, directly related to demographic size. According to this approach, the negative demographic trends are among the leading causes of socio-economic marginalization and the weakening of the socio-economic framework is caused by interdependent reasons that often bring to a negative feedback coil (Buran et al., 1998). In fact, a situation characterized by demographic problems may weaken consumptions and income potential; their reduction has negative effects on the infrastructural endowment

and local economy, that in turn can act on the territory's competitiveness and services endowment , further affecting demographic trend.

The concept of marginality can then be considered very close to the concepts of wellbeing and quality of life, or better can be deemed as a proxy of their lack. Since the CMEF, as reminded above, doesn't provide specific measures to evaluate quality of life in rural areas, and since the working documents provided by the Evaluation Network are still in a draft version, the concept of marginality seemed to be an appropriate and useful proxy by which it is possible to make assumptions on the issue concerned. Furthermore, a method to provide its measurement is already established.
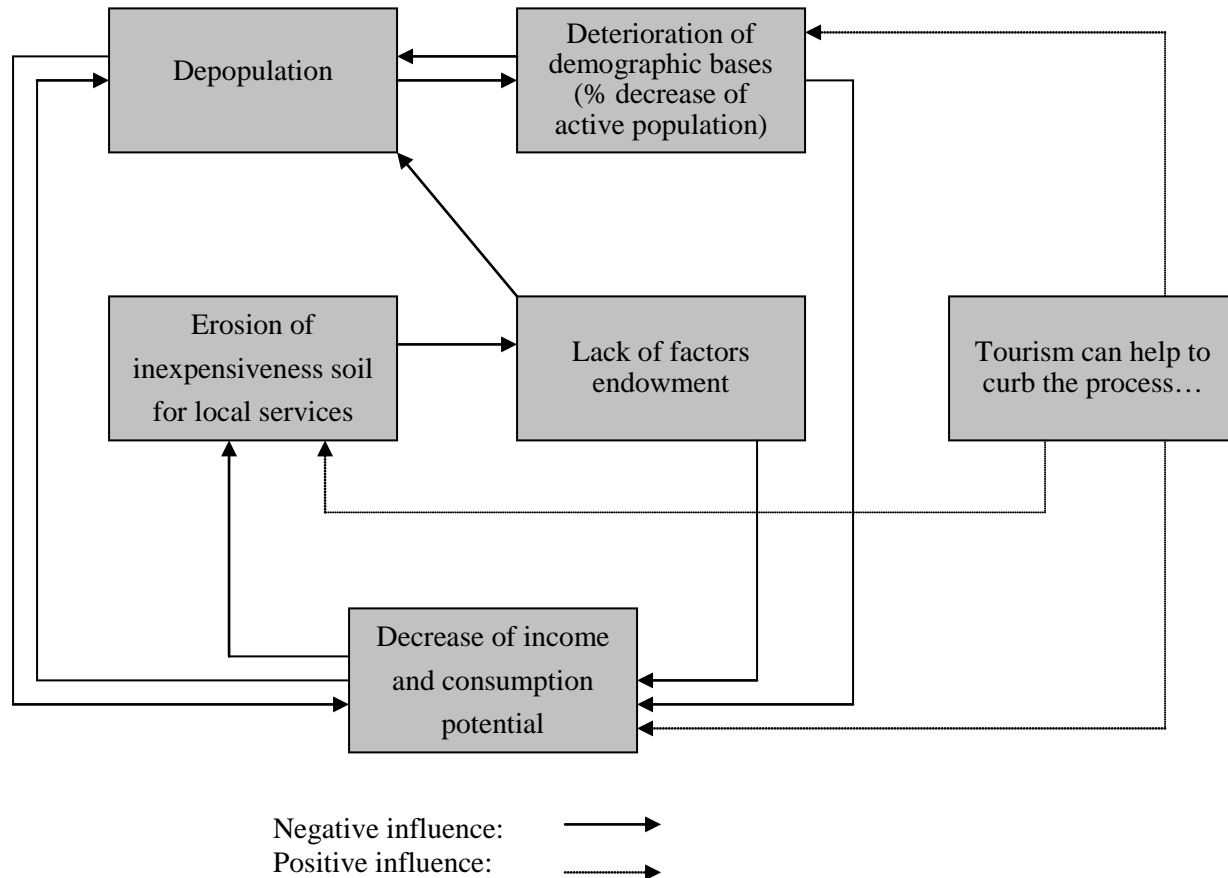
Figure 3. The escalation of marginality (Buran et *al*., 1998)

5. Measuring marginality: the IRES Piemonte method

5.1 The needs and the measuring object

Small towns in Piedmont are exposed to the risk of marginality because they suffer from a condition of incremental isolation, compared to the development processes that affect (on average) the rest of the region. To curb this situation and contain the risks, albeit with limited resources due to overall budgetary constraints, the regional administration has provided measures to support small municipalities through the Regional Law 15 passed on June 29, 2007 (BU July 5, 2007, 27). The financial support is available

annually to municipalities "in conditions of clear socio-economic marginality" (Art. 2), while additional financial resources can be used to support economic, social, environmental and cultural services for citizens and for the protection of social and cultural heritage. To better identify the more needy places, the law mention the need to set clear marginality indicators in order to obtain an annual list of municipalities to be financed.

The classification of the degree of marginality was made by IRES Piemonte in collaboration with a table of technical experts, which saw the participation of representatives of territorial autonomy and the Technical Secretariat of the Conference Region - Local Autonomous Body .

The methodology provides to estimate a synthetic index, calculated from a selection of different socio-economic variables, for all the municipalities of Piedmont until 5000 inhabitants (between different contexts in the mountains, plains and hills). Over the years some small changes were included in the framework; this depends on the fact that the methodology of analysis is the result of a participatory process and for this reason may be subject to successive adjustments, and also that some databases were no long available.

5.1 Identification of variables and dataset building

In accordance with what stated in Articles 1 (purpose) and 2 (general lines of action) of Regional Law 15, June 29, 2007, and under the classification results of previous experiences, it was decided to use 11 indicators organized as follows: three for the population size, three for income or economic well-being, three for the provision of services, and two for the manufacturing base.

The first step in the data set construction is the analysis of variables redundancy , because there must not be statistically significant interdependency among the variables (Büchi, 2001; Cagliero and Trione, 2009). In fact, it may occurred that the indices covered are not independent from the conceptual point of view or can be substituted in the case of strongly correlation; this could cause distortions in the result and errors in the assessment. In particular, highly correlated variables would attribute a disproportionate weight to certain phenomena with respect to others. To avoid this problem, the data set has been checked by a Bravais-Pearson approach, that measure the correlation between variables. (Crescimmano *et al.*, 2010).

Once identified the non-redundant set of variables, these are collected in a single data set, with reference to the most recent year made available from official sources and certified. The values thus obtained are still adjusted, because some variables express positive scenarios, while others express decline. In fact, the sign meaning must be uniform: increasing values correspond always a condition of incremental territorial advantage, and vice versa. The values are then checked in the distribution to assess the presence of outliers and weighted or expressed as a percentage (relative to population size or municipal) to avoid any distortions related to the diversity and size of the municipalities analyzed and to ensure the comparison. Then, the variables are standardized, by the following relation:

$$z_i = \frac{x_i - \mu(x)}{\sigma}$$

whereby z_i is the standardized value , xi represents the i-esim value, μ(x) is the average value and σ is the standard deviation.

In the analysis developed by IRES Piemonte, the classification of marginality is then given as result of four main dimensions (Table 2).

Demography: the quantitative and qualitative characteristics of the resident population and the evolutionary trends are elements that significantly affect the possibilities of territorial development.

Income: the level of population welfare, in terms of income, wealth and consumption is a primary factor in triggering the cycle of development;

Endowments: in a territorial system, the presence of endowments, such as infrastructure for connectivity or accommodation or services for families, affects the attractiveness of flows (finance, assets and people) from outside;

Activities: economic activities, e.g. manufacturing or service, are the basis for the development of any economic system: the wealth produced through them is used to maintain high not only the consumption levels of residents but also the investments.

Table 2. Representative variables for each marginality dimension (version 2009).

AREA	INDICATOR	DESCRIPTION	DATA PRODUCER[2]	DATA RELEASER[2]	REF. YEAR
Demography	Population	Number of inhabitants of the municipality	ISTAT	ISTAT	2008
	Population growth	Pop. $_{(N)}$ – Pop.$_{(N-10)}$ / Pop.$_{(N-10)}$)	ISTAT	BDDE	1998/ 2008
	Population > 64 years old	Pop. > 64/ Total Pop.	BDDE -estimate	BDDE- estimate	2008
Income	Taxable income	Taxable income / Pop.	MEF	MEF	2006
	Local Property Tax (ICI)	ICI / (homes + local units)	OFL	Home Affairs Ministry	2007
	Waste	Waste (t) / Total Pop.	Regional waste observatory	BDDM	2007
Endowments	Services to families	N. services to families[1]	BDDM	BDDM	2007
	Tourist attendance	N. of tourists / Population	Piedmont Region Tourism Dept.	BDDM	2008
	Connectivity	Distance from nearest autoroute; railway station	Piedmont Region Technical Map	CSI	2008
Activities	Manifacture	Manifacture empl./ Pop.	ISTAT	BDDM	2006
	Weight of commerce	Number of shops (differnt sizes)	Piedmont Region Commerce Dept.	ORC	2008

Source: Crescimanno *et al.*, 2010

[1] Postal offices; Pharmacies; Rest houses; Sanitary services; Secondary schools; Bank counters
[2] BDDE: Regional Demographic Databank; BDDM: Regional Mountain Databank; CSI: Consortium for the Information System; ISTAT: National Institute of Statistics; MEF: Ministry of Economy and Finance; OFL: Regional Local Finance Observatory; ORC: Regional Commerce Observatory.

6. From a measuring to an evaluating point of view: the case of Piedmont's RDP

6.1 The application on Piedmont's 2000-2006 RDP

Regulation (EC) No 1257/1999 (Article 33) offered a wide range of measures and actions that aimed at promoting adaptation and rural development. Among these, the Piedmont's RDP provided the implementation of 11 measures. One important aspect regarding these measures and actions were their modest financial endowment, in comparison with the total financial weight of the whole Programme (IRES, 2008). However, taking together the 11 measures, they reached roughly 18% of total liquidated resources. Overall, then, this is a set of diverse measures that, with a common generic address forward

rural development, cover different types of intervention, beneficiaries and eligible territories. The implementation of these measures were made also with very different criteria. The document VI/12004/00 STAR (mostly structured as the present CMEF, with evaluation questions and indicators) provided the effects of these measures to be assessed in overall terms (economic, employment and environmental impact on rural areas). In many cases the indicators proposed were very difficult or impossible to quantify, which made widespread use of proxy indicators.

In this sense, IRES Piemonte, independent evaluator for Piedmont RDP 2000-2006, provided an answer to the evaluation question IX.4-3 "To what extent the structural characteristics have been maintained or improved?", using the marginality index, as a proxy of the specific criterion IX.4-3 "Dynamism of rural actors promoted and potential for endogenous development mobilized in rural areas".

Comparing data on spatial distribution of support through RDP with indexes of marginality IRES Piemonte 2007 prepared and processed for unions of municipalities, a performance evaluation of supports has been drawn. The goal was to understand how the measures implementation is linked with the territorial marginality.

Following this approach, it has been possible to observe the distribution of the RDP interventions and contributions in each mountain area. Support tools considered were selected on the basis of the possible area effects in terms of dynamism, even taking into account the possible synergies between them and the typical economic architecture of rural mountain areas. The measures and actions are grouped into two blocks: those arising under Art. 33 and those from other articles, and in some functional categories, defined by the beneficiaries and the type of active interventions. For each category of support a "response to the marginality index" was built, by averaging the indices of marginality of municipalities, on which these interventions were activated.

Taking into account that the index of marginality calculated for all the mountains area was equal on average to 0.19, it was possible to underline that the interventions as infrastructures and natural damages (with a very low response index) moved in favour of less dynamic areas. On the other hand, the response index is particularly significant for the measures providing enterprise ammodernation and diversification (M and P), which have the goal of improving the production system of the mountain areas.

Table 3. Response Marginality Index related to measures programmed in Piedmont's 2000-2006 RDP

SUPPORT	MEASURE CODE	MARG. RESPONSE INDEX
Measures art. 33		
Infrastructures	T1; T2; N1; R1; R2; R3; J1; Q1	0,05
Enterprises	M1,M2; M3; N3; S1; P	0,16
Audit	L1	0,14
Natural damage	U1	-0,23
Other measures		
Organic farming	F2	0,1
Pastures	F6	0,19
Breeds threatened with extinction	F9	0,18
Compensatory allowances	E	0,1

Source: Ires Piemonte, 2010

6.2 Prospects for Piedmont's 2007- 2013 RDP evaluation

Piedmont's RDP 2007-2013 is articulated in four thematic axes, subdivided in turn in a set of measures. As explicated before, measures of axes 3 and 4, which represents roughly 10% of total RDP's public expenditure (after Health Check and Recovery Plan), with an amount of 133 millions of euro, are conceived for rural marginal areas (C and D territories, referring to Table1).

According to Council Regulation (EC) N. 1698/2005, the support under axis 3 should involve: (a) measures to diversify the rural economy, comprising (i) diversification into non-agricultural activities for members of the farm household, (ii) support for the creation and development of micro-enterprises of less than 10 employees, (iii) encouragement of tourism activities; (b) measures to improve the quality of life in rural areas, comprising (i) basis services for the economy and rural population, (ii) village renewal and development, (iii) conservation and upgrading of the rural heritage; (c) a training and information measure; (d) a skills acquisition and animation measure. The support under axis 4 should involve: (e) implementing local development strategies through Local Action Groups (LAGs), with a view to achieving the objectives of one or more of the three other axes; (f) implementing cooperation projects involving the objectives selected; (g) running the local action group, acquiring skills and animating the territory. Piedmont's RDP programmed measures for each requirement, as shown in Table 4.

Table 4. Programmed axis 3 and 4 measures in Piedmont's RDP 2007-2013

PROVIDED MEASURES		MEASURES PROGRAMMED IN PIEDMONT
Measures to diversify the rural economy	Diversification into non-agricultural activities for members of the farm household	311 - Diversification into non-agricultural activities
	Support for the creation and development of micro-enterprises	312.1- Creation of micro-enterprises (LAGs) 312.2 - Development of micro-enterprises (LAGs)
	Encouragement of tourism activities	313.1 - Encouragement of tourism activities connected to sustainable use of rural territory 313.2 – Development of tourist services to support local offer (LAGs)
Measures to improve the quality of life in rural areas	Basis services for the economy and rural population	321.1 – Accompanying to enterprise creation and development (LAGs) 321.2 – Innovative services for population (LAGs) 321.3 – Creation of polyfunctional centers (LAGs) 321.4 – Strengthening of broadband coverage
	Village renewal and development	322 - Village renewal and development
	Conservation and upgrading of the rural heritage	323.1 – Environmental protection and awakening 323. 2 – Valorisation of the natural heritage (LAGs) 323.3 - Valorisation of the cultural heritage (LAGs)
Training and information measure		331 – Training and information (LAGs)
Skills acquisition and animation measure		341 - Skills acquisition and animation
Implementing local development strategies, achieving the objectives of one or more of the three other axes		411 – Local development strategies (axis 1) (LAGs) 412 - Local development strategies (axis 2) (LAGs) 413 - Local development strategies (axis 3) (LAGs)
Implementing cooperation projects		421 – Cooperation between LAGs (LAGs)
Running the local action group, acquiring skills and animating the territory		431 - Running the local action group, acquiring skills and animating the territory (LAGs)

Source: Piedmont RDP 2007-13

As in the preceding programming period, there is a large set of measures, that also includes axis 4 ones, external from the previous RDP and its evaluation. They are separate categories in the policy 'menu', but they are conceived to generate cross connecting benefits, an aspect that the evaluation must take into account. At these measures, explicitly conceived for marginal areas, other connected measures from other axes have to be added (e.g. axis 2 compensatory allowances). The NUVAL Piemonte (Nucleo

di Valutazione e verifica degli investimenti pubblici), independent evaluator of Piedmont's RDP 2007-2013, decided to adopt the marginality index to evaluate the quality of life related measures. Unfortunately, at the present stage it is not yet possible to set up a definitive evaluation framework, because the programme is in its intermediate phase and some measures are not yet activated: the estimation of potential impacts exploiting current data to calculate the marginality index is premature and subject to changes.

Hence, currently, the paper intends to qualitatively assess how each measure of axes 3 and 4 (the only that at the moment will for sure applied on marginal territories) could affect the indicator(s) composing the marginality index. Some measures are excluded from the list because they support training or logistic preparatory activities, that are not directly measurable but that can be taken into account from the logically connected measures. Only at a later stage, with more certain data available, it will be possible to update the marginality index and used it for final evaluations.

Table 5. Possible marginality indicators involved for axis 3 and 4 measures

PROGRAMMED MEASURES	SUPPORT	MARGINALITY INDICATORS INVOLVED	EXPECTED SENSIBILITY TO THE EFFECTS
311	Farm diversification, energy from renewable sources, educational services, local touristic nets	Taxable income (I); Tourist attendance(E)	++ +++
312.1 312.2	Handcraft production, microenterprises support	Taxable income (I); Manufacture (A); Weight of commerce (A)	++ +++ +
313.1 313.2	Touristic paths, services and information to tourists	Waste (I); Tourist attendance (E)	++ +++
321.1 321.2 321.3 321.4	Counselling to enterprises, cultural, social and recreational activities and services	Population (D); Pop. > 64 years old (D); Services to families (E)	++ ++ +++
322	Building and infrastructures in small villages (activation of axis 1 and axis measures)	All	+
323.1 323.2 323.3	Natura 2000 Management plan; natural and cultural heritage	Waste (I) Tourist attendance (E)	+ +++
411 412 413	Local development strategies implemented by LAGs	Depending on each implemented strategy (potentially all)	++

Actually, as already indicated, it is not possible to estimate the effects of RDP, because of the very low level of implementation of the measures of Axis 3 and 4. However, an estimation of the marginalality index for the Piedmont municipalities has been calculated at two different times: in 2006 (the baseline year) and 2009 (latest year available from IRES Piemonte estimation). This exercise aims to assess the ability of the dynamic model of reading changes in the state of marginal rural Piedmont.

As an example, we report are in brief the results for the canges in the marginality index for the small municipalities (< 5.000 inhabitants) classified D in Provincia of Cuneo, one of the most involved area in the implementation of the Piedmont RDP.
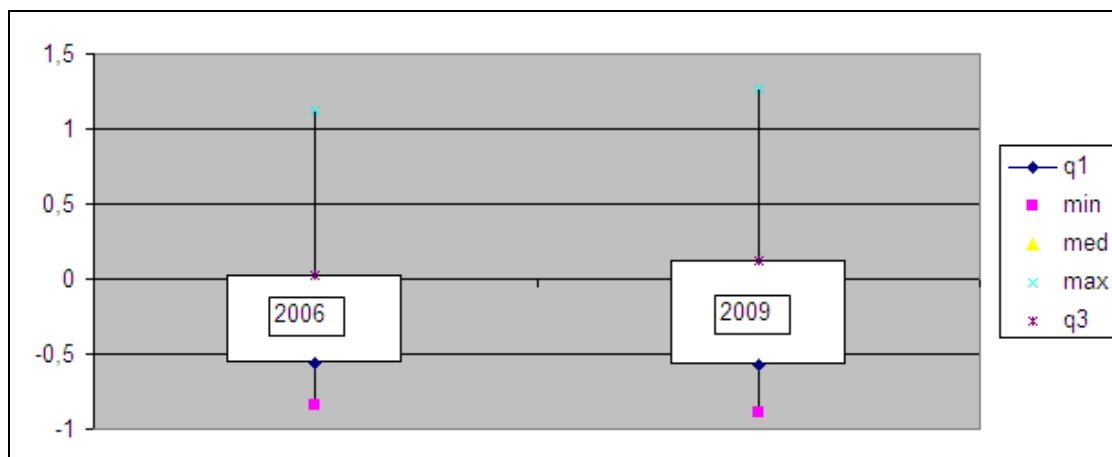
Figure 4. Marginality index for the small municipalities (< 5.000 inhabitants) classified D in Provincia of Cuneo – Box-Plot

In Figure 4 the two distribution are rappresented via box-plot, for displaing in a graphical way the differences between 2006 and 2009. The spacings between the different parts of the box help indicate the degree of dispersion and skewness in the data.

With reference to the mountain small towns, in 2006 57 municipalities (72%) have negative index (marginality), while 22 (28%) have positive values; in 2009, 51 (65%) have negative sign, while 28 (35%) positive.

In 48 cases the index is improved, while in the remaining 31 is worsen over time. The cases of transition from negative to positive situations are 6, while the opposite shift is observed in one case (Table 6).

In terms of partial indicators, we can observe significant increases in the endowments factors (73 municipalities) and in the activities factors, while for demography and income we can underline a situation of stability.

Table 6. Changes in marginality index by small municipalities (< 5.000 inhabitants) classified D in Provincia of Cuneo (2006-2009)

	Value	%	Value	%
Demography	41	52%	38	48%
Income	40	51%	39	49%
Endowments	73	92%	6	8%
Activities	51	65%	28	35%
Marginality	48	61%	31	39%

Source: Ires Piemonte

6. Conclusions

The importance of evaluation processes is taking an increasing weight in European policies, especially for interventions related to local development, as in the case of Axes 3 and 4 of the RDPs.

In this sense it is very important to understand an important factor in estimation of local development, especially in rural areas, such as quality of life. Recently, in fact, the EU has given strong

indications in this direction, thanks to the work done by the evaluation helpdesk of DG Agri to define the quality of life and to address the estimation process. However, there are several models to provide an estimation of the vitality of rural communities, such as, for example, the model proposed by IRES Piemonte that is based on the estimation of an index of marginality. It is essentially a comparative approach by a sort of normative benchmark, as the model was designed to provide guidance to implementing a Regional Policy to support the small towns in Piedmont.

In operational terms, for the period 2000-06 the index of marginality has been used with a spatial approach. For each category of support is built the marginality index by averaging the marginality of municipalities involved in the interventions. This tool makes possible to underline that the some interventions, as infrastructures and natural damages, are more related to less dynamic areas, while the measures providing enterprise ammodernation and diversification seem to be more related to most vital mountain areas. In other words, this application sorts out a kind of territorial target-performance evaluation.

For the current programming phase (2007-2013), the evaluation objective is to assess the effects of Piedmont RDP on rural areas. The approach, therefore, is a before-after comparison, similar to difference in difference analysis, of developments of the indices of marginality estimated for rural areas.

The ability to estimate this index at the municipal level allows, in fact, to create two different groups: a target group, where the interventions are focused, and a control group, where interventions are absent or poorly implemented.

At the present stage it is not possible to set up a definitive evaluation framework, because the low level of programme implementation, especially for measures of Axes 3 and 4, where most of the interventions are not yet implemented. However, it is decided to test the capacity of the model to estimate the changes in the marginality index in different areas, through a comparison of the baseline situation and the last year available by IRES Piemonte studies. This empirical check process shows that the index is sufficiently adequate to detect changes in estimated marginality, both in the overall index and its components.

Consequently, while for the RDP mid-term evaluation the model could be used only for descriptive purposes, for the future on going evaluation activities, especially for the ex post evaluation in 2015, model will be fully used, for assess the effects of the specific interventions in rural areas.

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