### Full Length Research Paper

# Rural policy and multifunctionality in eligible areas under objective 1: Points of convergence?

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The expression multifunctionality has synthesized the interest shown in themes such as food safety, production and sustainability. In the International literature, the concept of multifunctionality does not have had an unequivocal meaning. In the European Union documents, the acknowledging of multifunctionality has been assimilated with the "European Agricultural Model". In the course of the years, this Model has addressed the rural policies of the European Union. According to the EU rural policy, this paper proposes an analysis of the main strategic choices in the field of multifunctionality in the Italian regions outlined in Objective 1. This study also proposes to evaluate the sustainability of the different measures considered in regional rural policies. Multifunctionality and sustainability could have different meanings and that somewhat multifunctional measures aimed at production, not always have positive effects on the environment. This study emphasises a strong regional interest for measures defined as traditional policies, not sustainable as well as concerned the environment. Above all, in this context, the main type of measure for the rural development has concerned Investment in agricultural holdings. That has meant an increase in the use of plant protection products; it could become a model of intensive agriculture, which, of course, is not sustainable in environmental terms.

**Key words:** Rural policy, multifunctionality, sustainability, Italy, objective 1.

#### INTRODUCTION

The study analyses the main strategic choices in the field of multifunctionality, in the period 2000-2006, set up according to the EU rural policy (Regulation (EC) no.1257/99) in the Italian regions in Objective 1 [Regulation (EC) No. 1260/99] (Figure 1), emphasizing the role of regional institutions.

The scope is identifying specific regional methodologies in regard to types of measure for multifunctional agriculture.

The paper also proposes to evaluate the environmental sustainability of rural policy considered by the regions for sustaining multifunctionality, attempting to understand whether the concept of multifunctionality and sustainability can be regarded as synonymous or not, in regional rural policies.

Since the inception, the Common Agricultural Policy (CAP) has based on "productivism" and it has encouraged the specialization and commercialization of EU agriculture (Cummins, 1990a; Ward, 1993; Fanfani, 1990a).

In the mid-1980s, considering the failures of the CAP (Cummins, 1990b; Fanfani, 1990b), it started the process of CAP Reform, based on greater market orientation of institutional prices and an integrated approach to rural development (Huillet, 1994; Crowley, 1998; Bryndel, 1998, 2000; Sotte, 1999; Basile and Romano, 2002; Dwyer, 2003; European Commission, 1988, 1991).

Since 1992, environmental concerns play a vital role in the CAP (Buttel, 1994), which deals both with the integration of environmental considerations into CAP rules (Sumpsi-Vinas and Buckwell, 2002; Henke, 2002) and with the development of agricultural practices preserving the environment and safeguarding the countryside. Greening the common agricultural policy is a part of a wider process of addressing local, regional, national and even global environmental concerns (European Commission, 2006).

These goals were subsequently remarked in the European Commission's 1999 communication "Directions towards sustainable agriculture". The 2003 CAP reform is the latest step in this direction.

The CAP's objectives include helping agriculture to fulfil its role in society, in order to preserve the "fabric of rural society" (Rizov, 2004): producing safe and healthy food,

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**Figure 1.** Structural Funds. Eligible areas under Objective 1 in Italy (period 2000-2006).

Source: European Commission

contributing to sustainable development of rural areas, and protecting and enhancing the status of the farmed environment and its biodiversity ((Baldock et al., 2002; Brynden, 2000).

The EU's rural development policy evolved as part of the development of the CAP, from a policy dealing with the structural problems of the farm sector to a territorial policy addressing the multiple roles of farming in society. In the earliest 1970s, there were the first measures in order to stop the agricultural and rural exodus, which threatened the survival of certain rural areas and the presservation of the natural environment and landscape (European Commission, 2006).

With Agenda 2000, European Union established rural development policy as the 2nd pillar of the CAP, to accompany the further reform of market policy (the 1st pillar). The CAP is increasingly aimed at achieving the right balance between the two pillars. The 2nd pillar supports agriculture as a provider of public goods in its environmental and rural functions, and rural areas in their development (European Commission, 2006).

"Multifunctionality" is nowadays a key topic in the wider scope of rural development (Van Der Ploeg and Roep, 2003).

The term multifunctionality is used in reference to the capacity of agriculture to simultaneously produce market goods and non-market goods (OECD, 1998). The theme of multifunctionality is not completely new and can be

considered in the sphere of sustainable agriculture. It includes the themes with regard to the environment, food safety and economic growth (European Commission, 1998; FAO, 2001).

In the international panorama, multifunctionality became important in the 1999 WTO rounds (Guyomard and Le Bris, 2003), in which attention was called to the functions of agriculture, as well as the need to implement policies to support agriculture, which take account not only of the problem of liberalization of exchanges but also the awareness of the various services offered by the primary sector, for example environmental, recreational, land-scape and cultural services (Zacharasse, 2001; OECD, 2002).

The concept of multifunctionality however does not have an unequivocal meaning (FAO, 2001) and in the discussion on agricultural and rural policies the term is used with different meanings in different countries and contexts (Cahill, 2001). Multifunctionality is therefore a weak (Mollard, 2003) and abused concept (Boham et al., 1999; Anderson, 2000). Even though the term multifunctionality is associated with the capacity of agriculture to produce a positive effect in terms of goods and services of general interest (Boham et al., 1999; Velazquez, 2002; Idda et al., 2005), different concepts remain due to the fact that, from a certain point of view, it is possible to adopt a "wide" vision of multifunctionality. In this case, the relationship between productive activity and the process of rural development is obvious and positive. From another point of view, there exists a more "restricted" vision which indicates a "correct" agricultural model from an environmental viewpoint tied up with aspects of sustainability, food quality, food safety and social wellbeing (Henke et al., 2004). Such conceptual differences are caused by the different dimensions of multifunctionality, dimensions that can be synthesised in a "tactical approach" and a "strategic approach" (Allaire and Belletti, 2002; Pacciani, 2002). The theoretical relationships between multifunctionality, sustainability and rural development have been described by Lehman (Lehman, 1998). From a theoretical point of view, the increase in food production can provide specific benefits for rural development with particular reference to the increase of agricultural income and employment. At the same time, it can determine a worsening in environmental conditions because of the use of more fertilizers (Velazquez, 2001) and/or pesticides.

FAO tends to emphasize the role of agriculture in promoting the wellbeing of society, reducing poverty and attaining the desired socio-economic development (FAO, 2001). This position includes some interesting elements, for example:

- 1.) The services offered by agriculture to society.
- 2.) The synergies and trade-offs between the different functions of agriculture.
- 3.) The relationships between urban and rural areas.

OECD stresses that "as well as the production of food

and fibres (healthy and quality), agriculture can modify the landscape, contribute to the sustainable management of resources, to the preservation of biodiversity, maintain the economic and social vitality in rural areas" (OECD, 1998). The principal elements of multifunctionality are seen in environmental benefits and rural development, even though there is no lack of references to the theme of food safety and socio-cultural aspects.

Multifunctionality, in the European Union documents is assimilated with the "European Agriculture Model [The European Agricultural Model presents, in synthesis, the following characteristics: a) the prevalence of small farms with direct management and cooperatives formed by producers; b) orientation towards sustainable productions; c) functions of safeguarding the countryside, rural areas, employment]" which distinguishes between agriculture in the EU and other countries (European Commission, 1999a). Also, the European Union synthesises the functions of agriculture in categories of rural development and environmental protection. The range of rural policies includes the incentives for the adoption of environmentally compatible production techniques as shown in the market policy reform (that is, BPA - Best Agricultural Practices, Cross-compliance), and the measures to sustain rural development. Such measures can be listed in five categories (INEA, 2000):

- i) Measures for structural modernization.
- ii) Measures for agro-environmental purposes.
- iii) Measures of direct income support.
- iv) Measures for business and economic diversification.
- v) Measures in favour of infrastructures and services.

However, European Union rural policy appears somewhat generic as regards the theme of multifunctionality, as well as contradictory in some cases, especially as regards the not always positive effects, that some measures aimed at the promotion of production could have on agriculture's environmental functions. This should be considered in relation to the trade-offs of the different agricultural activities, for example, the production of alimentary products and the functions of environmental safeguards. In effect, measures directed at strengthening production structures (that is, investment in agricultural holdings) can support an intensive type of agriculture with negative consequences for the environment. This is in contrast with the principle of sustainability. In fact, Investment in agricultural holdings can bring about an increase in production, which could mean an increase in the use of plant protection products.

The research considers three aspects:

- i) Multifunctional approach of the EU rural policy (paragraph 3).
- ii) Rural policy choices as defined in the programming documents of the Italian Regions in Objective 1 (paragraph 4.1).
- iii) Public expenditure for measures of rural development

in the same Regions (paragraph 4.2).

#### **DATA SET AND METHODS**

The analytical set-up necessitates the use of various information sources. The main sources are represented by programme documents – Regional Operational Programme (ROP) and Rural Development Plan (RDP) for the period 2000-2006 – of the Italian Regions in Objective 1. Basilicata, Calabria, Campania, Molise, Puglia, Sardegna, Sicilia (2000). Such information serves both to delineate the regional rural policy choices and to analyse the allocation of the expenditure among all the multifunctional measures considered in above-mentioned documents.

From a methodological point of view, a reclassification was made of the measures foreseen in the Regulation (EC) no. 1257/99 and financed by the EAGGF, with the objective of measuring, on the basis of actions and interventions freely programmed by the Regions, the multifunctional value. Such reclassification was conducted on the basis of the classification of numerous agricultural functions which can be read in existing literature (Bohman et al., 1999; European Commission, 1999b; Japanese Government, 1999; Norwegian Minister for Agriculture, 1999).

Previous studies (INEA, 2002) have shown how each single intervention has sectorial characteristics and, therefore, are functional for the development of the territory and/or in favour of the environment and vice versa. In the aggregation of rural policy measures, it is necessary to take into account the direction, which appears dominant, even in the light of the interpretation given by the Regions in the preparation of the programmed documents.

The measures have been divided into four groups, each of which has its own macro objective (Table 1). Production function relate to investment in agricultural holdings, training, improving processing and marketing of agricultural products, land improvement and reparcelling, setting-up of farm relief and farm management services, marketing of quality agricultural products and agricultural water resources management have been brought together. The second grouping refers to 'social and cultural function' in which relates to: Setting up of young farmers, early retirement, basic services for the rural economy and population and, finally, renovation and development of villages and protection and conservation of the rural heritage.

Environment and territory function, consider less-favoured areas and areas with environmental restrictions, agro-environmental programme, investment in forests aimed at significantly improving their economic, ecological or social value, afforestation, other forestry measures and Protection of the environment in connection with agriculture, forestry and landscape conservation as well as with the improvement of animal welfare. In other words, those measures which even though important in farm matters because they create production, eco-compatible, increasingly of interest to consumers and that represent instruments for competition (above all organic farming and forestation for production ends), even those actions for "environmental maintenance", which are not productive and finalized exclusively for the creation of positive external effects as, for example, the actions foreseen in the context of the protection of the environment in connection with agriculture, forestry and landscape conservation as well as with the improvement of animal welfare.

In the fourth group, Local Development Function, measures finalized preferentially for the economic development are included: Diversification of agricultural activities and activities close to agriculture to provide multiple activities or alternative incomes, Encouragement for tourist and craft activities and the Development and improvement of infrastructures connected with the development of agriculture.

The elaboration of the data is aimed at the construction of interpretative models of decisions and evaluations in matters of public expenditure. In particular, the methodological system is divided into

Table 1. Classification of the measures foreseen in the Regulation (EC) no. 1257/99, according to the dominant agricultural function.

Production Function	<b>Environment and Territory Function</b>			
Marketing of quality agricultural products	Afforestation			
Training Investment in agricultural holdings Land improvement, reparcelling Agricultural water resources management Setting-up of farm relief and farm management services Improving processing and marketing of agricultural products	Investment in forests aimed at significantly improving their economic, ecological or social value  Other forestry measures  Agro-environmental programme  Less-favoured areas and areas with environmental restrictions  Protection of the environment in connection with agriculture, forestry and landscape conservation as well as with the improvement of animal welfare			
Social and Cultural Function	Local Development Function			
Setting up of young farmers Early retirement Basic services for the rural economy and population Renovation and development of villages and protection and conservation of the rural heritage	Diversification of agricultural activities and activities close to agriculture to provide multiple activities or alternative incomes  Encouragement for tourist and craft activities Development and improvement of infrastructures connected with the development of agriculture			

#### two sections:

- i.) A descriptive analysis of the elementary variables to evidence the distribution of expenditure between rural policy measures activated in the Regions of Objective 1.
- ii.) A study of the specialization of the expenditure.

The study of specialization was made using the construction of appropriate indices of expenditure specialization (ISE) applied both to the productive, environmental and territorial, social and cultural and local development functions and to the measures activated in the ROP e RDP (Bagarani et al., 1986). The indicator is:

$$ISE_{i,j} = \frac{a-b}{(1-a)b+(1-b)a}$$

$$a = \frac{X_{i,j}}{\sum_{i} X_{i,j}}$$

$$b = \frac{\sum_{j} X_{i,j}}{\sum_{i,j} X_{i,j}}$$

Where Xi,j =values of public expenditure for type i in the Region type j.

[1]

The index of specialization shows the level of relative concentration (specialization) of the chosen variables for the territory considered, starting from a general matrix  $m \times n$  of data and constructing a similar matrix  $m \times n$  of specialization values. The field of variation of the index is +1 (maximum specialization) and -1 (maximum de-specialization).

### The multifunctional approach of the EU rural policy: Historical review and latest development

Multifunctionality has been recognized in the document "Agenda 2000", which has outlined a reform of the CAP towards a European Agricultural Model, defined as "sustainable, competitive and multifunctional", whose key elements are the care for the countryside, protection of the environment, the vitality of rural areas, food quality and safety, the wellbeing of animals (European Commission, 1997; Economic and Social Committee, 1999).

It is useful to remember that this concept is not new and the references to the multifunctionality can be found in various CAP documents of orientation, such as:

- i) The Green Book of 1985 (COM/EEC/85/333), in which the need for a new vitality in rural economy using research for opportunities of farm income in non-traditional activities of agriculture was emphasized.
- ii.) The document "The Future of the rural world" (COM/ EEC/88/501).
- iii.) In the reports on the relationship between agriculture and environment (COM/EEC/88/338).
- iv.) In the final Declaration of the Cork Conference in November 1996.

In all these documents, the term "rural development" doesn't mean only helping small, marginal farms to survive, but it is used, as well as it is used in the most part of the literature on multifunctionality, as promotion of rural economy, which can also mean creating non-agricultural jobs in the countryside that may not be farm-based or even directly related to farming.

The principles of the new development model are: The environment as a resource to be valued, the diversifica-

tion in rural economy and the care for the quality and safety foods.

The evolution of the CAP, whilst continuing to care attention to the negative aspects of productive activities in an environmental profile, it considers the environmental component as an integrative part of the whole of the rural policies. The role of the environment in the production system and connected activities such as those related to the use of the environment, it is very important (Van Der Bijl, 1999).

By the way, acknowledging the multifunctional role of agriculture, as for example, the agriculture's ability to provide both commodities and non-commodity outputs with a positive value to society (positive externalities), do not imply that agriculture does not have also negative externalities.

In other words, there is not intrinsic contradiction in the idea of a multifunctional agriculture that is not sustainable; in fact, a particular agricultural system may have undoubted non-commodity benefits and yet be associated with strong negative externalities that make it unsustainable.

For example, plant protection products are often correlated in a positive manner to the financing for Investment in agricultural holdings: The amount of financing of such a variable, if incisive, can bring about a worsening of the quality of the environment. On the other hand, plant protection products have an inverse link with expenditure in favour of the Agro-environmental programme and for Forestry, and, therefore, the quality of the environment improves when the financing for these types of intervention increases (Giaccio and Mastronardi, 2007).

In this scenario, the amount of financing for some measures could have negative reflections on the environment and on the new Model of rural policies.

The interest of the EU for productive diversification in rural zones is already visible in the EEC Regulations no. 2088/85 (Mediterranean Integrated Programmes) with which an attempt was made to overcome the logic of the sectorial intervention based on agriculture, operating at the same time in every economic activity at local level. The development of a new and widespread business structure outside the agricultural sector was considered an essential element for the creation of jobs.

Attention for the elements of quality in agro-alimentary productions has emerged from the Community Regulations no. 2081/92 and no. 2082/92, regarding respectively indications of the origin and the certificates of specificity for agricultural products and foodstuffs. Interest for high quality products from the nutritional, organoleptic, commercial and hygienic-health point of view, has sprung up as a modern tendency, sometimes in opposition to the research of a higher productivity, which has marked the CAP. In this scenario, products with low environmental impact have found space, sanctioned by the EEC Regulations no. 2092/91 and no. 2078/92.

However, Agenda 2000 has defined a Model of Euro-

pean agriculture, whose foundations are the acknowledgement of the multifunctionality of agricultural activities and the development of rural areas using the process of diversification of the local economy. Agenda 2000 has introduced important innovations in the field of structural policy and rural development, which have become the "second pillar" of the CAP. Substantially, rural policy has a function of accompanying the process of change, and assumes, in the light of certain factors which influence directly the agricultural markets, and in consequence the economy in rural zones, a more incisive role in the panorama of agricultural policies.

The indications of Agenda 2000 have been made operative by a series of Regulations, which have given body to the policy of Structural Funds for the 2000-2006 phase and in the context of these regulations particular relevance is assumed by the Reg. EC 1260/99 and the Reg. EC 1257/99, already quoted in the introductive paragraph.

Regulation 1257/99 considers such a number of measures constituting the tools box to be mixed by Member States within their programmes, in order to reach different goals, according to local needs. According to the European Commission, some measures, as investment in agricultural holding are financed only under certain requirements, environmental standards and hygiene and animal welfare (Storti et al., 2004a).

In recent times, reflections on the theme of multifunctionality in agriculture have been considered in the context of the CAP Mid Term Review (The MTR had the scope of evaluating and identifying the margins of improvement of the reform process started in Agenda 2000. as well as to activate the objectives defined by the Berlin Council in 1999 and to the strategy for sustainable development approved by the European Council in Gothenburg in 2001. The MTR contains guidelines that are partially implied in the Fischler reform (European Commission, 2004) (MTR) (European Commission, 2002) and above all, in the Second European Conference on Rural Development in Salzburg (European Commission, 2003), where, in order to reinforce the rural economy, is emphasized the role of the multifunctional agriculture and the improving of the competitiveness of the farming sector, through the diversification, innovation and high added value products.

The conclusions of Salzburg Conference are reflected in the Rural Development Regulation for the period 2007-2013, adopted by the Council of Ministers (2005), where the aims of the Common Agricultural Policy (CAP) have been clarified around three defined economic, environmental and territorial objectives: agricultural restructuring, environmental concerns and the wider needs of rural areas.

In this context, rural areas and rural communities are considered "as a platform and starting point for economic diversification and a sustainable development" (Knickel et al., 2008a).

In particular, the latest Reform of the rural development policy (Council Regulation no. 1698/2005), considers a large number of measures, subdivided into four axes: Improving the competitiveness of the agricultural and forestry sector (which absorbs the largest part of the funds); improving the environment and the countryside; the quality of life and diversification of the rural economy; Leader.

#### **RESULTS**

## The choices of rural policy in the programmes of the Italian Regions in Objective 1

In this paragraph, the choices of the Italian Regions in Objective 1 and in Molise are made using the analysis of the programmed measures and the interpretations, which the latter have given to the Community orientation in matters of structural policies and rural development, revealed in Reg. no.1257/99.

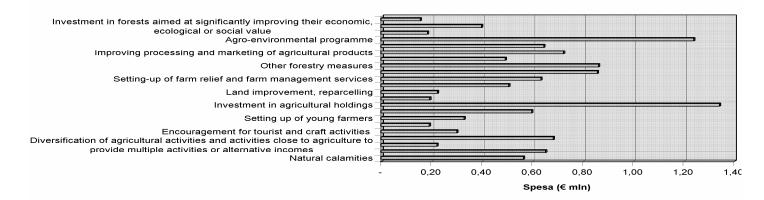
In the block named 'Production', all measures have been considered, as listed in the methodology part, which have farms as the subject of development. This includes a series of measures, which are traditionally part of the EU rural policies, and therefore an element of continuity with the past, which anchors community funding to the competitive choices of farm manager.

According to the propensity of the European Union over the last ten years, these choices can't ignore, for example, the quality improvement and a better allocation of production factors. This also results from the analysis of choices made by regional governments. Without doubt, almost all the measures in Reg. no. 1257/99 financed by EAGGF have, even by relapse, a multifunctional value. In synthesis, these measures, like the interventions effecttively programmed in the ROP, although they have had positive repercussions on the conditions of life and job of the agricultural population, in the defence and expansion of occupational levels in the rural areas (social function) as well as on the environment (for example, sustainable management of water resources for irrigation purposes and correct land cultivation), seem more of the sectorial type (productive type) and only by reflection are multifunctional.

In the socio-cultural grouping there are measures that, more than any other, are destined towards the reinforcing of essential services for the economy and for the rural population not only agricultural, and for the care of building heritage in rural areas. According to the interpretation given by the regions, such measures appear as fundamental and preparatory for local economic development. The interpretation at the regional level of these actions is propaedeutic for the economic development of a territory. This is the obvious also from the types of intervention forecast in the single regional operational programmes, because the Regions have diverted this type of assistance towards the re-construction, re-qualification and of-

ten change in function of historic buildings which are not destined to productive activities in the strict sense, but towards tourist development (both agricultural and rural) and other forms of local activities (cultural and handicrafts). The restoration of the architectural patrimony to be used for service centres (didactic, recreational, cultural) or as receptive structures (accommodation, gastronomic or other activities), prepares for tourist development, which is an economic activity differentiated from zone to zone.

In the group Environment and Territory, measures express the environmental and landscape function of agriculture. The measure related to compensation has several objectives and functions: social (to slow down depopulation and consolidate the anthropological presence in rural areas) and economic-welfare (to compensate lower incomes deriving from agricultural activity in zones with permanent and natural disadvantages, to consolidate farms in sensitive territories). However, this is instrumental towards the conservation of natural spaces, ensuring the continuity of agricultural practices with eco-compatible systems and respecting the safeguard and conservation of the environment and the rural landscape. Even though they originally had economic aims and intended to reduce surplus productions. Rather than creating an environmental conscience, the agro-environmental measures, have the obvious purpose of protecting the environment and defending rural territory (conservation of natural spaces and soil fertility, reduction of the use of technical means, but also a contribution towards the re-qualification of the landscape by the creation of hedges, dry-stone walls and the breeding of almost extinct autochthonous species), promoting sustainable agriculture. Many Regions have preferred to distinguish forestry actions of the "conservative" type (maintenance and ecological stability for the forests, fire-breaks to prevent forest fires, improvement of the existing forests to optimize their hydraulics and hydro-geological functions, increasing in agricultural land converted to forests) from those actions of the "productive" type. However, apart from the single interventions what seems obvious is the delineation of an allinclusive and integrated policy for the forestry sector, encouraging the development of the economic, ecological and social functions of forests, with the involvement of local authorities and municipal associations at the project and management level. If the social function of the forest has been indicated by some regions (Puglia, Campania and Sicilia) in the realisation of infrastructures which permit citizens to approach natural environments (trails, naturalistic observation points, special areas organised for visitors, environmental education centres) and in the creation of new jobs and in the economic creation of a firewood-forest production line, along with other forestry products and connected activities which it is possible to develop, what seems to prevail in the regional operational programmes is the recognition of the territorial and landscape function of forests.



**Figure 2.** Regions Objective 1 (period 2000-2006): ROP and RDP spending for rural policy measures. source: ROP and RDP of the Italian regions in Objective 1: data elaboration

In the last group, Local Development, the regional measures and interventions have been considered, and here the economic development function of the territory is prevalent. These measures have business and economic diversification in common as well as the application of the principle of economic and social cohesion, which has the territory as an objective for development. For a synthetic analysis starting from the diversification of agricultural activities, it must be pointed out that the interventions that regional governments have thought to propose can, in substance, be divided into two types: on one hand actions in favour of agro-tourism (recovery and restructuring of buildings to be used for agro-tourist activities), which are well-known for at least ten years as one of the most important activities of farm diversification promoted by the European Union and understood to be a driving force for territorial development and a source of extra income for farmer. On the other hand, a second block of actions regards activities considered akin to agriculture, of the didactic-cultural and tourist type and from which even local authorities can benefit. The last measure, regards rural infrastructures connected to agricultural development (viability, aqueducts and rural electrification) indispensable for any economic and social activity and obviously anticipated in every ROP. The general objective of the interventions seen so far is that of sustaining the economic development of the territories, where agriculture has an important role in economic growth in the area considered; for this reason, the strengthening of the agricultural infrastructures should have, in the intentions of the policy maker, a positive effect on other economic activities in the territory.

In conclusion, in this paragraph the rural policy choices of the Italian regions in objective 1 have been interpreted, analysing the programmed measures, the intended objectives and even the admissible interventions and actions, which often differ from region to region. Clearly, community objectives and regional planning do not always correspond. It is exactly this partial difference bet-

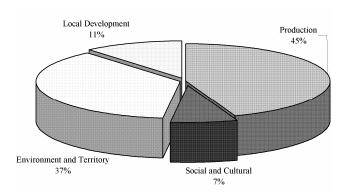
ween community policy and regional orientations that has caused the reclassification of the measures financed by EAGGF. In addition, it follows that most of them have more than one mission and that, at any rate, every measure has a characterising function that justifies its placing in one group rather than another. A valid proof of all this is given by regional choices and the system of classification chosen, and depends upon the effective wishes of the regions, made clear by the financial assignments given to each measure (and to each single intervention or action) which will be considered in the next paragraph.

### Public expenditure for measures of rural development in the Italian regions in objective 1

In this context, the analysis gives a framework for the consistency of regional expenditure for each measure financed by EAGGF.

In the period 2000-2006, the EAGGF resources for rural development destined for Italian regions in objective 1 were EUR 6,787.28 million, of which EUR 4,976.77 million sanctioned by ROP and the rest by RDP.

The analysis of the programmed expenditure in terms of rural policy measures (Figure 2) shows that the major weight, in absolute values, is obtained by the policy for investment in agricultural holdings (almost EUR 1.342 million), followed shortly by Agro-environmental programme (almost EUR 1,240 million) and by forestation financing (The reference is to measures Afforestation (EUR 0,597 million), Investment in forests aimed at significantly improving their economic, ecological or social value (almost EUR 0,400 million) and Other forestry measures (little more than EUR 0,86 million). Other significant rural policy choices in terms of assignment of financial resources are improving processing and marketing of agricultural products (EUR 0,723 million), Agricultural water resources management (EUR 0,506 million), Development and improvement of infrastructure connected with the development of agriculture (almost EUR 0,493 million), Setting up



**Figure 3.** Objective 1 areas (period 2000-2006): ROP and RDP expenditure for agricultural functions. Source: ROP and RDP of the Italian regions in Objective 1: data elaboration

of young farmers (EUR 0,329 million). For other policies that can be considered "more innovative", there is decidedly less attention and the interventions are concentrated on Diversification of agricultural activities and activeties close to agriculture to provide multiple activities or alternative incomes (little more than EUR 0,221 million). A clear picture emerges, of strong interest for interventions that are defined as traditional policies, whereas the so-called "new policies" are substantially ignored.

Regarding the division of resources amongst the four agricultural functions, Figure 3 highlights a strong concentration of financing in relation to Production Function, 45% of the total expenditure and environment and territory function and 37% of total expenditure. In contrast, the Social and Cultural Function and the Local Development Function receive less interest, 7 and 11% respectively of the EAGGF expenditure.

A cross-reading of the expenditure according to agricultural functions and the programmed measures (Table 2) gives other points for reflection on regional policy direction.

In the example, in relation to Production Function, the expenditure is destined to the investment in agricultural holdings (almost 45%), to the improving processing and marketing of agricultural products (little more than 24%) and to the agricultural water resources management (17%). In relation to the Environment and Territory Function, there is a strong prevalence of interventions for agro-environmental programme and forestry. In relation to the Social and Cultural Function, the expenditure is destined to the setting up of young farmers (66%), to the basic services for the rural economy and population (more than 17%) and to the renovation and development of villages and protection and conservation of the rural heritage (13%). In relation to the Local Development Function, the expenditure is directed almost exclusively to measures for the Development and improvement of infrastructure connected with the development of agriculture (66%) and for the Diversification of agricultural activities and activities close to agriculture to provide

multiple activities or alternative incomes (almost 30%).

The analysis of expenditure at the regional level (Table 3) shows a clear orientation of the regions towards the Production Function: Calabria, Campania, Sardegna and Sicilia have reserved 47, 42, 46 and 49% respectively of the EAGGF resources assigned to them. Basilicata and Molise have shown a greater interest for the Environment and Territory Function, 57 and 45% respectively of the financing. Puglia has had a more uniform behaviour, assigning to the Production Function 46% of the financing and 43% of the resources to the Environment and Territory Function.

The application of the indices of specialisation of expenditure (ISE) for agricultural functions shows more complete information on the choices of regional rural policy. The data in Table 4 highlight the following situation:

- i) Basilicata presents a degree of specialisation in relation to the Environment and Territory and Social and Cultural Functions.
- ii) Calabria appears more specialised in the Production Function, as well as in Local Development Function.
- iii.) Campania is specialised only in the Social and Cultural Function.
- iv.) Molise presents a triple specialisation in the Social and Cultural, Environment and Territory and Local Development Functions.
- v.) in Puglia there is a specialisation in the Environment and Territory Function, as well as a tepid tendency towards the Production Function.
- vi.) Sardegna is more specialised in the Local Development Function, Social and Cultural Function, Production Function.
- vii.) Sicilia results as specialised only in the Production Function.

The uni-variate statistical analysis applied to the rural policy measures extracted from the regional programme documents shows a better inter-regional confrontation. Table 5 reports the results of the uni-variate statistics related to the single measures taken by the Regions. The average values are quite low, whereas the variability appears diffuse and high in many cases. The Variation Coefficient is higher than one, above all in relation to the measures of rural policy that are considered "innovative", for example, the Encouragement for tourist and craft activities, Basic services for the rural economy and population, Renovation and development of villages and protecttion and conservation of the rural heritage, the Marketing of quality agricultural products. There exists a substantial ratification of the direction of traditional interventions in rural policy, whereas there is a noticeable behavioural difference in relation to the so-called "new policies", probably more suitable for exalting the multifunctional aspects. Referring to rural policy choices which are considered innovative in respect of multifunctionality (The direction of regional rural policy is calculated with ISE), Regional interest is mainly directed towards the Marketing of

**Table 2.** Italy, Objective 1 areas (period 2000-2006): ROP and RDP expenditure for agricultural functions and rural policy measures (percentage values).

Measures	Environment and Territory	Local Development	Production	Social and Cultural	
Afforestation	16.10	0.00	0.00	0.00	
Agricultural water resources management	0.00	0.00	16.92	0.00	
Agro-environmental programme	50.04	0.00	0.00	0.00	
Basic services for the rural economy and population	0.00	0.00	0.00	17.22	
Development and improvement of infrastructure connected with the development of agriculture	0.00	66.22	0.00	0.00	
Diversification of agricultural activities and activities close to agriculture to provide multiple activities or alternative incomes	0.00	29.75	0.00	0.00	
Early retirement	0.00	0.00	0.00	3.71	
Encouragement for tourist and craft activities	0.00	4.04	0.00	0.00	
Improving processing and marketing of agricultural products	0.00	0.00	24.17	0.00	
Investment in agricultural holdings	0.00	0.00	44.85	0.00	
Investment in forests aimed at significantly improving their economic. ecological or social value	24.11	0.00	0.00	0.00	
Land improvement. reparcelling	0.00	0.00	7.48	0.00	
Less-favoured areas and areas with environmental restrictions	6.27	0.00	0.00	0.00	
Marketing of quality agricultural products	0.00	0.00	2.18	0.00	
Other forestry measures	3.48	0.00	0.00	0.00	
Renovation and development of villages and protection and conservation of the rural heritage	0.00	0.00	0.00	12.95	
Setting up of young farmers	0.00	0.00	0.00	66.12	
Setting-up of farm relief and farm management services	0.00	0.00	2.12	0.00	
Training	0.00	0.00	2.28	0.00	
Total	100.00	100.00	100.00	100.00	

Source ROP and RDP of the Italian Regions in Objective 1: data elaboration

**Table 3.** Italy, Objective 1 areas (period 2000-2006): ROP and RDP expenditure for agricultural functions and for Region (percentage value).

Region	Environment and Territory	Local Development	Production	Social and Cultural	Total
Basilicata	56.64	8.53	25.80	9.03	100.00
Calabria	34.13	13.39	47.42	5.06	100.00
Campania	36.30	10.41	42.35	10.94	100.00
Molise	44.87	17.41	29.22	8.51	100.00
Puglia	43.00	7.05	45.56	4.38	100.00
Sardegna	27.51	17.89	46.11	8.49	100.00
Sicilia	35.20	8.60	48.93	7.27	100.00

Source: ROP and RDP of the Italian Regions in Objective 1: data elaboration

quality agricultural products (Sardegna, Sicilia), towards Agro-environmental programme (Basilicata, Puglia), towards Basic services for the rural economy and population, Renovation and development of villages and protection and conservation of the rural heritage (Basilicata, Campania), towards Encouragement for

tourist and craft activities (Campania).

#### **Conclusions**

In the light of these interpretations given by the Italian Regions in Objective 1, almost all the measures activat-

**Table 4.** Values of specialisation index of expenditure for agricultural functions (period 2000-2006).

Region	Environment and Territory	Local Development	Production	Social and Cultural
Basilicata	0.38	-0.14	-0.40	0.11
Calabria	-0.06	0.11	0.06	-0.20
Campania	-0.01	-0.04	-0.05	0.21
Molise	0.16	0.26	-0.32	0.07
Puglia	0.13	-0.24	0.02	-0.27
Sardegna	-0.21	0.27	0.03	0.07
Sicilia	-0.04	-0.14	0.09	-0.01

Source ROP and RDP of the Italian Regions in Objective 1: data elaboration

Table 5. Descriptive Statistics (period 2000-2006).

Afforestation 9.6 Agricultural water resources management 11. Agro-environmental programme 26. Basic services for the rural economy and population 2.0	38 ( 98 1	6.57		1.86 0.00 12.59	16.26 19.31 44.71
Agro-environmental programme 26.9 Basic services for the rural economy and 2.0 population	98 1	1.88	0.44		
Basic services for the rural economy and 2.0 population				12.59	44.71
population	)3 2	2.33			
			1.15	0.00	5.55
Development and improvement of infrastructure connected with the development of agriculture	45 (	6.65	0.53	7.01	24.25
Diversification of agricultural activities and activities close to agriculture to provide multiple 4.4 activities or alternative incomes	16 ;	3.43	0.77	0.59	10.29
Early retirement 0.6	61 (	0.60	0.98	0.07	1.87
Encouragement for tourist and craft activities 0.5	59	1.02	1.72	0.00	2.79
mproving processing and marketing of 9.5 agricultural products	58 ;	3.29	0.34	4.06	13.45
nvestment in agricultural holdings 18.4	48 (	6.21	0.34	12.06	28.34
nvestment in forests aimed at significantly mproving their economic. ecological or social 13.9 ralue	92	7.56	0.54	0.00	25.54
and improvement. reparcelling 2.1	0 ;	3.20	1.52	0.00	8.07
ess-favoured areas and areas with environmental restrictions	78 4	4.63	0.97	0.47	11.66
Marketing of quality agricultural products 1.3	39 (	0.80	0.58	0.73	3.03
Other forestry measures 2.0	)8	1.43	0.69	0.00	4.70
Renovation and development of villages and orotection and conservation of the rural heritage	19 2	2.20	1.48	0.00	5.66
Setting up of young farmers 7.0	6 ;	3.28	0.46	3.18	11.85
Setting-up of farm relief and farm management and farm management and 1.0	)8	1.45	1.34	0.00	3.47
raining 0.7	'3 (	0.78	1.06	0.00	2.15

Source ROP and RDP of the Italian Regions in Objective 1: data elaboration

ed in ROP and RDP, in the period 2000-2006 and on the basis of the indications of Regulation (EC) no. 1257/99, are considered in support of multifunctionality. An imbalance exists, however, between the objectives of the European Union and those of the Regions. That is also the

result of the lack of well-established criteria to control the respect of requirements environmental standards of the interventions, as is highlighted by this Regulation, with the consequent and strong orientation of the Italian Regions towards productive objectives (Storti et al., 2004b).

As regards multifunctionality, the most consistent functions, in terms of expenditure, are those finalised towards production and protection of the environment and the territory.

From the analysis of expenditure, however, a strong interest emerges for measures, which are defined as traditional policies, such as Investment in agricultural holdings, the Development and improvement of infrastructure connected with the development of agriculture, the reduction of fertilizers.

On the other hand, innovative policies such as the marketing of quality agricultural products, protection of the environment in connection with agriculture, forestry and landscape conservation as well as with the improvement of animal welfare, basic services for the rural economy and population, renovation and development of villages and protection and conservation of the rural heritage, encouragement for tourist and craft activities, receive decidedly less attention.

From the analysis of programming documents, a tendency emerges for the regions to attribute the same significance to the concepts of multifunctionality and sustainability.

The concepts of multifunctionality and sustainability must assume different meanings. Such a consideration is particularly important for Investment in agricultural holdings, which are strongly linked to the agricultural production, which the regions assign a key role among all the measures provided by Reg. EC no.1257/99 and fi-nanced by EAGGF.

In effect, measures directed at strengthening production structures can support an intensive type of agriculture with negative consequences for the environment. This is in contrast with the principle of sustainability. In fact, Investment in agricultural holdings does not seem to be anchored to the principle of de-coupling, and therefore can bring about an increase in production, which, as already pointed out, can mean an increase in the use of plant protection products.

In other words, the relationship between financing for investment in agricultural holdings and quantities of plant protection products can be positive and this is incomepatible with the environmental function of agricultural activity, in the sense that they diminish the role of agriculture in the production of services for the protection of the environment and the territory. This is probably because the intervention undertaken is the traditional type, aimed exclusively at increasing production.

In effect, the regions policies in favour of investment in agricultural holdings can be considered sustainable only if they result as being able to contribute to the acknowledgement of multifunctional agriculture, favouring a "New Production Model", which has greater respect for the environment. In this way, Investment in agricultural holdings can compete to improve the sustainability of the production and territorial system, conserving to the maximum its naturalness. Examples of sustainable investments are

those regarding the development of precision farming, the quality and safety of vegetable and animal products, the rational use of water resources, the reduction of product loss during processing and the creation of energy efficient structures; but also developing new services and exploring new markets, thanks to innovation processes, addressed to facilitate change and adjustment (Knickel et al., 2008b). All these kind of investments can produce many positive externalities, according to the logic of multifunctionality.

The increasing recognition of the multifunctionality of agriculture is clearly defined in some of the latest European documents (European Commission, 2006, 2007, European Council, 2005, 2006).

Above all in the Rural Development Regulation for the period 2007-2013, where the new objectives of the CAP (agricultural restructuring, environmental concerns, wider needs of rural areas) and the relate new measures, seem to go over the dichotomy between development and environment, between investments in agricultural holdings financed by EU and environmental sustainability of the same.

#### REFERENCES

Allaire G, Belletti G (2002). Multifunctionality and the role of qualities related to product origin in the new European agricultural model: framework for analysis and open questions. Toulouse, F: INRA.

Anderson K (2000). 'Agriculture's multifunctionality and the WTO', Aust. J. Agric. Res. 3.

Bagarani M, Magni C, Mellano M (1986). 'Specializzazione produttiva e differenziazione regionale nell'agricoltura italiana: un metodo di valutazione', Rivista di Economia Agraria 4.

Baldock D, Dwyer J, Sumpsi Vinas JM (Eds.) (2002). Environmental integration and the CAP. Institute for European Environmental Policy. Bruxelles, B.

Basile E, Romano D (2002). (Eds.) Sviluppo rurale: società, territorio, impresa. Milano, I: Franco Angeli.

Bohman M, Cooper J, Mullarkey D, Normille MA, Skully D, Vogel S, Young E (1999) The Use and Abuse of Multifunctionality, Economic Research Service, USDA, Washington.

Brynden JM (2000). Is there a "New Rural Policy"?. Paper presented at the International conference European rural policy at the crossroads, Aberdeen 29 June-1 July.

Buttel F. (1994) 'Agricultural change, rural society and state in the late twentieth century: Some theoretical observations'. In Symes D., Jensen A. (Eds.), Agricultural restructuring and rural change in Europe. Wageningen, N: Agricultural University.

Cahill C (2001). The Multifunctionality of Agriculture. What Does it Mean? EuroChoices, Premier Issue: pp. 36-40.

Crowley E (1998). 'Sustainable development and rural poverty in the Republic of Ireland', Econ. Soc. Rev. 29: 10-17.

Cummins P (1990). 'Restructuring agriculture in advanced societies: Trasformation, crisis and responses'. In Marsden T., Lowe P., Whatmore (Eds.), Rural restructuring: Global processes and their responses. London, UK: David Fulton Publishers.

Dwyer J (2003). The Second Pillar and sustainable rural development: early experience with the RDR and SAPARD. Paper presented at the Seminario INEA Le politiche di sviluppo rurale in Europa: profili attuali e proposte di riforma. (INEA Seminar. The European policies of rural development: aspects and perspectives) Roma, 29-30 Aprile.

Economic and Social Committee (1999). Opinion on "A policy to consolidate the European agricultural model", Bruxelles. No. 953/99.

European Commission (2007). Rural Development of the European Union – Statistical and Economic information – Report.

- European Commission (2006). The EU Rural Development policy 2007-2013. Office for Official Publications of the European Communities.
- European Commission (2003), Conclusion of Second European Conference on Rural Development "Planting seeds for rural futures", Salzburg (12-14 Novembre).
- European Commission (2002). Mid-Term review of the Common Agricultural Policy. COM. 394 Final. Bruxelles.
- European Commission (1999). Communication 'Directions towards sustainable agriculture'.
- European Commission (1998). Contribution of the European Community on the Multifunctional Character of Agriculture. AIE/40, Bruxelles.
- European Commission (1997). Agenda 2000. For a stronger and wider EU. Bruxelles.
- European Commission (1991). The development and future of the CAP Reflection paper of the Commission. COM(91)100 Final, Bruxelles.
- European Commission (1988). Environment and agriculture. COM (88) 338, Bruxelles.
- European Commission (1988). The Future of rural society. COM(88)501 Final, Bruxelles.
- European Commission (1985). Green Paper on "Perspectives for the Common Agricultural Policy". COM(85)333 Final, Bruxelles.
- The European Conference on Rural Development (1996). The Cork Declaration–Rural Europe. Future Perspectives. Cork, Ireland 7<sup>th</sup>-9<sup>th</sup> November.
- European Council (2006). Council Decision of 20 February on Community strategic guidelines for rural development programming (period 2007-2013), 206/144/EC.
- European Council (2005). Council Regulation no. 1698/2005 of 20 September on support for rural development by the European Agricultural Fund for Rural Development. (EAFRD). OJ L 277/1 40, 21/10/2005.
- Fanfani R (1990). Lo sviluppo della politica agricola comunitaria. Roma, I: La Nuova Italia Scientifica.
- FAO (2001). Roa Project Analytical Framework to Document the Roles of Agriculture in Developing Countries: Overall Approach and Concepts of Studying the Roles of Agriculture. Rome, I.
- Giaccio V, Mastronardi L (2007). Le politiche a sostegno della multifunzionalità. In Di Nocera A., Fanelli R, Giaccio V, Mariani A, Mastronardi L (Eds.)(year). Integrazione e diversificazione nell'agricoltura multifunzionale. Il caso del Molise, Multiprint, Roma.
- Guyomard H, Le Bris K (2003). Multifunctionality, Agricultural Trade and WTO Negotiations. A Review of Interactions and Issues, ENARPRI Working Paper no. 4.
- Henke R, Pierangeli F, Pupo D'andrea MR, Storti D, Velazquez BE (2004). 'Sviluppo rurale e multifunzionalità. (Rural development and multifunctionality). In Henke R. (ed.) (2004), Verso il riconoscimento di una agricoltura multifunzionale, (towards the acknowledgement of a multifunctional agricolture), Napoli, I: ESI.
- Henke R (2002). 'Dalla riforma Mac Sharry ad Agenda 2000: il processo di greening della PAC'. From MacSharry reform to Agenda 2000. The greening process of the CAP) La Questione Agraria 1: 7-42.
- Huillet C (1994). 'The rural development challenge in OECD member countries'. In Van der Ploeg J.D., Long A. (Eds.), Born from within. Assen, N: Van Gorcum: pp. 204-216.
- Knickel K, Brunori G, Rand S, Proost J (2008). Towards a better conceptual framework for innovation processes in agricultural and rural development: from Inear models to systemic approaches, 8<sup>th</sup> European IFSA Symposium, 6-10 July, Clermont-Ferrand (F) pp. 882-884.
- Idda L, Furesi R, Pulina P (2005). Mid Term Review e Multifunzionalità. (Mid Term Review and Multifunctionality) Rivista di Economia Agraria No.2.

- INEA (2002). Le politiche comunitarie per lo sviluppo rurale. Il qua-dro degli interventi in Italia. Rapporto 2001/2002, Osservatorio delle politiche strutturali, (The European Policies for the rural development. The action in Italy. Reports 2001/2002. Structural Policies Observatory).Roma.
- INEA (ed.)(2000). Le politiche comunitarie per lo sviluppo rurale: verso la nuova programmazione. Rapporto. (European Policies for the Rural development: towards a new planning). Roma, I.
- Japanese Government (1999). Negotiation on Agriculture. WT/GC/W/ 220. Tokyo.
- Lehman B. (1998). 'Domestic Objectives in Agricultural Policies and Liberalisation'. Paper presented at the Workshop Emerging Trade Issues in Agriculture. Paris (26-28 October).
- Mollard A (2003). 'Multifonctionalité de l'agriculture et des territoires: des conceptes aux politiques publiques'. Cahiers d'économie et de sociologie rurales 66: 28-54.
- Norwegian Minister for Agriculture (1999). Appropriate Policy Measure Combinations to Safeguard Non-trade Concerns of a Multifunctional Agriculture. Helsinki.
- OECD (2002). Multifunctionality: The Policy Implication. Paris, F.
- OECD (1998). Multifunctionality: A framework for Policy Analysis. Paris, F.
- Pacciani A (2002). Funzioni sociali dell'agricoltura e nuovi strumenti d'intervento pubblico. Comunicazione al XXXIX Convegno della SID EA, Firenze 12-14 settembre.
- Rizov M (2004). Rural development and welfare implication of CAP reforms. J. Policy. Model. 26.
- Sotte F (1999). Alla ricerca di una politica rurale. In Esposti R., Sotte F. (Eds.), Sviluppo rurale ed occupazione. Milano, I: Franco Angeli.
- Storti D, Henke R, Macrì MC (2004). The new European rural policy: a comparative analysis across regions in the EU. Report to the 87<sup>th</sup> EAAE-Seminar: Assessing rural development policies of the CAP, Wien pp.9-19.
- Sumpsi Vinas JM, Buckwell A (2003). Greening the CAP: The Future of the First Pillar. Datar 4.
- Van Der Bijl G (1999). EU Agricultural Policy After 2000: Has the Environment Been Integrated?. Report for the European Environmental Bureau, Centre for Agriculture and Environment, Utrecht.
- Ploeg VD, Roep D (2003). Multifunctionality and rural development: the actual situation in Europe. In Velazquez B.E. (2004). Multifunzionalità: definizione, aspetti tecnico-economici e strumenti. In Henke R. (ed.), Verso il riconoscimento di una agricoltura multifunzionale. Napoli, I: ESI.
- Velazquez BE (2002). La Multifunzionalità. In De Filippis F. (ed.), Le vie della globalizzazione: la questione agricola nel WTO. Milano, I: Franco Angeli.
- Velazquez BE (2001). Il concetto di multifunzionalità in agricoltura: una rassegna. La Questione Agraria 3.
- Zacharasse V (2001). Agricultural Economics and Policy: International Challenges far the Nineties. Amsterdam, N: Elsevier.