ENTERPRISE YOUTH QUALITY LANDSCAPE **SAFETY CLIMATE** WATER ENERGY **BIODIVERSITY** COHESION BROADBAND



MINISTERO DELLE POLITICHE AGRICOLE ALIMENTARI E FORESTALI

THE RURAL AREAS FOR SUSTAINABLE DEVELOPMENT

The new challenges in agriculture: young and efficient enterprises enhancing local products and protecting the environment and landscape



Project carried out by the National Rural Network under the National Strategic Plan's information activities

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### **INTRODUCTION** THE EU AGRICULTURAL POLICY: RESOURCES AND STRATEGIES FOR RURAL DEVELOPMENT

There has been a reduction in the Community resources for agriculture and the beneficiaries have changed: fewer funds allotted for production, more funds for structural measures

Between Community and national funds, for policies on Rural Development, Italy will have, during the 2007-2013 period, 17.6 billion Support for agricultural policies has always been one of the most important headings in the Community budget. Yet in recent years resources in that field have been considerably reduced: in fact, they went from 75% of spending in the early '80s to the current 45%.

This framework has seen, at the same time, over the last ten years, the reduction in production subsidies (the so-called "first pillar" of the Common Agricultural Policy- CAP) and the strengthening of a policy of structural measures to benefit rural areas ("second pillar" of the CAP), where agriculture has its strongest roots and a very important socio-economic weight. In these areas, which cover 92% of the entire national territory and where just over half of the population lives, the primary sector plays a very complex role: not only as the simple food reservoir, but also as a provider of services to the entire community, an irreplaceable bulwark in defence of a delicate balance to preserve land for future generations.

In this new mission, more responsive to the needs of all citizens, the EU has identified four new challenges since 2009: climate change, renewable energies, water management and biodiversity.

To cope with these new commitments, the latest CAP reform (the Health Check of 2009) has increased funding for rural development: the share allocated to Italy rose from 16.6 to 17.6 billion euros in the 2007-2013 period. These are the new frontiers of sustainable development, where agriculture plays a leading role in reducing socio-economic imbalances, to strengthen links between production activities and protect the environment and landscape, enhance the traditions, not only of typical products, but also of the rural culture and farm life.

Like all new challenges, these new goals also require a greater commitment from everyone, from public institutions to associations, from the operators to civil society. The management of structural intervention is, in fact, something far more complex than the traditional automatic aid paid to farmers based on the characteristics of the farm. The programming is more challenging, because it must also ensure spending efficiency and compliance with selection criteria consistent with the Community and national strategic indications identified in Italy by the National Strategic Plan for Rural Development (NDP), drawn up by the Ministry of Agriculture and Forestry, in

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#### **Ministry of Agriculture, Food and Forestry Policies**

NDP

Transposition of EU guidelines, national strategies development, integration of the measures programmed at the national and regional levels



#### **Regions and Autonomous Provinces**

Implementation of the policies identified at a European and national level and management of resources allocated through the implementation of individual measures set out in each regional rural development programme. The task of the Regions and Autonomous Provinces is also to adopt public selection procedures identifying the beneficiaries, projects and actions that are more consistent with programme objectives

agreement with the central and regional administrations, as well as representatives of associations and civil society.

But Rural Development is not just this. In addition to environmental protection and land conservation, it also provides incentives to strengthen the structures of farms, the infrastructures and local services, to support competitive markets and counteract the depopulation of rural areas. These are two faces of the same coin, confirming the fact that these new challenges cannot be met without a multifunctional and efficient agricultural system. Rural development thus becomes an advanced laboratory for a new method of vertical policy-making which involves the European Union, Member States, Regions and local authorities. All of it benefits 13 million farmers, but especially, a Community population rapidly approaching 500 million inhabitants.

A European policy at the service of 500 million citizens

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#### THE NATIONAL STRATEGIC PLAN: AGRICULTURE FOR THE BENEFIT OF ALL

A National strategic plan to share policies and programme measures In Italy, rural development policy is coordinated by the Ministry of Agricultural, Food and Forestry Policies (Mipaaf) and implemented by the Regions. In this context, the Mipaaf has developed the national strategy through the National Strategic Plan for Rural Development 2007-2013 (NDP), while the Regions, based on local needs, have translated the whole into operative measures included in the Rural Development Programmes (RDP).

The NDP's strategy builds on the analysis of historical problems in agriculture and the abandonment of the countryside, caused by the attraction exerted by other industries and poor land productivity, especially in more marginal rural areas.

From the analysis of problems to the development of solutions The NDP also brings to light other structural weaknesses in the sector: high production costs, the inadequacy of the infrastructure's facilities and services for the population and the production system, particularly in regions belonging to the so-called Convergence Objective (Calabria, Campania, Puglia, Sicily and Basilicata) and, again, the lack of uniformity in the production chains, market segmentation and lack of adequate marketing strategies.

The main objective of the NDP is to ensure a critical mass of resources, concentrating them around some priorities and adapting the types of measure to the varying spatial needs.

The most interesting and innovative aspects of the proposed strategy are as follows:

- 1 key actions identified within each priority objective
- 2 territorialization of rural Italian areas
- 3 integrated planning
- 4 strategic partnerships with other economic policy instruments.

The national strategic document is organized into specific objectives, as required by EU Regulation 1698/05, which must be achieved through measures organized into priority Axes. In this way, the NDP identifies a single matrix, then taken up and adapted to the respective territory by each Regional Programme. These are the Axes and objectives:

#### AXIS 1

Improving the competitiveness of agriculture and forestry, with a series of actions:

- Promoting the modernization and innovation in businesses and the integration of supply chains
- Consolidating and developing of the quality of agricultural and forestry production
- Providing better equipped infrastructures
- Improving the operators' business and professional capabilities in agriculture and forestry and supporting the younger generations

AXIS 2

Improving the environment and countryside through land management with incentive measures aimed at:

- > Conserving biodiversity, protecting and disseminating agro-forestry systems with high natural value
- Protecting surface and deep water quality and quantity
- > Reducing greenhouse gases
- > Land Protection

Competitiveness, environment and quality of life: major objectives focused on three Axes of rural development

#### AXIS 3

Improving quality of life in rural areas and encouraging diversification of economic activities, with incentive measures aimed at:

> Enhancing the attractiveness of rural areas for businesses and people

► Maintaining and creating new opportunities for employment and income in rural areas

In addition, the NDP provides a further strategic objective, through which to strengthen the capacity for planning and management, and the enhancement of local endogenous resources: this is the so-called Leader approach, included in Axis IV of the RDP.

With regard to territorialization, the NDP pays particular attention to differences between rural areas, both in terms of requirements, and potential for development.

To this end, it proposes a classification of the national territory into: urban centres, rural areas with intensive agriculture, intermediate rural areas, rural areas with overall development problems.

Different issues characterize these types of areas in terms of depopulation and ageing population, lack of infrastructures, landscape features, presence of agriculture, interaction with other productive sectors.

The central aspect of the strategy proposed by the NDP is represented by the choice to focus on a greater integration of measures, to activate a mix of actions which address individual enterprises, from those in a production line to those in a particular territory.

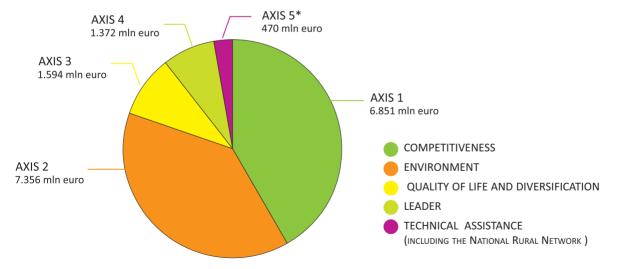
The NDP proposes, in particular, a number of approaches towards some issues that, because of their transversal nature, will require intervention methods that are conducive to integration among enterprises, supply chain or local. Among these issues are quality, environment, bio-energy, youth and women packages.

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To facilitate the resolution of problems in the agri-food sector and those of the rural areas, the NDP proposes a stronger integration with other EU economic policy instruments (the CAP and the cohesion policy, in particular), national or regional. In this sense, the NDP has proposed operational solutions both with respect to the CAP (for example, with reference to environmental requirements necessary to receive benefits) and to cohesion policies (on topics such as, broadband, logistics, innovation and research, services for the population, diversification, protection and enhancement of environment resources). To achieve these objectives, the rural development policy makes around 17.6 billion euros until 2013 available to the regions. Of these, nearly 9 billion comes from European funds.

Locally, the management of resources is entrusted to 21 Rural Development Programmes (RDP), implemented by 19 regions and the autonomous provinces of Trento and Bolzano. Each RDP is divided into Axes and Measures, consistent with the indications of the National Strategic Plan.





The total public expenditure for the RDP per Axis (\*) Axis 5 includes the measures for technical assistance and the National Rural Network

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The distribution of resources among the 4 Axes sees a high concentration in Axis 1 - competitiveness (6.8 billion euros) and in Axis 2 - environment (7.4 billion euros), followed by the Axis 3 - quality of life, with 1.6 billion euros and Axis 4 - Leader, with 1.4 billion euros. To complete the picture, 470

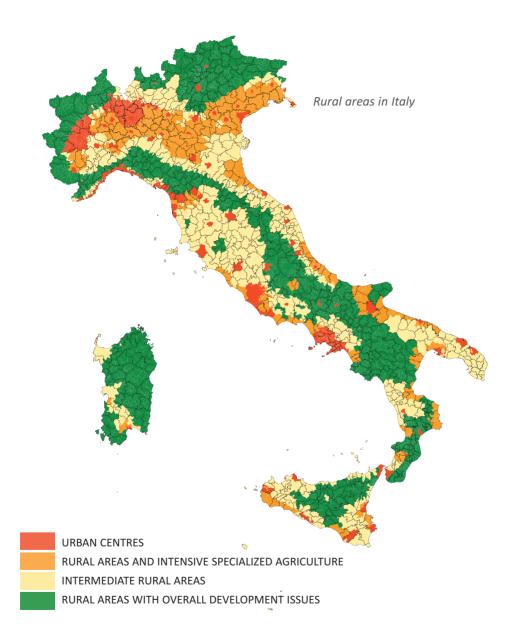
REGION	Public Expenditure	Community Share (FEASR)
Abruzzo	412,8	186,3
Bolzano	331,9	149,1
Emilia Romagna	1.057,4	483,6
Friuli Venezia Giulia	266,8	120,5
Lazio	703,9	317,5
Liguria	292,0	115,3
Lombardia	1.025,2	471,1
Marche	486,4	219,5
Molise	207,9	93,5
Piemonte	980,5	444,8
Sardegna	1.292,3	574,9
Toscana	876,1	391,4
Trento	280,6	109,2
Umbria	792,4	356,8
Valle d'Aosta	124,4	56,5
Veneto	1.050,8	482,0
Competitiveness	10.181,4	4.571,9
Basilicata	671,8	386,8
Calabria	1.089,9	653,9
Campania	1.813,6	1.118,8
Puglia	1.617,6	933,6
Sicilia	2.185,4	1.279,2
Convergence	7.378,3	4.372,4
National rural Network	82,9	41,5
Total Italy	17.642,6	8,985,8

million euros are earmarked for technical assistance and the National Rural Network.

The Axes, in turn, are divided into measures in order to allow a greater flexibility in managing planning and take into account the specific regional situations.

The measures include support for public and private investment, the payment of premiums and allowances for farmers, and the promotion and improvement of services

The resources devoted to Rural Development Programmes (Millions of euros for the period 2007-2013)





A Plan for a multifunctional agricultural system, efficient and sustainable

## ENTERPRISE THE ENGINE OF THE TERRITORY

Enterprise is the heart of the rural areas and its strengthening is a key national strategy. In Italy, there are 1.7 million operating farms that involve about 4 million people covering an area of 12.7 million hectares of farm land.

Over 120,000 of these farms are multifunctional, in as much as the agricultural income is supplemented with that from the provision of goods and services of another type (tourism, crafts, culture, social, etc.).

In economic terms, the value of agricultural and forestry production is approximately 49.6 billion euros while the added value of the sector has reached 27 billion. The farm work involves, including the owner, employees, family and seasonal workers, about 4 million people.

These large numbers confirm the important social and productive role of agriculture, but also indicate an excessive fragmentation that heavily influences the competitiveness of the system: higher production costs, limited diffusion of technological innovation, less bargaining power on the market.

The National Strategic Plan is the result of a consideration of these structural weaknesses. Through Axis 1 (for the competitiveness improvement of agriculture and forestry), the aim is to enhance the entire agri-food and forestry system in rural areas, with tools to promote, both in terms of production and marketing, the aggregation of small enterprises. Among these are integrated planning and supply-chain projects that make the different players of the food system a part of the network.

The RDP allots almost 7 billion euros of public funding to support competitiveness in agriculture and forestry, a very substantial package of resources, also for activating just as much private investment.

1.7 million operating farms that involve about 4 million people

Integrated projects, which consider the supply chain, to overcome fragmentation of the system

Seven billion euros in seven years for competitiveness and innovation

#### THE ULTIMATE GOAL OF THESE OPERATIONS IS TO CREATE CONDITIONS FOR:

IMPROVING THE EFFICIENCY OF FARMS, FAVOURING THE STREAMLINING OF PRODUCTION COSTS, THE USE OF MODERN MANAGEMENT TECHNIQUES AND IMPROVED FARM PRODUCTIVITY, INCREASING MARKET COMPETITIVENESS AND PROFITABILITY

TO IMPROVE THE FARM EQUIPMENT, IRRIGATION, LOGISTICS, ENERGY AND TELEMATICS, TO MAKE THE RURAL AREAS MORE COMPETITIVE

TO RAISE PRODUCTION QUALITY STANDARDS, PARTICULARLY INCREASING THE ADDED VALUE OF TYPICAL PRODUCTS LINKED TO THE TERRITORY

TO PROMOTE THE INNOVATION AND MODERNIZATION OF MORE EFFICIENT AND SUSTAINABLE FARM PROCEDURES FROM THE POINT OF VIEW OF ENVIRONMENTAL IMPACT

Competitiveness, Opportunities, Technological Innovation

### YOUTH YOUNGER GENERATIONS AND DIVERSIFICATION SUCCESS FACTORS FOR COMPETITIVE AGRICULTURE

Young people managing farms in Italy are in steady decline

The award for young people was increased to 70,000 euros

An allotment of 800 million to speed up turnover in farms Young people are the key resource for the development of a modern and competitive agriculture both for their dynamism and willingness to invest in innovation and technology, and for their capacity to give an essential boost to a sector characterized by a high rate of ageing.

More than two thirds of Italian farms, however, are run by farmers over the age of 55 years (68%), in comparison with 62% in 2000.

At the same time, the number of farms run by young people is in steady decline. In 2000, there were 223,000 (10.4% of the total), while in 2007, there remained a little more than half (114,000, 6.9% of the total).

Faced with these numbers, the question of the entry of young people and a generational turnover is a key part of the national strategy contained in the NDP. For this reason the measures already contained in past programming have been reinforced and new tools identified to facilitate the development of business strategies.

In particular, the award for young people under 40 years, setting themselves up as farm owners was increased to 70,000 euros. This ceiling is reserved for those who choose a combination of capital subsidy and interest. The ceiling is lowered to 55,000 euros for those who choose only the capital contribution.

The most important new addition is the so-called "Youth package" that combines the premium for a first farm with other RDP measures, in a way that encourages greater planning capacity in young entrepreneurs, also because in order to receive funding it is necessary to submit a proper business plan.

Overall, the RDP allocate about 800 million euros, equal to 4% of public resources available during the 2007 - 2013 period, for actions to support young farmers. Other measures which are activated through the "Youth Package" should make the measure even more effective.

The decision to focus on young people is also supported by the current trend, which shows that young entrepreneurs in recent years have shown a greater propensity toward introducing changes in farm management, focusing on:

INCREASED EFFICIENCY IN FARM PRODUCTION PROCESSES

INTRODUCTION OF INNOVATION ON THE FARM

SEARCH FOR NEW MARKET OPPORTUNITIES

DIVERSIFICATION OF PRODUCTS AND SERVICES

As evidence of this trend, the data is indicative on the greater ability of farms run by young people to diversify their activities.

Faced with an overall growth in the number of so-called diversified farms by 3% from 2005 to 2007, those run by young people under 35 years, in the same period, registered a growth of 14%. The latter is a sign which confirms a growing sensitivity among young people, with respect to an agricultural activity that pays attention to all the possibilities that the farm and the territory can offer.



Youth package to improve planning capabilities



The quality of agri-food products represents a strategic asset for meeting the challenge of competitive international markets. The growth recorded in the last decade in the demand for products which fall within the range of high quality products and the sustained quantity of exports, even at the height of the economic crisis, are an important confirmation.

On this front, Made in Italy puts forward record numbers, such as those of the brands DOP, IGP, Organic, DOC wines, the large family of traditional products. All the products have a strong connection in their DNA with the territory of origin. It is a starting advantage, given the positive trend of this segment, but does not supply a living.

On the contrary, there needs to be support from actions aimed at strengthening the productive base and especially marketing skills, to translate the fine image Italy enjoys throughout the food world, into added market shares.

Italy held the European record with 206 appellations of origin, with its 206 DOP and IGP brands (23% of total EU names), pointing to some heavy imbalances. The numbers are very important in absolute terms: the turnover is estimated at 5.2 billion euros in production, which become 9.2 billion if related to retail prices in Europe for consumption, of which one billion are exported. But this business is concentrated on a very few famous DOP and IGP labels.

It is estimated that about ten of them, among which are Parmesan cheese and DOP prosciutto, are concentrated into 85% of the turnover and still exceed reported exports. The goal, therefore, also referred to in the National Strategic Plan, is to expand the agricultural production base - first link of the entire chain - to achieve the critical mass needed to face, using appropriate planning and marketing measures, the markets, including those even further afield.

There are important implications, going back along the chain, including those in prices and therefore on the incomes of farmers. This is done by increasing the degree of the activation of the DOP and IGP system, which at the agricultural level already involves 80,000 producers, for a total of 132,000 cultivated hectares and 46,000 farms.

Great demand for quality products Made in Italy

> With 206 denominations of origin, Italy is first in Europe for DOP and IGP brands

A quality system that involves 80 thousand producers, for a total of 132 thousand cultivated hectares and 46 thousand farms The RDPs favour the adoption of certification systems to meet new consumer demands The NDP has taken this into consideration, indicating, among its priorities, the enhancement of quality and typical products linked to the territory. In line with these indications, the RDP measures aim at fostering farmers to voluntarily join certified quality systems, including the financing of information and promotion activities.

The other big Italian record is that of organic products, whose consumption (about 2 billion euros) grew continuously, even in the years of major crisis: + 6.9% in 2009 and + 5.2% in 2008. A success that benefits from high consumer loyalty and the growing trend toward health that increasingly characterizes the relationship between lifestyles and nutrition.

This is a segment with good future prospects, for which the National Strategic Plan has indicated the need to activate a system of incentives to support, in terms of production and marketing, this expansion phase. The RDPs combine to support this development with incentives aimed at supply chain projects and organic farming packages. This formula, by coordinating more measures, covers a wide range of actions: organic farming both in plant and animal production, reconversion, implementation or enhancement of production facilities and marketing structures.

Then there is the great chapter that regards traditional products, with 4471 specialty products recorded at a regional level: an operation initiated a decade ago to prevent the risk of extinction following the entry into force of EU health and hygiene standards. After being placed under protection with a series of exceptions, each Region has provided a codification of recipes and production methods, thereby helping to enrich the field of specialty Italian foods that are rooted in rural traditions and have strong ties with the territory.

There are many important niche products, to be purchased or consumed on the spot, capable of also meeting the local tourist demand, aimed at the flows of visitors attracted by the combination of food and territory.

More generally then, both the NDP and the RDP envisage measures to implement certified quality systems and traceability projects that, in addition to improving the quality of agricultural production and agri-food, guarantee the consumer higher safety standards.

# Dop and Igp, the leader speaks italian

## LANDSCAPE THE IDENTITY CARD FOR THE RURAL AREAS

Conservation and landscape enhancement: strategic local marketing leverage

Landscape as not just an aesthetic and cultural value but as part of a territorial development model

From the dry stone walls to the restoration of terraced land, and the rediscovery of local traditions The preservation and enhancement of the landscape represent one of the most current challenges for rural areas. It is an objective which must be interpreted both in terms of agricultural environmental protection, and in regional marketing, to contribute significantly to promoting local products, whose quality is also closely connected to the image of the territory from which they come.

The growing social and political significance that the issue of landscape is taking on at European and national levels, stems from a wide and deep change in economic structure and in the public perception that characterizes our society. The role of landscape and its perception are indeed changed: the landscape is no longer just an elitist phenomenon or an aesthetic and cultural value isolated from socio-economic context, but an important element in defining a model of development particularly adequate for Italian reality. A landscape of quality is an expression of a happy integration between social, economic and environmental factors over time and space, and is equipped to positively represent the image of a whole country: therefore it requires appropriate programming choices.

This dual function attributed to the idea of landscape conservation and enhancement, which directly involves agriculture, a concept of close relationship between man and nature, was transposed in a highly detailed manner by the National Strategic Plan and subsequently by the rural development programmes, which have translated the Community and national guidelines into operational measures, spread over several Axes.

As regards the protection of the landscape, the recommendations of NDP are designed to promote the sustainable use of agricultural land and promote the recovery of systems and traditional practices developed by local populations (e.g. rehabilitation of terraced land and recovery of traditional artefacts such as stone walls and old barns).

The application of this range of measures is an effective antidote to stem the flow of the erosion of agricultural soils. In Italy, over the past 25 years, agriculture has lost 5.8 million hectares of the total agricultural area.

A good 1.8 million were employed in an irreversible way by overbuilding, which has damaged the landscape and affected the tourist territory.

The conservation of the landscape can also help enhance typical local production whose image is closely tied to the quality and beauty of the place of origin, representing the true strength of an increasingly popular concept of territorial marketing. The incentive system included in the RDP, aimed at business competitiveness, also provides support for the promotion of the enhancement of the specificity and the identity of the product- territory and financial support for producers' associations which undertake to match the quality of local products with landscape quality.

Linked to the enhancement of the landscape there are also the farm holiday activities, a sector which has been the first to interpret the concept of multifunctional agriculture in Italy, diversifying and supplementing income. According to the last census by ISTAT (the National Statistics Institute), there are over 18,000 holiday farms in Italy, doubled over ten years, with a turnover estimated at about a billion euros. More difficult to quantify, but equally important, are the economic impacts on environment and landscape, thanks to the recovery of various types of farm buildings (from buildings with a historical value to the more traditional farms and farm houses, villages and rural houses), which are part of the landscape and its tradition.

The role of the holiday farm is becoming increasingly a socio-economic one, serving the local community, with the creation of agro- nurseries, educational farms and facilities equipped to care for the elderly.

The idea that "preserving the landscape" means avoiding any kind of change, even in terms of development, is giving way increasingly to the idea that conservation cannot be carried out without the genuine production of new values: any innovation may entail an enrichment of the values that have slowly settled into the past and in this sense, the countryside is called upon to play a fundamental key role in terms of enhancement and development.

The National Strategic Plan has included landscape protection among its objectives. In this way, Mipaaf wanted to emphasize the importance of recognizing the relevance of the landscape with the objectives and actions of the Community Agricultural Policy and rural development.

Attention to the countryside is present within all RDPs, with resources spread over several Axes.

With 18,000 holiday farms, Italy leads the sector



## **SAFETY** THE SOCIAL VALUE OF WORK BASED ON RURAL DEVELOPMENT

Safety at work in the agro-forest sector is a priority factor in future funding for the social and economic development of the entire compartment.

In fact, despite a slight decline in recent years, the accident phenomenon in agriculture is still of great concern. According to INAIL (National Institute for Insurance against Work-Related Accidents and Illnesses) data from 2008, there were 53,355 accidents recorded, with a decrease from the previous year equal to 6.7%. However, the victims in agriculture numbered 125, with an increase equal to 19%.

This situation is even more significant if one considers the incidence of accidents, or the number of accidents occurring every 1,000 persons employed. In this case, the increase in deaths is more than 18% compared to 2007, unfortunately, in contrast with the trends recorded in other sectors. Moreover, considering the main causes of accidents, it must be emphasized that 40% of fatal accidents are related to the use of the work machinery and equipment (data ISPESL –Institute for Prevention and Safety in the Workplace ).

It is clear that in certain types of agriculture, there is a higher probability of accidents than in other sectors. Besides the fact that most of the work is done "out in the open", other factors specific to the sector must be taken into consideration, such as: duration of the job and working hours, mainly linked to seasonal and weather factors, the inability to define precisely the characteristics of the workplace and the related risks, the huge variety of processes and equipment used, etc.

Alongside these operational factors, it is also necessary to consider the structural characteristics of the farm, one of the most significant being that most farms are small or very small. This obviously implies greater difficulty in applying best practices in the area of prevention (such as training, information and operator training) and safety management that increases the level of safety, mainly due to economic and financial barriers.

One particular problem is the high level of obsolescence in work equipment. In Italy, in a tractor park consisting of a number of tractors estimated at 1,650,000, more than a third are more than 20 years old. In view of this data, it should be emphasized that the period of technical and functional efficiency of a tractor is estimated at 15 years and that in recent years, technical Despite improvements in recent years, the average number of accidents in Italy is still of great concern

The greatest number of serious injuries are related to the use of farm machinery

Prevention and training to reduce the number of accidents In terms of safety, Community action is not limited only to legislation but also provides information, guidelines and promotion developments and legislation on the safety of machinery and equipment have been significant. Another critical issue of safety in fields is linked to the so-called "chemical hazard", or the use of products and chemicals (mainly PPP - plant protection products), whose safe use aspect requires the use of specific operating procedures and controls.

In recent years, there has been an increase in occupational diseases caused by chemical agents, mainly due to incorrect use (and in some cases the absence of) personal protective equipment and a lack of information and training on the use of nebulizers, the sprayers, nozzles, dusters and all the other equipment necessary for the distribution of plant protection products, throughout the entire production cycle, including post harvest and product storage phases.

Finally, there should be some mention of the increasing number of foreign workers, both in agriculture and forestry: this transformation in the social fabric of farms brings about significant problems associated with so-called transversal risks, or difficulties in communication, organizational weaknesses, problems of poverty and stress due to psycho-social factors.

Among other things, the same European Union considers safety at work to be a central element in its policy, promoting not only measures aimed at adapting legislation, but also activities to provide information, guidance and promotion in favour of a safer and healthier working environment.

The legislation (including the Legislative Decree 81/2008 and the Legislative Decree 17/2010), must also be applied in smaller farms to reduce work injuries typical of farms that are less professional or hobby farms (such as, for example, overturning tractors and mismanagement or poor running of agricultural machinery).

For these reasons, the RDP 2007 - 2013 provide specific measures to support farmers in the improvement of safety standards and implementation of good management practices, measures that transpose the Health Check indications, emphasizing the contribution of rural development policies, both for training and information on proper safety management in the workplace, and for the renewal and adaptation of agricultural and forestry machinery and equipment.

The RDPs contain planned interventions aimed at specific support for farms to improve safety standards Training, prevention and technological innovation

### CLIMATE AGRICULTURE, A STRATEGIC LINK IN THE FIGHT AGAINST THE GREENHOUSE EFFECT

The new challenge in agriculture linked to the risk of climate changes The reduced availability of water, the decrease in soil fertility and desertification are the weak points in many European regions, in particular in the Mediterranean area, where climate change in coming years will have an increasing impact, undermining local ecosystems and agricultural activity itself.

As regards Italy, the phenomenon of desertification affects all regions, although it is growing especially in the South, particularly in Puglia and Sardinia. Over the last 140 years, the air temperature has shown an increasing trend on the order of 1° C per century for all the climatic regions identified, a phenomenon that has similarly affected all the seasons of the year.

The balance between emissions and absorption in Agriculture has a positive balance of 34 million tonnes of CO2 Like all economic activities, agriculture too must deal with climate change: however, in the double absorption-emission, it must be stressed that in our country, the agro-forestry sector has a clearly positive average balance: with respect to an emission of 37 million tonnes of CO2 per year, the absorption capacity is significantly higher, amounting to 71 million tonnes of CO2, with a positive balance of 34 million tonnes of CO2, thus balancing a fundamental part of emissions of greenhouse gases from human activities (urban, areas industrial, transport, etc.)

Incidentally, the Italian situation is not as heavy as other countries, with an average of greenhouse gas emissions in the agriculture sector which still stands at 6.7%, compared to a European 9%.

The goal now is to strengthen this positive role of agriculture, in line with the new challenges of the CAP Health Check: improve its contribution to climate change, by strengthening the strategy in place and a significant injection of new resources, confirming, for rural areas of our country, a leading role in the overall odds for a sustainable future.

This route was also indicated by the Kyoto Protocol (2008 - 2012), based on which Italy must reduce its greenhouse gas emissions by 6.5% compared to 1990 (reference year). The contribution of the agro-forestry sector is also crucial for achieving this objective.

In line with these expectations, the Health Check brought additional resources: the Italian RDPs were awarded additional funds for about 128 million euros, that are combined with other interventions in the two chapters, competitiveness and agri-environment, and directly or indirectly, already regarded the combatting of climate change.

The indications of the National Strategic Plan, implemented by the Regions through the rural development programmes, could well provide a wide range of measures, both for the mitigation of climate change, and the adaptation of agriculture to the changing conditions of climate.

In particular, in the section on the reduction of greenhouse gases, the focus is on energy saving and energy production from renewable sources and development of less energy-intensive crops or that have a lower impact on the soil. This includes a series of agronomic practices that promote the accumulation of organic matter in soils and increase the amount of carbon stored, such as the maintenance of permanent pasture or grassland, the processes performed at shallower depths, seeding on hard ground (not tilled) and the re-vegetation of land used for tree crops.

As for the adaptation to new conditions, the incentives system encourages technological solutions that reduce the consequences of climate-related extreme events such as the use of agricultural crops better able to withstand climatic or water-related stress.

From the RDPs, a boost to energy savings and the development of renewable sources to reduce environmental impact



Agriculture absorbs 71 million tonnes of CO2 per year

## WATER A PRECIOUS RESOURCE TO PRESERVE AND USE CAREFULLY

Italy is a country rich in water, but lacking in efficient structures that can optimize the use of this increasingly valuable asset. The difficulty lies in there being two opposite problems. Many areas of the country have a rich water supply but still have a high degree of dispersion due to inefficient water plants, sometimes obsolete, resulting in high losses. On the other front, however, the absence of adequate control of fast flowing streams promotes phenomena of overflow, flooding and erosion, with serious consequences, both economic and in terms of damage to the landscape, with an obvious waste of water resources.

To this should be added the phenomenon of illegal drawing of water, through which large volumes of water are stolen from the system. These "diseconomies" and "waste" are even worse when one considers that Italy, because of its orographic characteristics, is one of the countries with the highest water consumption in Europe.

This is one issue that directly implicates agriculture, both for its role as a large consumer of water, and for the positive contribution that irrigation and land reclaiming may have on agriculture. In Italy, in fact, approximately 60% of the available fresh water is used for agriculture, 25% for industry and 15% for consumer use. At a national level, 53% of farms irrigate with water supplied exclusively by networks managed collectively, while 18% use a dual mode: collective and self-supplied. The collective network, whose management is entrusted to 645 irrigation bodies, is spread over 17,000 Km in the central north and 5,600 km in the south. The works surveyed by Mipaaf, that permit supply for irrigation, number 5,400.

While farming exerts considerable pressure on water resources it is also true that the irrigation bodies have a positive impact on the environment. In fact they play a protective role in the territory, producing

benefits on a hydro-geological order and a fundamental environmental function, in as much as the irrigation canals, especially in central and northern areas, have the dual function of irrigation and regulating the drainage network. Among other things, the part of the irrigation water that filters down, helps to replenish groundwater. In addition to the primary role of water distribution, this large network of canals is a fundamental system for flood control and an integral part of the cultural and social heritage of many regions: for example the Po and Veneto Plains, where the widespread use of the network characterizes Italy is a country rich in water but lacking in efficient distribution structures

Agriculture is the greatest consumer of water, but also plays a fundamental role in the reconstitution of the groundwater and scores the landscape. Another important role is played by the wetlands, rice paddies and artificial lakes, for nesting, the refuge and source of food for important species of migratory birds. But there is also another aspect, equally important, and that is water quality. In this case too, the irrigation cycle often provides improved standards of water quality, especially in the more natural character canals (canals with vegetation) through the dilution of nutrients and phyto-purification.

Among other things, the recent developments in EU law, which makes the protection of all waters, the assessment of potential impacts and the achievement of "good ecological status" key objectives, launched another challenge: ensuring the most sustainable and rational management of natural resources, through innovative measures that combine pollution prevention, rural and social-economic development, and the development of natural ecosystems. With these objectives, the Health Check of the CAP have entered sustainable water resources management as one of the four new environmental challenges within the rural development policy. This decision opens the way for a new way of managing and using water resources, which becomes an important part of an integrated development model (social, environmental, economic) applied to the territory as a whole.

To support this new challenge the budget was also enhanced. To the 807 million euros initially allocated by the regional RDPs for 2007 - 2013 (measure 125 - infrastructures) another 148 million euros have been added as a result of the Health Check.

At a national level, the water issue has long been addressed by the Ministry of Agricultural, Food and Forestry Policies. In 2004 it developed the National Irrigation Plan (NIP), which allowed for the continuation of infrastructural measures in the important irrigation sector, providing investments of around 1,122 million euros. Additional funding will be available from 2011 and will allow for the completion of the plan started in 2004. All the works financed by NIP provide for the construction of infrastructures of national importance, with the objective of increasing storage capacity and modernizing distribution networks. These latter will be joined to more extensive networks, financed by the regions with the RDP completing the programme scheme aimed at rationalizing management and saving water resources.

The sustainable management of water resources is one of the Health Check's new challenges

## Sustainable management of water resources

### ENERGY DEVELOPMENT OF AGRO-ENERGIES FOR INTEGRATING THE FARM INCOME

The development of renewable energy, a priority for improving the environment and controlling climate change The development of renewable energy for farms is an important opportunity for production diversification, and a way to increase farm income, as well as provide a greater contribution to combating climate change. The European strategy to counter energy and climate emergencies provides for plans to reduce greenhouse gas emissions by 20%, compared to 1990 levels, and increase energy efficiency by 20% by 2020 and cover, through energy produced from renewable sources, at least 20% of national requirement (20-20-20 Formula).

Italy's goal is to triple, by 2020, the current share of renewable energy on final consumption. Faced with this challenge, agriculture and forestry are called to do their part, and could provide environmentally friendly fuels and clean energy. The potential is very high, but despite the various incentive schemes, the results are not always satisfactory, especially as regards biomass energy.

On the scale of production values of primary energies in our country, in fact, against a gross national requirement equal to 192 million tonnes of oil (Mtoe), only 8.5% is provided by renewable sources (16.3 Mtoe). Among these are hydropower (24%), geothermal power (42%), wind power (3%), solar power (1%) and, finally, that produced from biomass and waste (30%). In the latter category, the most important role is still that of firewood (60%) and waste (30%), while the energy from biogas accounts for 7% and biofuels only 3%.

Seen in terms of so-called short chain, a model implemented in Italy to offer an attractive cultural and economic alternative to farmers, less encouraging results have so far been achieved by the biodiesel industry, where the hectares put under cultivation contract have not gone beyond 15 to 20 thousand.

There are rather more encouraging results on the production front with energy from biogas, thanks to the success of the micro-generation model spread throughout the territory and the mix of raw materials and manure used to provide the stations with up to 1 megawatt (MW).

Agro-forestry: great potential still poorly used for the production of agro-energy Of all the facilities in operation, totalling 1,481 (GSE - Power Services Manager data 2008), 76 are powered by biomass and 255 by biogas. Of these, 57 use biogas from manure, 141 biogas from landfills, 32 sewage sludge and 25 from crops and agro-industrial waste.

A new boost to the sector could come from the recent definition of the framework of incentives, under which is provided: the launch of the so-called energy account, the comprehensive fee granted to small plants of up to 1 MW, extended also to the use of pure vegetable oils, with the obligation to develop traceability of raw material, the application of a multiplier of 1.8 for the projects that are certified green, granted to installations over 1 MW using biomass from the short chain or sector agreements.

The need to seize this opportunity has been widely accepted by the National Strategic Plan, which nationally strengthens the Community strategy to empower renewable energy, focusing on integrated measures, where the goals of renewable energy production and energy efficiency can translate into a real opportunity for growth for enterprises in the agricultural, food and forestry sector, social and economic development for rural areas.

To this end, the RDP has provided support for specific actions: business investment (construction of facilities and creation of bioenergy supply chains), investment in infrastructures (construction of shared facilities for renewable energy production and the re-use of heat for co-generation, construction and upgrading of transport networks, the technology and logistics networks for collecting, etc.) new opportunities for employment and income in rural areas (investment of micro systems for processing and logistics management of renewable energy sources, production and/or installation of boilers and equipment for energy production from biomass produced on site, etc..) training for the diffusion of suitable business skills. A witness to the importance of this objective, included by the Health Check in the 4 new challenges for rural development, the RDP has allocated to renewable energies a further 43 million euros. Positive results in the biogas sector with 255 facilities operating in Italy

From the RDPs a boost to development of new projects aimed at starting up bio-energy chains



Bioenergy, efficiency, business and infrastructure investment

# **BIODIVERSITY** A HERITAGE PROTECTED BY THE RURAL WORLD

A variety of habitats and abundant species of animals and plants, many of which are related to agriculture, are the basis on which Italy has built its leading place in global biodiversity. This natural heritage boasts 6,700 higher species of plants, to which are added the 1130 species of mosses. Apart from the ornamental species, which are not of agricultural interest, there are 665 crop species in our country. As for animals in Italy, surveys numbered them at about 57,400 species. A wealth of farming habitats related to land use may be added to those, an endless series of landscape mosaics which are the most original contribution Italian agriculture makes to biodiversity.

These numbers show the two faces of biodiversity: the first is natural, the second developed by humans through farming and livestock raising.

The balanced relationship between these two systems is fuelling the huge reservoir of genetic resources to ensure a future for the public and new generations.

Agriculture, especially that related to protected areas and agro-forestry areas with a high natural value, is of major importance for the conservation of biodiversity. In Italy, the agricultural areas of high natural value cover an extension of about 6 million hectares, 32% of the total agricultural area, concentrated in protected areas and areas of the Natura 2000 network.

The National Strategic Plan considers the integration between biodiversity and agriculture a key objective to be pursued through rural development policies, such as identifying as a priority the conservation of biodiversity and the enhancement of high value components of natural agro-ecosystems. In this scenario, agriculture has a key role, both in the new on-farm conservation of plant and animal species on the way to extinction, and in the contribution to maintaining and restoring the habitats of high natural value. This is a solid case of a more modern model of agriculture, at the service of farmers and the whole community.

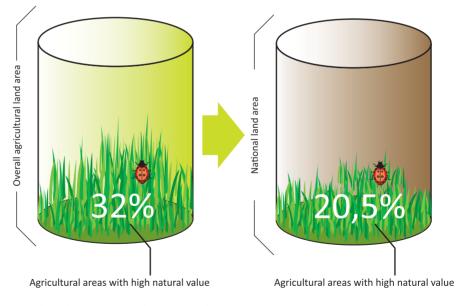
The measures provided under the rural development programmes, innovative with respect to previous programming, do not just appeal to farmers, but extend the system of incentives also to research institutions and structures qualified to catalogue and preserve genetic resources.

Italy offers a wealth of biodiversity tied to agriculture and forestry

32% of farm land is made up of highly valued natural areas New possibilities to extend incentives to companies and institutions specialized in conservation of genetic resources Close attention is paid to the preservation of endangered breeds: a heritage of 124 animal species, including 26 breeds of cattle, 42 of sheep, 27 of goat, 6 of pig, 17 of horse and 6 breeds of donkey, which the farmer helps to protect, also to strengthen traditional productive sectors based on marketing typical products.

In addition to resources already allocated in the context of the RDP, the revision of the Health Check brought Biodiversity another 140 million euros of additional funding.

Finally, to complement the NDP, the implementation by the Ministry of Agricultural, Food and Forestry Policies and the Regions of the "National Plan for biodiversity in agriculture " is a further important element for the preservation of genetic resources, animals and plants.



Agricultural areas with a high natural value in Italy

38

Agricultural areas with high natural value cover 20% of the national territory

## COHESION THE RURAL AREAS: FROM COMPENSATION FOR IMPOVERISHED CONDITIONS TO THE ENHANCEMENT OF RESOURCES

Priority given to cohesion between territories to guarantee all citizens equal opportunity in access to essential services

The aim of the NDP is to raise infrastructure standards to counter the phenomenon of depopulation The Italian rural areas are an exceptional container of diversity to be protected and valued. They are rich in quality agricultural production, traditional crafts related to agriculture, traditions and culture, and landscapes of great natural and historical value.

In Italy, 36% of the population lives in areas classified as highly rural, in an area equal to about 75% of the country. These areas are mostly located in hilly and mountainous regions, where agriculture plays a significant role, both in the agricultural area used (over 9 million hectares, 68% of the total), and for those working the land (54% of the total), but certainly less profitable than other areas of the country. In fact, 90% of the disadvantaged agricultural areas are part of these areas and the added agricultural value represents only half the national average.

This is actually a more difficult reality in terms of socio-economic development, with per capita incomes below the national average (88% average national), an average population density of less than the rest of the country, with about 91 inhabitants per square kilometer, and a trend of depopulation and an ageing population.

This situation is partly determined by the greater isolation, exacerbated by decreased availability of infrastructures and services. In this context of competitive disadvantage though there is, from an environmental perspective, a great potential, as demonstrated by the fact that almost 90% of Italian protected areas and Natura 2000 areas are located in these territories.

Supporting "cohesion", also means reducing the income gap of populations residing in areas with different levels of economic development and allowing people equal opportunity in accessing essential services, whether educational, health, or cultural, and helping the businesses to invest in a more competitive environment.

The NDP and RDPs pay particular attention to this situation, with the objective of mitigating the profound differences between different types of

rural areas, both in terms of requirements, and in potential for development. To this end, the NDP proposes a classification of the country in urban centers, rural areas for intensive agriculture, intermediate rural areas, rural areas with global problems of development, concentrating in the last two types the measures mainly aimed at compensating farmers' incomes: more than a billion euros in compensation to farmers in deprived areas, to which are added another 3 billion euros allocated in Axes III and IV.

The measures of these two Axes are of course aimed at revitalizing elements of potential development and encouraging the process of cohesion between countryside areas through:

#### > Incentives for diversification of economic activities to increase

Opportunities for income and employment (agritourism, rural tourism, crafts and other local economic activities)

#### > Improving the quality of life, to make rural areas

More attractive to younger generations through the creation and improvement of economic and social services

#### Relaunch the image of local areas, with funding

Of interventions for the enhancement of local heritage, whether natural, historic or cultural

#### > Incentives to encourage greater participation of local people in

Processes of development and greater social cohesion through instruments such as the  $\ensuremath{\mathsf{LEADER}}$ 

Greater integration with the instruments of the cohesion policy

3 billion euros to help the deprived areas



Diversification, attractiveness of rural areas, Partnership

### BROADBAND A DIGITAL BRIDGE FOR COMPETITIVENESS BUSINESS AND SOCIAL INCLUSION

The infrastructure and telecommunications (ICT), and in particular, improved access to high speed Internet (broadband), represent a fundamental prerequisite for overcoming the isolation of rural areas and to allow and encourage development and innovation.

The adoption of innovative technologies is the key to developing and maintaining economic growth and supporting the diversification of production in rural areas, through, for example, the formula of E-commerce, which makes it possible for local products to find new global market outlets.

There are also important consequences in the simplification of the relationship between citizens and public administrations. According to recent surveys, in Italy 99% of the urban areas are covered by broadband, while there is 80% coverage in rural areas.

In the rural areas, moreover, the service is also considered to be of poor quality: only 17% of the coverage in rural areas has a constant quality connection (compared to 89% in urban areas).

The high implementation costs associated with the difficult geo-morphological conditions and the excessive dispersion of the population is a barrier that hinders having Internet uniformly throughout the territory, at the expense of the rural areas.

The European challenge is to break down the digital divide between the various areas of the Union, ensuring, by 2010, full infrastructure coverage and a constant and fast internet connection (fiber optic networks and wireless) for all. To achieve this goal the EU has allocated special funds of the Plan for European economic recovery (Recovery Package) for broadband in rural areas, with a budget that has given Italy an additional 93 million approximately, to which we must add 55 million in co-financing for a total of 148 million.

In line with the European challenge, the NDP proposes, in addition to the activities in support of the application in ICT (which is already included in the 2000-2006 programming), a strategy to be implemented under Axis III - Measure 321 "Basic services for the economy and the rural population, to

Better access to high speed Internet to overcome isolation in rural areas

In Italy, little more than 80% of the rural areas are covered by broad band, but only 17% have a constant quality connection

The NRDP accepts the European challenge and proposed measures to strengthen and improve the digital offering strengthen the digital offering and overcome the strong imbalance in access to e-services, which heavily penalizes the most marginal areas.

These are, for the most part, publicly owned fibre optic infrastructures, which allow for a strong and constant quality connection (at least up to 20 mbs). Moreover there is the added possibility for financing the purchase of the user terminal (decoder and satellite dish), in more marginal areas, where even the publicly funded fibre optics are not financially viable.

The RDP then supports the National Plan for abatement of the digital divide, envisaged by the Ministry of Economic Development, with aims to extend and enhance broadband networks, implementing effectiveness in all activities in ICT provided in the RDP 2007-2013, hitherto never included in a comprehensive framework of measures.

There are approximately 2,100 areas eligible for fibre optics in the digital divide belonging to rural municipalities classified by the NDP as C (intermediate rural areas) and D (rural areas with global problems of development), in as much as broadband services do not exist or are not sufficiently wide spread or have a qualitatively inadequate connection capacity.

148 million allocated to reduce the digital divide over 2000 rural areas



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#### The National Rural Network

The National Rural Network (NRN) is a programme with which Italy participates in the larger project of the European Rural Network (ERN) and which accompany and integrate all activities related to the development of rural areas over the period 2007 to 2013. In a context where all rural development measures are administered directly by the Regions, the national network also works to improve the models of governance, promote design capabilities and exchange information, good practices and innovations. The NRN is operated under the responsibility and coordination of the Ministry of Agriculture and Forestry Policies - Directorate General of competitiveness for rural development, which is the Managing Authority of the relative programme.

In the National Rural Network there are representatives of more than 130 national and international partners invited to participate in a permanent work table, with the aim of assessing the results of the current programme, initiating discussions and providing suggestions and solutions for future policies.



### STRATEGIC PLAN FOR RURAL DEVELOPMENT "AGRICULTURE BENEFITS EVERYONE"



«The European Agricultural Fund for Rural Development: Europe investing in rural areas"