RURAL DEVELOPMENT PROGRAMME 2014-2020

B1.2 Mid term evaluation report
Executive Technical Summary
With the Rural Development Programme (RDP) 2014-2020 the Region of Tuscany supports the development of rural areas and the regional agricultural system, activating public resources for more than 949 million euros for economic incentives and financial benefits.

The European Union has set six priorities for rural development policy:

1. to **promote** knowledge transfer and **innovation in agriculture, forestry** and rural areas;
2. to **enhance the viability of farms** and the competitiveness of agriculture in all its forms in all regions and to promote innovative technologies for farms and sustainable forest management;
3. **promote the organisation of the food supply chain**, including the processing and marketing of agricultural products, **animal welfare** and risk management in the **agricultural sector**;
4. preserving, restoring and enhancing ecosystems related to agriculture and forestry;
5. promoting resource efficiency and the transition to a low-carbon and climate-resilient economy in the agri-food and forestry sector;
6. work for **social inclusion**, poverty reduction and economic development in rural areas.

The RDP of the Region of Tuscany has undergone some changes over the years that have brought it closer to the needs of the regional territory. The recession, which has hit the Eurozone since the end of 2007 and which has persisted in Italy for more than a decade, has also affected Tuscany in the last programming cycle. In recent years, corresponding to the start of the 2014-2020 programming period, there has been a good recovery at regional level, with a progressive growth in per capita income, despite the fluctuating trend in primary labour productivity.

With regard to the implementation of the RDP, the resources committed deriving from the decrees approving the single regional rankings and from the surface measures (for which the payment of Payment Agency AgEA is envisaged) amount to approximately € 1,109,289,712.26 (69.9% of the programmed). Public expenditure disbursed totals € 513,745,640.53 relating to payments to 26,398 beneficiaries with 105,562 payment claims settled. The advancement of the expenditure is equal to 28% of the programme’s budget and is related to operations subject to carry-over from the previous programming period only for a share of 15%.

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In order to ensure that they are result-oriented, each RDP not only includes the use of indicators to measure the effects generated, but also an evaluation service to analyse the use of resources and the effectiveness and efficiency of the Programme. In 2019, this evaluation, compatibly with the state of implementation of the RDP, takes stock of the results and provides initial responses to the evaluation needs of the MA, the partnership and the European Commission - DG AGRI. In this sense, and in relation to the 6 priorities defined above, the Evaluator has identified some of the main results illustrated below.

**Priority 1**
The socio-economic context shows a low level of specialization in Tuscan companies: in fact, less than 4% of company managers have obtained a degree in agriculture. There is also a reduced access to training which is reflected in a lack of knowledge on the part of agricultural entrepreneurs on issues of biodiversity, landscape, RES, management of water resources, effluents, soil and climate change, in addition to a low qualification and recognition of the professionalism of employees in the forestry sector. In order to address these critical issues, the transversality of knowledge transfer actions has been fully taken into account in the new RDP 2014-2020, where training and information should contribute to meet the needs arising from the analysis of the regional situation related to rural development priorities.

The regional reality, on the other hand, also requires an effort to bring together the different actors involved in innovation, starting from companies and their specific needs and consulting services, with reference to climate change mitigation and adaptation, biodiversity preservation, water protection, renewable energy, sustainability, as well as new models of intervention based on support to "young" companies. It seems necessary to promote the access of agricultural entrepreneurs to innovative information related to economic and social growth, as well as the promotion of training of suitable figures to promote and support the processes of change in rural areas and promote innovation at local level. The organisation of the sub-measures contributes effectively to the identification and promotion of innovation in a collaborative way through the support of both the cultural and technical growth activities of the operators and the support offered to the cooperation projects by consultants / innovation support services. The establishment and functioning of the Operating Groups (OGs) will lead to the development of a holistic approach to innovation support, combining all three paths: the identification of new ideas (the starting point for OGs), the ability to innovate (the support of consultants / innovation support services) and creating an environment conducive to innovation (the results of OG projects).

The regional strategy adopted to respond to the identified needs is also focused on an effective knowledge system governance structure aimed at improving relations between actors, stimulating the production of new tools and methods for knowledge transfer and using networks and different forms of cooperation in a multi-actor approach. The strategy foresees, in fact, the strengthening of integrated and territorial planning with training, consultancy and cooperation as complementary operational tools, while the innovative solutions for training and learning will be oriented on methods already used also in the managerial field.

**Priority 2**
Between 2013 and 2016, the regional agricultural sector was affected by a significant reduction in the number of farms, which fell by 32%, more than at national level. This decrease affected, first and foremost, smaller farms. The agricultural area also suffered a certain decrease, although much smaller, estimated at -7.2%, while, as evidence of the process of strengthening the regional sector and an increasingly professional agriculture, the average size of the company increased from 10.6 to 14.5 hectares. Farm investments were mainly directed towards restructuring and modernisation measures with a potential significant impact on competitiveness. As far as diversification is concerned, it is interesting to note that farm investments were mainly directed not only in favour of
the traditional agritourism sector, but to a significant extent towards social activities. This is an area that is always developing in rural regional areas, also thanks to the Regional Law on Social Agriculture.

The Youth Package continues the positive experience of the 2007-2013 cycle, with some innovations mainly related to the reduction of the number of measures that can be activated both because of the interest found and for management reasons. The participation of young entrepreneurs in the Package has been very positive (about 94% of the total), probably stimulated by the greater contribution recognized compared to the prize alone. On the other hand, the share of new settlements compared to takeovers is low (about 10%).

Finally, the introduction of a simplified business plan at the time of application has generated less administrative burden for potential beneficiaries and regional offices.

**Priority 3**

In Italy there are numerous certified productions: in the “food” segment alone there are 167 Protected Designations of Origin (PDO), 130 Protected Geographical Indications (PGI), 2 Traditional Specialities Guaranteed (TSG); among the wines, 405 are PDO and 118 PGI. Tuscany, with a total of 91 denominations, occupies the 1st position among the Italian regions in the IG Food & Wine ranking drawn up annually by Ismea-Qualivita. To have an order of importance of Tuscany in the universe of designations of origin and, at the same time, a measure of the weight of these productions for the regional food industry, consider that in 2017 alone the value of PDO production PGI TSG is equal to 1.30 M€ (11.2% of the national total) and involves 23,753 operators, of which 13,393 food and 9,360 wine. Most of the economic impact is generated by the wine segment with a production value of about 926 M€.

On the basis of the available data, it can be stated that RDP investments are contributing to the consolidation of the quality of agricultural production, improving the overall positioning of companies on the markets. The companies benefiting from the contribution showed, in fact, a strong interest in the organic production system (more than 70%). In particular, the participation of primary producers in quality schemes has improved with the participation of farms (21) receiving support for participation in quality schemes.

The wide membership and the positive results registered to date can only confirm a positive judgement with respect to the renewed experience of the BIPs in the RDP of the Region of Tuscany, which, valuing the successful experience of the 2007-2013 programming cycle, intended to recognize this implementation tool a strategic importance both in financial terms and by increasing its effectiveness (through the distinction of the wood energy chain from the agri-food chains). Among its strengths, the Integrated Supply Chain Design (IPP) has allowed the successful aggregation of hitherto fragmented production sectors. The RDP has favoured, in fact, the aggregation in supply chains which, once structured, have ensured, for the period of duration of the Supply Chain Agreement, a stable remuneration of the productions, allowing many companies to overcome the economic crisis which, otherwise, would have very probably led to the closure of the same. Similarly, the RDP allowed the aggregation of micro-enterprises for the collective purchase of production factors that, in the absence of financing, would not have been sustainable by individual companies. Among the weaknesses, two aspects emerge: on the one hand, the delays in the financing of projects resulting from the complexity and duration of the entire procedure; on the other hand, the choice to use in the RDP mainly this tool for the implementation of measures leads to the exclusion of many companies that, due to their characteristics, prefer the “single” approach.
**Priority 4**

In the description of the strategy of the Tuscan RDP, the focus area 4A aims at safeguarding, restoring and improving biodiversity, including in Natura 2000 areas and in areas subject to natural or other specific constraints, in agriculture of high naturalistic value, as well as in the landscape of Europe.

As far as biodiversity is concerned, it is interesting to highlight some data. The territorial extension of the Natura 2000 areas in the region is 14%, of which 13.3 are SCIs and 5.7% SPAs, in line with other regions in central Italy (Marche and Umbria), while it is lower than the same value as Lazio (23%). The N2000 UAA represents 5.3% of the regional UAA, thus showing a prevalence of other land uses (forest areas) within Natura 2000. The value of the FBI index, on the other hand, was 90.43 in 2017, a decrease of -9.57% since 2000. The HNV areas occupy 59.9% of the UAA, while at national level these cover a percentage of 51.3%.

The interventions of the Tuscan RDP considered potentially favourable to the restoration, protection and improvement of biodiversity can be indicated in grouped form according to the expected effect prevailing (although not exclusive) with respect to the theme:

- reduction or non-use of toxic pesticides for the benefit of wildlife;
- increase of the ecosystem complexity and of the "crop mosaic" of the agricultural environments, improvement of the edaphic biodiversity and of the areas of refuge and nutrition of the fauna, enlargement of the ecological corridors and contrast to the forest recolonization of the areas of pasture in a mountain environment;
- maintenance and reintroduction of the cultivation of plant varieties naturally adapted to local and regional conditions threatened by genetic erosion.

As far as the pressures of agriculture on water are concerned, the analysis of the context data shows a relatively good situation: the phosphorus surplus in the Region is close to 0 (-4 kg/ha), this occurs when the inputs (fertilization) are lower than the removals (yields). This condition shows, therefore, that on average phosphate fertilization is carried out in a virtuous way and that phosphorus does not seem to be an element of particular "pressure" on the environment. Moreover, the data published by ISTAT on the 2010 census compared to the previous one of 2000 shows that the number of farms with farms has drastically decreased by 8,686 units (-47%) for all types of farms. The latter figure, if it can be read negatively where it is considered a possible greater concentration and therefore more intensive forms of farming, could nevertheless make the management of wastewater more convenient (for example by building plants for the production of biogas).

The estimation of the improvements brought about by the application of the RDP measures concerned both the total nitrogen (N) and phosphorus (P2O5) loads brought about by fertilisation, and the surplus of N and P2O5 calculated on the basis of the simplified balance. Significant reductions in loads were also achieved with the adoption of organic farming techniques.

The protection and conservation of the resource "soil" is another priority objective of the agricultural policy for rural development, which provides for its protection:

- physical quality (defence against water erosion and hydrogeological instability)
- chemical quality (maintenance of the organic substance and protection against pollution)

For the Region of Tuscany it emerges that the average carbon in the soil is equal to 0.124 g kg⁻¹; this value is in line with the national average 0.132) and other regions of central Italy: Umbria 0.131, Lazio 0.132 but lower than that of Abruzzo 0.168, obtained from the cartography of the JRC.

The data on water erosion, on the other hand, defines for Tuscany a value equal to 6.82 t/ha/year of soil loss: this value is in line with the data referred to the Lazio region (7.93) but lower than other central regions such as Umbria (9.01), and the Marche Region (17.13%).

The physical surface area committed is about 199,900 hectares, while the area falling in areas classified according to the classes of potential erosion risk (t/ha) is instead equal to 195,468,42 ha.
This distribution shows a high concentration of areas subject to commitment in the classes with the highest rate of erosion. If we consider the concentration of the surface favourable to the reduction of the erosive phenomenon in the moderately high, high and very high classes, in these classes are distributed about 98,151 hectares, 50% of the areas subject to commitment (total corresponding to 43% of the agricultural surface of the same areas and 16% of the regional UAA (Utilized Agricultural Area), thus showing a good concentration in the areas with greater need for intervention.

**Priority 5**

The data on the structure of agricultural holdings (ISTAT) show a very marked reduction in the regional irrigated area in the period 2013-2016 (-32.4% compared to -16% in Central Italy and a national figure of -12%), which goes from 51,486 hectares in 2013 to 34,800 hectares in 2016. The comparison of irrigated consumption with the regional irrigated UAA identifies a unitary consumption of 2,992 m³/ha/year, a figure well below the national average (4,588 m³/ha/year) and, to a lesser extent, the value recorded in Central Italy (3,473 m³/ha/year), also thanks to the widespread use of high efficiency irrigation systems (microirrigation covers more than 33% of the total irrigated area, against 17.5% at national level). The theme of water saving is addressed by the Tuscan RDP by a wide range of interventions that activate investments and premiums aimed at greater efficiency in the use of water resources in agriculture. In this phase of implementation of the programme, however, the portion of the intervention directly linked to the company's investments pays for delays in implementation that do not yet allow the formation of a park of projects eligible for funding and therefore evaluation analysis in this regard. As far as energy consumption is concerned, direct consumption by agriculture and forestry in Tuscany corresponds to 4.1% of direct consumption in the sector in Italy (127 ktoe out of 3,107) and 1.46% of total regional consumption, while direct consumption by the Tuscan agri-food industry (111 ktoe) corresponds to 3.4% of national consumption and 1.28% of total regional consumption.

The production of renewable energy from the agricultural and forestry sectors, on the other hand, stood at 624.46 Ktoe in 2011, representing 5% of the total regional production of renewable energy compared to a national value of 13%. Overall, the plants currently financed by the RDP will be able to guarantee the annual production of energy from renewable sources of 15,623 Mwh/year, equal to 1,343 toe/year (complementary result indicator R15). This production represents 0.2% of the renewable energy production from the agricultural sector and the forestry sector surveyed by EUROSTAT and SIMERI-GSE in 2011. If we consider the obligations arising from the Burden Sharing Decree, which provides for a production of 1,554 ktoe for Tuscany by 2020, we can see that currently the interventions financed contribute only 0.09% of the target by 2020.

Finally, a word on the emissions of the agricultural sector. Those recorded in the NIR in Tuscany represent in 2015 2.2% of national emissions. The area covered by the RDP commitment (area subject to commitment) that contributes to the reduction of GHG is 106,000 hectares, or 18% of the agricultural area of the region. 95% of this is associated with organic farming (old and current programming), the remaining 5% with other operations. Overall, the RDP interventions that contribute to the reduction of greenhouse gas emissions from agriculture generate a reduction in the annual nitrogen contribution, compared to conventional agriculture, of about 1019 tonnes, equal to an emission reduction of 4,770 tCO2eq-years. In particular, integrated agriculture (previous programming) contributes for more than 24% while 69% of the total is obtained thanks to organic farming (3267 tonnesCO2eq), the remaining 7% of the reduction is divided among the other actions.

With regard to the absorption of CO2 by the regional forest sector, the cumulative figure shows that forests have a large incidence representing 28% of total emissions. Overall, the forest areas contributing to carbon sequestration or conservation represent only 0.4% of the total regional forest area. In consideration of this, the Managing Authority proposed a modification to the Programme to transfer the economies that occurred to other forest submeasures properly aimed at the management of existing wooded areas, both in economic terms, through productive investments for the enhancement of the forest/wood chain (with submeasure 8.6), and in environmental terms, for
the strengthening of forest ecosystems and for the enhancement in terms of public utility of forest areas (with submeasure 8.5).

Priority 6

In the last five years, the Tuscan region has seen the population living in rural areas remain substantially stable, both in intermediate areas (C areas) and in those with overall development problems (D areas): both, in fact, record only a decrease of 0.3% compared to 2013. On the other hand, the rural areas with intensive agriculture (B areas) remain more stable, with a population decrease of 0.1%. The demographic situation is therefore consistent with the national trend, which records a decrease in the resident population of 0.36% in areas C and 0.31% in areas D, a very slight increase in areas B (0.1%) and slightly higher in areas A (0.3%). Two other relevant contextual indicators are those relating to the role of the primary sector in the structure of the economy and in the structure of work: in the first case, between 2013 and 2017, there was a slight decrease of 0.27% (in line with the national figure of 0.20%); in the second case, however, the regional situation is in contrast to the national figure, as there was a slight decrease of 0.01%, against the increase in the positive Italian trend (+0.2%). Finally, we must take into account the poverty rate which, in the years between 2013 and 2017, recorded a decrease of 0.6%, in contrast to the national negative trend (+1.9% in 2017) which recorded 12.3% of the total Italian population, compared to 5.9% recorded in Tuscany.

Support for the development of the rural territory and its population requires the implementation of the LEADER method. The Tuscan Local Action Groups (LAGs) are 7, in continuity with the previous programming and cover (with the Integrated Local Development Strategies - SISL) a territory comprising 189 municipalities (one less than the previous programming), an area of about 16,774 km2 and a population of 885,130 inhabitants. Compared to the previous programming, the rural territory and the population covered by the Tuscan LAGs have increased on average by 0.94% and 7.1% respectively.

As can be seen from the comparison between the last one and the current programming, the situation regarding the composition of the partnerships remains substantially stable as far as the total number of LAG members is concerned, which has increased from 233 to 236. There was a 4% decrease in the share of municipalities and a 1% increase in the share of associations representing agriculture compared with the previous programming. Moreover, in the current programming period, there is a slight prevalence of private members (55%) compared to public members (45%).

Finally, there is the intervention for the creation and modernization of broadband infrastructures, also aimed at the creation of solutions for online public administration services and applications for information technologies. Measure 7.3 financed two operations, one of which involved the installation of a high-speed line and the other a very high-speed line.

Altogether 33,107 inhabitants of rural areas (corresponding to 3.9% of the population living in rural areas) benefit from this innovation. The impact of the Measure on the accessibility, use and quality of ICT in rural areas is still limited compared to what was set as a target for the end of the Programme: in fact, out of a population of 500,000 potential people to benefit from the innovations funded, currently 33,107 inhabitants are affected (6.6%).