

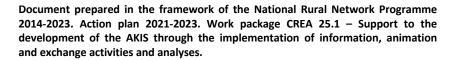




# **POLICY BRIEF**

# IMPLEMENTATION OF THE EUROPEAN INNOVATION PARTNERSHIP FOR AGRICULTURAL PRODUCTIVITY AND SUSTAINABILITY IN ITALY





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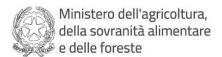
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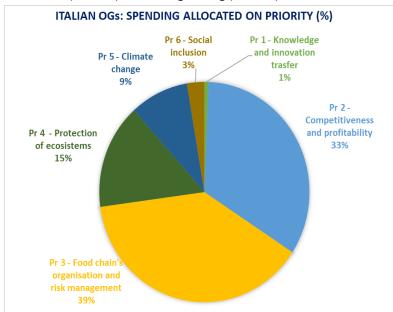


The analysis of the implementation of the European Innovation Partnership for Agricultural Productivity and Sustainability (EIP-AGRI) in Italy, in the 2014-2022 programming period, reports a very positive situation.

All Italian regions, except for Valle d'Aosta, activated, within their Rural Development Programs (RDP), the measures to support the creation of Operational Groups (OGs). As of October 2022, 679 OGs had been funded by 16 regions, accounting for 215-million-euro, an average of some 31-million-euro per year.

Considering the link with rural development priorities, 38% of the OGs address competitiveness and viability issues, 30% relate to supply chains and risk management, 17% to ecosystems protection, 14% to climate change, and 1% to social inclusion.

Viticulture (87 OGs) and fruit-growing (65 OGs) are the sectors with the highest number of OGs implemented,



followed by cattle breeding and arable crops. Farm management (83) and precision agriculture (67) stand out as the most common cross-cutting themes addressed by OGs. Finally, organic farming, plant protection and biodiversity are addressed by a relevant number of OGs.

The regions that have invested the most are Emilia-Romagna, with 44-million-euro budget, followed by Sicily (29-million-euro), Veneto (23-million-euro) and Apulia (22-million-euro). Latium, Abruzzo, Molise, and Sardinia have not yet closed the OG selection process, a condition that, beyond the

specific cases, is indicative of an undoubted bureaucratic-administrative difficulty in the management of the calls and in the implementation of the projects, both by the regional institutions and by the other actors involved in the projects.

As of November 2022, official data published in the websites of the regional RDP Managing Authorities shows that about 170 OGs completed their activities.

The National Rural Network (NRN) disseminated, throughout the 2014-2022 programming period, up to date materials and news about the implementation of EIP AGRI measures in Italy, conveyed through the dedicated web portal Innovarurale (<a href="www.innovarurale.it">www.innovarurale.it</a>), which provides, among others, details on the following items:

- summaries of data elaboration about the OGs' implementation in the section "Operational Groups in Italy".
- "Database of Operational Groups", which provides access to all relevant information about OGs, including results.

In addition, a wide overview of events and news related to OGs' activities is offered.

### 8,9% Organic agriculture Precision farming 11,2% Greenhouse farming 0,8% 4 Seedbed agriculture 0,1% Social farming 0,2% **2** Disadvantaged areas 0.2% 1 Animal welfare 19 3,0% Biodiversity 7,3% Climate change 0.4% 3 Pest control 8,5% 57 Diversification 2,6% 18 Emissions of pollutants/greenhouse gases 2.4% 22 0,2% Renewable energy 0,6% 8.2% Food supply chains 54 11,9% Farm management 86 Risk management 0,2% Agricultural byproducts' management 6.1% Young people and generational change 0,1% Carbon footprint 2,0% 18 5 Logistics 0.5% 2,4% Labels and certifications 14 Mechanization 1,0% Local market and short supply chains 2.9% 19 Market and food security 5,6% 35 Quality products 3,8% 22 Water resources 3.3% 26 Robotics 2.5% 16 Land use 2,1% 13 Natural resource's use 0.7% 4 Direct sale 0,2% 1 Not available 0.1% 1

### ITALIAN OGs ON THEMATIC: NUMBERS AND CONTRIBUTION GRANTED (%)

In view of the implementation of OGs also in the new programming period, the CREA-PB (Council for Agricultural Research and Economics, Centre of Policies and Bioeconomy) working group, operating under the NRN, considered it useful to carry out an in-depth study on the experience of the EIP-AGRI OGs in Italy, with the aim of providing insights and suggestions to improve future implementation and financing processes.

A survey was submitted to OGs, targeting both leaders and partners, and a semi-structured interview was prepared as a basis to carry out in-depth case studies. 517 answers to the survey were collected and processed, while 10 in-depth case studies were conducted. Furthermore, the data of OGs database were elaborated and used to run a Social Network Analysis (SNA).

The present policy brief summarises the most relevant insights of the analysis. Full results of the study are available in the Innovarurale website at the following link <a href="https://www.innovarurale.it/it/pei-agri/analisi-dellapproccio-pei-agri-italia">https://www.innovarurale.it/it/pei-agri/analisi-dellapproccio-pei-agri-italia</a>.

# 2. What worked

The implementation of innovation actions in such a widespread and diffuse way on regional territories had, as a positive effect, the creation of professional relationships and collaborations and, where these were



already present, their strengthening. This contributes to the achievement of one of the objectives of the EIP AGRI, that is the creation of networks for knowledge and innovation.

This aspect was highlighted by the majority of those involved in the survey (Report "The EIP-AGRI model in Italy: The results of the survey on Operational Groups" available at the link <a href="https://www.innovarurale.it/it/pei-agri/documenti/il-modello-pei-agri-italia">https://www.innovarurale.it/it/pei-agri/documenti/il-modello-pei-agri-italia</a>) and was not taken for granted. As it is sometimes the case in other projects that imply the creation of partnerships (e.g. the European Framework Programs for Research), members could also have limited their involvement to the essential contacts, carrying out their own tasks within the project and achieving their own results to be then "collated" with those of the other partners. Respondents, on the contrary, reported that in case of EIP-AGRI-related projects, sharing, coordinating and proceeding together to determine the project objectives have been key to ensure that the innovations identified as solutions were effective for enterprises and territories that raised the issues in the first place. In some cases, it was reported that joint work can also lead to the ongoing modification of innovative paths and results to be pursued.

This positive effect is partially triggered by specific governance choices of the regional RDP Managing Authorities (MAs), such as the organisation of animation and awareness-raising activities; the content of the calls for proposals; the definition of selection criteria; the participation of partners with brokering functions, able to support processes of co-creation and dissemination of innovation. The latter were often professionals, but also individuals with different specialization could take this brokering role. x

Furthermore, respondents reported that the creation and strengthening of the relationships determined **the growth of their skills** and, thus, also of the overall knowledge and innovation systems in the territories where OGs were implemented.

This aspect is of vital importance. Increased technical knowledge of entrepreneurs, advisors, and business services enables them to carry out their activities with greater understanding of biological, economic, social and environmental mechanisms. Awareness of researchers and research institutions about needs, experiences and perspectives of farmers and entrepreneurs is a fundamental expertise for developing future studies and better understanding of approaches to specific problems.

Another positive element of the EIP-AGRI initiative in Italy, highlighted by the case studies, is the establishment of project partnerships consistent with the problem(s) and innovation(s) being addressed. The consistency of OGs' partnerships stems from multiple factors. On the one hand the content of the calls for proposals and the award systems designed by the regional MAs guided the shaping of the partnership around the problem/opportunity addressed by OGs' projects. On the other hand, the lead partners' and/or innovation brokers' (when involved) understanding of the fact that the objectives of the project can be easily addressed by experts and practitioners familiar with the problems tackled or opportunities addressed rather than institutions or their representatives only formally involved with them. This resulted in the involvement of a high number of non-traditional actors in the agricultural knowledge and innovation system (e.g., service companies, industrial actors, non-agricultural professional firms), which account for 19% of all partners involved (source: OG database on Innovarurale - Statistics) and provide a space for broadening the horizons of local and regional AKIS as well as those related to specific sectors and themes.

The **setting up phase**, which provided support to preliminary actions useful to stakeholders for shaping the project's partnership and defining common objectives, is considered beneficial by many of the interviewees. The setting-up enables to define in detail the problem/opportunity to be addressed and the solutions available, and based on this, to involve the most experienced and appropriate actors within the partnership.



In relation to the management of the Italian EIP AGRI, the **data collection path** set-up and carried out jointly by the Ministry of Agriculture, Food Sovereignty and Forestry (MASAF), the regional MAs and the NRN stands out as an interesting element, especially for improving the governance. This information system was created because the official monitoring system is run at measure level. This implies that detailed data about submeasures are not collected. To overcome this potential lack of information, this was set up starting from the minimum monitoring data required by the EC, and then it was customized and enlarged. The template resulting from this operation was circulated to all regional MAs and used by the most part of them to monitor the implementation of the EIP AGRI OGs (mainly sub-measures 16.1 and 16.2). Data collected is collated and organised in a database of OGs available for consultation in the Innovarurale portal. At this stage, Italy has, therefore, a set of data and results useful to understand the effects of the EIP AGRI intervention and to plan its continuation, considering strengths and weaknesses.

# 3. What worked less

The results of the survey show that the projects of Italian OGs, with few exceptions, focused on internal needs, objectives and activities and neglected relationships with external actors, which could be potentially interested about the issues and innovative solutions addressed by the OGs. Even the European Commission, in the first phase, did not emphasize this aspect of external communication. However, given the scope of disseminating innovations that the EIP AGRI OGs were assigned, broadening the target audience of their information and dissemination activities should be an additional task.

Indeed, the case studies reveal a substantial **weakness in the dissemination tools** used. They are often traditional and generic, aimed at a wide audience without trying to differentiate them based on the knowledge and specific content. The most obvious criticism concerns the lack of attention towards the actions needed to adopt the innovations produced by the projects. These actions are usually information events or the preparation of descriptive materials (manuals, guidelines, technical protocols, etc.) that improve the knowledge about the opportunities available for interested enterprises, but do not accompany in the complex process of change in the production activities and processes needed to implement an innovation, that is the so-called adoption.

This issue is certainly connected with **the low level of participation of advisors in OGs partnerships**. These professional figures fulfil, among others, the role of connecting the creators of innovations with the enterprises. The importance of this role links, on the one hand, to the need to introduce and adapt innovations to the specific conditions of each firm, and, on the other hand, to inform the chain of production of innovations (research, industry, services, etc.) about the real needs of users.

Another aspect of difficulty connected with the previous ones was **the lack of consistency between the themes tackled by OGs and the needs of the project users** (enterprises and rural territories). Given that codecision processes (of objectives and content) and the continuous sharing of results and products are key elements of the interactive approach, this criticism becomes relevant to be highlighted. This critical issue, based on the findings of the case studies, could be determined by the role that different partners play in the preparation of projects. The OGs objectives were often reported to be defined by researchers in agreement with specialized service companies, while farmers/entrepreneurs were aggregated to the partnership in a second stage. Researchers have more experience in setting up complex, partnership-based projects and, they often need to find financial resources to finalize studies already undertaken. This is not a constant, but certainly it happens in a fair number of projects.



The importance of intense and well-managed relationships is a strength of OGs and, confirming what mentioned above, its lacking might cause poor results and/or failure to finalize the efforts of the various partners. Some case studies have shown that a lack of attention to the sharing of issues and results, or polarization between different points of view, or even the excessive protagonism of one or more partners can undermine even projects with good initial assumptions in terms of objectives and content. In this case, the coordination and brokerage function become key.

**Administrative complexity** is one of the critical elements that influenced most heavily the management and successful completion of projects. Beyond the usual generic reference to the simplification, the following aspects, considered of relevance, emerged from the analysis carried out:

- The approval of partnerships and projects was complex and time-consuming, thus not adequate for the implementation of innovation initiatives that should be rapid to respond to real problems of firms and territories.
- The process of defining formal partnerships could borrow the implementation methods from the European Research Framework Programs (Horizon 2020, Horizon Europe), which are "lighter" both in terms of the requirements they prescribe and the documents to be produced.
- Changes in project content and management are restrained if not inhibited by current procedures; whereas, in an innovation action the need to introduce variations is frequent and, in some cases, even to be incentivized if, during the implementation, new needs emerged from the enterprises or the initial results are not adequate to the problems addressed.
- The setting up phase should be built on simpler and faster procedures; in some cases, it was complex and slowed down the whole process contributing to the delayed establishment of OGs.
- The implementation procedures and fulfilments of the EIP-AGRI varied substantially between regions, making the participation of the same actors in multiples regional calls complex and burdensome.

The data collection activity mentioned above can be improved and integrated to better understand in which direction innovation for agriculture is heading and to direct it to the most urgent and significant needs of firms and territories. Aspects to adequately consider in the future include the simplification of the collection of qualitative information about projects activities, the introduction of quantitative parameters to enable unbiased evaluation of results, enhanced sharing with all regions about the collection approach and subsequent uniform and coordinated application of the procedure to all OGs.

Related to the issue of data collection and analysis, it should also be noted the need that **projects provide an economic-financial assessment of the proposed innovations** in terms of the size of the investment required, impact on farm management and production processes, and on the viability of the adoption of the proposed innovations. Indeed, in some case studies, the substantial usefulness of the adopted innovative solution emerged, but, at the same time, also its impracticability due to the excessive costs involved became clear.

Making an effort to observe OGs and their projects from outside enables to formulate some considerations that can help to define the implementation approach of the OGs interventions in the 2023-2027 programming period. Using the Social Network Analysis (SNA) method (Report "Evaluation of the capacity of Italian Operational Groups to create networks for innovation" available at the link https://www.innovarurale.it/it/pei-agri/documenti/valutazione-della-capacita-dei-gruppi-operativi-italiani-di-creare-reti), an attempt was made to evaluate the EIP AGRI measure as a tool for fostering collaboration and co-creation of knowledge among actors, which possess different skills and are located in different geographical areas. As it might be predicted, the analysis shows that **OG networks are still not very cohesive**. This indicates, on the one hand, that it is possible to expect new relationships to be created among the



different OGs and, on the other hand, that there is the possibility of new partners to participate in the Italian EIP-AGRI, the network being still not very interconnected.

This evidence was certainly unsurprising considering the governance choices and management processes adopted in Italy. The establishment of the OGs had a purely regional management and in each region no actions have been put in place to promote formal interrelationships among OGs of different regions. Informal interrelationships were fostered by meetings and other initiatives promoted by the NRN and by some regions, but they did not affect the implementation of single OGs. The reasons for these choices can be found in the complexity of the implementation of the EIP-AGRI intervention, which led the regions to focus on the implementation of individual projects in their own territory.

In addition, the analysis of individual partners carried out with the SNA shows the centralization of collaborative relationships and co-creation of knowledge around relatively few actors (often pertaining to research subjects) who could be the actors to focus on for the next programming to increase connection and contamination between projects with similar content in different regions.

# 4. What might be useful to do for the future?

Considering the arguments exposed in the previous paragraphs, some recommendations are proposed with respect to the implementation of upcoming initiatives related to the Italian EIP-AGRI.

## What role for EIP-AGRI in the Italian Agricultural Knowledge and Innovation System (AKIS) strategy

EIP-AGRI has proven to be an excellent intervention for promoting innovation and activating networks and relationships among actors of the knowledge system. The large number of projects, the variety of content and issues addressed, and the number of actors involved enabled to verify its effectiveness (albeit for the time being in the short term) and to include it among the tools for supporting and disseminating innovation. In the 2023-2027 programming period, the core element of the policies is the system approach, the AKIS: actors, projects and tools are tasked to cooperate by connecting activities to achieve priority goals (the general and specific objectives of EU Regulation 2021/2115).

Therefore, it would be appropriate to include the EIP-AGRI both at the regional and national level in a broader and shared strategy by entrusting it with results and targets that start from a comprehensive analysis of agricultural, food and forestry issues, also connecting and coordinating its implementation with other CAP interventions (such as information, training and advice) that can reinforce and strengthen its effects.

# Orientation of OG projects to the problems and opportunities of rural enterprises and territories

Involving enterprises and territories is a key element of the interactive approach to innovation that EIP-AGRI embraced. To ensure that it is implemented in the OG partnerships, not only formally but also substantively, it is necessary to work in two directions:

- To promote animation and training actions that improve the skills of AKIS actors toward the sharing and co-creation approach; in particular, this capacity should be the subject of reflection of researchers.
- To incentivize the active participation of agricultural enterprises by facilitating the financial reimbursement of their participation, of course against real and effective involvement.



### The central role of the advisory

The difficult involvement of final users, often reported in the 2014-2022 programming period, was magnified by the almost total absence of advisors within the EIP-AGRI partnerships. All skills and capacities of this professional figure should be considered, that is technical support, managerial analysis, dissemination, support for decisions, information and animation. These characteristics allow advisors to combine specific technical knowledge with design, relationships and communication skills.

The participation of advisors in OG as partners will facilitate the exchanges with entrepreneurs and territorial stakeholders; furthermore, their presence might streamline the dissemination of project results outside the OG to other potential users with problems and firms' characteristics compatible with the innovative solutions adopted within the OG.

### Activities to disseminate and promote the adoption of innovations

This relates to two main topics: enhancing the value of what has been achieved and improving the capacity to disseminate innovations.

- (a) The implementation of the 2014-2022 EIP-AGRI sub measure can be considered rich in terms of initiatives and, thus, innovations useful for solving specific problems or enhancing opportunities (in Italy at least 680 counting one innovation per OG, but potentially many more given that some OGs had multiple objectives). However, there might be a high risk that a portion of all these results will remain at the exclusive disposal of the project's partner. It should be strongly supported the importance to disseminate these results tomake them common heritage for all potential interested users.
- (b) The lack of effectiveness of the actions aiming to promote the wide adoption of the innovations identified by the OGs' project emerged from the analysis. It could be appropriate to provide specific training to improve the skills of advisors in terms of promoting and supporting the adoption of innovations. Additionally, it might be relevant to explicitly ask in the calls and public notices for specific actions in this direction, to be rewarded in the selection process.

### The governance of the PEI-AGRI

The EPI-AGRI sub measure achieves its objectives more efficiently and effectively if it is managed within the framework of strategic governance. The 2014-2022 experience confirms this.

The critical points, emerged from the analysis, to be considered are described as follows:

- the identification of clear and substantiated specific objectives;
- prior and ongoing dialogue with AKIS stakeholders to communicate decisions and understand needs;
- the animation for selecting themes and establishing partnerships;
- the establishment of calls for proposals with criteria consistent with the EIP-AGRI approach;
- the speeding up of selection processes and simplification of procedures;
- the sharing of design, implementation and financing arrangements among relevant institutions at all territorial levels.

An effort should be made, especially with the launch of a second phase of the Italian OGs, to avoid the replication of innovative actions already funded in the same territorial contexts.

### A multi-level view of the EIP-AGRI

The interventions that support innovation have the distinctive characteristics of being a response to solve both micro-problems (those implemented at local level and tackling specific users), and broader issues that become relevant only if developed at the district level and in wide, even diverse, areas.



Taking stock from the experience already developed especially in terms of definition of administrative procedures, in the 2023-2027 programming period the Italian EIP-AGRI could make a step forward and be implemented at the interregional, national and transnational levels, and not only within regions. Important benefits would result from this: duplication could be avoided, useful solutions could be applied to different territories, and more expertise could be concentrated on complex issues.

This choice would also be facilitated by the presence in the Italian CAP Strategic Plan of the AKIS Coordination bodies at both regional and national levels that could become the place for consultation and where decisions can be made regarding themes and implementation methods for future OGs.



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