

Three-year Research Plan 2018-2020 - Objectives of the CREA-Research Centre for Agricultural Policies and Bioeconomy

MISSION

CREA - Research Centre for Agricultural Policies and Bioeconomy carries out studies on the economic and social dynamics related to the agri-food, forestry and fishery sectors. The Centre analyzes the characteristics and evolution of rural areas and the related competitiveness factors. The Centre provides support for developing sectoral policies by monitoring their evolution and assessing their effects on systems. CREA-Policies and Bioeconomy is the flagship **Statistical Office of CREA**, that is included in the National Statistical System (SISTAN) and it currently participates in the National Statistical Programme (NSP).

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Strategic objectives

Objective 1. Methodological tools and systematization of available database aimed at studying the impact of policies and economic and social dynamics of the agri-food system

This mainly methodological objective is aimed at reinforcing the quantitative and modelling component of the analytical tools for the impact analysis of the agricultural policies at the EU, national and regional levels, and of other drivers of socio-economic changes on the agri-food system, at different levels: territorial, sectoral and company. It is therefore a matter of creating different methodological tools for providing the most adequate answers to possible evolution scenarios of intervention policies, multilateral and bilateral trade agreements and of the economic operators' choices. The Centre intends to work in line with the development of analytical models operating in the main European consortia which operate at different territorial levels, and which, in turn, act in the framework of the models developed at the European Commission. The definition of analysis methods ties in with the systematization of the database available at CREA and at the one of other producer entities and data-elaborators within the framework of SISTAN, to which CREA belongs to. This task, entrusted by statute to the Centre, represents a crucial point for properly updating the analysis models. This objective is functional to the achievement of the subsequent targets and it represents the methodological contribution to the fulfillment of the expected actions.

Objective 2. Assessment of the CAP's impact on Italian agriculture and the national public budget

CAP is the main reference regulatory framework in support of the primary sector and of the European agricultural development model. Its impact on European national and regional agricultural systems is relevant not only in terms of product and market objectives but also in terms of territorial equilibrium, enhancement of quality and traceability of products and sustainable production processes, maintenance of the primary activities in the most marginal rural areas, characterised by natural disadvantages and where agriculture does not have alternative sources of employment. Recent CAP reforms have led the Member States to make choices to render the intervention tools increasingly in line with the specific national and territorial realities. The result is a CAP that differentiates not only from one country to another but also in the various territories. This objective aims to develop evolution scenarios of the two CAP Pillars, of the related economic, environmental and social impacts, at a sectoral level on the agri-food system and a territorial level. The results of such analysis are firstly addressed to national and regional policy makers, to adopt conscious choices in terms of agricultural policy and rural development.

Objective 3. Development of methodologies for policies and tools to achieve sustainable use of natural resources

The sustainable use of natural resources is one of the major themes in the contemporary approach to the primary sector and the food system as a whole, as farmers are personally involved, in their activities, in the management and care of the environment and territories. The support policies, that for various reasons and in various ways hold up the primary sector, have to cope with the environmental impact of the support and, more in general, of the primary and processing activities. As from Agenda 2000 onwards, the agricultural intervention policies have increasingly been bound to environmental and natural resources management constraints, firstly following a mere conservative approach and then seeking synergies between production activity and system sustainability. On the one hand, research in this field aims at creating and validating agri-environmental and socio-economic indicators for measuring the impact of public interventions on natural resources and territories, taking into account the diversity of contexts and the complexity of relationships; on the other hand, the research aims at making agricultural interventions increasingly compatible with production needs and sustainable from an economic, environmental and social point of view. The results of such analyses are useful for making choices in agricultural policy and rural development, besides being functional to the monitoring and evaluation systems of such policies.

Objective 4. Analysis of the competitiveness of the Italian agri-food system

The scenario of globalization is rapidly changing with new stakeholders entering the international market and with multilateral and bilateral agreements that regulate its mechanism. The Italian agri-food system is traditionally very open, playing an outstanding role in the Country's trade balance, not only in the framework of the European common market but also concerning third-party and diversified markets. The next three-year period intends to study the impact of new globalization on the Italian agri-food system, in terms of: changes in the quality of products and the production processes to comply with international standards and enter new markets; quality competition vs. price competition in international trade; opportunities for the agri-food "Made in Italy" to enter and consolidate on old and new markets; employment, migration and new entrepreneurship. The results of such analyses are addressed to economic operators and policy makers to increase awareness of changes and economic opportunities.

Objective 5. Economic and social assessment of needs and innovations' impact

The effectiveness of innovations, in terms of improvement of competitiveness for the agricultural entrepreneurial system and in terms of the solution of specific technical production issues, is unanimously acknowledged. However, it has also been verified, in different conditions and territories, that the innovative process hardly spreads and produces the expected economic and social effects. Firstly, the innovative solutions do not fit the specific needs of the various agricultural types of farms. One possible solution consists in getting closer those who offer innovation to those searching for innovation, besides promoting joint work. It is nonetheless crucial to set economic and social analysis instruments that might point out the need for innovation by homogeneous groups to plan, on a larger scale, possible support measures of public institutions. Worthy of note would be the check actions for production, economic and social results when implementing innovations both on a micro-scale (at the company level) and on a macro-scale (by homogeneous areas). The aim of the study consists therefore in promoting a general assessment of the needs and impact of innovations in the different regional agricultural realities and the development of quantitative and qualitative study methods that might provide support to the programming and political

choices. The results of such analyses are addressed to economic operators and policy makers, to understand the effectiveness of innovations and adopt incentive policies.

Institutional and third mission activities

Objective 1

The results of the research actions will be used for drafting analysis documents, attending national and international meetings, promoting institutional debate on the post-2020 CAP guidelines, carrying out in-depth analysis on its related regulatory provisions. Such activities will be carried out within the framework of the National Rural Network, supervised by the Italian Ministry of Agricultural, Food and Forestry Policies (MiPAAF), and by the support and assistance projects entrusted to CREA by the Italian Ministries and Regions.

Objective 2

After the remarks made by the European Court of Auditors (2011) and the conference held in Cork in 2016, the agri-environmental payments will have to be conditional to the real results achieved by the agricultural and forestry policies on the environment. The institutional activity of the Centre will be therefore aimed at providing support and consulting services to regional administrations and companies' representatives to define policy tools, encouraging payment and/or remuneration of the ecosystem services. Technical-scientific support activity to the Italian Ministry of Agricultural, Food and Forestry Policies (MiPAAF) for the implementation of the 2014-2020 NRDP is carried out in the framework of the policies for a sustainable use and a district planning of water resources (environment and agriculture); in particular, the implementation, at a national level, of a plan for the financing of investments in water infrastructures is part of the 2000/60 Water Framework Directive and of the 2007/60 Floods Directive. The activity will therefore consist in the elaboration of support documents for the implementation of the program; physical, procedural and environmental monitoring; management of the information flows on the national water system and related webgis platform (*SIGRIAN - National Information System for Water Management in Agriculture* and *DANIA - National Database of Investment for irrigation and environment*), in support to the water resources management policies. Attendance to Committees and technical boards, working groups, national, international and EU commissions are therefore expected (example "Water Scarcity in Agriculture – WASAG" and delegated representatives of the "Global Bioenergy Partnership – GBEP" at FAO, in addition to the participation at "Joint Working Party Agriculture and Environment – JWPAE"). As for organic farming, elements that could enhance the conversion to organic farming, or rather the shift from conventional intensive agriculture to low environmental impact agriculture, with reduced use of chemicals, will be analysed.

Objective 3

The Centre will continue to carry out its traditional activity of elaboration and gathering of general and specific information on the Italian agri-food system (structures, productions, markets, trade, policies). This activity, consisting in coordinating and aggregating data produced by different stakeholders, in creating some original elaborations (databank of the Italian Agriculture Yearbook, import-export data on foreign trade, public spending, land market, the survey on migrants), will produce scientific and informative prints, but also seminars related to the diffusion and dissemination of the state of the Italian agri-food system.

Objective 4

The policies for the dissemination and widespread adoption of the innovations in the agri-food system have represented a priority for the European Union in the five-years 2014-2020, and it's likely that they will be re-proposed in the following period. It will therefore be important to provide advisory services and support to public institutions in each of the three action levels (European, national and regional), with particular reference to the effects of what has been achieved and to the possibilities for adjusting the interventions of governance and financing. Moreover, debates, animation and dissemination activities will be encouraged to promote the match between the demand and the offer of innovations, as well as the creation of new partnerships in the research and experimentation field. Participation in technical boards and Committees, working groups, national, European and international commissions are expected.

Released products and services

1. Development of quantitative and qualitative models for monitoring and evaluating the effects of CAP reforms on the Italian agriculture, by differentiating the results in terms of territories, typologies of businesses and specializations, but also simulation models for assessing the economic and social impact of the introduction of new genetic traits in the typical Italian agri-food crops, also aimed at assessing the effects of bilateral commercial agreements of new products on the "Made in Italy" that the European Commission is negotiating with different Third Countries.

2. Quantitative analysis model (multicriteria) for the optimal programming of irrigation investments for agricultural and environmental purposes, compatible with the prevention and mitigation of hydro-geological instability.

3. Innovative technical support tools aimed at analyzing the possible greater environmental and economic benefit of organic production. The objective is to assess carbon credits, generated from national and/or European policies, put in place to achieve the new goals set by the European road map and by the international agreements.

4. Mapping of underutilised, contaminated, and marginal lands in Europe to be used for the sustainable cultivation of biomasses for energy purposes to produce advanced biofuel. In particular, a web platform based on satellite remote sensing will be developed in the next three-year period, which will gather the results of the feasibility studies, the economic-financial indications and elements to facilitate the realization of agro-energy projects.