



Innovation through research to transform agriculture and food systems

The DeSIRA initiative

Key messages

The global political agenda is increasingly stressing the importance of innovation in achieving SDG and especially for agricultural and rural transformation.

Research may significantly contribute to innovation by producing scientific knowledge, participating in technology development and contributing to strengthen actors' capacities.

Research contribution is key for addressing systemic innovation able to address challenges regarding the economic, social and environmental dimension of agriculture and rural development.

Research in low-middle income countries needs to be strengthened to play a protagonic role in their countries or regions.

Alliance between agricultural research organizations in Europe and low-middle countries may contribute to a significant change for addressing collective challenges such as those related to the green deal, job creation or digital revolution.

Evidences: challenges and opportunities

The top down transfer of knowledge and technology model is no more valid to address systemic changes needed to promote sustainable food systems in a context of rapid transitions. Because innovation is a complex process including technical, organizational and institutional dimensions and mobilizing a wide range of actors (farmers, farmers' organizations, NGO, advisory services, private firms, etc.), public policies need to rely on multistakholder approach to produce new knowledge, mobilize resources, and synergize competencies.

With such a perspective, research for innovation needs to combine fundamental research, participatory research or action-research based on a plausible theory of change to achieve desirable impacts at scale. There is a need to strengthen the capacity of researchers and research organizations to design, monitor and assess research to achieve impacts and address the urgent challenges.

EU approaches / responses

After the One Planet Summit held in Paris in 2017, the European Commission launched the DeSIRA initiative (development - smart innovation through research in agriculture).

The DeSIRA objectives are (i) to foster climate-relevant innovation for agricultural and food systems transformation in developing countries, (ii) to strengthen research capacities and governance mechanisms, (iii) to enhance evidence for policy design and implementation.

The principles of DeSIRA initiative are (i) linking research and innovation to contribute to impacts and address climate change, (ii) supporting national research capacities at individual and organizational level, (iii) contributing to the continental and global governance of research, (iv) building strong partnership between research organizations at European level and between Europe and developing countries, (v) contributing to the assessment and fostering of Agricultural Innovation Systems and national innovation policies.

The principles of the DeSIRA project are (i) addressing key challenges to promote Food and Nutrition Security and Sustainable Agriculture with climate change resilience as overarching objective, (ii) implementing a multistakeholder approach to promote innovation, (iii) designing and monitoring an impact pathway approach based on a plausible theory of change

Projects addressing thematic issues: crops varietal improvements, vegetables and legumes production and consumption, crops pests and diseases, livestock and pastoralism, aquaculture, agroecology (incl. agroforestry and forestry, bioenergy), water management and energy, innovation service support & innovation policies.

Projects addressing capacity building issues: strengthening of African networks (regional or continental research networks or advisory services networks) and global bodies (such as Global Forum on Agriculture Research and Innovation, Tropical Agriculture Platform)

Geographical focus : Africa but also Latin America and South-East Asia

The governance of the projects :

- Projects identified by EU Member States or EU Delegations

- Platform involving EU Member States and key partners

- Technical Advisory committee

Funds : €270 million between 2018 and 2020