# Action plan for innovation and learning Agroecology and organics in EU innovation policy

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#### Abstract

Putting ideas into practice has become the central goal of Horizon 2020, the EU's Framework Programme for Research & Innovation for 2014-2020. In comparison with earlier EU research policy, the focus has shifted from research for its own sake to innovation with tangible impact. This evolution also affects the EU's Common Agricultural Policy. By learning from experiences with agroecology and organics, policy makers can make these policies a success. TP Organics, the European Technology Platform for Organic Food & Farming, is preparing an Action Plan for Innovation and Learning with recommendations for this to happen. These include the demand to include a preparatory phase in multi-actor projects needed to build a solid basis of trust among the participants. In addition, the European Commission should develop means of rewarding the efforts made by practitioners and researchers to collaborate. Practitioners should be remunerated for the value they add and the knowledge they develop.

#### Introduction

The EU has put innovation at the heart of its strategy for achieving smart, sustainable and inclusive growth. Putting ideas into practice has become the central goal of Horizon 2020, the EU's Framework Programme for Research & Innovation for 2014-2020. This evolution also affects Europe's food and farming sector. Innovation support will be strengthened in the EU's Common Agricultural Policy (CAP). Among the different measures that are foreseen in the CAP for 2014-2020 is the creation of a European Innovation Partnership for Agricultural Productivity and Sustainability (EIP-AGRI) that should close the gap between research and practice.

Organic and agroecological farming has a long history of strong collaboration between researchers and practitioners and across disciplines. The objective of this contribution is to analyse:

- If EU innovation policy offers opportunities for organic and agroecological innovation and if so which.
- What lessons EU innovation policy could learn from experiences made with organic and agroecological innovation.

## Innovation in the EIP-AGRI and Horizon 2020

According to the draft guidelines of the EIP-AGRI, the EIP-AGRI follows an "interactive approach" in which "building blocks for innovations are expected to come from science, but also from practice and intermediaries, including farmers, advisory services, NGOs, researchers, etc. as actors in a bottom-up process" (European Commission, 2013a). This "interactive innovation includes existing (sometimes tacit) knowledge which is not always purely scientific". The European Commission expects that innovation generated with such an interactive approach will "deliver solutions that are well adapted to circumstances and which are easier to implement" (European Commission, 2013a). This interactive innovation model will in the first place be implemented through operational groups, the support of which is foreseen in the CAP. Operational groups should bring innovation actors together on the initiative of the innovation actors themselves and should tackle a certain (practical) problem or opportunity that may lead to an innovative solution (European Commission, 2013a).

The interactive approach is also reflected in the Horizon 2020 regulation which asks for a "multi-actor

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approach" which "will ensure the necessary cross-fertilising interactions between researcher, businesses, farmers/producers, advisors and end-users" (COM(2011) 809 final). The first draft Work Programme of Horizon 2020 (2014-2015) for the so-called Societal Challenge "Food Security, Sustainable Agriculture and Forestry, Marine and Maritime and Inland Water Research and the Bioeconomy", contains 14 research calls demanding a multi-actor approach. The Work Programme stresses that this multi-actor approach is more than a strong dissemination requirement. It means involving stakeholders all along the project, with a clear role for the different actors. Projects should have sufficient quantity and quality of knowledge exchange activities. The objectives of the projects should be targeted towards the needs and problems of the endusers. The project consortium must be composed of key actors with complementary types of knowledge. The European Commission recommends projects to show openness and involve additional partners during the project.

## Opportunities for agroecological innovation in the EIP-AGRI and Horizon 2020

EU thinking on agricultural innovation is based on the "systems of innovation" concept (Smits *et al.*, 2010). Smits *et al.* (2010) distinguish between two views on innovation policy: the systems of innovation approach versus the macro-economic approach. The macro-economic view tends to see innovation as a linear process from (basic) research via R&D to a commercial application. The systems perspective of innovation focuses on interaction between different stakeholders (European Commission, 2013b).

The "systems of innovation" concept corresponds in a way to the agroecological concept. According to this concept, science should not be disconnected from day to day life, but should directly engage with social realities. Therefore, agroecology is based on general principles, rather than unique, rigid and fixed recipes that are supposed to work always without taking local, climatic, cultural, economic specificities into account. Direct participation of practitioners is needed to adapt these general principles to a specific problem and context. Practitioners are not any longer considered as users of knowledge generated by others, but become experts themselves. They participate in setting the research agenda and during the whole research process. These two elements, tailored solutions and stakeholder participation, are the basis of agroecological innovation.

Agroecology as well as the systems perspective of innovation broaden the concept of innovation from technological to know-how and social innovation. New fields such as the organisation of food chains and innovation for the public good rather than commercial products are addressed. Both approaches ask for transdisciplinary collaboration between scientists (such as natural scientists, rural sociologists, economists) and between scientists, practitioners and agricultural advisers.

The new EU policy potentially offers many opportunities for more stakeholder and demand-driven research & innovation. However, a lot depends on practical implementation. Contradictions exist with other developments in EU policy, e.g. the tendency to fund fewer but larger projects. These may mainly benefit big research institutes and companies that have the capacity to manage the accordingly big budgets. This makes it difficult for individual farmers or SMEs to participate which could act against considering agroecological and organic approaches. There is also a need for learning among public servants who might not always be familiar with the new approach taken. This might for example be the case for authorities in the Member States, who are responsible for setting-up the operational groups, but were not necessarily involved in the design of the concept.

## **Conclusions and outlook**

EU innovation policy has adopted a systems approach of interactive innovation which is a welcome shift away from the linear model. The success of this new thinking will depend on the political will and the services' capacity to implement it. By learning from experiences with agroecology and organic farming, policy makers and public servants can make Horizon 2020 and the EIP-AGRI a success. In order to provide guidance, TP Organics, the European Technology Platform for Organic Food & Farming, is preparing an Action Plan for Innovation and Learning. In short, this Action Plan will:

- Demonstrate the innovation potential of organic farming and agroecology
- Develop a vision on agroecological learning and innovation
- Analyse opportunities offered by EU policy instruments
- Provide policy recommendations for innovation and better learning in the EU

Among the first recommendations is the suggestion to include a preparatory phase in multi-actor projects. This is needed to build a solid basis of trust through communication among the participants, compared to

purely academic research where the researchers are more familiar with each other's worldview. This aspect of the work must be recognised and budgeted for accordingly. In addition, the European Commission should develop means of rewarding the efforts made by practitioners and researchers to collaborate. Practitioners should be remunerated for the value they add and the knowledge they develop. Finally, policy makers should provide long-term support to innovation projects. Following the close of a successful project, further financial support and follow-up promotion is often necessary to help disseminate the new ideas and change farming practices.

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