

Priority topics for Horizon 2020 Work Programme 2018/2020

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Introduction

This paper describes the priority topics of TP Organics for the Work Programme 2018/2020 of Horizon 2020. They have been selected from TP Organics' Strategic Research and Innovation Agenda that was published in December 2014. This Strategic Research and Innovation Agenda is the product of an intensive participatory process, which lasted for a year and a half and included an online consultation for members and stakeholder that attracted more than 300 responses. The selection of topics was a first time discussed at the Organic Innovation Days of December 2015. Descriptions were improved based on feedback from experts in the Advisory Board and National Technology Platforms of TP Organics.

The paper contains two kinds of projects: 1) projects that should be part of a wider flagship programme for the transition of Europe's food systems and 2) projects that address specific challenges of organic food and farming being a separate agricultural sector regulated by specific EU legislation.

Flagship programme for the transition of Europe's food systems

In order to achieve food and nutrition security and sustainable agriculture, a transition of Europe's food systems is needed. Many lock-in factors prevent the dominant food system to change. Policies from the local to the global level need to be redesigned and better integrated, new farming systems based on ecological approaches are needed, new supply chains need to be set-up, and innovation systems, including extension and education need to adapt. Given the huge number of actors involved and the many interactions in food systems, such transition cannot be addressed by one single project. **TP Organics calls for a flagship programme with considerable amount of budget that is able to make significant advances in the transition of Europe's food systems.** Such programme should foster the cross-fertilization between the organic and conventional food and farming sector. Increased cooperation between the organic and conventional food and farming sector has much to offer, not only in terms of designing more sustainable production systems, but also for the design of new and resilient business models and cooperation among stakeholders across the value chain. This paper proposes 7 topics that could be part of such a flagship programme.

Research and innovation for the organic food and farming sector

The production and marketing of organic food is regulated at EU level by Council Regulation EC/834/2007. This safeguards consumer confidence in organic products and ensures fair competition between operators in the different Member States. **Given the fact there is a distinct market for organic food which has to comply with specific EU regulations, the organic sector has specific research and innovation needs which are not shared by other parts of the food and farming sector.** This is also acknowledged by the Commission's *Action Plan for the future of Organic Production in the European Union* which features specific actions to strengthen research and innovation for the organic sector. This paper puts forward 5 topics covering specific research and innovation needs of the organic sector.

In total this paper presents 12 priority topics. They are clustered according to the call themes of Societal Challenge 2 of Horizon 2020, namely Sustainable Food Security and Rural Renaissance. The call theme of Sustainable Food Security addresses the issues of resilience and efficiency in the food value chain. It supports research and innovation all along the food chain, from primary production, food processing to healthy and safe foods and diets. Seven priority topics are proposed for this call theme.

The call theme of Rural Renaissance focuses on innovation as a driver for rural development, with a particular emphasis on developing framework conditions for innovation and new business models adapted to the rural context, and support for skills development in rural communities. Five topics are proposed for this call theme.

Sustainable Food Security

Flagship programme for the transition of Europe's food systems

Topic 1 - Supporting the transition towards diverse and sustainable food and farming systems

Specific challenge

In the EU there is a need to better understand agri-food policies that promote or prevent the transition towards sustainable food systems. Currently, a wide range of policy measures and instruments are used at different levels of governance across the EU, including the CAP, food safety and environmental legislation, and other related policies which are affecting European food and agricultural systems. The overall results are unsatisfactory from a sustainable development perspective both in Europe and more globally. It is urgent to analyse the existing policy landscape in the context of current global challenges such as food security, climate change, environmental degradation in particular biodiversity loss, and global justice. New, more coherent and better targeted policy mixes need to be designed.

Scope

Projects should map the policy areas affecting a given sector from production to consumption and address the complex interactions and dependencies between different policies under different regional conditions. Projects should improve the means used to monitor the effectiveness and efficiency of policies affecting the chosen sector. New policy mixes promoting the transition towards more sustainable food systems need to be developed and tested. It should be assessed what possible changes are needed in the current EU institutional decision making structures, to develop and govern these policy mixes. In order to avoid too general conclusions, projects should work on one specific sector of agriculture (animal products, arable crops or horticultural products/specialised crops). Within that sector, projects should also consider how more coherent and well-targeted support programmes for organic farming can support the transition towards sustainable food and farming systems.

Projects should pay particular attention to external costs, i.e. costs related to loss of biodiversity, water contamination, climate change impact, and other negative effects on the environment, public health and the society that are not taken into account by the market price. Since, the externalisation of these costs is one of the main obstacles preventing the breakthrough of sustainable food systems, policy options need to be designed that make the market price of food reflect external costs.

A multi-actor and multi-dimensional approach should be adopted, which considers the views of farmers and their suppliers, as well as food manufacturers, distributors and policy-makers.

Expected impact

- Targeted, multi-objective policy instruments and policy mixes promoting the transition towards sustainable food and farming systems
- Enhanced delivery of public goods by the food and farming systems in Europe
- Increased capacity of European food and farming systems to address global challenges
- Policy options to internalise external costs in the market price of food

Topic 2 - Agroecological farming for global food and nutrition security

Specific challenge

While today's global food production is sufficient to cover nutritional needs of the global population, food insecurity remains a problem, mainly in the rural areas of Sub-Saharan Africa and South Asia. There is growing evidence that the adaptation of agroecological principles and training in agroecological and organic farming methods will result in increased productivity, greater stability of yields, increased crop diversity, soil fertility and ecosystem recovery through use of locally available resources. However, the contribution of such approaches to food security is frequently questioned because of the lower productivity of certain crops under high input conditions of Europe. Yet, practical experience has shown that agroecology can change non-productive landscapes into fertile, productive ecosystems.

Scope

Projects will investigate how agroecological farming methods and practices can provide food security in all its dimensions. They will study agronomic, biological, sociological and economic aspects in case studies in different geographical areas in an integrated approach. Possibilities for generalising and up-scaling the results will be tested. Research will address the impact of different food chain development models (including those with links to markets through certification) on food security and rural development at the local and the national level. Furthermore, projects should investigate the potential benefits and drawbacks from agroecological farming methods and organic agriculture in terms of (i) adaptation to and mitigation of climate change and (ii) provision of ecosystem services, e.g. clean water, soil quality and conservation of biodiversity.

A multi-actor approach with a balanced partnership between participants from the EU and developing countries (minimum three International Cooperation Partner Countries) should be achieved. Projects should include relevant expertise and practical experience from a variety of actors and development organisations to design and implement participatory agroecology-based solutions for improved food security.

Expected impact

- Improved knowledge of the potential and limitations of agroecological farming and organic agriculture as a pathway to improved food security
- Characterisation of food systems and their integration through markets in terms of their potential to provide food security in different geographical areas
- Improved knowledge on ecosystem restoration for agricultural production and food security
- North-South exchange of knowledge and good practices in agroecological farming and organic agriculture

Topic 3- Climate change adaptation and mitigation through improved soil management

Specific challenge

Increasing and improving soil organic matter is fundamental in order to improve resilience of farming systems against climate change. At the same time, it has significant potential to store carbon in the soil and hence to contribute to climate change mitigation. A bunch of techniques is available to develop climate change resilient agricultural systems with low emissions yet high sequestration

rates of organic carbon. In order to make these approaches more powerful and applicable for many farmers on a large-scale, more interdisciplinary research and innovation is crucial.

Scope

The potential of improved soil management to enhance soil organic matter and carbon sequestration should be strengthened. Measures to be considered include conservation tillage, crop rotations, crop mixtures, green manure systems, agroforestry and application of compost and manure. Appropriate machinery to implement these measures should be developed.

A better understanding is needed of the effects of various treatments, e.g. composting and/or storage, on the quality of organic matter and its potential to store carbon in the soil. Care should be taken to avoid trade-offs such as increased emissions of nitrous oxides and methane due to improper crop rotations and manure handling. Special attention should be paid to the importance of organic matter for building soil water holding capacity and supporting soil biodiversity as a means to increase resilience of farming systems against climate change, droughts and flooding.

A system-based approach including field experiments, farm level studies and modelling of soil organic matter dynamics is needed. Multi-actor on-farm research and exchange of experience and expertise among different regions are essential. Practices for climate change mitigation and adaptation need to be designed taking into account local conditions and different climate change scenarios. Project should benefit both conventional and organic farming systems

Expected impact

- Improved soil fertility and long-term productivity of farming systems under adverse weather conditions associated with climate change
- Improved management of soil biodiversity in relation to carbon sequestration, nutrient cycling and water management
- Improved resource use efficiency of organic matter
- Increased carbon sequestration in organic and conventional farming
- Improved resilience of the soil system and the farming system as a whole

Topic 4 - Strategies for minimal and mild food processing

This topic has been developed in cooperation with the European Technology Platform “Food for Life”

Specific challenge

In the past decades, the production of food and food ingredients has become highly optimized. Plant-based ingredients such as sugars, proteins, starches and many other ingredients, are often highly purified, which makes them universally applicable in many products. However, fractionation and purification affect the sustainable use of raw materials, energy and water. In addition, there is an opposing consumer pull for organic food and natural ingredients. Innovation in the design of minimal, mild or careful processing methods that preserve food structure and deliver healthy, tasty and environmentally friendly foods for consumers is needed. These new processing methods should be embedded into systematic “cradle-to-cradle” and circular economy approaches.

Scope

Projects should aim at assessing and developing mild, minimal and careful processing methods to ensure the integrity of food, especially its naturally occurring nutritional, structural and functional properties, by taking into account all types of processing, including industrial food processing and cooking in public canteens and restaurants.

To accomplish this, activities will be carried out at four levels:

1. Technology

Projects should deliver a framework for defining and assessing minimal, mild and careful processing of food in the context of sustainability and public health and with the aim to reduce the use of additives and processing aids. This should entail the development of scaled-down processing solutions to enable local ingredient sourcing. Advanced technologies, based on the “cradle-to-cradle” and circular approaches, should be developed to make better use of the diversity and complexity in raw materials and to facilitate their total use.

2. Market

Projects should contribute to a better understanding of how consumers perceive natural food ingredients and how this perception is linked to food origin and processing methods. They should provide insight in the way how the benefits of minimally, mildly and carefully processed food can be communicated to consumers in order to enhance sustainable consumption and public health. Finally, the acceptability of proposed food processing technologies by producers and processors, consumers and other stakeholders should be investigated.

3. Sustainability, nutrition and public health

Projects should assess the impact of processing technologies on the characteristics of products including food structure, composition and stability, safety, nutritional and sensory quality, as well as the impact on all sustainability dimensions (environmental, social, economic), public health and labour safety.

4. Strategy

Projects should produce a Code of Practice, covering processing of conventional, organic and origin-linked quality food that provides guidance and decision criteria for selecting and developing the most appropriate mild, minimal and careful technologies for food processing. Business models should be developed to bring minimally produced food products on the market.

Projects should cover conventional food processing as well as processing for organic and origin-linked quality schemes. A multi-actor approach should be adopted, involving the industry, consumers and other actors in the agri-food chain.

Expected impact

- Evidence based criteria for selection, design and control of minimal, mild or careful processing technologies
- New appreciation of the diversity of European foods, and understanding of their impacts on both health and sustainability in production
- More minimally, mildly or carefully processed food available on the market resulting in positive impact on the environmental, social and economic dimensions of sustainability as well as public health

- Support for new job creation and job retention in rural areas through down-scaling of processing methods
- Better communication about minimally processed foods and increased consumer awareness about the benefits of minimal, mild and careful processing

Topic 5 - Increasing consumer understanding and engagement, with special focus on sustainable consumption

This topic has been developed in cooperation with the European Technology Platform “Food for Life”

Specific challenge

Food consumption is essential in human life, not only in terms of nutritional needs, but also in terms of social (relationships), emotional (life satisfaction), and identity-related (food culture) needs. Despite increasing similarities across Europe, the aspects that consumers or specific consumer groups value in food and eating depend on local context and socio-economic background and may relate to primary production, processing and manufacturing, distribution, purchase, preparation, eating and even food waste disposal. This diversity of values and preference makes the transition towards sustainable production and sustainable food consumption in Europe a significant challenge. In order to make progress, a better understanding of consumer knowledge and behaviour is needed. Close relationships need to be re-established between consumers and food producers. Research and practical models are needed to make the choice for sustainable food the easy choice for consumers.

Scope

A. Consumer understanding

Projects should achieve a better understanding of the role of consumer awareness, knowledge and behaviour as well as social and cultural values in the transition towards sustainable food systems. Projects should focus on how consumers and specific consumer groups perceive sustainability issues and adhere to sustainable dietary patterns. Projects should investigate the systems and institutional, socio-cultural and purchase context surrounding food choices in everyday life to better understand essential leverage points that support the transition to sustainable food systems. Research should explore the various strategies that consumers adopt to negotiate between potentially conflicting aspirations in their daily decisions when buying food. Special attention should be paid to value-based food systems and how they can foster sustainable consumption. In this regard, there is a diversity of models that could be explored, such as the organic food system, or food supply more tailored towards (individual) consumer needs. Research should consider to what extent consumer choices and activities can drive further improvement of the sustainability performance of food systems. A segmentation of consumers according to involvement in different food systems and cultural and socio-economic background should be made in order to develop efficient support policies, commercial and social marketing strategies.

Projects should adopt a multi-actor approach with close collaboration between supply chain actors (SMEs), consumers and researchers.

B. Consumer engagement

Values and knowledge that consumers have about sustainable food do not correlate with their behaviour. This *value-action gap* prevents progress towards sustainable food systems. Therefore, projects should develop and test strategies to close this gap. Strategies should include:

- Re-establishing close contacts between consumers and food producers regardless of location or scale of production;
- Making consumers co-producers of food;
- Exploring and developing ICT and big data tools that provide consumers with transparent, reliable and relevant information about sustainability aspects of food;
- Identifying, analysing and testing models which strengthen the role of the consumer in the transition towards sustainable food production and consumption, such as the organic food system, food supply more tailored towards (individual) consumer needs or origin-linked quality schemes.

Projects should adopt a multi-actor approach with close collaboration between supply chain actors (SMEs), farmers, consumers and researchers.

Expected impact

- Improved strategies for communicating sustainability and ethical issues of food systems and solutions to promote the added value of sustainable food systems
- Strategies for enhancing the role of consumers in the transition towards sustainable food production and consumption
- Contribution to improved policy support for sustainable food systems, including model systems like the organic food system
- Practical systems and ICT tools that make the sustainable choice the easy choice for consumers

Organic specific topics

Topic 6 - Appropriate and robust organic livestock systems

Specific challenge

Many organic livestock systems have become increasingly specialised. They have a narrow ecological base, which threatens their resilience. The challenge lies in converting them into sustainable farming systems that rely on smart eco-functional intensification. Greater efforts are needed to improve the environmental and economic sustainability of these systems, while ensuring high levels of animal health and welfare.

Scope

A. Improving organic poultry systems

Appropriate breeding goals for poultry breeds adapted to organic production systems should be defined. These breeding goals should aim to simultaneously improve performance, robustness and animal health and welfare. Breeds for laying hens, broilers and dual-purpose, including slow-growing breeds, should be considered and tested under differing conditions.

Management systems should be designed that reduce the risk of diseases or injuries, foster animal health and welfare (incl. expression of species-specific behaviour), and allow reducing and ultimately

phasing out antibiotics and synthetic medication. Alternatives of phytotherapy that can support animal health should be considered. Solutions should be developed to reduce the environmental impact of the high nutrient loads associated with free-range areas, especially around fixed stables, while at the same time maintaining the level of welfare that free-range areas provide.

Finally, enhanced efforts are needed to increase the local and on-farm production of feed crops for poultry systems. Special attention should be paid to protein sources in order to phase out the use of conventional protein feed and to avoid the unsustainable import of legumes from overseas.

Projects should follow a multi-actor approach, and are expected to adequately involve the organic poultry sector, as well as regional research and advisory bodies.

B. Sustainable strategies to increase the health and welfare of organic dairy livestock

For different agroecological and economic conditions, innovative grazing systems are required that improve the production of roughage and proteins while at the same time protecting biodiversity and soil and water quality. Grazing systems should aim to maximise pasture-based nutrition. Management systems should be designed that foster animal health and welfare (incl. expression of species-specific behaviour) and allow reducing and ultimately phasing out antibiotics and anthelmintics. Alternatives of phytotherapy (incl. grazing on herb-rich grassland) that can support animal health should be investigated. Finally, milk quality in relation to different feed systems should be investigated.

Projects should follow a multi-actor approach, and are expected to adequately involve the organic farming sector, as well as regional research and advisory bodies.

Expected impact

- Implementation of new organic poultry systems which maintain a high level of animal welfare and health, high environmental standards, and strong economic performance
- Increased knowledge and implementation of biodiverse organic dairy systems with improved productivity, reduced environmental impact, enhanced animal health and welfare, improved milk quality and reduced use of synthetic medication
- Increased practical knowledge for farmers on how to combine biodiversity, soil and water conservation with higher productivity in organic livestock production systems

Topic 7 - Development of innovative systems for organic aquaculture

Specific challenge

Organic aquaculture is a growing sector worldwide, which addresses key sustainability issues in seafood production. Organic aquaculture is developing innovative green approaches, based on the appropriate management of processes and resources. It is designed to respect the environment and consumers' health. Although EU rules on organic aquaculture have been in force since 2010, several controversial issues still need to be solved. These are mainly related to environmental performance, the organic production of juvenile fish, fish behaviour and welfare, nutritional needs and feed sources.

Scope

Innovative and integrated aquaculture systems need to be developed for both freshwater and marine areas, which ensure high overall system performance, while reconciling economic efficiency

and environmental compatibility. Polycultures and multi-trophic production systems should be developed, which are more self-sustaining and have a lower impact on ecosystems. In addition, breeding programmes to develop breeds which are more adapted to organic aquaculture conditions should be set-up. As regard shrimps, breeds are needed that do not need eyestalk ablation for reproduction. Since fishmeal and fish oil are limited resources, alternative sources of feed ingredients should be identified that satisfy nutritional requirements, maintain animal health and welfare, achieve final products of good quality, and ensure compliance with the organic principles. Finally, an integrated approach is needed to assess relationships among fish welfare and stocking density, environmental conditions, water quality and feeding quality. For organic aquaculture, it is crucial to consider the fish physiological condition and the capacity of fish to cope with stressful conditions.

Projects should follow a multi-actor approach with the active involvement of organic aquaculture farmers and researchers, and the support of the aquaculture industry at local, regional and European level, as well as consumers.

Expected impact

- Scientific advice for the economic growth of organic aquaculture
- Development of innovative farming systems for organic aquaculture
- Enhanced environmental performance of organic aquaculture systems
- Reduction of bottlenecks in breeding protocols and juvenile production for organic systems
- Improved availability and quality of protein and lipid sources for organic feed
- Full integration of animal welfare concerns into organic aquaculture systems
- Enhanced quality of organic aquaculture products

Rural Renaissance

Flagship programme for the transition of Europe's food systems

Topic 8 - Co-design, organisation and cooperation for sustainable farming systems

Specific challenge

Farming systems must be productive. Yields need to be stable in terms of both quantity and quality. At the same time farming systems need to be robust, resilient and environmentally friendly. The concept of eco-functional intensification provides guidance for the design of more resilient farming systems which combine enhanced soil diversity, healthy crops and livestock with higher economic revenue. The challenge is to combine the concept of eco-functional intensification with demand for large volumes. Large-scale implementation requires integrated action at the territorial and regional level, such as through cooperation between different farms in the same area. A more collective design is necessary.

Scope

Working with farmers and other local actors, projects should design new farming systems that incorporate all levels, from the field to the region. The new farming systems should mix different livestock species and re-integrate livestock in plant production at regional level. They should make optimal use of the diversity of crops and natural biodiversity. The farming systems should improve the quality and stability of production at low nutrient levels, and lead to lower production costs and higher income. Activities should result in diversified, stress-tolerant, multi-functional systems with low environmental impact. The new farming systems should be resilient against climate change and improve soil and water management at the regional level.

Project should benefit both conventional and organic agriculture in different geographical and climatic conditions. They should follow a multi-actor approach, and are expected to adequately involve the farming sector, as well as regional research and advisory bodies.

Expected impact

- Balanced environmental and economic benefits from agricultural production
- Increased competitiveness of farmers implementing eco-functional intensification through improved yield stability
- More sustainable farming systems with less dependence on inputs, lower environmental impact, greater resilience against climate change and better soil and water management

Topic 9 -Implementing the circular economy for nutrients

Specific challenge

The growth in fertiliser use in modern agriculture has caused to exceed sustainable limits for the rate of human interference with the global nitrogen and phosphorous cycles. The production of synthetic nitrogen fertiliser requires significant amounts of fossil energy, while the production of phosphorous depends on mining associated with large negative impact on the surrounding environment. At the same time, the disconnection of nutrient cycles at field, farm, regional and global level results in pollution of soils, waterways, seas and the air. A circular economy for nutrients should be

implemented in order to reduce demand for synthetic nutrients while lessening environmental impact associated with nutrient disposal.

Scope

Projects should improve existing and implement new strategies for closing nutrients nutrient cycles at farm, landscape and regional level. Their economic and technical viability, environmental impact as well as consumer acceptance should be assessed. Following a multi-actor approach adoption of the best strategies should be encouraged. Following strategies should be considered:

- Test and implement multiannual crop rotations that improve the efficient use of nutrients, including the use of catch crops, intercrops and under-sowing for preventing run-off.
- Promote effective application of farmyard manure and slurry as well as crop residues and plant material in order to return nutrients to the soil while improving soil quality and sequestering organic carbon. Care should be taken of proper storage, treatment and application of farm waste in order to reduce the risk of nutrient losses through water or air, as well as spreading of diseases.
- Exploit the nutrient-mining properties of plants and soil organisms. The phosphorous solubilising effects of crops and green manures, as well as the effects of biofertilisers based on mycorrhiza and plant-growth promoting rhizobacteria should be tested for their practical use under real farming conditions.
- Ensure effective balancing of nutrient inputs and outputs on farm, making use of field level and farm gate nutrient budgets and soil analyses. Tools and instruments that help farmers to measure the nutrient content of their soils and organic fertilisers should be identified and improved.
- Reconnect arable and livestock farming at regional level. Design and implement economically viable and environmentally sound models to bring livestock manure back to arable land.
- Explore alternative nutrient sources such as hygienised sewage sludge and source-separated human excrements, digested or composted urban organic waste and waste from organic food processing as well as thermally treated animal products. The safety, agronomic quality and economic feasibility of these alternative products should be assessed. New and existing technologies to gain clean phosphorous from sewage sludge should be evaluated and assessed, considering efficiency, economic feasibility as well as environmental impact, safety and public health.

Projects should build on the analysis of nutrient flows and prototyping work of projects funded under the SFS-30 call of Horizon 2020 Work Programme 2017. Projects should benefit both conventional and organic farming systems and cover different geographical and climatic conditions. They should follow a multi-actor approach, and are expected to adequately involve the farming sector, composting companies, waste water treatment plants, regional research and advisory bodies and public institutions.

Expected impact

- Decreased emission of nutrients into the air, water and soil
- Reduced dependency on chemically synthesised and mined nutrients
- Improved nutrient use efficiency at field and farm level
- Closed nutrient cycles at farm, landscape and regional level
- Increased use of alternative nutrient sources recycled from organic (urban) waste

Organic specific topics

Topic 10 - Strengthening the knowledge and innovation systems for organic farming

Specific challenge

Agricultural knowledge and information systems may contribute a great deal to supporting the resilience of farms. However, as the organic farming sector evolved from a social movement and has followed very different development trajectories in each Member State, often the innovation systems for organic farming are neither well embedded in national innovation systems nor well connected between the different Member States. Rather, the organic sector has a strong tradition of self-help groups, and of producers, advisers and researchers working together to develop solutions. Little is known about how to foster effective and efficient innovation systems for the specific circumstances of the organic farming and food sector.

Scope

Projects should explore the various mechanisms for promoting research and innovation, for demonstration, coordination, networking and training, and for supporting infrastructure in the organic farming and food sector by mapping the current initiatives in the EU. They should contribute to a better understanding of processes that trigger on-farm innovation including how to support processes for involving farmers in identifying their multiple research and innovation needs and facilitate their participation in innovation projects. Particular focus should be given to small and family-owned businesses and to systems level innovation. Success factors for locally adapted innovations provided by nationally and internationally embedded innovation systems should be identified and promoted. Ways to involve food processing and retail companies in innovation projects for organic farmers should be explored. Finally, robust evaluation criteria need to be developed for innovation initiatives, in particular for the Operational Groups and other activities of the European Innovation Partnership for Agricultural Productivity and Sustainability (EIP-AGRI). Projects should focus on countries where the organic sector is less developed in particular. Projects should take into account the results of the “SOLINSA” project and other projects that have analysed innovation processes for sustainable agriculture, as well as the results of “OK-Net Arable” which has analysed the communication tools that organic farmers and farm advisers use to collect information and exchange knowledge.

Expected impact

- Characterisation of the governance systems that encourage learning, experimentation and collective action for innovation in organic farming
- Recommendations to policy-makers on how to boost regional, national and EU-wide innovation systems for organic farming

- Active and effective participation of the organic farming sector in the EIP-AGRI, through improved cooperation between scientists, farmers, farm advisors and industry players, at regional, national and European levels
- Models for organic food and farming innovation systems that will result in effective responses to the big challenges facing agriculture

Topic 11 – Better market data for the organic sector

Specific challenge

The lack of reliable market data is a major impediment for new entrants along the supply-chain in making the decision to step into the organic sector. Market data of good quantity and quality are needed to inform effective and rapid decisions both at governmental (policy-making) and enterprise or farm level.

Scope

There is a need to collect and analyse data on volumes and values of key products at farm and retail level as well as data on exports and imports. It is important that volumes can be traced throughout the value chain. Building on the Code of Practice of the Organic Data Network, projects should implement procedures to improve data quality and to deal with sparse data and different level of aggregation. Statistical information should be collected in a harmonized way for the whole EU, the (potential) candidate countries, the EFTA countries, USA, China, Japan and selected non-European Mediterranean countries. An integrated platform should be developed that allows business actors to get access to up-to-date data at all times.

A multi-actor approach with close collaboration between farmers, consultants, supply chain actors (SMEs), public and private bodies publishing organic market data and researchers should be adopted. Activities should build on the outcomes of “Organic Data Network”, funded by the European Commission under FP7.

Expected impact

- Transparency of the organic market is improved
- Confidence in opportunities offered by the organic sector is increased

Topic 12 - Improving organic certification

Specific challenge

While reliable third-party certification lies at the basis of the market success of the organic sector, new approaches are needed to safeguard consumer confidence and future growth and reduce the administrative burden on farmers and control bodies. Third party certification tends to reduce organic farming and food processing to a rigid set of production rules and check lists preventing progress towards the objectives of the organic sector.

Scope

Projects should explore alternative ways in which the third-party certification process can support improvements of all operators along the whole supply chain towards the aspirational principles and

objectives of organic farming (in relation to sustainability, environmental and social impact, health and animal welfare). Risk-based approaches to certification, international developments in sustainability assessment for food and agriculture, new technologies and the transaction costs of certification should be considered. Finally, projects should develop proposals for group certification in Europe, which should reduce the cost of certification, in particular for small operators

A multi-actor approach with the involvement of (groups of) farmers, supply chain actors, certification bodies and consumers in pilot projects is essential.

Expected impact

- Improved transparency of organic value chains. Strengthened credibility of the organic food and farming sector
- Improved consumer trust in organic certification
- Reduced cost of certification for organic farmers
- Improved sustainability, quality and certification of organic production along entire supply chains