Organic Farming Research Support and Research Priorities in the European Union

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Abstract

Support for Organic Farming focused research has increased significantly in successive EU research funding frameworks. This is in line with constantly increasing consumer demand for organic foods over the last 20 years, which has accelerated again over the last 2 years in many European countries, including new member states.

Under the 7th Framework Programme (FP7), the expected new increase of funds for organic farming could significantly decrease, even below the levels made available under the 5th Framework Programme (FP5). Most of the project topics listed focus on the development of methods for economic analyses of Organic Farming and/or follow a very "reductionist" one problem - one potential solution approach.

On the other side, as there is no clear instruments to establish priorities in research programmes at European level. The IFOAM EU Group has developed a consultation process to set organic farming sector priorities, which could be used as a model to set research priorities in the future.

This paper also presents a first assessment of the EU support to organic farming research, reviewing main achievements in organic food production systems research and proposing some changes in the current 7th Framework Programme.

Introduction

The European Commission acknowledged several benefits of organic food and farming in its "Action Plan on Organic Food and Farming", launched in 2004. This Action Plan, which was welcomed by European Parliament and Council in, clearly pointed out that research on organic agriculture and production methods has to be strengthened.

The European Parliament in its report (2004) "considers that organic farming and other low-input farming methods must be made a specific research priority" (point 13) and further "as little research has been carried out in this field to date, a great amount of innovative potential exists..."

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Europe is a global leader when it comes to organic food and farming research. The national and EU budgets spent on organic farming projects are estimated at 70 to 90 million € (Niggli, 2006) per annum total. In comparison, the US spending on organic farming research is below 20 million € (Niggli, 2006) and countries such as Canada, Australia and Russia have far lower budgets. On the other hand, in Asian countries like India and South Korea, the funding for organic farming research has tremendously increased in recent years (Niggli, 2006).

Support for organic research in the EU Framework Programmes

Support for organic farming focused research has increased significantly in successive EU research funding frameworks, from approximately 5 million € under FP3 (AIR 4), 11 million € under FP4 (FAIR), 33 million € under FP 5 (QOL) and probably 35 million € under FP 6 (IFOAM EU, 2006b). This was in line with constantly increasing consumer demand for organic foods over the last 20 years, which has accelerated again over the last 2 years in many European countries.

The most active countries in organic farming research in Europe are Austria, Denmark, Finland, France, Germany, Italy, the Netherlands, Norway, Sweden, Switzerland and UK. The national spending of these 11 countries on organic farming research amounted to 25 million € in the year 2000, 32 million € in 2001, 44 million € in 2002, 55 million in 2003, 50 million in 2004 and 41 million € in 2005 (calculations based on Lange et al., 2006)

The latest survey of the European Commission on national public funding for organic food and farming research covering 2003 & 2004 showed that the funding differed greatly from country to country (EC, 2004).

Table 1- National public funding for organic food and farming research (2003-2004)

Level of investment in organic farming research	European Countries
Very high (more than 13 million €/year)	The Netherlands
High (10-7 million €/year)	Germany, Switzerland, Denmark, France
Medium (4-6 million€/year)	Sweden (6 million €), Italy (4 million €)
Low (1-3 million €/year)	Austria, Finland, Norway and UK
Very low (under 1 million €/year)	Spain and the rest of EU Countries

Source: Survey EU Commission years 2003-2004 (EC 2004)

Organic research priorities

There is no particular procedure to establish organic research priorities at European level. The IFOAM EU group – representing all European organic stakeholders – has intensively discussed the role of research activities for the future development of organic food and farming over the last 5 years, on the basis of a broad consultation process, and in its own 3-year workplan (IFOAM EU, 2006a), on research topics and priorities (IFOAM EU, 2005). A detailed list of proposals for relevant and innovative research topics has been produced after a broader internal consultation process.

The highest research priority, identified by all IFOAM EU Group members, was in the area of organic plant production, particularly techniques for improving soil health and plant health. Other areas deemed universally important were environment and biodiversity, and food processing to support innovation in SMEs.

Old Member States (EU-15) gave a relatively high priority to socio-economic aspects of organic farming, the investigation of organic farming and climate change, and improving animal husbandry systems with respect to animal welfare. The new EU Member States, on the other hand, gave higher priority to nutrient losses and recycling, the development of novel pesticides suited for organic farming, particular socio-economic aspects involving consumer attitudes and organic food markets.

The IFOAM EU Group especially highlighted a greater involvement of stakeholders at all stages of research programmes (IFOAM EU Group, 2004). The involvement of farmers and other actors in research enhances their trust in the findings, ensures that relevant research is conducted, ensures that new skills and techniques are learned and guarantees a rapid dissemination of results. Research budgets should include the costs of stakeholder participation. The IFOAM EU Group is involved in 3 EU Research Projects Consortium to support policies (ORGAP⁵, Orwine⁶ & Organic Revision⁷), has also developed some tools to integrate organic sector actors in research activities (Gonzálvez, 2006).

Organic research support under the 7th Framework Research Programme

In the 7th European Research Framework Programme (FP7), it was expected that Organic Food and Farming research would be strengthened. However, the latest list of topics for the 1st, 2nd and 3rd Calls indicate that the funding for organic farming will for the first time significantly decrease, probably even below the levels of funding that were made available under the 5th European Research Framework Programme FP.

Furthermore the current topics of the 7th RFP will make it very difficult to continue with a "**whole system**" approach, such as was successfully implemented in organic farming research projects under FP5 (e.g. Blight MOP) & FP6 (Integrated projects) These projects had also been highlighted by the European Commission as a positive example of innovative research.

Most of the project topics listed in the 7th RFP focus on the development of methods that are only marginally applicable to organic farming systems and/or follow a very "reductionist" - one problem-one potential solution - approach. In fact, only 4 projects in 3 calls on the provisional list have the word "organic" in the title, one of which is focused on improving biodiversity impact assessment and the other on one type of innovation (breeding). Three of these four projects are more indirect support projects and do not directly help to practically develop organic food and farming systems.

In general, to boost the development of organic food and farming appropriate through innovative research, a different range of research projects is needed (IFOAM EU, 2006b): both <u>direct</u> (dealing with following topics: organic system development in production and processing; Specific market and consumer research; Specific policy support projects) and <u>indirect</u> (dealing with topics related to comparison projects, which are of interest mainly for the public society but do not contribute to system development like the contribution of organic farming to biodiversity, societal benefits of organic farming; or projects focussing on reduction in energy/fossil fuel use, environmental impact, food quality and safety through organic and low input

⁵ Webpage http//;www.orgap.org

⁶ Webpage: http://:www.orwine, org.

⁷ Wepage: http//:www.organic-revision.org

agriculture. In the launched calls of the FP7, only indirect research projects have been approved.

The 5th and 6th FP clearly showed in several cases that research projects designed for high input agriculture cannot be adapted to the organic food and farming system approach, where many inputs or additives are not allowed. The knowledge and technology transfer to organic farmers and organic food processors is very limited, in these cases, while on the other hand knowledge transfer from specific organic food and farming projects to other farming systems can be very high, in particular regarding innovative and systems-oriented preventive strategies.

The organic farming research projects focussed on conversion problems under FP3 and FP4 and, more specially, the "whole systems" development R&D projects under FP5, allowed for the first time the development of interdisciplinary teams of researchers specialising in organic farming and also the integration a wide range of innovations to solve the main problem target by the project (Blight MOP and Worm cops). Under FP6, the first Integrated Project (QLIF) on organic farming was funded by the EC. This project has already provided a wide range of outputs both with respect to documenting specific food quality attributes in foods from organic (and other "low input") systems and developing innovations that improve production efficiency and yields, nutritional sensory and processing quality of organic and "low input" foods.

Organic research needs

Organic agriculture is highly knowledge-based, and exploits interactions in natural and semi-natural habitats and biological and ecological self-regulation. As many of these mechanisms are intuitively used by skilled organic farmers and are not yet widely explored by science, research activities in this field of agriculture and food production have a fast and high impact on technology progress and economic performance.

To resolve the lack of organic food and farming research relevant R&D in FP7, the IFOAM EU Group propose to remove the topics related to "societal benefits of organic farming and the one related to "Costs of different standard setting and certification systems for organic food and farming" and to give a high priority as it's is dealing with one of the main barriers of producers to convert to Organic Agriculture

In a long term , a significant number of research topics for organic agriculture need to be taken up for the development of the 3rd and 4th and subsequent calls under FP7, to compensate the small number of research topics for Organic Agriculture in the second and third calls (IFOAM EU Group, 2006c). Furthermore, a detailed gap analysis to identify the current and upcoming requirements of the organic food and farming industry should be carried out in collaboration with the organic research community around Europe.

Concluding remarks

There are several justified reasons for more specific research support for organic agriculture. There are also many experiences and results from past and on-going organic food and farming research projects, which also justify that the amount of money for the development of organic agriculture and food processing should at least be doubled compared with the 6th Framework Programme.

The latest known list of topics for the FP7 indicates that the funding for Organic Farming research will decrease, contradicting the economic potential , the and societal

benefits, and also the scientific challenges of the food and farming approach which is counteracting several EU policy strategies.

The IFOAM EU Group research priorities, based on a broader stakeholder consultation, should be considered for immediate and long term improvements in the research topics and areas covered by FP7.

Literature

- EC (2002) Seminar on organic research in Europe. How to facilitate the development of transnational cooperation in research in OA by member and associated states. Consolidated report summarizing individual contributions. DG Agri, Brussels
- EC (2004): 2sd Seminar on "Organic Food & Farming Research How to improve trans-national cooperation. Consolidated report. Slabe A. 56 p, DG Agri, Brussels
- IFOAM EU Group (2004): Implementation of research priorities in European Organic Farming. Brussels
- Gonzálvez, V; Schlueter, M; Slabe, A & Schmid, O (2006) Organic research and stakeholders involvement: The IFOAM EU Regional Group contribution. Brussels
- IFOAM (2005) The IFOAM norms for Organic production and Processing. Bonn
- IFOAM EU Group (2006a). IFOAM EU Group Workplan 2006-2008 Research Committee. Brussels
- IFOAM EU Group (2006b) Briefing Note. Organic Farming Research in the 7tth Framework Programme. September
- IFOAM EU Group (2005): Research Priorities Position Paper. Brussels. Internal document. http://www.ifoam.org/about_ifoam/around_world/eu_group/.html
- IFOAM EU Group (2006c) Proposals for the 3rd and 4th call of the EU Research Framework Programme. Letter of 3rd of October
- Lange, S., Williges, U., Saxena, S.. & Willer, H. (Eds) (2006). Research in Organic Food and Farming. Reports on organisation and conduction of research programmes in 11 European countries. Federal Agency for Agriculture & Food BLE, Bonn, Germany. http://orgprints.org/8791/
- Niggli, Urs (2006). Strengthening research on organic food and farming: a strategic advantage for the EU and European countries. Paper presented at the VII Congreso SEAE, Zaragoza, Spain