



A transnational perspective

Ulla Sonne Bertelsen is coordinating a European consortium of research projects in organic food and farming systems. Here, she outlines its core objectives and projected impact on a European scale



Could you explain how the Coordination of European Transnational Research in Organic Food and Farming Systems (CORE Organic) first started in 2004?

Two of our partners in Germany and Austria noticed the ERA-NET instrument being discussed in the European Commission (EC) and perceived the need for a transnational effort in the organic agriculture sector. They contacted the organic research centres in Denmark and Switzerland to take the lead. More countries joined and that is how we became one of the first ERA-NETs.

What is your role in the network?

I began my current role as Project Manager four and a half years ago. Beforehand,

I had never worked with ERA-NETs and so the past few years have been a steep learning curve. During this time, I have taken on an increasing amount of responsibility. My boss Dr Niels Halberg – CORE Organic Coordinator – operates as my advisor and takes the lead in the more strategic and political issues. However, the daily management and coordination workload is mine.

For what reasons is open access of project results and materials central to CORE Organic's goals?

Unfortunately, many materials from projects like ours tend to fade over time. Of course, the scientific papers don't disappear but can be difficult to locate, while the accompanying best practice documents aimed at farmers are hard to access because, once a project ends, the website is often closed down. With the consistent use of Organic Eprints, the materials are kept safe and are available for anybody. All uploaded materials have a summary in English.

How do the consortium's aims fit within the Horizon 2020 funding scheme?

We have the same aims, but utilise different means in trying to succeed. Horizon 2020 focuses on multi-actor involvement and a bottom-up approach where the dialogue with end-users is at the core of the projects. Our organic projects are applied research and the results are, in most cases, ready to use by farmers. Farmer involvement

before, during and after the projects is also the standard in several of our projects. Therefore, we complement each other very well. Furthermore, the European Innovation Partnership (EIP) AGRI Service Point, established by the Directorate-General for Agricultural and Rural Development (DG-AGRI) also focuses on implementation of results and making these results accessible to everyone. We focus on a very small research area while the EIP AGRI service point covers all of agriculture so it should be much easier for us. Additionally, we have use of our wonderful open-access resource – Organic Eprints – to assist implementation.

Do you expect CORE Organic to have an impact in the future?

I personally hope CORE Organic will continue forever, and since there always will be a need to support the organic sector's development with research, why not? There are challenges in legislation which the sector struggles to fulfil, and at the moment there are derogations in, for example, the use of organic seeds, 100 per cent organic feed and non-organic ingredients. Researchers and food producers need to collaborate to find new solutions. Also, innovative ideas and research are needed to improve production, economics and the organic sector's contribution to public goods (eg. reduction in use of antibiotics, increase in biodiversity and a cleaner environment), including Europe-wide objectives such as animal welfare, resource efficiency and nature preservation.

Innovation in the growing organic sector

Constant development in a growing organic sector is urgent. The European research network **CORE Organic** is driving the quality, value and application of transnational organic agricultural research

IN EUROPE, CONSUMER demands for organic products are rising and more food producers are converting to organic agriculture, which is gradually becoming more mainstream and is seen as an integral part of agricultural production and consumption. Each year, 500,000 hectares of agricultural land is converted to organic fields in the European Union (EU). In the period 2000-12, the total organic area increased by an average of 6.7 per cent yearly, to reach an estimated 9.6 million hectares, which is 5.4 per cent of the total utilised agricultural area in the EU.

The growing prominence of the organic sector is recognised and supported by many national agriculture ministries across the EU's Member States; however, this has not been matched by increased funding efforts in organic farming research. With the notable exceptions of countries such as Denmark, Germany and Switzerland, financial resources devoted to organic agriculture tend to be a very small fraction of the total funds given to agriculture at large.

The ERA-NET CORE Organic – Coordination of European Transnational Research in Organic Food and Farming Systems – is fuelled by the growth in the sector and by the knowledge-intensive nature of organic farming practices. "There is an urgent need for support to improve not only production, but also economics and the contribution of the organic sectors to public goods," explains Niels Halberg, coordinator of CORE Organic and Director at the International Centre for Research in Organic Food Systems, Denmark. "The idea of CORE Organic is that, by integrating research otherwise scattered across Europe, results have the potential to make a profound impact and carve new insights into organic agriculture."

A CUTTING-EDGE CONSORTIUM

CORE Organic was launched in 2004 to improve the quality, relevance and use of European research in the area of organic food and farming. The consortium then represented a transnational collaboration of 13 partners

from 11 countries mainly comprised of national ministries of agriculture.

Importantly, the inception of this innovative collaboration marked a concerted attempt to address the fact that many public European R&D efforts in organic agriculture were characterised by small, scattered and fragmented research communities. CORE Organic has sought to aggregate the dispersed expertise in order to consolidate and advance the competitive quality and real-life relevance of research in the organic sector. One of its chief aims is to engender cooperation between national research activities in organic agriculture and pool financial resources for transnational research.

Significant achievements have been made since CORE Organic launched its first call for research projects in 2007, with eight initial projects completed by 2010/11 and nearly €9 million invested in organic research. The second term of funding from the European Commission (EC) began in 2010, with twice as many partners and countries. This led to the launch of a further 14 innovative research projects supported by €14 million. And on 2 October 2014, 11 new research projects were selected by the CORE Organic Plus consortium, which are set to begin in early 2015. Thereby another €11 million is now being invested in organic research with co-funding from the EC.

The overarching focus is on projects that fuel the development of organic food and farming – thereby contributing to solving key societal challenges. Thus the consortium follows a threefold strategy: select the areas of research that are most significant for the organic sector; ensure the selected projects are run by top scientists with a thorough knowledge of the sector; and encourage collaborations with the wider research network and help the results reach end-users.

A TRANSNATIONAL FOCUS

CORE Organic's transnational approach delivers highly positive results, largely



because there tends to be limited investment in organic research at the national level. Because of this, CORE Organic is especially significant for smaller countries where organic research is still in its infancy, allowing expertise and research methods to be translated from more developed organic sectors to these countries.

"These countries don't have the same tradition for organic research and their researchers are often not in the established and already existing networks. So we try to integrate these researchers by inviting the selected pre-proposals to add a partner from one or more of the countries," project leader of CORE Organic, Ulla Sonne Bertelsen explains. "I think we – with the aim of building a European Research Area – have an obligation to raise the networking of researchers in these countries who joined the EU later and might struggle to be successful in Horizon 2020 applications, because they are often not a part of the western networks of researchers."

Slovenia had not enough applicants in successful preproposals when it joined CORE Organic in 2010. Therefore applicants were invited to find a Slovenian partner if the project as a whole would gain from it. The coordinator of the project, BICOPLL, later fed back that the expansion of his consortium with Slovenian and Turkish partners had a very positive impact.

"In the CORE Organic Plus call there were many applicants from Slovenia in both successful pre-proposals and selected projects. Slovenia actually received the

second highest part of the EC funds compared to allocated funds. This is a very positive development," Bertelsen enthuses.

RESEARCH IMPACTS

ERA-NETs are intended to create and bolster the European Research Area – this is reflected by the ERA-NET logo, which depicts birds flying in formation. "The logo has inspired me to reflect on how we can save maximum national energy by initiating transnational research," Bertelsen adds. "By shifting the focus to sharing results gained, we can analyse the potential for implementation in all European countries, even if not every country is actively participating in the specific research project." CORE Organic is therefore actively building bridges between research findings and practical applications for end-users. For instance, the results of each project will be evaluated for their usefulness across borders, while a network of professional disseminators identified by the partners will be used to reach transnational stakeholders throughout the partner countries. The hope is that research-based knowledge generated will be put into practice at a trans-European level.

Therefore, accessibility to research findings is paramount. This is facilitated by Organic Eprints, the open-access database hosted by the International Centre for Research in Organic Food Systems. As the sixth largest archive of agricultural research in the world, the database is used in 68 countries worldwide by over 200,000 people – researchers, advisers, farmers and lecturers – on a monthly basis. It hosts all of the scientific publications

from the CORE Organic research projects, as well as user-friendly leaflets, guidelines, best practice documents, handbooks and articles.

FUTURE STEPS

For the CORE Organic consortium, it has been a challenging yet rewarding process to perform their latest research call using the EC's ERA-NET Plus scheme. The Commission has injected extra financial resources into the national funds, thereby providing a buffer that makes it possible to close gaps when a country has spent all of its funds. Additionally, the top up from the Commission has meant more projects being selected, resulting in 96 per cent of the allocated national funds being spent on research.

"This is an amazing result, because the EC does not allow partners to be taken out or added after the expert evaluation. We did that in previous calls to make the puzzle fit with the allocated national funds," Bertelsen confirms. "To be able to gain such a high usage of national funds requires an engaged and flexible consortium and careful planning."

The 11 new CORE Organic projects all have a strong focus on the needs of the sector – and the CORE Organic monitoring team plans to follow the research activities closely, ensuring that the focus on end-users remains throughout the duration of the projects. Ultimately, the hope is that the consortium's efforts will lead to the implementation of a thriving and innovative European Research Area in organic food and agriculture, paving the way for improved solutions in the food sector at large.



Spotlight on the projects



Christine Brenninkmeyer, HealthyHens

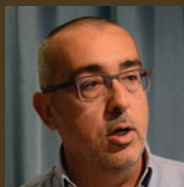
Has building a transnational project differed from building a national one?

Building a transnational project allowed us to include an international choice of specialists for the different topics covered by our project. This positively influenced knowledge exchange and cooperation between the involved poultry experts within our project and with other transnational projects working on related topics.

Vittorio Rossi, VineMan.org

How can your results be used by conventional wine producers and organic producers?

All recommendations given by the VineMan.org project can be fruitfully used by conventional wine producers and those under Integrated pest management programmes. This includes, for instance, the use of canopy- and weather-adapted methods to apply fungicides at the minimal necessary dosage in a way that reduces fungicide drift into the environment.



John Hermansen, ICOPP

You built your research partly on already existing data and ongoing experimental work. How did that impact your results?

It was quite amazing, the partners covered 80 per cent of the organic pig and poultry production in Europe, and we had access to the feed data collected and research performed in these countries previous and ongoing. None of us had imagined that we could reach this far in a three-year project. We actually documented possibilities of feeding pigs with 100 per cent local organic feed, on very solid ground, and with a data base of options.

PROJECTS FUNDED BY CORE ORGANIC II

AuthenticFood: Fast methods for authentication of organic plant based foods

BICOPOLL: Targeted precision biocontrol and pollination enhancement in organic cropping systems

BIO-INCROP: Innovative cropping techniques to increase soil health in organic fruit tree crops

COBRA: Coordinating Organic plant Breeding Activities for Diversity

Healthy Growth: From niche to volume with integrity and trust

HealthyHens: Promoting good health and welfare in European organic laying hens

ICOPP: Improved Contribution of local feed to support 100 per cent Organic feed supply to Pigs and Poultry

IMPROVE-P: IMproved Phosphorus Resource efficiency in Organic agriculture Via recycling and Enhanced biological mobilization

InterVeg: Enhancing multifunctional benefits of cover crops – vegetables intercropping

ProPIG: Farm specific strategies to reduce environmental impact by improving health, welfare and nutrition of organic pigs

SafeOrganic: Restrictive use of antibiotics in organic animal farming – a potential for safer, high quality products with less antibiotic resistant bacteria

Softpest multitrap: Management of strawberry blossom weevil and European tarnished plant bug in organic strawberry and raspberry using semiochemical traps

TILMAN-ORG: Reduced tillage and green manures for sustainable organic cropping systems

Vineman.Org: Integration of plant resistance, cropping practices, and biocontrol agents for enhancing disease management, yield efficiency, and biodiversity in organic European vineyards

INTELLIGENCE

CORE ORGANIC

OBJECTIVE

To continue, update and consolidate the series of transnational research calls that support a focused and coordinated research and innovation effort covering the most important and pertinent challenges along the organic value chains.

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Read about the CORE Organic II projects here:
www.coreorganic2.org

<http://bit.ly/1rhXfWj>

