



ERA-NET
In the Area of **F**ood,
Agriculture and
Fisheries, and
Biototechnology

Food, Agriculture and Fisheries, and Biotechnology

Knowledge - Based Bio - Economy (K B B E)

THE ERA-NET SCHEME

More than the 90% of the EU publicly funded research in the areas of food, agriculture, fisheries and biotechnology is conducted at national or regional level.

The ERA-NET scheme has been developed by the European Commission to overcome the fragmentation and duplication of research efforts in these areas.

Operating within the Commission's Framework Research Programmes (FP6 and FP7), ERA-NET has promoted the networking of national and regional research programmes with a view to stimulating the exchange of best practice, the pooling of ideas and resources, and the development of joint transnational research activities.

ERA-NET now involves hundreds of national research programmes and more than 1 000 programme owners and managers. It is part of Community action to integrate, strengthen and structure the European Research Area.

The scheme aims to improve coordination and effectiveness of national research efforts and is targeted at national ministries, regional authorities and the funding agencies which implement programmes on behalf of their governments.

In addition to the exchange of ideas and good practice in programme management it enables research bodies across the EU to jointly undertake tasks that they would not be able to do independently.

Under the Seventh Framework Programme which commenced in 2007, the ERA-NET scheme is no longer a 'stand-alone' action and has been developed into an implementation tool for supporting the strategic areas identified through dialogue with Member States.

The ERA-NET scheme now operates through two specific actions:

- ⊙ 'ERA-NET actions' – which provide a coordination framework for actors implementing public research programmes e.g. by developing joint activities or by mutually supporting joint calls for trans-national proposals.
- ⊙ 'ERA-NET Plus actions' – providing, in a limited number of cases with high European added value, additional EU financial support to facilitate joint calls for proposals between national and/or regional programmes.





ERA-NET SAFEFOODERA

Coordination of food safety research*

CONTEXT

The EU is one of the largest producers of food and drink and a leading world exporter. Food safety is a key policy priority for Europe. Indeed there have already been outbreaks of food-borne disease, such as BSE in beef or salmonella in eggs, and incidences of dangerous chemicals like dioxins in dairy products which have had a serious impact on farming and exports, and consumer confidence.

The EU White Paper on food safety of January 2000 stressed the need for high-quality assessment, management and communication of risks and this ERA-NET project responds to this need.

National research efforts are often embedded in environment or agriculture research programmes and not well coordinated or communicated at European level.

The ERA-NET SAFEFOODERA project was launched in 2004 to coordinate national food safety research across Europe and enables research programmes to cooperate across national borders. The four-year project has created a European platform for protecting consumers against health risks.

The project has established an effective network of programme managers and actively looks for opportunities for transnational research programmes to fill gaps in knowledge. It also aims to improve Europe-wide communication to stakeholders of new research and risks, thereby helping to safeguard the safety and welfare of European citizens.

ACTION

To bring together relevant knowledge and experience, SAFEFOODERA has set up two main committees, comprising representatives of the partner countries.

The European Steering Committee manages the day-to-day work, while the European Expert Advisory Group provides scientific and technical support. These two groups work closely together to compare ongoing and proposed research activities in the various national and regional food safety research programmes.

Working parties have been set up on specific aspects of food safety research, including microbiology, packaging, allergy and consumer perception. It is important that people are properly educated about any possible risks and the network disseminates results from national research programmes, through dialogue with consumer groups, industry and other stakeholders across Europe.

* Food Safety – Forming a European Platform for Protecting Consumers against Health Risks.



ACHIEVEMENTS

A first pilot Call was launched by SAFEFOODERA in 2006 to help the consortium better organise and run subsequent full transnational programmes. This concentrated on:

- ◉ pathogen-free food production chain;
- ◉ emerging risks;
- ◉ zoonosis (integrating veterinary and medical laboratory-based surveillance in food-borne zoonosis control).

Four projects were funded under the first Call with a network budget of EUR 3.8 million.

A second Call was launched in 2008 focusing on:

- ◉ the detection of traces of allergens in food;
- ◉ the safety of bioactive ingredients in functional foods;
- ◉ chemical food contaminants;
- ◉ emerging risk effects of climate change on feed and food safety;
- ◉ the development of screening methods for GMOs;
- ◉ MRSA/antibiotic resistance;
- ◉ risk-benefit analysis;
- ◉ risk assessment of food-borne pathogens;
- ◉ traceability.

The total budget of the Call is approximately EUR 6 million.

FUTURE PERSPECTIVE

Research programmes in many countries are now working on how to trace products through the food chain, and new techniques are being tried out, such as the use of DNA sequences to detect meat species. The safety of new genetically modified foods is another common priority.

SAFEFOODERA is identifying a system to describe new and potential chemical and microbial risks as they emerge around Europe.

In all, this collaboration between high-profile food safety authorities should reassure everyone in the food chain, from farmer to consumer, that every effort is being made to keep European food as safe as possible.

SAFE FOOD RESEARCH COORDINATOR

Mads Peter Schreiber

The Nordic Innovation Centre

25 Stensberggt.

NO-0170 Oslo

Norway

Tel.: +47 47 61 44 00

Fax: +47 22 56 55 65

Email: m.schreiber@nordicinnovation.net

PARTNERS

- **Belgium:** Federaal Agentschap voor de Veiligheid van de Voedselketen
- **Cyprus:** The Research Promotion Foundation of Cyprus
- **Denmark:** The Danish Ministry of Science, Technology and Innovation • National Food Institute – Technical University of Denmark • The Nordic Council of Ministers
- **Finland:** The National Technology Agency of Finland
- **France:** The French Ministry of Research and New Technologies • Institute National de la Recherche Agronomique
- **Germany:** Federal Office of Consumer Protection and Food Safety • Federal Institute for Risk Assessment
- **Hungary:** National Office of Research and Technology
- **Iceland:** The Icelandic Centre for Research
- **Italy:** The Italian National Institute for Public Health
- **The Netherlands:** The Dutch Food and Consumer Product Safety Authority • Ministry of Agriculture, Nature and Food Quality
- **Norway:** The Research Council of Norway • The Nordic Innovation Centre
- **Poland:** Instytut Żywności i Żywienia
- **Portugal:** The Portuguese Foundation for Science and Technology Research • National Institut Biological Ressources
- **Slovenia:** Republic of Slovenia Ministry of Education, Science and Sport
- **Spain (Basque Country):** Department of Agriculture and Fisheries, Research Directorate
- **Sweden:** The Swedish Agency for Innovation Systems
- **Turkey:** The Scientific and Technical Research Council of Turkey
- **United Kingdom:** The Food Standards Agency

WEBSITE:
www.safefoodera.net

DURATION:

58 months

TOTAL BUDGET:

€ 3.8 million

PROJECT REFERENCE:

CA 515726

DIRECTORATE-GENERAL FOR RESEARCH:

<http://www.cordis.lu/coordination/home.html>



Publications Office



Food,
Agriculture and Fisheries,
and Biotechnology

Knowledge-Based Bio-Economy (KBBE)

ISBN 978-92-79-10449-7



9 789279 104497



© Marn Paris

ERA ARD

Improved coordination of Agricultural Research Development*

CONTEXT

The ERA ARD Agricultural Research Development project is focused on research addressing the agricultural challenges faced by developing countries.

Most developing countries rely on agriculture as the engine for their economic growth. In Africa, for example, 70% of the population works, directly or indirectly, in the agricultural sector, and agriculture accounts for 35% of the gross national product and 40% of exports.

Agricultural research is thus a critical element in fighting poverty and hunger in poor countries and also in promoting sustainable development.

Europe also faces its own challenges over agriculture, food chains, food safety, animal health and welfare etc., which clearly have a global dimension.

Many EU Member States have developed specialist scientific expertise in agricultural R&D and give support through their bilateral and multilateral programmes.

Together with the European Commission they support the international research centres of the Consultative Group on International Agricultural Research (CGIAR), providing more than EUR 140 million per year.

Europe has a strong tradition in ARD and as many as 10 000 scientists are involved in projects in this field. But in EU Member States, the responsibility for ARD programme planning and funding is often dispersed. One of the aims of ERA ARD is to overcome this fragmentation by improving synergies between national ARD programmes across Europe.

ACTION

The four year ERA ARD project commenced in April 2005 with a total budget of EUR 3.5 million.

Initial efforts of the programme have focused on mapping exercises to define a shared vision and a strategic agenda on ARD in Europe. In particular a series of specific objectives have been established:

- to identify the national ARD sub-programmes which can benefit the most from joint and transnational activities;
- to explore innovative approaches and institutional arrangements for implementing joint ARD sub-programmes;
- to implement joint activities for the two selected ARD sub-programmes;
- to develop common methodologies and tools for ARD programmes management (planning, monitoring, evaluation and impact assessment);
- to promote the European role and contribution to ARD at the regional and global levels.

* The Agricultural Research for Development (ARD). Dimension of the European Research Area (ERA).



ACHIEVEMENTS

In September 2008 the first ERA ARD Call was launched targeted at 'Bioenergy' – a sector which can greatly benefit from transnational research activities. The Call focused on issues of bioenergy production and food security; poverty alleviation and rural development; natural resources (land, water, ecosystems, biodiversity).

This 'Bioenergy' Call is looking at the key social, economic and ecological consequences of the rapid development of bioenergy, with particular focus on the challenges and issues faced by the rural poor in developing countries. The development of methods and tools to measure and predict the impact of bioenergy at the household level and on local and regional economies, as well as effects on the wider social and natural environment are of major importance for sustainable development and food security in these countries.

Five projects have been selected involving a commitment by ERA ARD Consortium Members of nearly EUR 2 million in funds over the coming three years (2009-2011).

FUTURE PERSPECTIVE

Agriculture is greatly exposed to the dangers of climate change and consequences are already visible: e.g. increased variations in crop yields, adaptation of new plant species, re-emergence of parasitic and zoonotic diseases, shortage of water resources, expansion of areas of salinisation.

These consequences must be addressed at a global level. For Europe, it means that agricultural research programmes must not be coordinated in close interaction with the Southern regions.

Greater efforts must be made towards the identification and coordination of European agricultural research programmes targeted at climate change mitigation and adaptation actions for mutual benefit of Europe and its Southern partners.

COORDINATOR

Christian Hoste

CIRAD – Centre de Coopération
Internationale en Recherche Agronomique
pour le Développement
42 rue Scheffer
F-75116 Paris
France
Tel.: 33 (0)1 53 70 22 30
Email: christian.hoste@cirad.fr

PARTNERS

- **Austria:** Bundesministerium für Land- u Forstwirtschaft, Umwelt u Wasserwirtschaft – Division on International Cooperation for Food and Development (BMLFUW)
- **Belgium:** Federale Overheidsdienst Buitenlandse Zaken, Buitenlandse Handel en Ontwikkelingssamenwerking – Foreign Trade and Development Cooperation Directorate (DGOS)
- **Denmark:** Ministry of Foreign Affairs – Department of Development Policy, Research Section (DMFA)
- **France:** Ministère de l'Enseignement Supérieur et de la Recherche – Direction des Relations Internationales et de la Coopération (MESR)
- **Germany:** Bundesministerium für Verbraucherschutz, Ernährung und Landwirtschaft – Federal Ministry of Food, Agriculture Consumer Protection (BMELV)
- **Hungary:** Földművelésügyi és Vidékfejlesztési Minisztérium – Ministry of Agriculture and Rural Development – Dpt for Natural Resources (FVM)
- **Italy:** Ministero degli Affari Esteri – Directorate General for Development Cooperation (DGCS)
- **Lithuania:** Lietuvos Respublikos Žemės Ūkio Ministerija – Rural Development Department (ZUM)
- **The Netherlands:** Ministry of Agriculture, Nature and Food Quality – Department of Knowledge (LNV)
- **Poland:** Ministerstwo Rolnictwa i Rozwoju Wsi – Department of Science, Advisory Services and Agricultural Education, Ministry of Agriculture and Rural Development (MriRW)
- **Switzerland:** Federal department of Foreign Affairs • Swiss Agency for Development and Cooperation – Thematic and Technical Resources Department (DFA/SDC)
- **Slovenia:** Ministry of Higher Education, Science and Technology • Office for International Cooperation and EU Affairs (MHEST)
- **Spain:** Instituto Nacional de Investigaciones y Tecnología Agraria y Alimentaria – Department of International Programmes (INIA)
- **United Kingdom:** Department for International Development – Central Research Department (DFID)

WEBSITE:

<http://www.era-ard.org>

DURATION:

4 years

EC FUNDING:

€ 3.5 million

PROJECT REFERENCE:

CA 517837

DIRECTORATE-GENERAL FOR RESEARCH:

<http://www.cordis.lu/coordination/home.html>



Publications Office



Food,
Agriculture and Fisheries,
and Biotechnology

Knowledge-Based Bio-Economy (KBBE)

ISBN 978-92-79-10449-7



9 789279 104497



© Shutterstock

ERA-NET ARIMNet

Coordination of agricultural research in the Mediterranean

CONTEXT

Agriculture is a major component of the economic and social activity in the Mediterranean area.

The countries of the Mediterranean basin face many similar challenges in the agricultural area, particularly in relation to the use and management of natural resources – such as soil and water. Crop protection and the threats which climate change brings to the security and sustainability of agricultural production are also a major concern.

In the EU's Mediterranean Member States agriculture accounts for 2% to 3% of GDP whilst in other countries of the Mediterranean area, economic growth is more dependent on agricultural production which contributes from 10% to 15% of GDP.

Overall, agricultural and agro-food products play a very significant role in Mediterranean trade accounting for 5% to 20% of the imports and 15% to 25% of exports.

The countries in this area face common challenges in achieving a sustainable equilibrium between the preservation of biodiversity and the use of natural resources in an increased food and non-food production.

Mediterranean agriculture has to find solutions to the issues of rural development and urbanisation as well as the environmental challenges.

The ARIMNet consortium has been set up to strengthen scientific cooperation between Mediterranean basin countries to maximise support for sustainable development, in particular for the management of natural resources and the adaptation to and mitigation of threats resulting from climate change.

ACTION

Launched in July 2008 the ARIMNet project sets out to identify and address the key issues and challenges by strengthening scientific cooperation between EU Members and other countries of the Mediterranean basin.

During the initial 18-month phase ARIMNet is undertaking an inventory and analysis of national research programmes dedicated to Mediterranean agricultural issues. This will enable the partners to select those research areas and projects with potential for cross-border action.

Coordination may take the form of joint programming between the participating countries or become more integrated as a single programme involving a call for tenders involving all countries. Through this process the ARIMNet project will establish an initial framework for joint action. It will also be an opportunity to rethink and develop scientific cooperation with the Mediterranean countries through the funding of cooperation initiatives.

While the project follows the traditional Era-Net structure, it has several original characteristics: the four non-EU countries from the south of the Mediterranean are full members of the project and are systematically responsible for performing the tasks identified in the project. The ARIMNet project will consequently provide a forum for dialogue between the relevant Mediterranean countries to determine scientific issues of joint interest and to establish priorities.

Part of the 'inventory' work will include a survey of research exchange structures and available technical platforms in order to provide better support for programme coordination, by enabling some liaison for hosting researchers and access to technical platforms.



STRATEGIC AIMS

The overall aim is to develop common responses by coordinating national research activities. This can help reduce fragmentation, lead to the identification of common research programmes between the countries of the Mediterranean area and exploit synergies.

On the basis of the groundwork currently underway, the work of the ARIMNet partners will lead to calls for proposals to expand the structuring impact of the network.

The cooperation should lead to better coordination between partners' agricultural research programmes and the possible redesign of them to eliminate overlapping and address neglected topics.

It should help develop a common vision regarding agricultural research in the Mediterranean area.

The ARIMNet project should ultimately lead to more efficient agricultural research on issues affecting Mediterranean agriculture and develop a joint vision of agricultural research in the Mediterranean Area and recommend a strategic agenda to reach the objectives.

Alongside the work of its members, the project may also benefit from support from two international organisations that are very active in this part of the world: CIHEAM – the International Centre for Advanced Mediterranean Agronomic Studies, which was active in setting up the project – and ICARDA the International Centre for Agricultural Research in the Dry Areas.

COORDINATOR

Michel Dodet

Institut National de la Recherche
Agronomique (INRA)
147 rue de l'université
F-75338 Paris Cedex 07
France
Tel.: +33(0)1 42 75 90 00
Fax: +33(0)1 47 05 99 66
Email: michel.dodet@paris.inra.fr

PARTNERS

- **Algeria:** Institut National de la Recherche Agronomique d'Algérie (INRAA)
- **Cyprus:** Agricultural Research Institute (ARI)
- **Egypt:** Agricultural Research Centre (ARC)
- **France:** Institut National de la Recherche Agronomique (INRA) • Centre de Coopération Internationale en Recherche Agronomique pour le Développement (CIRAD)

- **Greece:** National Agricultural Research Foundation (NAGREF)
- **Israel:** Ministry of Agriculture and Rural Development (MOARD)
- **Italy:** Ministero delle Politiche Agricole Alimentari e Forestali (MIPAAF)
- **Morocco:** Hassan II Institute of Agronomy and Veterinary Medicine (IAV)
- **Portugal:** Fundação para a Ciência e a Tecnologia FCT
- **Spain:** Instituto Nacional de Investigación y Tecnología Agraria y Alimentaria (INIA)
- **Tunisia:** Institution of Agricultural Research and Higher Education (IRESA)
- **Turkey:** Ministry of Agriculture and Rural Affairs, General Directorate of Agricultural Research

ASSOCIATED PARTNERS

- CIHEAM, the International Centre for Advanced Mediterranean Agronomic Studies
- The International Center for Agricultural Research in the Dry Areas (ICARDA)

WEBSITE:
www.arimnet.net
DURATION:
48 months
EC FUNDING:
€ 999 999
PROJECT REFERENCE:
CA 219262

DIRECTORATE-GENERAL FOR RESEARCH:
<http://www.cordis.lu/coordination/home.html>



Publications Office



Food,
Agriculture and Fisheries,
and Biotechnology

Knowledge-Based Bio-Economy (KBBE)

ISBN 978-92-79-10449-7



9 789279 104497



© Van Parys

ERA-NET EUPHRESKO

Coordination of plant health research*

CONTEXT

EUPHRESKO is a project focused on research policy development and implementation in the field of statutory and emerging plant pests, diseases and invasive species (excluding GMO's).

Statutory plant pests and diseases can cause serious economic and environmental damage and today there are multiple threats to plant health that must be addressed.

Over the last century, the rate of introduction and establishment of new, economically or environmentally damaging plant pests and diseases has increased steadily as a result of the expansion in global trade of plant material.

Unfortunately, this has also simultaneously opened the door to unwanted imports such as foreign pests, disease and invasive plant species which threaten agriculture and the environment alike.

Whilst the regulatory policy designed to protect European agriculture and environment from these exotic pest threats is determined at the EU level, the research that underpins this policy is undertaken primarily at the national level and there is little coordination of these programmes.

Increased global trading and continued enlargement of the EU are likely to increase the risks from exotic plant pests and pathogens. Improved coordination and collaboration between national research programmes is therefore essential to ensure effective support of EU policy and its implementation.

ACTION

The EUPHRESKO partnership was launched in 2006 to bring together national research programmes so as to better serve the needs of EU phytosanitary science and policy.

EUPHRESKO's broad aim is to increase cooperation and coordination of national phytosanitary (statutory plant health) research programmes at the EU level through networking of research activities and joint activities (e.g. trans-national research commissioning) between national programmes.

It has three over-arching strategic goals:

- to develop phytosanitary (statutory plant health) research policy at the EU-wide level;
- optimise the research provision that underpins EU quarantine plant health policy development and policy implementation;
- increase the capacity of European phytosanitary science and research, in order to prevent the disappearance of EU expertise in this field and maintain Europe's competitiveness in the global market.

Whilst bringing together all existing and future key players EUPHRESKO will support the development of common agendas based on identified, shared priorities.

It will help create a long-term, sustainable network of phytosanitary research programme funders and improve the interaction with stakeholders and industry bodies at national and EU levels. It will help build a European phytosanitary research capacity and establish links between the Network and key research funding bodies around the world.

* Coordination of European Phytosanitary (Quarantine Plant Health) Research.



ACHIEVEMENTS

EUPHRESKO partners have made available in excess of EUR 1 million in funding for joint calls for specific phytosanitary research topics. These pilot Calls that are intended to:

- test the transnational funding mechanisms, processes and tools developed within the EUPHRESKO project through short, specific research projects;
- build confidence in transnational phytosanitary research funding and facilitate further joint calls in the future;
- produce research outputs that will support European Plant Health policy and operations;
- contribute towards maintaining and developing European phytosanitary science capability.

Two competitive funding mechanisms have been set up for the Calls:

- *the virtual pot*: under this process each country (organisation) participating in a Call commits to providing funds to a virtual 'pot' (total funding available);
- *the real common pot*: under this mechanism each country (funding organisation) participating in a Call provides funds into a real 'pot';
- a non-competitive funding mechanism has also been piloted.

FUTURE PERSPECTIVE

The EUPHRESKO consortium is building a long-term network of phytosanitary research funders that will endure well beyond the 51-month lifetime of the project.

Common research agendas are being determined on the basis of shared priorities. In this way targeted research projects be designed and executed through transnational activities even after the project ends in 2010.

To complement its work EUPHRESKO will also seek to establish additional strategic partnerships with other stakeholder organisations within Europe, as well as national and international bodies outside the European Union.

COORDINATOR

Alan Inman

Food and Environment Research Agency (FERA)
Sand Hutton, York – YO41 1LZ
United Kingdom
Tel.: +44 (0)1904 462000
or Project Office: +44 (0)1904 462323
Fax: +44 (0)1904 462111
Email: alan.inman@fera.gsi.gov.uk

PARTNERS

- **Austria**: The Federal Ministry of Agriculture, Forestry, Environment and Water Management (BMLFUW) • The Austrian Agency for Health and Food Safety (AGES)
- **Belgium**: The Institute for Agricultural and Fisheries Research (ILVO) • The Federal Public Service for Public Health, Food Chain Safety and Environment (FPS)
- **Bulgaria**: The National Service for Plant Protection (NSPP)
- **Cyprus**: The Agricultural Research Institute (ARI)
- **Czech Republic**: Ministry of Agriculture (NAAR)
- **Denmark**: The Directorate for Food, Fisheries and Agri-business (DFFAB)
- **Finland**: The Ministry of Agriculture and Forestry (MMM-FI)

- **France**: The Ministry of Agriculture and Fishery, General Food Directorate (MAP-DGAL) • Institut National de la Recherche Agronomique (INRA)
- **Germany**: The Federal Ministry of Food, Agriculture and Consumer Protection (BMELV) • The Julius Kuhn Institute (JKI) (formerly BBA)
- **Ireland**: Department of Agriculture, Fisheries and Food (DAFF)
- **Italy**: Ministero delle politiche agricole, alimentari e forestali (MiPAAF) • The Agricultural Research Council (CRA)
- **The Netherlands**: Ministry of Agriculture, Nature and Food Quality (LNV) • Plant Protection Service (PD)
- **Slovenia**: The Ministry of Agriculture, Forestry and Food (MAFF)
- **Spain**: The Plant Protection Department of the National Institute of Agricultural Research (INIA)
- **Switzerland**: The Swiss Federal Office of Agriculture (FOAG)
- **Turkey**: The Ministry of Agriculture and Rural Affairs, General Directorate of Agricultural Research (MARA-GDAR)
- **United Kingdom**: The Food and Environment Research Agency (Fera) of the Department for Environment Food and Rural Affairs (Defra)

OBSERVERS

- **Estonia**: Ministry of Agriculture, Plant Health Department
- **Greece**: Ministry of Rural Development and Food, Department of Phytosanitary Control
- **Hungary**: Ministry of Agriculture and Rural Development, Department for Plant Protection and Soil Conservation
- **Lithuania**: Ministry of Agriculture
- **Malta**: Plant Health Department, Ministry of Rural Affairs and the Environment
- **Portugal**: Direcção Geral de Protecção das Culturas (DGPC)

WEBSITE:
<http://www.euphresco.org>

DURATION:

51 months

EC FUNDING:

€ 2 633 991

PROJECT REFERENCE:

CA 036212

DIRECTORATE-GENERAL FOR RESEARCH:

CA 036212



Publications Office



Food,
Agriculture and Fisheries,
and Biotechnology

Knowledge-Based Bio-Economy (KBBE)

ISBN 978-92-79-10449-7



9 789279 104497



© Shutterstock

ERA-NET MariFish

The Coordination of European Marine Fisheries Research Programmes

CONTEXT

The EU fishing industry is the third largest in the world. It supplies some 6.9 million tonnes of fish each year. Fishing and fish processing directly provide jobs for more than 400 000 people.

In addition, the maritime economy overall accounts for some five million jobs and some 5 % of GDP is generated directly by marine-based industries and services.

Today this sector faces many challenges and the priority for EU fisheries policy is to strike the right balance between having a competitive fishing industry and sustainable fish stocks and a sustainable marine eco-system.

European aquaculture, for example, is at the forefront of sustainable development in the world, both in terms of social and environmental impacts. Aquaculture can help offset declining wild fish stocks. Already, 19% of the tonnage sold by the EU fishing industry comes from fish farms.

The ERA-NET MariFish project brings together the major European national funding agencies involved in marine fisheries research to increase the coordination and effectiveness of fisheries research at the European and regional level.

The goal is to build on Europe's strengths in marine research, technology and innovation. With better coordination of national research efforts the EU will be in a stronger position to tackle the significant challenges facing European fisheries management.

ACTION

MariFish sets out to encourage joint working and increased understanding between the project partners. This will help to avoid duplication and reduce financial risk by spreading the cost of new research.

The five year project was launched in 2006 and for the first time the major funders of fisheries research are able to meet and discuss a wide range of issues including the future priorities for research, identification of gaps and overlaps in national programmes, and how to achieve better collaboration.

The partners in the MariFish project have a combined annual research budget of EUR 160 million. Much of their work is geared towards providing a better understanding of the biology and dynamics of fish stocks and the impact of fishing on the marine environment.

MariFish has set out to find ways to improve research planning and procurement. The project also aims to compare and analyse national research programmes to identify areas of common interest, gaps in research and areas of duplication. This will help the partners develop and commission shared research activities in up to five pilot areas.

The long-term aim has been to identify the strategic and innovative requirements of fisheries research over the next ten years and develop jointly funded programmes to meet those needs.



ACHIEVEMENTS

One of MariFish's objectives is to identify research topics that will be particularly suitable for coordination at European level and will bring added benefits to the European Research Area.

In the initial phase, the project has prioritised collecting information on topics such as the shape and content of partners' programmes and existing collaboration. Subsequently, there was increased focus on how partners can collaborate on their shared research projects to maximise the impact of the research carried out.

Through this process the project partners have identified the most important topics in marine fisheries management and selected five to be developed into collaborative research programmes by a group of interested countries.

Two programmes have a regional focus and three focus on a particular issue. Some programmes aim to collaborate without providing any new research funding and some use additional funding to strategically link the programmes together.

FUTURE PERSPECTIVE

On the basis of a number of long-term strategic research issues which have been identified by MariFish members, a joint call for research was made at the end of 2008 and a series of themes have been proposed for joint research.

This encompasses:

- the relationship between stock size and recruitment;
- by-catches and discards;
- biological interaction between species;
- environmental impact of fisheries;
- economic indicators.

The projects represent a total combined budget of EUR 4.2 million between 2009 and 2011.

By providing the opportunity for a number of distinct, autonomous organisations to learn from each other, the MariFish will help to develop a strong strategic dimension to marine fisheries research in Europe.

COORDINATOR

John Lock

Department for Environment,
Food and Rural Affairs (Defra)
Fisheries Directorate
3-8 Whitehall Place
UK-London SW1A 2HH
United Kingdom
Fax: +44 207 270 8020
Email: john.lock@defra.gsi.gov.uk

PARTNERS

- **Norway:** The Research Council of Norway
- **Germany:** The Federal Ministry of Consumer Protection, Food and Agriculture, and the Federal Research Centre for Fisheries
- **The Netherlands:** Ministry of Agriculture, Nature and Food Quality, Department of Fisheries
- **Sweden:** The Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning
- **Iceland:** The Icelandic Centre for Research
- **France:** French Research Institute for the Exploitation of the Sea
- **Denmark:** Ministry of Food, Agriculture and Fisheries, Directorate for Food, Fisheries and Agri Business.
- **Portugal:** Ministry of Agriculture, Rural Development and Fisheries
- **Poland:** Morski Instytut Rybacki wGdyni • Sea Fisheries Institute in Gdynia
- **Cyprus:** Research Promotion Foundation
- **Greece:** General Secretariat for Research and Technology, Ministry of Development
- **Ireland:** Marine Institute
- **Belgium:** Ministry of the Flemish Government Centre for Agricultural Research, Sea Fisheries Department

- **United Kingdom:** Scottish Executive, Fisheries Research Services
- **Spain:** Ministry of Education and Science
- **Poland:** Ministry of Science and Information Society Technologies

WEBSITE:
www.marifish.net

DURATION:

5 years

EC FUNDING:

€ 2 977 070

TOTAL BUDGET:

€ 3 780 000

PROJECT REFERENCE:

CA 025989

DIRECTORATE-GENERAL FOR RESEARCH:

<http://www.cordis.lu/coordination/home.html>



Publications Office



Food,
Agriculture and Fisheries,
and Biotechnology

Knowledge-Based Bio-Economy (KBBE)

ISBN 978-92-79-10449-7



9 789279 104497



© iStockphoto

ERA-NET CORE ORGANIC

Coordination of organic food and farming*

CONTEXT

Since 1993, there has been annual growth of 25-30% in European organic agriculture and trade in organic food products. By 2001, organic agriculture had expanded to cover 4.6 million hectares, 3.7% of farmland in the European Union.

Organic farming offers potential solutions for the sustainable development of agriculture, environment and the countryside and as such can be a valuable tool to support European agricultural policy.

Biological pest control methods such as disease-resistant varieties or feed processing methods represent substantial progress. But to conform to the basic principles of organic farming, such novelties must be backed by thorough research proving they are effective and environmentally safe.

There is a strong need to gather the dispersed expertise and provide a European perspective on research directions. The present research effort in Europe is undertaken by small research communities, often scattered and fragmented both geographically and institutionally.

The ERA-NET project CORE Organic (Coordination of European Transnational Research in Organic Food and Farming) is a transnational partnership which brings together European research resources in the area of organic food and farming.

The aim of the project is to enhance the quality, relevance and utilisation of European research resources in organic food and farming through effective coordination and collaboration.

* Coordination of European Transnational Research in Organic food and farming.

ACTION

Since the launch of CORE Organic in October 2004, the partners have been sharing information about their research and working to organise organic food science at a European level, where more complex and long-term issues can be addressed.

The identification of common evaluation procedures that are relevant to organic farming is seen as crucial for safeguarding and enhancement of research quality.

The project's four specific objectives are:

- ⊙ increased exchange of information and establishment of common, open web-based archives;
- ⊙ the coordination of existing research and integration of knowledge;
- ⊙ the sharing and developing best practice for evaluating organic research;
- ⊙ the identification and coordination of future research.

They aim to channel EUR 3 million a year from their national funding programmes into transnational organic research that will pool European expertise and capitalise on their EU perspective on research needs.

As part of its work programme CORE Organic is introducing tools to bring together European researchers in the area of organic food and farming by:

- ⊙ setting up of a common Internet portal for communication;
- ⊙ building open common Internet databases for publications, research programmes, etc.;
- ⊙ coordinating existing research and integrating knowledge within organic research;
- ⊙ sharing and developing best practice for evaluating organic research;
- ⊙ identifying and prioritising future research topics in organic food and farming.



ACHIEVEMENTS

As a result of the groundwork undertaken by the CORE Organic partners, a pilot Call for research projects was launched in 2006.

The key thematic areas chosen were:

- animal disease and parasite management;
- quality of organic food (health and safety);
- innovative marketing strategies.

From this first Call, eight transnational research projects were initiated on:

- methods to improve quality in organic wheat;
- planning for better animal health and welfare;

- how to communicate ethical values;
- a tool to prevent diseases and parasites in organic pig herds;
- more organic food for young people;
- assessing and reducing risks of pathogen contamination;
- what makes organic milk healthy;
- how to assure safety, health and sensory qualities of organic products.

At present, 11 countries are involved but the project hopes to include all those Member and Associated States with national research programmes in organic food and farming.

COORDINATOR

Dr. Erik Steen Kristensen

Danish Research Centre for Organic Farming (DARCOF)
Research Centre Foulum
PO Box 50
DK- TJELE 50
Denmark
Email: Erik.steen.kristensen@agrsci.dk

PARTNERS

- **Austria:** Federal Ministry of Agriculture, Forestry, Environment and Water Management (BMLFUW)
- **Denmark:** Danish Directorate for Food, Fisheries and Agri Business (DFFAB) & Danish Research Centre for Organic Farming (DARCOF)

- **Finland:** Ministry of Agriculture and Forestry (MMM)
- **France:** Ministry of Agriculture (MAAPAR)
- **Germany:** Federal Ministry of Consumer Protection, Food and Agriculture (BMVEL)
- **Italy:** Ministry of Agriculture and Forestry (MiPAF)
- **The Netherlands:** Ministry of Agriculture, Nature and Food Quality (MinLNV)
- **Norway:** The Research Council of Norway (RCN)
- **Sweden:** Swedish Research Council for Environment, Agricultural Science and Spatial Planning (Formas)
- **Switzerland:** Switzerland Swiss Federal Office for Agriculture (FOAG)

- **United Kingdom:** Department for Environment, Food and Rural Affairs (Defra)

WEBSITE:
www.core-organic.org

DURATION:

36 months

EC FUNDING:

€ 1.2 million

PROJECT REFERENCE:

CA 011716

DIRECTORATE-GENERAL FOR RESEARCH:

<http://www.cordis.lu/coordination/home.html>



Publications Office



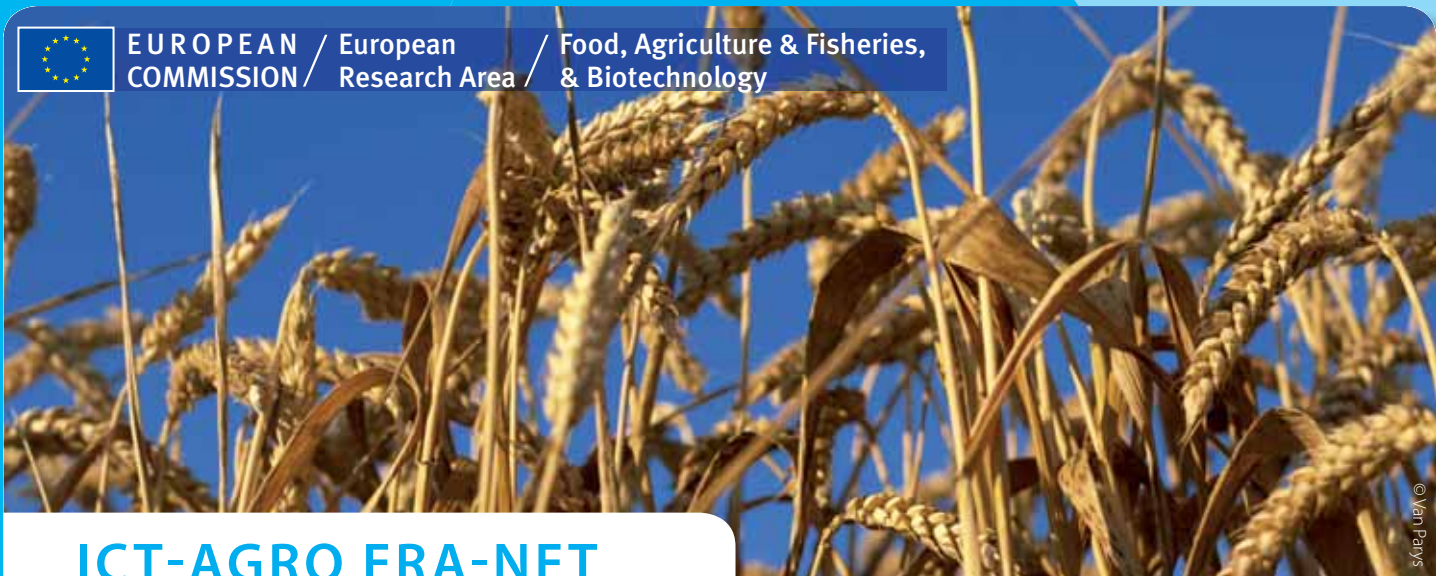
Food,
Agriculture and Fisheries,
and Biotechnology

Knowledge-Based Bio-Economy (KBBE)

ISBN 978-92-79-10449-7



9 789279 104497



ICT-AGRO ERA-NET

Coordination of European Research within ICT and Robotics in Agriculture and Related Environmental Issues

CONTEXT

The worldwide demand for food is increasing and there is a general need to increase productivity and profitability in agriculture to meet this.

New technologies are rapidly emerging which will be capable of revolutionising farming in the near future.

In particular, global demand is increasing for bioproducts such as food, feed, biofuels, biomaterials, etc. Issues such as the environment, animal welfare and ethics also call for technological solutions.

ICT-AGRI ERA-NET has been launched to support the development and implementation of these new technologies to bring about an agricultural sector that is competitive, sustainable and environmentally friendly.

Key areas in need of innovative technologies are biological systems, in particular Information and Communication Technologies (ICT) and Robotics.

By putting all these technologies together, new, smart way of managing and regulating agriculture can be created which benefit farmers as well as the environment.

ICT-AGRI sets out to pool fragmented human and financial resources across the EU in order to improve both the efficiency and the effectiveness of Europe's research efforts. ICT-AGRI will help coordinate European research in ICT and robotics and develop a common research agenda based on shared priorities.

ACTION

ICT-AGRI ERA-NET was launched in May 2009 and will run for 51 months.

The project consortium covers 20 countries and receives Community funding of EUR 2.3 million from the 7th Framework Programme for Research.

It aims build and maintain the capacity of the European Research Area within ICT and Robotics.

In particular it sets out to improve the coordination of research programmes in a number of cross-thematic areas:

- ⊙ Food, Agriculture, Fisheries and Biotechnology;
- ⊙ ICT;
- ⊙ Environment including Climate Change.

It represents a unique platform for building and maintaining international collaborations and networks.

As part of its work programme ICT-AGRI will:

- ⊙ map and analyse existing research and future needs;
- ⊙ develop instruments and procedures for transnational funding activities;
- ⊙ develop a strategic transnational research agenda and programmes;
- ⊙ establish and maintain international collaboration and networks.



ACHIEVEMENTS

The consortium has launched a website to provide project partners and stakeholders with up-to-date information on project progress, upcoming events and project publications.

The website will be an important tool for information exchange throughout the project both as internal information resource for project partners, but also for effective external communication to interested stakeholders.

The ERA-Net will announce research calls that will be based on funds from the participating countries' national research programmes. The first call is expected to be launched in 2010.

The funding mechanisms to finance the call will be determined by the partner organisations participating in the call.

FUTURE PERSPECTIVE

The ERA-NET will contribute significantly to the European Research Area by improving the coherence and coordination of ICT-AGRI research programmes across Europe and the development of joint research calls at an early date.

It will also bring added value and leverage the extensive research effort undertaken by Member States' own initiatives ensuring that the research undertaken is of high quality and also gives the best value for money.

ICT and precision farming is only slowly becoming an integrated part of farming and farm management. There are many challenges. The solutions must be safe, user friendly and economically feasible for all the many parties in agriculture, agro-industry and agricultural regulation.

COORDINATOR

Danish Food Industry Agency
Nyropsgade 30
DK-1780 Copenhagen
Denmark
Tel: 31 32 33 34
Fax: 31 32 33 35
E-mail: ict-agri@ferv.com

PARTNERS

- **Belgium:** Ministry of Agriculture of the Flemish Community, Institute for Agricultural and Fisheries Research (EV-ILVO)
- **Denmark:** Ministry of Food, Agriculture and Fisheries, Danish Food Industry Agency (DFIA) • Ministry of the Environment, Danish Environmental Protection Agency (DEPA)
- **Finland:** Ministry of Agriculture and Forestry (MMM)

- **France:** CEMAGREF Technical Centres Development (CEMAGREF)
- **Germany:** Federal Agency for Agriculture and Food (BLE) • Federal Ministry of Food, Agriculture and Consumer Protection (BLEV)
- **Greece:** Greek Research and Technology Network (GRNET)
- **Israel:** Ministry of Agriculture and Rural Development (MARD)
- **Ireland:** Agriculture and Food Development Authority (TEAGASC)
- **Italy:** Ministry of Agriculture, Food and Forestry Policies (MiPAAF)
- **Latvia:** Latvian Academy of Sciences (LAS)
- **Malta:** Malta Council for Science and Technology (MCST)
- **The Netherlands:** Netherlands Organisation for Applied Scientific Research (TNO)
- **Spain:** Region of Murcia Agency of Development (INFO Murcia)

- **Switzerland:** Swiss Federal Office for Agriculture (FOAG)
- **Turkey:** Ministry of Agriculture and Rural Affairs, General Directorate of Agricultural Research (GDAR) • Scientific and Technological Research Council of Turkey (TÜBİTAK)

OBSERVERS

- Cyprus:** The Agricultural Research Institute
- The Netherlands:** Wageningen University

WEBSITE:
www.ict-agri.eu
DURATION:
51 months
EC FUNDING:
€ 40.26 million
TOTAL BUDGET:
€ 53.3 million
DIRECTORATE-GENERAL FOR RESEARCH:
<http://www.cordis.lu/coordination/home.html>



Publications Office



Food,
Agriculture and Fisheries,
and Biotechnology

Knowledge-Based Bio-Economy (KBBE)

ISBN 978-92-79-10449-7



9 789279 104497



ERA-NET PLANT GENOMICS

Collaboration in plant genomic research*

CONTEXT

The future competitiveness of Europe's agricultural and food processing industries will depend on plant genomics, biotechnology and their smart application.

The agro-food industry in the EU represents some EUR 600 billion in annual turnover and utilises a fifth of the EU's land. It is the continent's third largest employer, accounting for 2.6 million jobs – excluding farmers.

Plants are not only our food and fodder for animals but we also use them to make inter alia clothes, paper, paints, oils, medicines, and biodegradable plastics.

Plants are a big part of Europe's economic prosperity and continued population growth and rising living standards mean that the key challenge for the coming decades will be to meet global needs for food, feed and plant-derived products.

Greater food production capacity can be secured through better land use and improved crop science. Plant genomic research has a significant role to play in this.

Europe has a long tradition of innovation in food production and the fundamental aim of ERA-NET Plant Genomics (ERA-PG) is to develop the common multi-country knowledge base necessary for coherent policy development.

ERA-PG sets out to stimulate high quality research, drive innovation and create a fruitful environment for its commercial exploitation in Europe.

ACTION

Launched in 2004 as a four year programme with a budget of EUR 2.2 million, ERA-PG was one of the first ERA-NET coordination actions to receive funding.

The overriding aim of ERA-PG's work programme, however, has been to develop a large common research programme to be implemented between 2006 and 2009.

All network members believe that close collaboration and synergy between research activities and joint investment in cutting-edge research and innovative technologies can create the critical mass that Europe needs to sustain its competitiveness.

ERA-PG has built upon the work of plant genomics programmes at national level. Its first task was to undertake a substantial information gathering exercise on research activities and the economic impact of plant genomics.

This has helped define a common ground for joint strategic activities at scientific and administrative levels, and has led to the development of common framework mechanisms and best practice.

Various networking activities have been undertaken ranging from discussion meetings for research programme makers and programme managers, to short-term exchange of programme managers, the establishment of a joint database of experts/advisors or respective committees/boards, and an electronic communications network.

In addition it has undertaken benchmarking activities, joint studies, an exchange of best practices and the drafting of common position papers.

* ERA-NET Plant Genomics.



ACHIEVEMENTS

Two Calls for joint research projects in plant genomics have been undertaken so far providing a total budget of more than EUR 55 million in joint funding.

The first joint Call was made in February 2006 with the aim of providing researchers with opportunities for transnational collaboration within overarching plant genomics themes. The Call attracted more than 100 pre-proposals, making it one of the largest coordinated national research programmes in the ERA-NET scheme. Twenty-nine projects were selected for joint funding with a budget of more than EUR 35 million.

A second joint Call was launched January 2008 with the theme of 'Strengthening European Research in Plant Genomics – integrating new technologies in plant science'. This Call targeted projects related to the development of a strong and competitive European bio-economy.

Twelve transnational projects were selected for funding with a total budget of some EUR 16.5 million. The selected projects will run over three years starting in 2009.

FUTURE PERSPECTIVE

From the outset the network was committed to expanding membership to others engaged in national plant genomics initiatives and Portugal, Switzerland, Israel and Sweden joined as members in January 2006. Later in 2006 Bulgaria joined the network as the first new EU Member State and in 2007 Canada participated in the second call.

Future work of the network will involve the deepening and coordination and enlarging the consortium to lay the foundations for a follow-up coordination action on molecular plant sciences under the 7th Framework Programme.

COORDINATOR

Christine Bunthof

Netherlands Organisation for Scientific Research, Netherlands Genomics Initiative (NGI/NWO)
334 Laan van Nieuw Oost Indië
NL-2593 CE The Hague
The Netherlands
Tel.: +31 70 344 0672
Fax: +31 70 344 0632
Email: christine.bunthof@genomics.nl

PARTNERS

- **Austria:** Austrian Federal Ministry Science and Research (BMWf) • Austrian Science Fund (FWF)
- **Belgium:** Flemish Government, Department of Economy, Science and Innovation (EWI)
- **Denmark:** Danish Agency for Science, Technology and Innovation (DASTI)
- **Finland:** Academy of Finland (AKA)
- **United Kingdom:** Biotechnology and Biological Sciences Research Council (BBSRC)

- **Italy:** Ministry of Education, University and Research (MIUR)
- **France:** Institut National de la Recherche Agronomique (INRA) • Agence National de la Recherche (ANR)
- **Germany:** German Research Foundation (DFG) • Forschungszentrum Juelich GmbH (FZJ) on behalf of Federal Ministry of Education and Research (BMBF)
- **Israel:** Ministry of Agriculture and Rural Development (MOARD)
- **Norway:** Research Council of Norway (RCN)
- **Portugal:** Foundation for Science and Technology (FCT)
- **Spain:** Ministry of Science and Innovation (MICINN)
- **Sweden:** Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning (FORMAS)
- **Switzerland:** Swiss National Science Foundation (SNF)

AFFILIATE

- **Bulgaria:** Ministry of Education and Science (MES)
- **Canada:** Agriculture and Agri-Food Canada (AAFC) • Genome Alberta • Genome Prairie/Manitoba Agriculture • Food and Rural Initiatives • National Research Council (NRC) Plant Biotechnology Institute

WEBSITE:
www.erapp.org

DURATION:

6 years (4 years + 2 years extension)

TOTAL BUDGET:

€ 2.9 million

PROJECT REFERENCE:

CA 518716

DIRECTORATE-GENERAL FOR RESEARCH:

<http://www.cordis.lu/coordination/home.html>



Publications Office



**Food,
Agriculture and Fisheries,
and Biotechnology**

Knowledge-Based Bio-Economy (KBBE)

ISBN 978-92-79-10449-7



9 789279 104497



ERA-NET RURAGRI

Agriculture and sustainable development in a rural development context

CONTEXT

With increased urbanisation in Europe the relationship between agriculture, rural areas and the challenges of sustainability is changing.

Throughout Europe, there is an increased requirement for improved connectivity between urban and rural areas and a better understanding of how agriculture can contribute to local and global sustainability.

Research on agriculture and rural development is mostly carried out at a national and regional level and these research activities would benefit from a stronger international focus.

In the context of the far-reaching changes taking place regarding agricultural and rural development policies at the European level, such coordinated activities initiated by Member States and associated countries will improve the knowledge base which underpins European decision-making about agriculture and rural development.

Through this enhanced coordination, the RURAGRI ERA-NET aims to improve the observation, understanding and characterisation of the new relationships between rural areas and agriculture and strengthen the coordination between on-going and future European, national and regional research programmes in this area.

ACTION

The RURAGRI ERA-NET was launched in October 2009 and will run for 48 months. It sets out to bring together research funding bodies operating in the field of agriculture and sustainable development in a rural development context.

RURAGRI sets out to:

- strengthen the coordination between existing research programmes dealing with the new relationships between rural areas and agriculture in Europe and the challenge to improve their contribution to sustainable development;
- implement joint research activities, enhancing the progress of knowledge and technology;
- develop a lasting focused network of national research funding organisations in EU Member and associated States of the EU that will work towards a common research agenda.

To achieve this the project will evaluate and analyse existing research in this sector.

It will build an open web-based archive to increase the exchange of information on existing research programs, funds and capacities in all the countries participating in the consortium.

It will help identify medium to long-term research needs in this area and draw up a strategic transnational research agenda that will enhance future joint activities and transnational research cooperation.



ACHIEVEMENTS

The RURAGRI consortium brings together 4 countries from Northern Europe, 6 countries from Central and Eastern European countries, 4 countries from Western Europe and 5 Mediterranean countries. The partners involved reflect the geographical, cultural and economic diversity these issues across Europe.

The project will provide the first step in establishing trans-national activities on EU-wide networking or coordination between national agricultural and rural development research programs.

It will establish lasting cooperation between ministries and other research funding agencies responsible for conducting national research programs and help manage the multiple functions which are expected today from a sustainable European agriculture.

A fully informed European approach will enhance understanding of the institutional and governance approaches that will allow these new challenges to be addressed.

COORDINATOR

Joan Calvera Vehi

National Institute for Agricultural and Food Research and Technology (INIA)
Spain
Tel.: +34 (91) 3476801
E-mail: calvera@inia.es

PARTNERS

- **Austria:** Federal Ministry of Agriculture, Forestry, Environment and Water Management (BMLFUW)
- **Belgium:** Institute for Agricultural and Fisheries Research (ILVO)
- **Cyprus:** Ministry of Agriculture, Natural Resources and Environment • Agricultural Research Institute (ARI)
- **France:** National Institute for Agricultural Research (INRA) • French Ministry of Agriculture and Fisheries (MAP)
- **Germany:** Federal Ministry of Education and Research (BMBF) • Project Management Agency Jülich (JUELICH)
- **Hungary:** Hungarian Academy of Sciences, Institute of Economics (IEHAS)
- **Ireland:** The Agriculture and Food Development Authority (Teagasc)
- **Italy:** Italian Ministry of Agricultural Food and Forestry Policies (MIPAAF)
- **Israel:** Ministry of Agriculture and Rural Development • Agricultural Research Organisation (ARO)
- **Latvia:** Latvian Academy of Sciences (LAS)
- **Lithuania:** Ministry of Agriculture of the Republic of Lithuania (MAL)
- **Poland:** Research Institute of Pomology and Floriculture in Skierniewice, Poland (ISK)
- **Slovenia:** Ministry of Higher Education, Science and Technology (MHEST)
- **Spain:** National Institute for Agricultural and Food Research and Technology (INIA)
- **Sweden:** Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning (Formas)
- **Switzerland:** Swiss Federal Office for Agriculture (FOAG)
- **The Netherlands:** Ministry of Agriculture, Nature and Food Quality (LNV)
- **Turkey:** Ministry of Agriculture and Rural Affairs, General Directorate of Agricultural Research (GDAR)
- **United Kingdom (Scotland):** Rural and Environment Research and Analysis Directorate • Scottish Government (SG-RERAD)

DURATION:

48 months

EC FUNDING:

€ 22.9 million

TOTAL BUDGET:

€ 28.8 million

DIRECTORATE-GENERAL FOR RESEARCH:

<http://www.cordis.lu/coordination/home.html>



Publications Office



Food,
Agriculture and Fisheries,
and Biotechnology

Knowledge-Based Bio-Economy (KBBE)

ISBN 978-92-79-10449-7



9 789279 104497



© VanParys

ACENET

Coordination and cooperation in the field of applied catalysis*

CONTEXT

Applied catalysis is one of the fundamental pillars of green chemistry: the design of chemical products and processes that reduce or eliminate the use and generation of hazardous substances.

More than 80% of the processes in the chemical industry depend on catalytic technologies. The design and application of new catalysts and catalytic systems are simultaneously achieving the dual goals of environmental protection and economic benefit.

They have been ubiquitous enabling technologies behind significant economic growth in recent years and are involved in products ranging from the hydrogenisation of oils and fats, catalytic cracking, plastics and polymers, petrochemicals to low temperature laundry products etc. The catalyst markets amounts to some EUR 15 billion.

Applied catalysis and new catalytic technologies will be very important for the sustainability and cost-efficiency of products and processes. They offer benefits such as clean, low hazard, waste free manufacturing of chemicals, polymers and pharmaceuticals, the utilization of biomass and recycled materials, low energy household products, food manufacturing etc.

The ACENET ERA-NET brings together the most important European national programmes and funding schemes in this field. The objective is to jointly bring a transnational dimension and greater coherence between the various national research programmes and policies.

ACTION

The four year ERA-NET project was launched in 2004 to develop a coherent vision and strategy for applied catalysis focused on industrial innovation.

It seeks to identify the gaps and requirements in knowledge and technology, develop a strategy to effectively address these challenges and, finally, to promote pan-European implementation of potential solutions.

As part of its work programme the ACENET ERA-NET has set out to:

- integrate processes between the national research-funding organisations, as a result of sharing good practice and infrastructure;
- increase efficiency in research by promoting interdisciplinary knowledge-sharing;
- provide a framework for the education and qualification of young scientists following an inventory of real and genuine training needs.

It aims to achieve this through:

- the systematic exchange of information and good practices;
- common agreement on, and joint implementation of, efficient and effective joint management processes, mechanisms and procedures;
- coordination and cooperation between existing research programmes;
- the formulation and establishment of new transnational research programmes and initiatives;
- the development of the necessary tools and activities for communication and information exchange;
- the development of a framework for a European education and training programme.

* ERA-NET for applied catalysis in Europe.



ACHIEVEMENTS

The first Call for research proposals in this area was launched in May 2007 focusing on applied catalysis and, in particular, on 'Innovative, Sustainable Catalytic Processes with Improved Energy and Carbon Efficiency'.

Six research projects were selected covering:

- Alkanes to Light Olefins via Novel Catalysts and Process Schemes (AL2OL);
- Heterogeneous Catalysis for the Conversion of Solid Biomass into Renewable Fuels and Chemicals (HECABIO);
- Methane Activation as a Route to CO₂ Remediation: The Integration of Dry Reforming into Fischer-Tropsch Fuel Production Plants (METACOOR);
- Hydrogen from Bio-Alcohols: An Efficient Route for Hydrogen Production via Novel Reforming Catalysts (NUCAT4HYDROGEN);
- Simultaneous PROduction of HYdrogen and C₂ Hydrocarbons in Solid Oxide Membrane Reactors (SIPROHYM);
- Catalysis by Regenerable Super Bases (SUBACA).

More than EUR 4.5 million of national funding has been made available to these projects during their three-year duration.

FUTURE PERSPECTIVE

The important next phase for ACE is to analyse available roadmaps and define possible technology and scientific gaps, and identify approaches to solutions.

The consortium aims to submit a new ACENET project II as a horizontal project under the European Commission Framework Programme 7 (FP7).

The overall aim will be to enhance and better structure coordination and cooperation between innovation-driven research programmes in the area of applied catalysis and related sustainable chemical research.

COORDINATOR

Dr. Louis B.J. Vertegaal

Director, NWO Chemical Sciences/ACTS
of the National Research Council
of the Netherlands
P/O Box 93138
NL-2509 AC Den Haag
The Netherlands
Tel.: +31 (0)70 344 06 40
Fax: +31 (0)70 385 09 71
Email: werner@nwo.nl

PARTNERS

- **France:** French National Centre for Scientific Research (CNRS)
- **Germany:** Federal Ministry of Education and Research (BMBF) • Jülich Research Centre (FZJ)

- **Greece:** Ministry of Development (GSRT)
- **Ireland:** Irish Research Council for Science, Engineering and Technology (IRCSET)
- **Italy:** Ministry for Education, University and Research (MIUR-CIRCC)
- **The Netherlands:** Netherlands Organisation for Scientific Research NWO (coordinator)
- **Poland:** Ministry of Education and Science (ICSC) • Institute of Catalysis and Surface Chemistry of the Polish Academy of Sciences
- **Portugal:** Fundação para a Ciência e a Tecnologia (FCT)
- **Spain:** Ministerio de Ciencia e Innovación (MICINN)

- **United Kingdom:** Engineering and Physical Sciences Research Council (EPSRC)

WEBSITE:
www.acenet.net

DURATION:

4 years

TOTAL BUDGET:

€ 2 710 000

PROJECT REFERENCE:

CA 11784

DIRECTORATE-GENERAL FOR RESEARCH:

<http://www.cordis.lu/coordination/home.html>



Publications Office



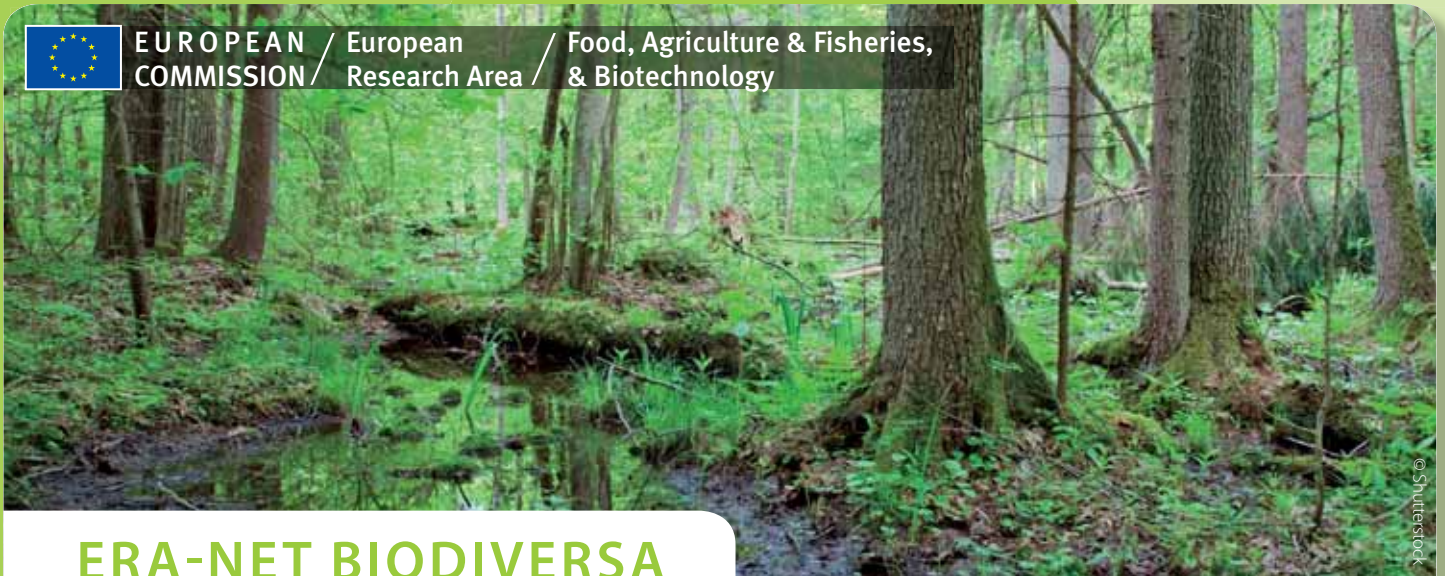
**Food,
Agriculture and Fisheries,
and Biotechnology**

Knowledge-Based Bio-Economy (KBBE)

ISBN 978-92-79-10449-7



9 789279 104497



© Shutterstock

ERA-NET BIODIVERSA

Cooperation in biodiversity research*

CONTEXT

The current rapid decline in biodiversity, both in Europe and worldwide, has been recognized – the result of the ever-increasing extent and intensity of many human activities.

This recognition has resulted in ambitious commitments for action by the EU to halt the decline in biodiversity by 2010. Since 2007, the 2010 Biodiversity Target has been fully integrated into the Millennium Development Goals.

It is recognised that achieving this will require unprecedented efforts in adapting our activities to the needs of natural systems.

The four-year ERA-NET BIODIVERSA project was launched in 2005 to enhance cooperation in the field of biodiversity research.

There is widespread consensus that Europe needs a new mechanism to harness and manage the funding for basic research, which is largely undertaken at the national level and setting up such a mechanism for greater transnational co-operation in biodiversity research funding is one of the aims of BiodivERsA.

Also, as part of its contribution to the EU's Biodiversity Strategy, the BiodivERsA project has allowed the funding agencies to collate existing activities, compare future strategies and the recommendations of consultative bodies, and systematically explore opportunities for future collaboration.

Disseminating information on best practices is also recognised as a key action in supporting more effective biodiversity research at the European level.

ACTION

To bring about improvements in biodiversity research, BiodivERsA has embarked upon a seven-stage process to:

- create inventory, description and classification of biodiversity research programmes and research funding programmes of ERA-Net members;
- collect information on partner funding programmes with developing countries;
- identify best practices to be compared, shared and implemented among the participants;
- identify the existing opportunities for cooperation and also administrative, legal and technical barriers to cooperation;
- undertake collaborative planning, joint activities, training, career-development and assessment;
- initiate mutually open research call on biodiversity issues;
- develop proposals for management of a sustainable pan-European biodiversity research.

The networking of biodiversity research funding agencies in Europe will help in the process of implementing the Gothenburg 2010 target to halt biodiversity loss, the recommendations of the Malahide Conference (May 2004) and the European Council of June 28th 2004.

Developing a durable partnership in research funding policy and practice between the partner organisations will help create added value in high quality biodiversity research across national boundaries.

It will help build a platform of co-operation which can be extended to other European countries and other fields of science beyond the field of biodiversity.

* Biodiversity research ERA-NET.



ACHIEVEMENTS

The first BiodivERsA Pan-European Call for international research projects on biodiversity was launched in 2007. It set out to link scientific advancements to policy and practice.

It addressed the themes of:

- global change and biodiversity dynamics;
- ecosystem functioning;
- ecosystem services.

The joint Call resulted in EUR 14.7 million being granted to 12 collaborative research projects on biodiversity across 9 countries (out of 182 outline applications were received).

BiodivERsA has also launched a new Research Information System on European Funding programs and funding organisations for biodiversity research.

FUTURE PERSPECTIVE

BiodivERsA RIS is a reference database providing a unique and centralised access to information on European, national and regional funding opportunities open to biodiversity researchers including thematic and non-thematic programs, grants, fellowships and studentships.

BiodivERsA RIS will also serve as a tool for analysing current funding trends in the field of biodiversity and for defining future priority research areas for European funding agencies.

It is one of the various tools that will enable the BiodivERsA project develop better coherence and increased synergies between the national programmes of cooperation with developing countries in the field of biodiversity research funding.

COORDINATOR

Jacques Weber

Institut français de la biodiversité (IFB)
57 Rue Cuvier
F-75231 Paris Cedex 05
France
Fax: +33 (0)1 4079 5663
Email: jacques.weber@gis-ifb.org

PARTNERS

- **Austria:** Fonds zur Förderung der wissenschaftlichen Forschung (FWF)
- **Belgium:** Federal Public planning Service • Science Policy (BELSPO)
- **Estonia:** Estonian Science Foundation (EstSF)
- **France:** Fondation pour la Recherche sur la Biodiversité (FRB) • Agence nationale de la recherche (ANR) • Ministère de l'Écologie, de l'Énergie, du Développement Durable et de l'Aménagement du Territoire (MEEDDAT)

- **Germany:** Projektträger im Deutschen Zentrum für Luft und Raumfahrt e. V (PT-DLR)
- **Hungary:** Ministry of Environment and Water (MEW)
- **Ireland (until October 2006):** Environmental Protection Agency (EPA)
- **Italy:** Ministero dell'Istruzione, dell'Università e della Ricerca (MIUR)
- **The Netherlands:** Netherlands Organisation for Scientific Research (NWO)
- **Norway:** The Research Council of Norway (RCN) • European Science Foundation (ESF)
- **Portugal:** Fundação para a Ciência e a Tecnologia (FCT)
- **Spain:** Ministerio de Ciencia e Innovacion (MICINN)

- **Sweden:** Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning (FORMAS) • Swedish Environmental Protection Agency (SEPA) • Swedish Research Council (VR)
- **United Kingdom:** The Department of the Environment, Food and Rural Affairs (DEFRA/Natural) • Environment Research Council (NERC)

WEBSITE:
www.eurobiodiversa.org

DURATION:

4 years

EC FUNDING:

€ 2 837 000

TOTAL BUDGET:

€ 20 million

PROJECT REFERENCE:

CA 517836

DIRECTORATE-GENERAL FOR RESEARCH:

<http://www.cordis.lu/coordination/home.html>



Publications Office



Food,
Agriculture and Fisheries,
and Biotechnology

Knowledge-Based Bio-Economy (KBBE)

ISBN 978-92-79-10449-7



9 789279 104497



© Van Parys

ERA-NET BIOENERGY

Coordination of European Bioenergy Research Programmes

CONTEXT

The EU's energy strategy sets out to replace 12% of total energy consumption with renewable sources such as bioenergy by 2010.

Bioenergy is a form of energy that could bring many benefits to the developing as well as the developed world. The biomass used to create bioenergy or biofuels is abundant in many countries, especially in the form of agricultural by-products.

Growing bioenergy crops can give a boost to rural economies, providing an alternative market for existing crops. Biomass also has the advantage that it can be mixed in with other fuel sources. As an energy source biomass is nearly 'CO₂ neutral'.

The 50-month ERA-NET Bioenergy programme which was launched in 2004 set out to develop a sustainable, long-term platform for transnational cooperation in bioenergy research across the EU.

Across Europe there are many national and regional bioenergy research programmes which have been working independently, driven by the potential benefits of bioenergy and renewable energy sources.

The ERA-NET Bioenergy project is focused on developing structured co-operation between national bioenergy research programmes in the EU Member States.

Its mission is to enhance the quality and cost-effectiveness of European bioenergy research programmes and encourage the development of new transnational research projects.

ACTION

The aims of the ERA-NET Bioenergy programme are to:

- create a structure for cooperation and systematic information exchange;
 - identify areas of common strategic interest for collaboration by networking national RTD programmes;
 - develop a workable model of cooperation between the partners;
 - set up pilots of joint work packages and learn from these projects;
 - develop national political support and expand the collaboration by dissemination of results.
- The involvement of high level management from each of the ERA-NET partners helps ensure that the project results will become embedded in national research policies.

A further aim of the Bioenergy programme is to enhance the complementarity and synergy between Community actions undertaken under the EU's Framework Programme and those of other European scientific cooperation organisations, such as COST, EUREKA, etc.

Over the first four years of operation the programme has developed 'co-operation models' for both short and long term projects which take into account the legal aspects, selection criteria, evaluation methods, financial support and monitoring methods.

Gaps have been identified in research, and opportunities for interdisciplinary work have been pinpointed. A platform has been created for information exchange between programme managers and pilots of transnational bioenergy research in joint work programmes.



ACHIEVEMENTS

The first pilot project launched in 2006 was focused on 'small scale combustion'. This brought together the national programmes of Austria, Finland, Germany, Sweden and the UK and resulted in the backing of five separate projects.

This was followed by a call for projects relating to gasification – the cleaning and treatment of product gas from biomass gasifiers. This involved seven countries and an industrial partner – a new project requirement – and led to the funding of six individual projects.

In 2008, a call was launched relating to short rotation coppice, and in 2009, one on clean biomass combustion.

Further calls are planned relating to:

- foresight studies (strategic priority settings);
- sustainable forest-based energy feedstock;
- biorefineries;
- synthetic natural gas from biomass;
- biofuels.

So far, joint funding has been provided for 14 projects (EUR 7.3 million).

FUTURE PERSPECTIVE

Over four years the project has successfully established an 'umbrella' to link national and EU projects and funding and strong collaboration between very different programmes has been developed.

Based on this successful experience, the ERA-NET programme has been extended by 18 months until April 2010. Two new partners, Poland and Ireland, have also joined the network.

Based on this platform of cooperation, a joint bioenergy research strategy is being developed which will carry forward the integration process beyond the period of Community financial support.

The group will continue the development of new joint work programmes and will continue its work of embedding ERA-NET Bioenergy into the STRATEGic ENERGY TEChNoloGy (SET) plan.

COORDINATOR

Kees Kwant

SenterNovem – Netherlands Agency
for Innovation and Sustainability
PO Box 8242
NL-3503 RE Utrecht
The Netherlands
Fax: +31 302316491
Email: k.kwant@senternovem.nl

PARTNERS

• **Austria:** Federal Ministry of Transport, Innovation and Technology • Austrian Research Promotion Agency (FFG) • Austrian Energy Agency

- **Denmark:** Energinet.dk
- **Finland:** National Technology Agency of Finland (TEKES)
- **France:** French Environment and Energy Management Agency (ADEME)
- **Germany:** Federal Ministry of Consumer Protection, Food and Agriculture • Agency for Renewable Resources (FNR)
- **The Netherlands:** Ministry of Economic Affairs
- **Sweden:** The Swedish Energy Agency
- **United Kingdom:** Engineering and Physical Sciences Research Council

WEBSITE:
www.eranetbioenergy.net

DURATION:

50 months

EC FUNDING:

€ 2 652 000

PROJECT REFERENCE:

CA 515738

DIRECTORATE-GENERAL FOR RESEARCH:

<http://www.cordis.lu/coordination/home.html>



Publications Office



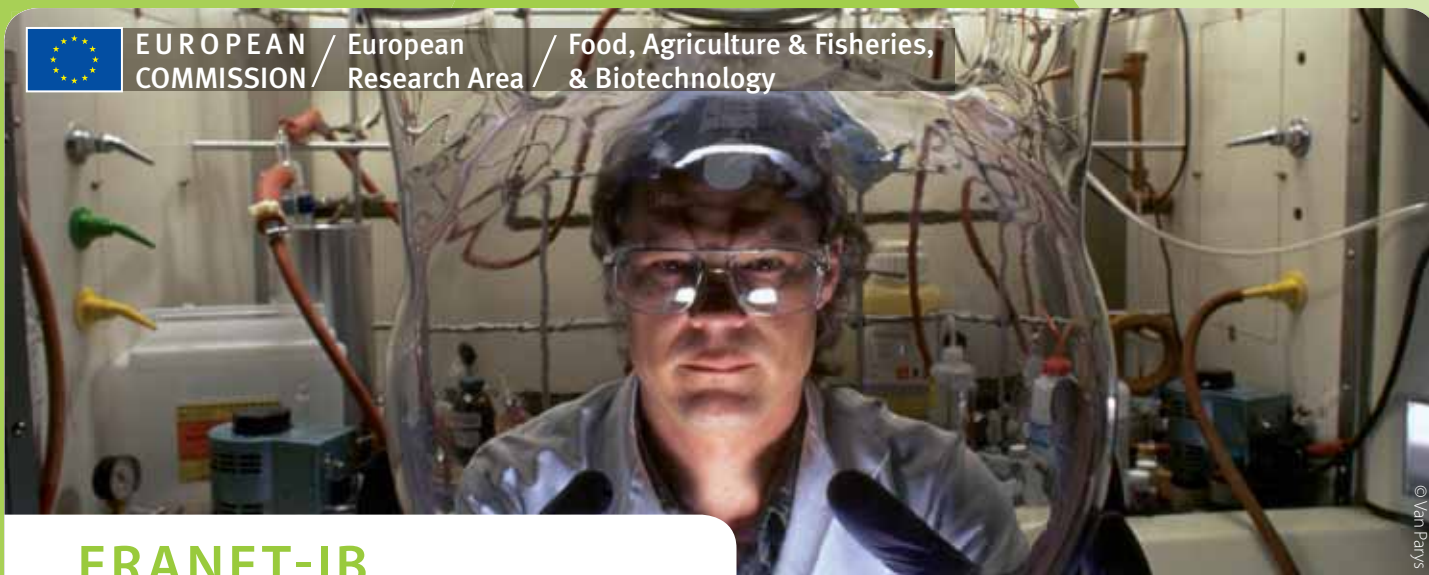
Food,
Agriculture and Fisheries,
and Biotechnology

Knowledge-Based Bio-Economy (KBBE)

ISBN 978-92-79-10449-7



9 789279 104497



© Van Parys

ERANET-IB

Towards a European research area in industrial biology

CONTEXT

Industrial biotechnology (IB) is the application of biotechnology – and in particular enzymes and micro-organisms – to the environmentally-friendly production and processing of chemicals, pharmaceuticals, materials and bio-energy.

The potential economic value of industrial biotechnology for the chemical industry alone is estimated to be EUR 11-22 billion per annum by 2010. This area of biotechnology is making industry more sustainable and is expected to offer benefits across a range of critical society-based areas.

It can, for example, open the way towards substantial reductions in greenhouse gas emissions of the order of 17-65%, and permit a more profound shift towards bio-based chemicals. This could potentially account for up to 20% of the global Kyoto target.

Industrial biology is an environmentally attractive alternative to the use of high-temperature, energy-intensive processes using chemical catalysts. IB also provides tools for the development of new products that cannot be made by using traditional synthetic methods and processes.

The central aim of ERA-NET Industrial Biotechnology is to establish cross-border partnerships between industrial and academic IB research, with a view to improving and accelerating technology transfer and strengthening European efforts to achieve sustainable industrial development.

ACTION

Over the five years of the programme, the partners in the ERA-NET IB network are working to reduce fragmentation of national research efforts and try to ensure there will be a sufficient critical mass and better use of scarce resources in this field.

ERA-NET IB's objective is to create a true European Research Area in the field of industrial biotechnology. To achieve this it has set out to:

- determine the status quo of basic and applied research funding in industrial biotechnology in Europe;
- define the joint procedures and commonly agreed RTD strategies needed as the foundation of an ERA in industrial biotechnology;
- implement strategic activities between existing research programmes;
- stimulate new strategic transnational research programmes and increase the effectiveness of research programming and management.



ACHIEVEMENTS

In 2008, ERA-NET IB launched its first call for project proposals entitled 'Industrial biotechnology for Europe: an integrated approach'. It offers funding possibilities to excellent innovative industrially relevant R&D and applied research projects in this area, in particular those relating to novel enzymes and microorganisms for new and more efficient bioprocesses.

This first joint call has offered academic and industrial researchers the possibility to establish cross-border partnerships in IB research. The total budget available for this Call is approximately EUR 11 million.

Out of the 32 applications received, eight projects were selected for funding. The total budget granted is EUR 9.7 million.

In all, 51 research groups in academia and industry were funded, and an additional seven partners will participate with their own funding. The projects will run at least three years.

FUTURE PERSPECTIVE

One of the ERA-NET IB work programmes seeks to anchor the network and ensure its sustainability in the long run.

The activities undertaken during this work package are intended to evaluate the overall efficiency and effectiveness of the ERA-NET IB network and its activities and to secure the future development of ERA-NET IB.

On the basis of the evaluations, the organisations concerned will decide on their future participation in a long lasting European cooperation in the field.

The ultimate objective is to secure a long term future for European programmes in the field of industrial biotechnology.

COORDINATOR

Dr. Louis B. J. Vertegaal

NWO – Netherlands Organisation for Scientific Research
ACTS – Advanced Chemical Technologies for Sustainability
P/O Box 93223
NL-2509 AC Den Haag
The Netherlands
Fax: +31 (0)70 385 07 87
Email: ERA-IB@nwo.nl

PARTNERS

- **Belgium:** Belgian Federal Science Policy Office (BelSPO)
- **Croatia:** Ministry of Science, Education and Sports of the Republic of Croatia (MSES)
- **Denmark:** Danish Agency for Science, Technology and Education (DASTI)
- **Finland:** Finnish Funding Agency for Technology and Innovation (Tekes)
- **France:** French Environment and Energy Management Agency (ADEME)

- **Germany:** Federal Ministry of Education and Research (BMBF) • Fachagentur Nachwachsende Rohstoffe e.V. (FNR) • Forschungszentrum Juelich GmbH • Sächsisches Staatsministerium für Umwelt und Landwirtschaft (FZJ)
- **Israel:** Chief Scientist Office, Ministry of Health (CSO-MOH) • Ministry of Science, Culture and Sport (MOST)
- **Poland:** National Centre for Research and Development (NCBiR)
- **Portugal:** Fundação para a Ciência e a Tecnologia (FCT)
- **Romania:** National Centre for Management Programme (CNMP)
- **Spain:** Spanish Ministry of Science and Innovation (ICINN) • Fundación Española de Ciencia y Tecnología (FECYT)
- **The Netherlands:** Netherlands Organisation for Scientific Research (NWO)
- **United Kingdom:** University of York • Bioscience for Business Knowledge Transfer Network (UoY) • Technology Strategy Board (TSB)

OBSERVERS

- **Germany:** Deutsche Bundesstiftung Umwelt (DBU)
- **Italy:** IB Section Italian Technology Platform for Sustainable Chemistry
- **Norway:** The Research Council of Norway
- **Slovenia:** Ministry of Higher Education, Science and Technology (MHEST)
- **Sweden:** Swedish Governmental Agency for Innovation Systems (Vinnova)

WEBSITE:
www.era-ib.net

DURATION:
5 years

EC FUNDING:
€ 2 513 644

TOTAL BUDGET:
€ 11 million

PROJECT REFERENCE:
CA 035581

DIRECTORATE-GENERAL FOR RESEARCH:
<http://www.cordis.lu/coordination/home.html>



Publications Office



Food,
Agriculture and Fisheries,
and Biotechnology

Knowledge-Based Bio-Economy (KBBE)

ISBN 978-92-79-10449-7



9 789279 104497



© Van Parys

ERA-NET ERASysBio

Coordination in systems biology research*

CONTEXT

Systems biology is helping Europe take a leading position in the generation of new products such as drugs, therapies and biotech-based goods and knowledge.

It is a leading-edge research area which seeks to converge life sciences with information technology & systems science. By increasing the safety and efficiency of biotechnological production processes, Systems Biology has the potential to strengthen Europe's economic competitiveness and to improve the quality of life for EU citizens.

A key focus for systems biology is the exploration of the complex mechanisms that are involved in the regulation of genes, proteins and various metabolic products. This research has particular applications in medicine and the design of pharmaceuticals. Outside medicine, systems biology is likely to have a big impact on agriculture and biotechnology and is expected to be a major contributor to Europe's industrial future.

The ERASysBio project, which was launched in February 2006, sets out to consolidate European research in this area through the convergence of national research programmes in systems and computational biology, mathematics, information technology, engineering and other systems biology-related fields.

It also builds upon the work of programmes such as EUREKA, the European Science Foundation, the European Molecular Biology Laboratory and several other EU-supported projects.

ACTION

The consortium has drawn up an inventory of the projects and programmes under way in the partner countries and their plans for the future. Based on this, a draft research agenda in systems biology was established for the period 2006-2008 outlining topics of common interest and potential for future collaboration. This formed the basis for new transnational funding initiatives under a joint funding scheme.

Part of the work of the ERASysBio consortium involves improving the European market through improved mobility of knowledge, resources, personnel, etc. It also promotes research & training in this area as part of a European research policy.

A web-based service has been set up to help students and researchers set up exchanges through the existing European Researchers Mobility Portal.

In addition, ERASysBio has organised a programme of partnering and brokerage events to promote networking.

* Towards a European Research Area for systems biology – a transnational funding initiative to support the convergence of life sciences with information technology and systems sciences.



ACHIEVEMENTS

At the end of 2005, a pilot funding round on the systems biology of micro-organisms – SysMo – was launched. This transnational initiative is a joint activity between funding agencies from six partner countries in the ERASysBio network.

This first joint call for collaborative research proposals, led to the approval and financing of 11 transnational projects involving 89 research groups. The work will be undertaken between 2007-2010 with a total budget of EUR 29 million.

SysMO is currently one of the largest and most ambitious funding initiatives in Europe as in addition to funding research collaborative projects, SysMO is building an integrated platform for the management and sharing of data and models.

FUTURE PERSPECTIVE

The second Call EraSysBio Plus was been launched in January 2009 with a specific focus on 'stimulating the widespread adoption of systems approaches in biomedicine, biotechnology and agri-food'.

The aim of the call is to enable transnational, collaborative research projects in systems biology research involving the quantitative and integrative understanding of dynamic biological processes.

Proposals must involve interdisciplinary studies that will combine applied mathematics and/or statistics with experimental data to create and validate appropriate models.

All aspects of biotechnology, biomedicine and agri-food from molecular systems, to cells, organs, up to whole organisms are considered in this Call. The projects selected for funding are expected to start in autumn 2009.

The long-term aim of EraSysBio is to build a sustainable basis for a European-wide systems biology community that will outlast the ERA-NET itself.

COORDINATOR

Dr. Stefan Lampel

Forschungszentrum Jülich GmbH, PTJ
Leo Brandt Strasse
D-52425 Juelich
Germany
Tel.: 02461 61-0
Fax: 02461 61-8100

PARTNERS

- **Austria:** Federal Ministry of Education, Science and Culture
- **Belgium:** National Fund for Scientific Research
- **Finland:** Academy of Finland
- **France:** National Centre for Scientific Research

- **Germany:** Federal Ministry of Education and Research
- **Israel:** Israel Science Foundation
- **Italy:** Autonomous Province of Trento
- **The Netherlands:** Netherlands Organisation for Scientific Research
- **Norway:** Research Council of Norway
- **Russian Federatikon:** Russian Foundation for Basic Research
- **Slovenia:** Ministry of Higher Education, Science and Technology
- **United Kingdom:** Biotechnology and Biological Science Research Council

AFFILIATED PARTNERS

- **Luxembourg:** Fonds National de la Recherche Luxembourg (FNR)
- **Switzerland:** Swiss National Science Foundation (SNF)

WEBSITE:
www.acenet.net

DURATION:

4 years

TOTAL BUDGET:

€ 2 710 000

PROJECT REFERENCE:

CA 11784

DIRECTORATE-GENERAL FOR RESEARCH:

<http://www.cordis.lu/coordination/home.html>



Publications Office



**Food,
Agriculture and Fisheries,
and Biotechnology**

Knowledge-Based Bio-Economy (KBBE)

ISBN 978-92-79-10449-7



9 789279 104497



© iStockphoto

EUROTRANS-BIO

Coordinating biotechnology research

CONTEXT

Modern biotechnology is an integral part of the EU economy. It underpins the generation of up to 1.69% of the EU gross value added (GVA) to which can be added pharmaceuticals research & development and health effects of modern biotechnology products.

Biotechnology companies are often important intermediaries between academia and industry in developing and disseminating technology. The majority of these companies are small to medium-sized enterprises (SMEs).

In the global marketplace, European biotech SMEs face a major challenge in achieving a critical market size in terms of research and development, capitalisation, and scientific and managerial excellence.

The EUROTRANS-BIO (ETB) initiative was launched in October 2004 to help coordinate national and regional funding programmes for biotechnology research across the EU. Its focus is on providing support for transnational biotechnology research cooperation and in particular close-to-market projects involving SMEs.

The ETB consortium represents key actors in this field and has long surpassed a 'critical mass', currently covering more than 55% of the EU's biotech industry and progressively extending its reach.

The overarching objective of the programme is to establish cross-border partnerships between SMEs and thus improve and accelerate technology transfer. Such transnational public-private partnerships, it is hoped, will foster synergy effects, contribute to share risks and reduce costs in R&D, and thus improve competitiveness of the European SMEs.

ACTION

Part of ETBs work over the first four years has been to develop and implement best practices, establish cross-border partnerships between SMEs and/or public research laboratories and strengthen European efforts to achieve sustainable development in this area.

In the ETB context the countries/regions involved in the initiative have launched a series of common calls for industry-driven transnational R&D&I projects. The consortium has launched four calls for proposals focused on industrial R&D projects in all sectors of modern biotechnology from 2006 to 2009.

In the first call (2006) five countries/regions, Austria, Finland, France, Germany and the Basque Country participated. January, 2007 saw a second call open to SMEs and research organisations in Austria, Flanders Region, Finland, France, Germany, Italy, the Netherlands, Spain and the Basque Country. The third call launched in November 2007 set out to improve the capacity of biotech industry in general, offering support to SMEs in strategic partnerships covering all fields of biotechnology. The fourth call was launched in January 2009 and continued to support challenging and innovative projects in the fields of industrial R&D&I, applied research projects and experimental development. 4 new partners participated in this call: Hungary, Wallon Region, Catalonia and Madrid Region. Under the ETB rules, the consortia can involve as many partners as necessary but each consortium must include at least two SMEs from two ETB member regions or countries.



ACHIEVEMENTS

In four calls EUROTRANS-BIO generated 170 proposals for innovative industrial research and development projects, signifying a high level of interest from the SME community. By the end of these four calls, an estimated total of EUR 79 million of funding has been awarded to 81 recommended projects. This in turn has mobilised a further EUR 61 million of industry finance to cover the overall project costs of EUR 140 million.

Some 203 SMEs together with 66 academic partners and six large industrial groups are currently benefiting from ETB funding to undertake transnational projects. The majority of projects are found in the health sector (82%) followed by Agro-Food (11%). Industrial biotech and marine biotech applications account for 7%.

EUROTRANS-BIO fulfils an important role in providing SMEs with a transnational funding instrument which is designed specifically for small consortia and understands the needs of SMEs. From 2009 to 2012, ETB activities will continue to be supported under the EU's FP7 programme. The ultimate aim is for the joint programme to be self-sustaining.

FUTURE PERSPECTIVE

A fifth Call for projects has been launched in October 2009. The strategic objective of ETB will continue to enhance the competitive capacity of Europe's biotech industry by supporting research-intensive SMEs and their strategic partnerships. Further ETB calls will be continuously launched on an annual basis and thus allow applicants to plan their projects foresightedly, will cover all areas of biotechnology and release a funding budget of at least EUR 30 million each.

COORDINATOR

Christian Listabarth

Federal Ministry for Economics,
Family and Youth
Stubenring 1
A-1011 Vienna
Austria
Tel.: +43 (0) 57755 1701
Email: Christian.Listabarth@ffg.at

PARTNERS

- **Austria:** Federal Ministry for Economics, Family and Youth (BMWFJ) • The Austrian Research Promotion Agency (FFG)
- **Belgium (Flanders):** Institute for the Promotion of Innovation by Science and Technology (IWT)
- **Belgium (Wallonia):** Directorate General operational for Economy, Employment and Research (Ministry of the Walloon Region) (DGOEER)
- **Finland:** Finnish Funding Agency for Technology and Innovation (Tekes)
- **France:** French Agency for Innovation (OSEO)
- **Germany:** Federal Ministry of Education and Research (BMBF) • Research Centre Jülich Jülich GmbH (FZJ)
- **Hungary:** The National Office for Research and Technology (NORT)
- **Italy:** Ministry of Economic Development (MSE) • Institute for Industrial Promotion (IPI)
- **The Netherlands:** SenterNovem (agency of the Ministry of Economic Affairs)
- **Spain (Basque Country):** Industry, Trade and Tourism Department (ITT) • The Basque Innovation Agency (Innobasque)
- **Spain (Catalonia):** Centre for Innovation and Business Development (ACC10-CIDEM-COPCA)
- **Spain (Madrid Region):** Institute for the Development of Madrid Region (IMADE)

WEBSITE:
www.eurotransbio.eu

DURATION:

4 years

EC FUNDING:

€ 3.17 million

PROJECT REFERENCE:

GA 235368

DIRECTORATE-GENERAL FOR RESEARCH:

<http://www.cordis.lu/coordination/home.html>



Publications Office



Food,
Agriculture and Fisheries,
and Biotechnology

Knowledge-Based Bio-Economy (KBBE)

ISBN 978-92-79-10449-7



9 789279 104497



© stockphoto

ERA-NET NanoSci-ERA

Coordinating basic nanoscience research*

CONTEXT

NanoSci-ERA is the ERA-Net project devoted to nanoscience, a new discipline that investigates the mechanisms of events that happen at the scale of a nanometre, or one-billionth of a metre.

At this tiny scale, the classical laws of physics 'break down' and the exploration of the nano-world, can lead to new processes in miniaturised manufacturing, information handling and diagnostics – developments known collectively as nanotechnology.

Nanoscience provides the theoretical basis for the development of nano-products and substantial research is necessary however to develop new knowledge and understanding of processes occurring.

The great potential of nanoscience has encouraged many nations to invest heavily in it. While not yet matching the US and Japan, European nations and the European Commission together spend close to a billion euros each year on nanoscience.

But this effort is fragmented. Collaboration between national programmes has so far been very limited to a few specific applications.

The three year NanoSci-ERA programme launched in March 2005 aims to establish closer collaboration and help integrate these separate programmes.

It is recognised that nanotechnology will make a major input to Europe's economic growth in the 21st century.

The NanoSci-ERA programme will put nanoscience on a European footing for the first time, laying a firmer foundation for continuing European prosperity.

ACTION

The fragmentation of nanoscience knowledge and expertise in along national lines Europe is not conducive to meeting today's global scientific challenges.

A prime objective of NanoSci-ERA has thus to bring these communities together on a European scale through effective and durable coordination of the partner and associate organisations.

The first stage has been to set up the actual network between national partners with systematic exchange of information and best practice, creating the basis for open collaboration.

The mapping of available research programmes and capabilities has helped develop an overview of the current state of nanoscience in Europe.

This forms the basis for possible joint transnational research proposals to be developed, to capitalise on joint strengths or fill obvious gaps in knowledge.

Within the European nanoscience community, researchers use very specialised research infrastructures (RI) that are scarce and have limited availability.

One of the tasks of NanoSci-ERA has been to compile an inventory of RI at nanotechnology research centres that are accessible to external users and in particular on nanotechnology research equipment in the EU that is either unique or is renowned for its particular expertise.

In this way, expensive nanotechnology facilities are being made available to researchers from other partner countries for the fabrication of samples or nanoscale measurements and analysis.

* Nanoscience in the European Research Area.



ACHIEVEMENTS

The first Call for transnational collaborative proposals was launched in March 2006 on the theme of 'generating new knowledge on the fabrication, study, control or manipulation of individual nanoscale objects'.

The aim of the Call was to enable scientists working in nanoscience in different European countries to build up effective collaboration on common research projects which are based on ambitious and original ideas at the frontier of knowledge.

Particular encouragement was given to novel, multi-disciplinary, high-risk projects in fundamental research. A further goal of the Call was to encourage new collaborative projects and the support for young scientists.

Twelve projects were funded under this first Call with a total budget of EUR 10 million over three years.

FUTURE PERSPECTIVE

In January 2008 NanoSci-EPlus was launched to manage a second Call for proposals.

Building on the work already undertaken, the primary goal of NanoSci-EPlus is to launch, manage and follow up the second transnational call, this time with top-up funding from the Seventh Framework Programme (FP7).

Under the second Call a minimum of EUR 16 million will be distributed for the funding of high-quality projects, possibly complemented by an additional EUR 8 million (subject to contract with the European Commission).

It is focused on: 'Frontier research projects that address the issue of interfacing functional nano-objects or nano-materials'.

Other ERA-NETs, such as ERAChemistry, MNT (Micro-Nano-Technology) and MATERA (Materials), have nanotechnology elements, and NanoSci-ERA will maintain close contact with them so that mutual benefits can be easily realised. These networks will play their part in ensuring that the opening decades of this century see developments in nanotechnology that match those of recent years in electronics.

COORDINATOR

Prof. Jean-Louis Robert

Centre National de la Recherche Scientifique
Département Maths, Physique, Planète et
Univers (MPPU)
3 rue Michel-Ange
France
Tel.: +33-144965339
Fax: +33-144965320
Email: Jean-louis.robert@cnsr-dir.fr

PARTNERS

- **France:** Agence Nationale de la Recherche (ANR)
- **Austria:** Fonds zur Förderung der Wissenschaftlichen Forschung (Austria)
- **Finland:** Academy of Finland

- **Germany:** Deutsche Forschungsgemeinschaft (DFG)
- **Israel:** Israel Science Foundation (ISF)
- **Italy:** Consiglio Nazionale delle Ricerche (CNR)
- **The Netherlands:** Stichting voor Fundamenteel Onderzoek der Materie (FOM) • Stichting voor de Technische Wetenschappen STW
- **Poland:** National Centre for Research and Development
- **Portugal:** Fundação para a Ciência e a Tecnologia (FCT)
- **Republic of Ireland:** Science Foundation Ireland
- **Slovakia:** Slovak Academy of Sciences (SAS)

- **Spain:** Fundación para el Conocimiento madrid • Ministerio de Educación y Ciencia (Fmid)
- **United Kingdom:** Engineering and Physical Sciences Research Council (EPSRC)

WEBSITE:
www.nanoscience-europe.org

DURATION:

3 years

EC FUNDING:

€ 2.2 million

TOTAL BUDGET:

€ 3.04 million

PROJECT REFERENCE:

CA 16146

DIRECTORATE-GENERAL FOR RESEARCH:

<http://www.cordis.lu/coordination/home.html>



Publications Office



**Food,
Agriculture and Fisheries,
and Biotechnology**

Knowledge-Based Bio-Economy (KBBE)

ISBN 978-92-79-10449-7



9 789279 104497



© Van Paris

ERA-NET ETB PRO

EUROpean programme for TRANS-national R&D&I cooperation between BIOTech SMEs

CONTEXT

Modern biotechnology is an integral part of the EU economy and has an important role to play in developing new products and services in fields as diverse as health, food, the environment and energy. Furthermore, the sector comprises more than 2 100 small and medium-sized enterprises (SMEs) employing over 100 000 people. It underpins the generation of up to 1.69% of the EU gross value added (GVA).

In the global marketplace, European biotech SMEs face a major challenge in achieving a critical market size in terms of research and development, capitalisation, and scientific and managerial excellence.

The ETB PRO project was launched in January 2009 to continue and further develop the work of the 2004-2008 EUROTRANS-BIO programme. Its focus is on providing support for transnational biotechnology research cooperation and in particular close-to-market projects involving small to medium-sized enterprises (SMEs).

It particular it targets areas such as: health applications (diagnostics, pharmacology, therapeutics); agro-food (agriculture, plant genomics and breeding); environment, industrial biotech applications; marine applications.

The ETB PRO consortium represents key actors in this field and a 'critical mass', covering more than 55% of the EU's biotech industry.

ACTION

The overarching objective of the ETB-PRO programme is to reduce the fragmentation of research in the sector and support high quality R&D&I project cooperation between European biotech SMEs. It will build on the successful work of the preceding project and help establish cross-border partnerships between SMEs and accelerate technology transfer. It will aim for increased impact and long term sustainability.

ETB-PRO will broaden the network and include at least five new partners into the current network of European biotech key players. A particular focus will be on the remaining key players and on Central and Eastern European countries. This will increase the opportunities for cooperation, bring together scattered know-how and increase national funding resources.

Four joint calls are foreseen under the 48 month programme. ETB-PRO aims to strengthen the operational efficiency of the program through streamlining procedures and optimising processes. It will also test and implement well-defined and cost-efficient tools and processes. These applications and know-how will be transferred put in place before the launch of sustainable joint programmes.



FUTURE PERSPECTIVE

Under the first EUROTRANS-BIO programme five calls were launched. The strategic objective of these calls has been to enhance the competitive capacity of Europe's biotech industry by supporting research-intensive SMEs and their strategic partnerships.

Under ETB-PRO, a further four calls are planned and these will be undertaken in two stages. The calls represent a funding volume of EUR 35 million each as an implementation tool.

ETB-PRO will fulfil an important role in providing SMEs with a transnational funding instrument which is designed specifically for small consortia and understands the needs of SMEs.

ETB-PRO will actively avoid duplication of efforts through targeted cooperation with other EU programs and position the program through unique combination of features to provide complementarities to other EU funding instruments.

Having already moved forward substantially in operational terms, ETB will now tackle the goals of increasing the impact on ERA and streamlining, reorganising and adapting processes to new needs, in order to establish a sustainable joint program.

COORDINATOR

Christian Listabarth

BMWFI

Federal Ministry of Economics Family and Youth (Austria)

Tel.: +43 5 7755 1701

Email: christian.listabarth@ffg.at

PARTNERS

- **Austria:** Federal Ministry for Economics, Family and Youth (BMWFI) • The Austrian Research Promotion Agency (FFG)
- **Belgium (Region of Flanders):** Institute for the Promotion of Innovation by Science and Technology (IWT)
- **Belgium (Wallonia):** DGOEER – Directorate General operational for Economy, Employment and Research (Ministry of the Walloon Region)

- **Finland:** Finnish Funding Agency for Technology and Innovation (Tekes)
- **France:** French Agency for Innovation (OSEO)
- **Germany:** Federal Ministry of Education and Research (BMBF) • Research Centre Jülich Forschungszentrum Jülich GmbH (FZJ)
- **Hungary:** The National Office for Research and Technology (NORT)
- **Italy:** Ministry of Economic Development (MSE – Ministero dello Sviluppo Economico) • Institute for Industrial Promotion (IPI)
- **The Netherlands:** SenterNovem (agency of the Ministry of Economic Affairs)

- **Spain:** Industry, Trade and Tourism Department (ITT) • Innobasque – The Basque Innovation Agency • Centre d'Innovació i Desenvolupament Empresarial (CIDEM)

WEBSITE:
www.eurotransbio.net

DURATION:

48 months

EC FUNDING:

€ 47.5 million

TOTAL BUDGET:

€ 55.9 million

DIRECTORATE-GENERAL FOR RESEARCH:
<http://www.cordis.lu/coordination/home.html>



Publications Office



Food,
Agriculture and Fisheries,
and Biotechnology

Knowledge-Based Bio-Economy (KBBE)

ISBN 978-92-79-10449-7



9 789279 104497



© Van Parys

ERA-NET EMIDA

Coordination of animal health research*

CONTEXT

The economic cost of animal disease epidemics ranging from foot and mouth, mad cow disease (BSE), avian flu, etc., runs in billions of euros.

Indeed the threat of disease to the livestock industry has increased steadily over past decades as a result of globalisation, evolving pathogens and climate change.

The response to animal disease threats relies heavily on science. Research makes a significant contribution to the development of disease control policy and the practical implementation of policy and other drivers for improving animal health, into practical effect.

The aim of the ERA-NET EMIDA project is to build on and accelerate the work of the EU Standing Committee on Agricultural Research (SCAR) Collaborative Working Group in developing a durable, focused network of national research funders in EU Member States and Associated States to share information, coordinating activities and work towards a common research agenda and mutual research funding activities in the field of animal health.

Launched in April 2008, EMIDA's work includes emerging and major infectious diseases of production animals, including fish and bees and includes those conditions which pose a threat to human health.

It excludes food safety issues relating to the handling of livestock products and wildlife diseases except where they act as reservoirs of infection for humans or production animals.

ACTION

A key part of the EMIDA work programme is the definition of a common strategic research agenda (SRA) to deal with emerging and major infectious livestock diseases at EU-level to be used by Member States in their own strategic research agendas.

To achieve this longer-term strategic requirements have to be identified. This requires that the current state-of-the-art knowledge on future developments of animal disease in Europe and the world is assembled.

This means, for example, that the driving forces and threats related to infectious animal diseases as identified in existing foresight studies must be mapped and validated against current expert knowledge.

The planet is made up of many dynamic ecosystems which influence animal health so this exercise should not be a one time event. It must be repeated with a certain frequency to enable us to adjust research programmes and adapt to the dynamic environment we are living in.

The early work of the EMIDA project has involved the mapping and analysis of existing research and needs.

It is also actively engaged in developing, evaluating and refining instruments through pilots studies. This will form the platform for developing a strategic trans-national animal health research agenda.

* Coordination of European Research on Emerging and Major Infection Diseases of Livestock.



FUTURE PERSPECTIVE

A Foresight & Programming Unit (FPU) has established by EMIDA to bring together a small group of specialists with an interest in the future perspectives of animal diseases.

This highly active, flexible and decisive group has already made considerable progress.

Its approach involved developing a common strategic research agenda comprising three activities:

- identification of topics and review of foresight exercises;
- prioritisation of topics;
- identification of shared priorities and regional preferences.

It will undertake a ten year, multidisciplinary, forward-looking exercise to identify strategic (including infrastructure and expertise) and innovative requirements for animal disease research.

This will help to develop criteria for priority setting and subsequently develop a common strategic research agenda based on shared priorities resulting in jointly funded programmes to be taken forward over the longer term by a sustainable coordination network.

In the long term the FPU will become an operational unit of the SCAR CWG, which will be the sustainable version of the EMIDA ERA-NET.

COORDINATOR

Alex Morrow

Defra
Nobel House
17 Smith Square
UK-London SW1P 3JR
United Kingdom
Email: Alex.morrow@defra.gsi.gov.uk

PARTNERS

- **Austria:** Federal Ministry of Agriculture, Forestry, Environment and Water Management (BMLFUW)
- **Belgium:** Belgian Federal Public Service of Health, Food Chain Safety and Environment • Federal Agency for the Safety of the Food Chain (FASFC) • Veterinary and Agrochemical Research Centre (CODA-CERVA)
- **Cyprus:** Veterinary Services, Ministry of Agriculture (VS)
- **Czech Republic:** Ministry of Agriculture – Research, Education and Consultancy Department (MZE)
- **Denmark:** The Danish Ministry of Food, Agriculture and Fisheries
- **Germany:** Forschungszentrum Jülich, Project Management Jülich (PTJ) • Federal Research Institute for Animal Health • Federal Ministry of Research and Education (BMBF)
- **Finland:** Ministry of Agriculture and Forestry
- **France:** French National Institute for Agricultural Research (INRA)
- **Israel:** Kimron Veterinary Institute (IVSAH)
- **Italy:** Ministry of Agricultural Food and Forestry Policies (MiPAAF) • Ministry of Work, Health and Social Policy
- **Netherlands:** Ministry of Agriculture, Nature and Food Quality (LNV) • Food and Consumer Product Safety Authority (VWA)
- **Ireland:** Department of Agriculture, Fisheries and Food (DAFF)
- **Lithuania:** The Ministry of Agriculture of Lithuania (MAL) • Lithuanian Veterinary Academy
- **Norway:** The Research Council of Norway (Norges Forskningsrad)
- **Spain:** National Institute for Agriculture and Food Research and Technology (INIA)
- **Switzerland:** Swiss Federal Veterinary Office
- **Turkey:** General Directorate of Agricultural Research (TAGEM)
- **Serbia:** Ministry of Agriculture, Forestry and Water Management, Veterinary Directorate
- **Sweden:** The Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning
- **United Kingdom:** DEFRA • Biotechnology and biological sciences research council BBSRC • The Scottish Government

ASSOCIATED PARTNERS

- **Croatia:** Ministry of Agriculture, Forestry and Water Management (MPS)
- **Germany:** Federal Ministry for Food, Agriculture and Consumer Protection (BEMELV)
- **United Kingdom:** Department of Agriculture and Rural Development (DARD) Northern Ireland • The Wellcome Trust

WEBSITE:

www.emida-era.net/

DURATION:

39 months

EC FUNDING:

€ 977 220

PROJECT REFERENCE:

CA 219235

DIRECTORATE-GENERAL FOR RESEARCH:

<http://www.cordis.lu/coordination/home.html>



Publications Office



Food,
Agriculture and Fisheries,
and Biotechnology

Knowledge-Based Bio-Economy (KBBE)

ISBN 978-92-79-10449-7



9 789279 104497



© Shutterstock

ERA-NET WOODWISDOM-NET

Networking and integration of national programmes in the area of wood material science and engineering in forest-based value chains

CONTEXT

Europe's forest-based sector makes a substantial contribution to the European economy generating an annual turnover of more than EUR 400 billion. It accounts for 8% of manufacturing added value in the EU and provides nearly four millions jobs in industry.

The sector produces many forest-based materials and products which are essential for a more sustainable society. It enjoys global technological leadership and is a major player at international level but, to compete in the global market and improve its sustainability, Europe must make better use of this ancient material.

The strategic objective of the WoodWisdom-Net project is to deepen collaboration between European funding organisations and create a critical mass for European research efforts.

Wood material science is central to this task, as researchers try to alter and improve the properties of wood.

The wider use of wood will enable Europe to reduce its environmental impact, replacing non-renewable materials and lowering CO₂ emissions. In addition, wood could provide feedstock for chemicals and bioenergy, while better management of forests would protect ecosystems and improve biodiversity.

ACTION

WoodWisdom-Net sets out to coordinate the use of research funds and to integrate research resources from different countries into a series of joint Calls in the field of wood material science to help promote the competitiveness and sustainability of the European forest cluster.

It was launched in 2004 with 12 partners from five countries and was expanded in 2006 with six new partners from three countries.

The project is a development of the Finnish Forest Cluster Research Programme Wood Wisdom (1998-2001) and the Finnish-Swedish co-funded Wood Material Science Research programme (2003-2006).

The main focus of the WoodWisdom-Net's work has been the benchmarking and dissemination of good practices and the identification of the research areas and instruments needed to improve competitiveness and sustainability of the forest cluster.

The outcome of this has been the development of a series of transnational research programmes which set out to improve competitiveness and sustainability of the forest cluster.



ACHIEVEMENTS

The first Call for projects was made in 2006 and focused on basic research in wood production and properties (four call themes). It also looked at the development of new wood-based products, efficient processes and sustainable forestry (ten call themes).

This resulted in the launch of the first Joint Transnational WoodWisdom-Net Research Programme (2006-2011) comprising 17 consortia projects with a total value of more than EUR 20 million.

The project's main themes are forestry, wood and fibres. These encompass various aspects of the value chain from forestry to wood fibres and represent basic and applied research as well as developmental aspects.

The topics have been selected with a view to promoting long-term sustainable and profitable forestry management and forest production, efficient raw material supply for specific products or demands and end-uses, and new innovative, eco-efficient, cost competitive products, processes and services.

The partners in consortia projects are universities, research centres, companies, (large and SME) and co-funding industrial partners as end users of results.

The share of public national funding is 70%; industrial funding 15%; and research centres own funding is 15%.

FUTURE PERSPECTIVE

The follow-up project WoodWisdom-Net 2 was started in March 2009 with 19 partners from 12 countries.

Its overall objective is to promote the transformation of the European forest-based industry from resource-intensive into a value-added knowledge-intensive, innovative and globally competitive industry.

To achieve this, it aims to expand the funding platform by deepening and broadening the cooperation of the national funding organisations and by inviting partners from additional new countries to join the platform.

The follow-on programme also sets out to promote competitiveness by assisting raw material optimisation in the development of innovative, eco-efficient processes, products and services along different forest-based value chains, thereby promoting the competitiveness of the sector. It will promote the utilisation of cutting-edge knowledge for new applications which are at the cross roads between different technologies and disciplines.

A third Call is planned for 2010 focusing on consortia which combine basic and applied research. It will be broad in scope covering new and innovative production in forest-based value chains and promoting participation of researchers outside EU.

COORDINATOR

Ilmari Absetz

Tekes – Finnish Funding Agency for Technology and Innovation (Tekes)
National Technology Agency
PO Box 69, Kyllikinportti 2
FIN-00101 Helsinki
Finland
Email: ilmari.absetz@tekkes.fi

PARTNERS

- **Austria:** Austrian Research Promotion Agency (FFG)
- **Denmark:** Danish Forest and Nature Agency (DFNA) • Danish Agency for Science, Technology and Innovation (DASTI)
- **Finland:** Ministry of Agriculture and

Forestry (MMM) • Academy of Finland (AKA)

- **France:** Ministry of Agriculture, General Direction for Forest and Rural Affairs (DGFAR) • Institut Technologique (FCBA) • National Institute of Agronomical Research (INRA)
- **Germany:** Federal Ministry of Education and Research (BMBF) • Project Management Jülich (PTJ)
- **Norway:** The Research Council of Norway (RCN) • Innovation Norway (INNVANOR)
- **Sweden:** The Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning (Formas) • Swedish Governmental Agency for Innovation Systems (VINNOVA)

- **United Kingdom:** Forestry Commission (FC) • Scottish Enterprise Dumfries and Galloway (SEDG)
- **Nordic Forest Research Co-operation**

WEBSITE:

<http://www.woodwisdom.net>

DURATION:

4 years

EC FUNDING:

€ 2.2 million

PROJECT REFERENCE:

CA 510206-WOODWISDOM-NET

DIRECTORATE-GENERAL FOR RESEARCH:

<http://www.cordis.lu/coordination/home.html>



Publications Office



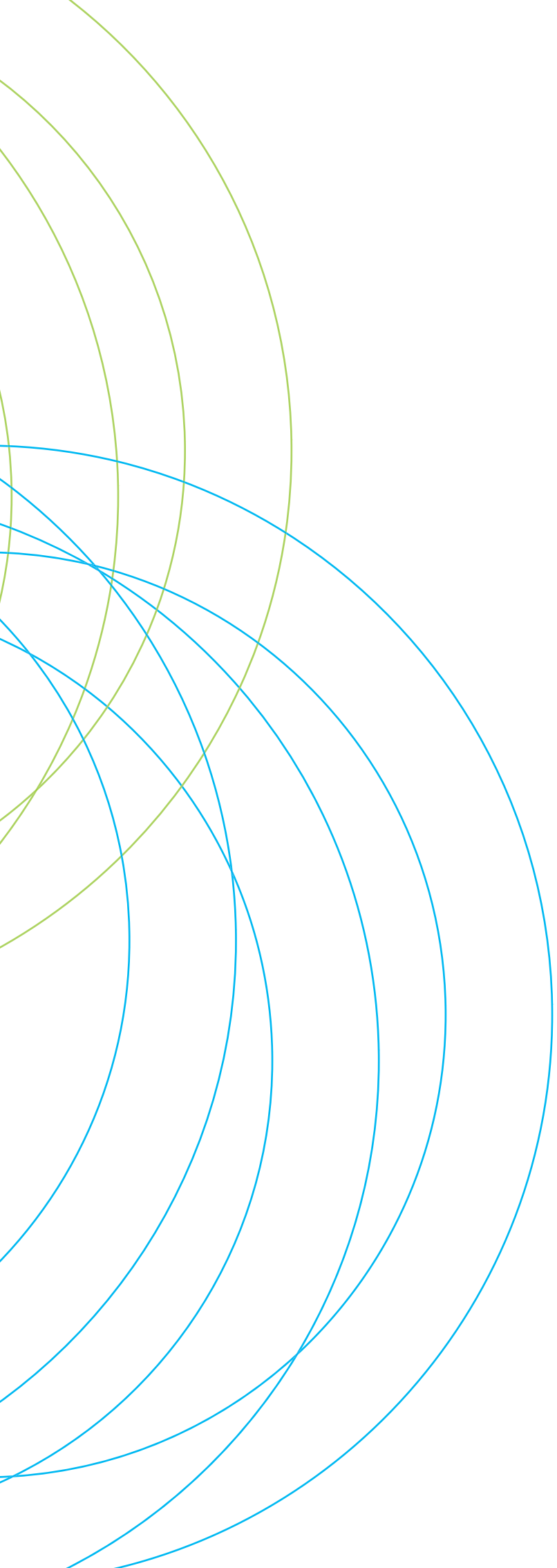
**Food,
Agriculture and Fisheries,
and Biotechnology**

Knowledge-Based Bio-Economy (KBBE)

ISBN 978-92-79-10449-7



9 789279 104497



Food, Agriculture and Fisheries, and Biotechnology

Knowledge - Based Bio - Economy (K B B E)

Food, Agriculture and Fisheries, and Biotechnology (FAFB) is the second theme of the Seventh Research Framework Programme (FP7). Between 2007 and 2013, FAFB will implement initiatives to advance the Knowledge-Based Bio-Economy (KBBE).

FAFB is structured around three major activities.

- **Activity 2.1:** sustainable production and management of biological resources from land, forest and aquatic environments.
- **Activity 2.2:** fork to farm, food (including seafood), health and well-being.
- **Activity 2.3:** life sciences, biotechnology and biochemistry for sustainable non-food products and processes.

FAFB is implemented through three funding schemes.

- **Collaborative Projects:** support for research projects carried out by consortia with participants from different countries, aimed at developing new knowledge, new technology, products, demonstration activities or common resources for research.
- **Networks of Excellence:** support for a joint program of activities implemented by a number of research organisations, integrating their activities in a given field, and carried out by research teams in the framework of longer-term cooperation.
- **Coordination and Support Actions:** support for activities aimed at coordinating or supporting research activities and policies, such as networking, exchanges, transnational access to research infrastructures, studies, and conferences.

More information on FAFB and KBBE is available at
www.cordis.europa.eu/fp7/kbbe/home_en.html



Publications Office



ISBN 978-92-79-10449-7



9 789279 104497