

RESEARCH IN ORGANIC PRODUCTION IN FP 7: RULES and POSSIBILITIES.

1. PROGRAMMES AND THEMES:

There are 4 programmes, COOPERATION, CAPACITIES, IDEAS and PEOPLE

http://cordis.europa.eu/fp7/home_en.html, of which **COOPERATION** is the largest and most important.

Of the 10 themes under the programme “COOPERATION” the most important for organic research are:

- **FOOD, AGRICULTURE and FISHERIES: CALL 1: FP7-KBBE-2007-1**
http://cordis.europa.eu/fp7/dc/index.cfm?fuseaction=UserSite.CooperationDetailsCallPage&call_id=16
- **ENVIRONMENT** (including climate change) : CALL 1: [FP7-ENV-2007-1](http://cordis.europa.eu/fp7/dc/index.cfm?fuseaction=UserSite.CooperationCallsPage&id_activity=6)
http://cordis.europa.eu/fp7/dc/index.cfm?fuseaction=UserSite.CooperationCallsPage&id_activity=6
- **ENERGY** : CALL 1: [FP7-ENERGY-2007-1-RTD](http://cordis.europa.eu/fp7/dc/index.cfm?fuseaction=UserSite.CooperationCallsPage&id_activity=5) (longer term projects) and [FP7-ENERGY-2007-2-TREN](http://cordis.europa.eu/fp7/dc/index.cfm?fuseaction=UserSite.CooperationCallsPage&id_activity=5) (shorter term projects, particularly demonstration projects).
http://cordis.europa.eu/fp7/dc/index.cfm?fuseaction=UserSite.CooperationCallsPage&id_activity=5
- Information and communication technologies
- Health

Besides that there may be some themes of relevance under the programme, “CAPACITIES”:

- Research Infrastructures,
- Research for the benefit of SMEs
- Regions of Knowledge
- Research Potential of Convergence Regions,
- Science in society
- Support to the coherent development of research policies
- International cooperation (INCO)

And some themes under the programme, “PEOPLE”:

- Marie Curie Initial Training Networks
- Marie Curie Awards
- European Reintegration Grants
- International Reintegration Grants
- Researchers' night

Links to most of the above mentioned themes may be found in Annex 1 on pg.

2. PROJECT TYPES, RESOURCES, DURATION and REQUIREMENTS under “COOPERATION” and “CAPACITIES”:

Under COOPERATION there are the following project types:

- Small collaborative projects (SCP): Max 3 mill. € from the Commission (24- 36 months)
- Large collaborative projects (LCP): 3 to 6 mill. € from the Commission (48-60 months)
- Networks of Excellence (NoE): Between 3 and 6 mill. € from the Commission (48-60 months)
- Coordination and Support Actions (CSA): Max 1 mill. € from the Commission

NB! The limits for the EU contribution mentioned above is for the Food, Agriculture and Fisheries theme. They may be different for other themes, so the specific Call text, Work Programme and Guide for Applicants should always be consulted!!

NB! NB! Projects with a budget over the limits mentioned in the particular call will not be considered eligible for funding.

For SCP, LCP, NoE and CA (Coordination Actions) the minimum requirement is at least 3 (normally), which are independent of each other and established in different EU Member States or Associated Countries.

For SA (Support Actions) the minimum requirement is at least one legal entity.

Large Collaborative Projects and Networks of Excellence are evaluated in a 2 step procedure (see pg 65 of Work Programme 2007 theme 2 Food, Agriculture and Fisheries, and Biotechnology). This may be different for other themes.

3. COST MODELS and EC CONTRIBUTION:

The AC (Additional Cost model) used by Universities does not exist any longer.
There are 2 Cost models:

- **FULL COST:** To be used by all legal entities, which have an analytical accounting system making it possible to calculate the real indirect costs. The indirect costs shall be calculated in accordance with the usual accounting and management principles and practices and it shall be based on actual costs.
- **FULL COST FLAT RATE:** To be used by non-profit public bodies, (e.g. universities), secondary and higher education establishments, research organisations and SMEs, which are unable to identify their real indirect costs for the project. They may use a flat rate overhead of 60 % of their direct eligible costs except subcontracting and resources made available by third parties until 31.12.2009. From 01.01.2010 the flat rate will be reduced to 40 %.
- **FULL COST FLAT RATE OF 20 %:**
A private company or institution not fulfilling the above mentioned requirements for the full cost flat rate of 60 % model may opt for a flat rate for 20 % of its total direct eligible costs excluding subcontracting and resources from third parties.

4. ACTIVITIES and REIMBURSEMENT RATES:

- **RTD activities:** 50 % (private companies)
75 % (non-profit public bodies, research organisations and SMEs)
- **Demonstration Activities:** 50 % (private and public institutions)
- **Management Activities:** 100 % (up to 7 % of the total eligible project costs)
- **Other Activities:** 100%
- **NoE:** Lump sum: 23500 € per researcher per year.

5. RELEVANT TOPICS IN CALL 1 FOR THEME 2: “FOOD, AGRICULTURE AND FISHERIES”:

Please consult original text in the Work Programmes, as there may be references to other themes or cross cutting issues for some project proposals!

“REAL ORGANIC PROJECTS”

KBBE-2007-1-3-07: Improving animal health, product quality and performance of organic and low-input livestock systems through integration of breeding and innovative management techniques Call: FP7-KBBE-2007-1

In this project, different breeding concepts will be analysed for their success in achieving specific breeding aims (health condition, tolerance to stress, product quality, etc) needed for organic and low-input rearing of livestock. Prioritising farm-level research, indicators will be developed and tested in different breeding programmes, integrating management and feeding practices in different macro-climatic regions including ICPC (see Annex 1 of the Work Programme), with the purpose to produce high quality and differentiated food products. Multicriteria evaluation of systems shall be considered through experimental/model approaches and integrating innovative management techniques.. Thus, the project will assist in reducing the gap between the genetic potential of livestock and their site- and environment-specific performance. The work may address cattle, pig, small ruminant and/or poultry production systems, which, in addition to food production, may also be desirable for tourism, rural development and landscape management.

Funding scheme: Large collaborative project

Expected impact: The project will stimulate organic and "low-input" livestock production by enabling logical, regionally-adapted breeding strategies to be developed that are compatible with sustainable production, high product quality and organic principles.

KBBE-2007-1-4-03: The farm of tomorrow Call: FP7-KBBE-2007-1

The “farm of tomorrow” will take account of Europe’s ecological and cultural diversity, will be non-uniform, will be built on technological, social and economic innovations and a variety of research outputs. The specific main issues facing the farm of tomorrow are: New models of farm material flow management, based on on-farm or local integration of environmentally friendly closed-cycle processing facilities (energy, food/non-food raw materials, bio-refining). Energy efficient cultivation with light machinery (avoiding soil compaction), precision farming, and robotics are important components, considering special requirements for high value markets, such as organic agriculture/livestock production. Integrated technologies and ICT tools are needed to make cost efficient compliance with standards (public and private) an integral part of farm operations, including the whole chain of suppliers and services by sharing good practices. The multifunctional European farming model delivering public goods (environment, landscape, social functions) in an efficient way needs research support to integrate, assess and quantify these services and linkage (e.g. rural tourism) to the rural economy. Overall trends of the European societies have to be considered and new models of relationships with consumers and citizens.

Funding scheme: Small collaborative project

Expected impact: The project will increase competitiveness of farming in less protected markets, will increase viability of rural areas and improve competitiveness of the European farm machinery industry. It will substantiate perspectives of farming in providing public goods and services.

KBBE-2007-1-4-07: Costs of different standard setting and certification systems for organic food and farming Call: FP7-KBBE-2007-1

Research should analyse the costs, and thus the effectiveness, of different standard setting procedures and certification systems as a basis for optimisation of the current EU certification system (Reg. EEC 2092/91). The task is to quantify for selected products all relevant expenditure and transaction cost for certification along the entire supply chain for the actors involved: farm, processing, wholesaling, retail

and import level as well as the administration level and recognition of the various standards, logos and trademarks by consumers in various regions of the EU. The project should conclude in recommendations to increase the effectiveness and the efficiency of organic certification for the EU Commission, national competent authorities and private actors in organic food and farming.

Funding scheme: Small collaborative project

Expected impact: Efficient certification systems for organic farming with lower costs, contribute to better regulation and will increase the competitiveness of the European organic farming sector.

PROJECTS WHERE “ORGANIC RESEARCH” MAY BE OF SOME INTEREST

KBBE-2007-1-2-01: Annual Food crops with improved tolerance to multiple abiotic stresses Call: FP7-KBBE-2007-1

This project will support the development of “climate proof” food crops that better utilise **agricultural areas affected by erratic rainfalls, drought and other associated stresses in the Mediterranean region**. The long-term aim will be the stabilisation of yield capacity in cultivars adapted to combinations of abiotic stresses. The work should be underpinned by a holistic approach integrating research on agricultural systems, husbandry practices including the use of bio-fertilisers and plant breeding technologies, and should also address socio-economic aspects, in order to ensure sustainability and field applicability of results in different pedo-climatic conditions encountered in the Mediterranean region.

Funding scheme: Small collaborative project

Additional information: - SICA- Specific International Cooperation Action: The project is expected to contribute to the EU neighbourhood policy and other EU-MED initiatives and dialogues such as co-operation with countries signatories of S&T agreements with the EU (e.g. Egypt, Morocco and Tunisia). Minimum Number of Participants: 2 from different MS or AC and 2 from different Mediterranean ICPC.

Expected impact: The project will allow improved productivity and sustainable exploitation of agricultural lands in the Mediterranean region, thus supporting economic development in non-European Mediterranean countries while ensuring mutual interest and mutual benefit with the EU. It will also help adaptation of agricultural practices to future needs and constraints.

KBBE-2007-1-2-04: Reducing the need for external inputs in high-value protected horticultural and ornamental crops Call: FP7-KBBE-2007-1

This project will improve the efficient use of inputs (plant protection products, nutrients and water, CO₂ and energy) in high-value horticultural crops - including small fruits – and/or ornamentals crops grown in soil-less and closed-cycle cultivation systems. The project will integrate research on novel cultivation techniques and equipment with the development of “real-time” monitoring tools, and will include the application of advanced technologies, such as bioscience-based technologies, computer sciences, ICT, non-invasive sensory electronics, novel greenhouse building concepts, etc., to optimise the use of inputs, reduce running costs and produce high-quality and safer vegetables and ornamentals.

Funding scheme: Small collaborative project

Expected impact: The project will increase market competitiveness of the European protected horticultural and/or ornamental sector by reducing the running costs of systems/infrastructures and optimising the use and recycling of both the growth media and the external inputs.

KBBE-2007-1-2-08: Reduction of N excretion in ruminants Call: FP7-KBBE-2007-1

Research on fundamental aspects of nitrogen metabolism is needed to reduce nitrogen excretion from dairy farming. The objective is to obtain knowledge of the complex interactions between ruminal, microbial and intermediary metabolism and to develop new strategies for feeding and managing high yielding dairy cows to reduce nitrogen loss. The research will address the following tasks: development of rapid tools for measuring protein degradability and microbial synthesis, calibration of *in vivo* and *ex vivo* methods on the base of animal experiments; investigation of N metabolism in the rumen, understanding of amino-acid absorption in the intestine and metabolism of absorbed amino-acids and

their conversion to milk; harmonisation of protein evaluation systems in Europe; and development of reliable tools to assess N adequacy on animal and farm level.

Funding scheme: Large collaborative project

Expected impact: The project will help develop sustainable ruminant farming systems. By improving the knowledge on nitrogen metabolism in ruminants, the project will also contribute to the achievement of EU policy objectives in support of the implementation of the Nitrates Directive and the thematic strategy on air pollution (reduction of ammonia emissions).

KBBE-2007-1-2-12: Consolidate alliances with third countries in the field of aquaculture Call: FP7-KBBE-2007-1

The objective of the project is to set up a network of aquaculture research with third countries, with the aim to promote coordination of research and facilitate the emergence of joint research programmes in the concerned regions. The project should also develop a multi-stakeholder platform for dialogue, disseminate knowledge up to final users and should establish needs for further research in order to maintain the basis for a sustainable aquaculture development in the concerned regions.

Funding scheme: Coordination and support action aiming at coordinating research activities

Additional information: SICA (Specific International Cooperation Actions) - Minimum Number of Participants : 3 from different MS or AC and 3 from different ICPC. (International Cooperation Partner Countries according to Annex 1 of the Work Programme)

Expected impact: Ensure a sustainable development of aquaculture in the concerned regions while increasing links with EU partners.

KBBE-2007-1-2-15: Reducing the utilisation of mineral fertilisers by improving the efficiency of nutrient use in European crops Call: FP7-KBBE-2007-2A

Using genomics and metabolic tools, this project will further our understanding of the molecular genetic basis of nutrient use efficiency in crop plants. It will study the impact of environmental factors on nutrient use efficiency and identify genetic variation that affects such efficiency. It will design genetic markers for marker assisted breeding of cultivars with improved nutrient use, and explore alternative strategies for improvement of nutrient use efficiency, including those based on genetic engineering. The project will also develop monitoring tools and adapt agricultural practices to reduce the need for fertiliser in plant production systems and will construct models of nutrient uptake and acquisition, storage and utilisation of fertilisers by crops. Inclusion of ICPC partners, particularly from developing countries, is encouraged.

Funding scheme: Large collaborative project

Expected impact: The project will reduce the environmental impact of crop production, leading to more efficient and sustainable farming.

KBBE-2007-1-3-01: Breeding tools for improved livestock products

Call: FP7-KBBE-2007-1

The project will develop new, practical technologies to measure product quality and animal robustness and tools to measure the consequences of breeding for specific traits on other characteristics (e.g. robustness on product quality and vice versa). It will include statistical methodologies that can cope with a complex biological background. Genetic tools, based on genomic information, promise to improve selection for specific traits. However, this development is slow partially as a result of lack of data and partially as a result of lack of tools for processing data. In addition, the interaction of prioritised traits (such as added value of products) with those affecting the animal themselves (robustness) means that selection can rarely be aimed at a single characteristic.

Funding scheme: Small collaborative project

Expected impact: The project will support the competitiveness of the livestock breeding and production industries within the context of sustainable production and European policy on animal welfare.

KBBE-2007-1-4-04: GMO cost-effective and crop-specific co-existence measures

Call: FP7-KBBE-2007-1

Development of feasible and cost-effective coexistence measures remain a key issue for the application of biotechnology in EU agriculture. This project will research into best practice for crop-specific technical segregation measures in crop and seed production including measures for the co-existence between non food/feed GM crops and non GM crops. The project should also assess the economic cost of the proposed measures and should take into account, and when appropriate establish interactions with, ongoing research projects. Furthermore it should develop a comprehensive information system which will make existing research results available to the Member States and other stakeholders.

Funding scheme: Small collaborative project

Expected impact: The project will support the coherent development and implementation of guidelines for crop specific measures.

KBBE-2007-1-4-11: Assessing the impact of Rural Development policies (including Leader) Call: FP7-KBBE-2007-1

This project will assess the economic, social and environmental impact of rural development programmes currently adopted for the period 2007 to 2013. The work will focus on the EU priorities defined in the Strategic Guidelines for rural development. These include the competitiveness of the agricultural and forestry sectors, knowledge transfer and innovation, biodiversity and preservation of high nature value farming and forestry systems, water, and climate change, the creation of employment opportunities in the fields of diversification and quality of life, improving governance and mobilising the endogenous development potential of rural areas. The research will focus on the key areas of expenditure and will be grounded in the approach defined by the Common Monitoring and Evaluation Framework established in the rural development regulation.

Funding scheme: Small collaborative project

Expected impact: The project results will help understand the contribution of rural development programmes to EU priorities and feed into the development of the next generation of rural development policies, leading to more effective targeting of measures and use of resources.

KBBE-2007-1-4-12: Policy and institutional aspects of sustainable agriculture, forestry and rural development in the Mediterranean partner countries Call: FP7-KBBE-2007-1

This project will provide research on the impact of (EU and national) agricultural, rural and environmental policies; impact of agri-food trade liberalisation on the Mediterranean partner countries: studies on structural changes, impact on rural populations, including employment, poverty, income distribution and possible migration trends; commercial relations with major trade partners such as the EU; increasing competition on the export market with emerging economies; impact of consumers' changing demands, prospects for quality products; impact of norms and standards on trade; institutional and traditional management of access to resources (land, water, etc.) .

Funding scheme: Small collaborative project

Expected impact: The project results will support the trade negotiations by assessing the impact on Mediterranean partner countries.

KBBE-2007-1-4-14: Cost of production using FADN data Call: FP7-KBBE-2007-1

The project aims to define and to develop one (or more) economic model(s) for estimating the cost of production of various types of agricultural products using the FADN data. As a first step, a methodology concerning the development of the model(s), the evaluation of the accuracy of the results provided by the model(s) and the estimation of the error(s) per model should be developed. In the next step and on the basis of the outcome of the first part of the project one or more models should be developed, validated and tested covering at least 3 types of products (do be defined during the first phase, once the methodology is developed). Finally a mechanism/methodology for maintaining and updating the model(s) should be described and applied and tested at least for one type of product (to be defined during the initial phase). The model(s) will be used for evaluating the impact of the various agricultural measures on agricultural income and business using FADN data.

Funding scheme: Small collaborative project

Expected impact: The project results will allow the accuracy of the impact assessment of CAP measures to be improved.

KBBE-2007-1-4-15: Assessing the socio-economic consequences and costs benefits of measures promoting good animal welfare Call: FP7-KBBE-2007-1

This project will assess the benefits and costs to society, the livestock industry, and to the animal, of measures aimed at promoting animal welfare. It will include analysis of welfare standards in the EU and in third countries, evaluation of methods used for documentation of animal welfare and behaviour and implications on international trade and competitiveness. Typically, European consumers demand high levels of animal welfare in livestock production. Regulation to improve animal welfare, however, raises fears of unfair competition for imported livestock products. Despite this, some high welfare standards may not imply significant additional costs, and some may result in added value and increased economic benefits.

Funding scheme: Coordination and support action aiming at supporting the KBBE

Expected impact: The project will support the development of European policy on animal welfare and, in particular, the implementation of the Community Action Plan on the Protection and Welfare of Animals 2006-2010

KBBE-2007-1-4-16: Establishment of an information platform on the protection and welfare of animals Call: FP7-KBBE-2007-1

This project will develop a forum for the interchange of information on animal welfare research by different stakeholders. It will identify best practices, disseminate information on such practices and develop information tools and communication strategies in the animal welfare field. It will identify areas within current and proposed animal welfare legislation where more knowledge is needed and will help identify and prioritise needs for animal welfare research of interest to Europe.

Funding scheme: Coordination and support action aiming at supporting the KBBE

Expected impact: The project will support the development of European policy on animal welfare and, in particular, the implementation of the Community Action Plan on the Protection and Welfare of Animals 2006-2010

KBBE-2007-1-4-18: External costs of pesticides Call: FP7-KBBE-2007-1

Internalisation of external costs of pesticides is an option considered by some Member States as a valid policy action to reduce their use and limit their negative impacts on humans and on the environment. Research is needed to assess the feasibility and benefits of such an approach. The project should; (i) identify true external costs of pesticides, taking into account the direct impact on the operators and indirect impact on bystanders, residents, consumers and the environment; (ii) develop options/criteria for an effective and realistic system of taxes/levies on pesticides; (iii) study the potential support of incentives to implement the substitution principle to pesticides (preferred use of plant protection products with lower risks to human health and the environment) and; (iv) study the possible implementation and feasibility of such a system.

Funding scheme: Small collaborative project

Expected impact: The project will contribute to the further development of market-based instruments to support the development and implementation of the Sustainable Use of Pesticides thematic strategy. In the preparation of the strategy, following detailed research and taking into due account the specificities of both pesticides' supply and demand, the Commission finally considered that knowledge and instruments were not yet ripe to allow taxation to be part of the TS - this research should contribute to fill this knowledge gap.

KBBE-2007-2-1-01: Networking of food consumer science in Europe and development and application of social and behavioural sciences to food research Call: FP7-KBBE-2007-1

The food consumer is critical to the food and agriculture industries in shaping demand and, particularly in this context, responding to new products (e.g. functional foods) and production methodologies (e.g. GMO safety). However, food consumer science is currently a rather poorly defined field involving a broad range of scientific disciplines. There is therefore a need to develop new knowledge and new working methods in this field. The network should involve the most important disciplines and promote

new knowledge through strengthening consumer science in Europe. Objectives of this topic will be the development of a critical mass (scientists, scientific disciplines, facilities, etc.), facilitation and promotion of data exchange, joint activities (protocols, metrics, collaborative studies, etc.) and comparability of research actions in the field of consumer science in food.

Funding scheme: Network of Excellence

Expected impact: New knowledge and harmonised working methods in this field; Increased comprehension of societal problems through the development of a critical mass in food consumer science; strategies to involve relevant communities, stakeholders, practitioners in the making and/or diffusion of research; better targeted public policies that address consumer needs, in particular the policies of the Health and Consumer Protection Directorate General in the fields of health, nutrition and food safety (e.g. obesity, nutritional claims, supplementation, new food technologies).

KBBE-2007-2-2-01: Effect of diet on the mental performance of children Call: FP7-KBBE-2007-1

Research needs to be conducted to improve the knowledge of the effect of diet on mental performance. The objective is to study the role, the mechanisms and the risks and benefits of specific nutrients and food components to respond to specific needs and improve the mental performance of children. The research will include areas such as quantification of the nutrient effects of early programming on later cognitive and mental disorders, effects of food on mental state and performance such as mood, activation, attention, sleep, motivation, effort, perception, memory and intelligence and effects of food on mental illness (depression, anxiety, stress, etc.).

Funding scheme: Large collaborative project

Expected impact: To increase knowledge of nutrient effects in mental performance, to stimulate technological innovation and improve research methodology in this area, to provide sound scientific data to substantiate health and nutrition claims and to develop harmonised dietary recommendations for specific population groups. To enhance the cooperation and dialogue between different scientific disciplines (nutrition, food science, paediatrics, neuro-sciences, etc.). To increase the excellence and innovation potentials of the European nutrition research communities by means of stronger links to cognitive- and neuro-sciences.

KBBE-2007-2-4-04: Innovative and safe packaging Call: FP7-KBBE-2007-1

The aim is to support the development and safety assessment of modern packaging solutions (active, intelligent, recyclable, easy-to-use, organic, antibacterial, etc.) that will improve food quality by increasing shelf life, provide additional information to the consumers such as indication of food spoilage, and will be easy to use, re-use, and recycle. The project should develop biosafety assessment and assess the risk versus the benefit of the use of recycled materials. Key aspects include: i) safety assessment of non-intentionally added substances coming from raw material or formed during processing, ii) the use of novel technologies such as active packaging and nanotechnologies iii) chemical characterisation and toxicological profile of complex mixtures migrating from food contact materials.

Funding scheme: Small collaborative project

Expected impact: Novel food packaging technologies and novel tools for risk-benefit assessment of these technologies, including the potential use of recycled materials. Results would provide a basis for a risk management tool and address policy needs in the area of food contact materials (European Commission Health and Consumer Protection Directorate General).

KBBE-2007-2-5-04: Sustainability of the food chain Call: FP7-KBBE-2007-2A

Research using life cycle assessment in combination with other tools for 'system analysis', should establish to what extent food chains differ with respect to their sustainability. Parameters affecting the sustainability at the global level of food supply systems will be identified and will enable the development of pilot models to be used for identification of more sustainable production systems, taking into account also the issues of fair and ethical trade. Secondly, technological and management solutions to increase sustainability may be developed for the identified 'hot spots' within production, processing, packaging

and transportation, from a food chain perspective. Thirdly, research will develop methods for increasing the transparency of sustainability attributes with the aim of enhancing consumer trust and facilitating food choice. Participation of third countries, especially of ICPC developing country partners, is encouraged. **Funding scheme:** Large collaborative project

Expected impact: Systems analysis of the food supply systems will provide data required to improve the sustainability of food chains. Technologies to be developed to aid implementation of sustainability strategies. Help will be provided to the consumer in choosing sustainably produced foodstuffs.

KBBE-2007-2-5-05: Reducing mycotoxin contamination in the food and feed chain

Call: FP7-KBBE-2007-2A

The research should focus on reducing the mycotoxin contamination of the food and feed chain by novel methodologies, improved handling procedures and information and education strategies. The project will involve relevant International Cooperation Partner Countries. Research on the effect of food processing technologies, further processing, preservation methods on mycotoxin levels in food and feeds will also be carried out. The principle of mutual interest and shared benefits will underpin this international cooperation with Third Countries.

Funding scheme: Large collaborative project

Additional information: Specific International Cooperation Action (SICA) – Minimum Number of Participants: 3 from different MS or AC and 3 from different ICPC

Expected impact: The project should a) develop novel methodologies and improved handling procedures, b) generate and disseminate information and education strategies for reducing the risk for human mycotoxicoses c) enhance cooperation between researchers in Europe and in other geographic regions

KBBE-2007-3-1-07: FUTURE CROPS - Technical, socio-economic, environmental and regulatory aspects of future non-food crop systems

Call: FP7-KBBE-2007-1

The project will analyse parameters that can contribute to establishing non-food crop system alongside food crop systems. This could include land allocation of non-food areas, ways to ensure parallel cultivation with food crops and the safety of the food chain. Parameters can be technical (choice of crop, rotation, yield, raw material characters, distance field/plant etc.), socio-economic (public acceptance, rural development, impacts on market prices etc.), environmental (sustainability criteria, impacts on soil and water resources) and regulatory (co-existence; safety measures when using crops for both food and non-food uses). The research should help the EU to be competitive in developing its bioeconomy and should involve all players along the chain, taking into account ongoing activities world-wide.

Funding scheme: Coordination and support action aimed at coordinating research activities

Expected impact: Research should provide answers as to whether a competitive bio-economy is a viable option for Europe.

KBBE-2007-3-1-08: BIOMASS SUPPLY AND IMPACT – Identification of optimal terrestrial and aquatic biomass and waste for Bioproducts

Call: FP7-KBBE-2007-1

In the context of the anticipated expansion of the farming area designated to biomass and biofuel production, there is a need to quantify the potential, and identify the best sources, of European biological feedstocks for industry, while at the same time evaluating the sustainability of biomass and biofuel production with respect to their availability, production, supply cost and environmental impacts. Furthermore, an overview on the present status of research is needed, as are tools for assessing the suitability of different types of land for different types of biomass/biofuels production. Identification of the optimum Life Cycle Assessment and economic and environmental impact schemes must be included in the study.

Funding scheme: Coordination and support action aimed at coordinating research activities

Expected impact: EU sanctioned guidelines for farmers and policy makers as to the best biomass sources to cultivate according to region, climate, policy, life cycle assessment, processing, access, etc. Optimised use of industrial and agricultural waste as resources for added value products contribute to more sustainable industrial production and better resource uses.

INDICATIVE “ORGANIC” TOPICS OF THE 2008 WORK PROGRAMME:

- Area 2.1.2: Improved indicators of the relationship between organic/low-input farming and biodiversity
- Area 2.1.4: Societal benefits of Organic Farming
- Area 2.2.3: Sustainable processing, water and energy savings.

6. RELEVANT TOPICS IN CALL 1 FOR THEME 5: “ENERGY”:

ENERGY.2007.3.6.1: Demonstration of liquid and gaseous biofuels use in transport/ vehicles

Content/scope: Medium scale fleets demonstration of pure biofuels, high blends (also with regard to engine behaviour) and to the introduction of new technologies such as the combination of electric hybrid technologies are intended. Biofuels derived from innovative production processes and innovative ways of use will be considered more valuable.

Funding scheme: Collaborative project, with a predominant demonstration component.

Expected impacts: 1) To widen the range of biofuel use for vehicles 2) Contribution to a more sustainable, less fossil depending fuel distribution for the transport sector. 3) To facilitate the introduction of new car biofuel technologies.

Other information:

Open in call: FP7-ENERGY-2007-2-TREN

7. RELEVANT TOPICS IN CALL 1 FOR THEME 6: “ENVIRONMENT (including climate change)”:

ENV.2007.1.1.6.3. Impacts and feed-backs of climate policies on land use and ecosystems in Europe.

Research should assess the impacts of climate (and other sectoral) policies on land use and ecosystems and the resulting feed-back on the climate system. Regional climate models should be coupled with land use models to improve the representation of explicit biophysical and economic mitigation and adaptation strategies in agriculture and forestry. Improved methodologies should include explicit crop/trees growth models that have sufficient, sub-national spatial detail to estimate the responses and adaptation possibilities of crops and trees to both scenarios of extreme climate events and changes in weather patterns. Models should include scenarios for the distribution and pressures from socio-economic drivers with sufficient geographical details. Impacts of climate mitigation measures need to be covered with sufficient details on bioenergy sources and pathways. Research should help in assessing and evaluate the impacts of alternative policy scenarios and estimating the associated costs and benefits of the policies. **(Policy relevant topic)**

Funding scheme: collaborative projects (small or medium-scale focused research projects)

Expected impact: *Assessment of the efficiency of current and future land use adaptation and mitigation processes, including carbon sinks and biomass/-fuel production. Identification of the adaptation induced by policies, in particular by the Common Agricultural Policy, Rural development Strategy, EU Forestry Strategy and Forest Action Plan, and in general EU policies on climate change.*

ENV.2007.2.1.4.2. Use of natural resources: the impact on biodiversity, ecosystem goods and services

Improve understanding of how the use of and trade in natural resources at European and international levels affects biodiversity (marine, inland waters and terrestrial), ecosystem goods and services and the resilience and resistance of ecological-economic systems, and develop or improve methods to measure and value biodiversity and ecosystem resilience and detect when ecosystems are approaching the limits

of their natural functioning or productive capacity. Establish and improve mechanisms and methods to determine the sustainability of various intensities of use of components of biodiversity and of ecosystems. This topic complements the preceding one. It relates to competitiveness, which depends on the state of biodiversity and ecosystem. Results will be shared effectively with citizens and other societal actors in ways that facilitate general understanding and impact on social, economic and environmental planning and decision making. Participation of International Cooperation Partner Countries (ICPC) is encouraged.

Funding scheme: collaborative projects (small or medium-scale focused research projects)

Expected impact: *Assessment of the impact of the use and abuse of natural resources on biodiversity, the ways in which systems (ecosystem services) may respond and how resource use could be made more ecologically sustainable. The results should allow governmental and non-governmental actors to discuss and develop viable policy options and should support their implementation. Results will have to be communicated effectively to citizens and other societal actors in Europe and in other parts of the world in ways that facilitate general understanding and impact on social, economic and environmental planning and decision making.*

ENV.2007.2.1.4.3. Biodiversity values, sustainable use and livelihoods

Increase knowledge of the cultural, social, spiritual, economic and other values of biodiversity. Improve understanding of public beliefs, perceptions, attitudes and preferences regarding biodiversity and the drivers of biodiversity change, and how they influence human behaviour and public policy. Improve and assess value-based strategies to promote sustainable livelihoods and lifestyles, and to reduce the vulnerability of livelihoods, while conserving and husbanding biodiversity and securing income to rural marginal areas. Improve understanding of and capacity to deal with conflict over the multifunctional uses and preservation of ecosystems and components of biological diversity, and contribute to the development of policy instruments and tools for conflict reconciliation. Understanding the link between loss of biological and cultural diversity at global and local levels. **(Specific International co-operation action)**

Funding scheme: collaborative projects (small or medium-scale focused research projects)

Expected impact: *Constructive engagement with a broad selection of social groups and their governmental and non-governmental representatives in order to enable serious consideration and uptake of information generated from this work to improve their capacity to design policies that take into account the true social (economic and non-economic) value of biodiversity.*

Annex 1: LINKS TO THE MOST IMPORTANT THEMES:

- **COOPERATION** (32413 mill. €) - most important programme - containing among others the research themes:
 - **Food, Agriculture and Fisheries**, http://cordis.europa.eu/fp7/cooperation/food_en.html
 - **Environment (including Climate change)**, http://cordis.europa.eu/fp7/cooperation/energy_en.html
 - **Energy**, http://cordis.europa.eu/fp7/cooperation/energy_en.html
 - **Information and communication technologies**, http://cordis.europa.eu/fp7/cooperation/ict_en.html
 - **Health** http://cordis.europa.eu/fp7/cooperation/health_en.html
- **CAPACITIES** (4.097 mill. €), which contain the following programmes which may be of relevance:
 - Research infrastructures http://cordis.europa.eu/fp7/capacities/research-infrastructures_en.html
 - Research for the benefit of SMEs http://cordis.europa.eu/fp7/capacities/research-sme_en.html
 - Regions of Knowledge http://cordis.europa.eu/fp7/capacities/regions-knowledge_en.html
 - Research potential of Convergence Regions http://cordis.europa.eu/fp7/capacities/convergence-regions_en.html
 - Support to the coherent development of research policies http://cordis.europa.eu/fp7/capacities/research-policies_en.html
 - International cooperation (INCO) http://cordis.europa.eu/fp7/capacities/international-cooperation_en.html
- **PEOPLE** (4.750 mill. €) http://cordis.europa.eu/fp7/people/home_en.html, which contain the following themes
 - Marie Curie Initial Training Networks http://cordis.europa.eu/fp7/dc/index.cfm?fuseaction=UserSite.PeopleDetailsCallPage&call_id=21
 - European Reintegration Grants http://cordis.europa.eu/fp7/dc/index.cfm?fuseaction=UserSite.PeopleDetailsCallPage&call_id=22
 - International Reintegration Grants http://cordis.europa.eu/fp7/dc/index.cfm?fuseaction=UserSite.PeopleDetailsCallPage&call_id=23
 - Researchers' night http://cordis.europa.eu/fp7/dc/index.cfm?fuseaction=UserSite.PeopleDetailsCallPage&call_id=24
 - Marie Curie Awards http://cordis.europa.eu/fp7/dc/index.cfm?fuseaction=UserSite.PeopleDetailsCallPage&call_id=25