

Building a Europe of Knowledge

The Seventh Framework Programme

2007 - 2013

Theme 2

Food, Agriculture and Biotechnology



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EU/SA NCP Theme 2

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Specific Programmes

Cooperation – Collaborative Research

Ideas – Frontier Research

People – Human Potential

Capacities – Research Capacity

+

JRC (non-nuclear)

JRC (nuclear)

Euratom

Commission Proposal

I. Cooperation – collaborative research Budget (€million)*

Projects and networks within 9 themes

1) Health	8.373
2) Food, agriculture and biotechnology	2.472
3) Information and communication technologies	12.756
4) Nanosciences, nanotechnologies, materials and new production technologies	4.865
5) Energy	2.951
6) Environment (including climate change)	2.552
7) Transport (including aeronautics)	5.981
8) Socio-economic sciences and the humanities	797
9) Security and space	3.987

* for seven years

Look particularly for SICAs (Specific International Co-operation Actions) (about Euro14m) and highlighted international co-operation projects



ESASTAP

European - south african science and technology
advancement programme

Cooperation

- Under each theme there will be sufficient flexibility to address both ***Emerging needs*** and ***Unforeseen policy needs***
- Dissemination of knowledge and transfer of results will be supported in all thematic areas
- Support will be implemented across all themes through:

Collaborative research

(Collaborative projects (size is defined); Networks of Excellence; Coordination/Support Actions)

Joint Technology Initiatives

Coordination of non-Community research programmes
(ERA-NET; ERA-NET+; Article 169)

International Cooperation

Food, Agriculture and Biotechnology in FP7

Collaborative Projects

Indicated Commission Contribution

- Small Collaborative Projects >Euro3m
- Large Collaborative Projects and Networks of Excellence Euro3-6m
- Coordination and Support Actions >Euro1m

Key Dates

- Call *KBBE-2007-1* 02.05.07 at 17h00 Brussels time
- Call *KBBE-2007-2A* 11.09.07 at 17h00 Brussels time

Indicative Calls for 2008 are shown

Food, Agriculture and Biotechnology in FP7

Three Activities (Pillars)

1. Sustainable production and management of biological resources from land, forest, and aquatic environments
2. “Fork to farm”: Food, health and well being
3. Life sciences and biotechnology for sustainable non-food products and processes



Food, Agriculture and Biotechnology in FP7 Objectives

- Build a European Knowledge-Based Bio-Economy (KBBE)
- Lisbon Strategy
- Respond to social and economic challenges:
 - High quality food and sustainable food production
 - Food-related disorders (cardiovascular disease, obesity....)
 - Infectious animal diseases and zoonoses
 - Sustainable agriculture / fishery and climate change
 - Clean biomaterials from renewable bio-resources
- Involve all stakeholders (incl. industry) in research
 - Support CAP and CFP
 - Be able to respond quickly to emerging research needs

Food, Agriculture and Biotechnology in FP7 - Rationale

- **Biotechnology and food companies / SMEs need to be competitive on the world market ('European Strategy on Life Sciences and Biotechnology' COM(2002) 27)**
- **Society demands safe and healthy food**
- **Renewable resources and biomass for non-food applications help reduce dependence on hydrocarbon-based economy**
- **Society demands sustainable and eco-efficient production methods in agriculture / fishery / forestry**
- **International cooperation ensures optimal exploitation of resources and application of results**



Activity 1: Sustainable biological resources from land, forest, and aquatic environments

- Enabling research ('omics', converging technologies, biodiversity) for micro-organisms, plants and animals
- Improved crops and production systems incl. organic farming
- Sustainable, competitive and multi-functional agriculture, forestry and rural development
- Animal welfare, breeding and production
- Infectious diseases in animals, including zoonoses
- Policy tools for agriculture and rural development



Activity 2: “Fork to farm”- Food, health and well being

- Consumer, societal, industrial and health aspects of food and feed
- Nutrition, diet related diseases and disorders
- Innovative food and feed processing
- Improved quality and safety of food, beverage and feed



Activity 3: Life sciences and biotechnology for sustainable non-food products and processes

- **Improved crops, feed-stocks, marine products and biomass for energy, environment, and high added value industrial products; novel farming systems**
- **Bio-catalysis; new bio-refinery concepts**
- **Forestry and forest based products and processes**
- **Environmental remediation and cleaner processing**

Food, Agriculture and Biotechnology in FP7

What's new ?

- **New:** Pillar 1 “Sustainable production and management of biological resources” and
- **New:** Pillar 3 “Life sciences and biotechnology for sustainable non-food products and processes”
- Pillar 2 “Food, health and well-being” ensures continuity of FP6 “Food quality and safety” research
- Some topics under Pillars 1 & 3 partly financed in FP4 and FP5 (BIOTECH, FAIR, QoL, etc.), FP6 efforts scattered and not of sufficient critical mass (some activities under materials, energy and environment), no synergies

Technology platforms on plant biotechnology, food, industrial biotechnology, animal breeding, global animal health, forestry.

http://cordis.europa.eu/technology-platforms/individual_en.html



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Food, Agriculture and Biotechnology in FP7 Borderline with other Themes

- Enabling / systems biology research on plants, animals and microbes complementary to systems biology for human health applications under “Health” - Theme 1.
- Complementary research relating to the management / conservation of natural resources addressed under the “Environment including Climate Change” - Theme 6.
- Demonstration of bio-processes for biomass conversion to energy / materials under this priority, up-scaling and complete process design under “Materials” and “Energy” – Themes 4 & 5

Food, Agriculture and Biotechnology in FP7

New Activities within Themes

- Integration of new and emerging science and technologies (NEST)
- Support to policy development (CAP, CPF, public health, food safety, animal health, ...)
- International co-operation

... to be defined on the level of the related
specific programme or work programme

THE EUROPEAN KNOWLEDGE-BASED BIOECONOMY

NUTRITION (nutrigenomics) - PATHOGENS
CONTAMINANTS - ALLERGENS

CONSUMER CHOICE

STABILITY - BIODEGRADABILITY
FUNCTIONALITY (Chirality)



TRACEABILITY SYSTEMS
ADVANCED FOOD TECHNOLOGIES

PROCESSING

WHITE BIOTECH
CLEAN BIOPROCESSES
RAW MATERIALS/WASTE

LOW INPUT FARMING - BIODIVERSITY
ANIMAL HEALTH - RURAL DEVT.

PRODUCTION

GREEN/BLUE BIOTECH
OPTIMISED RAW MATERIALS



SUSTAINABLE MANAGEMENT OF BIOLOGICAL RESOURCES
(LAND, FOREST, MARINE)



Thank you!

More information
www.esastap.org.za



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