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Community Research

*Building a Europe of Knowledge*

# **The Seventh Framework Programme**

2007 - 2013

Theme 2

Food, Agriculture and Biotechnology

Commission Proposal of 6 April 2005



# FP7 in Context - a Challenge

- Lisbon strategy mid-term review
- Financial perspectives 2007 - 2013
- Barcelona 2002 objective : 3%
- Continuity (in contrast to past)
- Flexibility (from 4 to 7 years)
- Simplification (trust building)
- European Research Council (ERC)
- Technology platforms – initiatives
- International cooperation  
→ Knowledge for growth





# What's new ?

## Main new elements compared to FP6:

- Management:
  - ERC (Basic Research)
  - Logistical and administrative tasks transferred to external structures
- Simplification of procedures
- Annual budget doubled
  - Total: EUR 5 billion ► 10 billion per year
  - Basic research (~ EUR 1.5 billion per year)
- Joint Technology Initiatives, Research Infrastructures





# Management

- A doubling of the FP budget will require new structures to be put in place to manage this increased budget while not increasing the number of Commission staff.
- Commission will “externalise” part of the FP management to executive agency structures for the first time.



# Simplification of procedures

## Measures proposed:

- Rationalising the funding schemes
  - simpler set of funding instruments
- Avoiding red-tape!
  - less bureaucratic and more user-friendly languages
- Reducing
  - number and size of documents
  - number of requests to participants





# Funding Schemes

## General principles

- FP6 emphasised new instruments to structure research efforts and overcome fragmentation
- FP7 proposes flexible use of funding schemes, either alone or in combination, to fund actions that address scientific and technological objectives throughout the Framework Programme.



# 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



# 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; 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

## 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





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# 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





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# 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 reducing 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





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

- Enabling research ('omics', converging technologies, biodiversity) for micro-organism, 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





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## 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
- Total food chain concept
- Traceability





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# 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





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# 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 biotech 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.



# 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, whereas up-scaling and complete process design under “Materials” and “Energy” – Themes 4 & 5



# Food, Agriculture and Biotechnology in FP7 New Activities within Themes

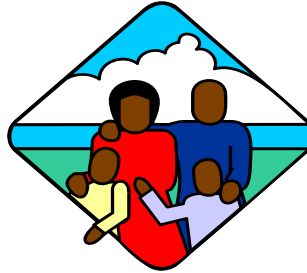
- Integration of new and emerging science and technologies (NEST)
  - Support to policy development (CAP, CPF, public health, food safety, animal health, ...)
  - International co-operation
- ... to be defined on the level of the related specific programme or work programme

# 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)



# Roadmap

## 2005

Apr	Adoption of FP7 proposals by EC
Sep	EC - Proposals on Specific Programmes (SP) and Rules for participation and dissemination RfP&D)
Late 2005	EC - Proposals under Articles 169 and 171 and Executive Agencies
Dec	EP – First reading on FP

## 2006

Jan	Council – Common position on FP and RfP&D
Mar	EP – Second reading on FP and RfP&D
Apr	EP – Opinion on SP
Jun	Council + EP – Adoption of FP and RfP&D
Jul	Council – Adoption of SP
Oct	EC – Adoption of WPGs and model contracts
Nov	EC – Publication of first calls

