

**55<sup>th</sup> EOQ Congress**  
World Quality Congress  
Budapest, Hungary - June 20-23, 2011

"Navigating Global Quality in a New Era"



**June 20, 2011 (Monday)**

**Pre-Congress Seminars**

**Ministry of Rural Development**  
**CONFERENCE ROOM**

**Kossuth Lajos tér 11. Budapest V.**  
**Monday 10:00 – 18:00**

## **1.2. NEW QUALITY AND SAFETY REGULATIONS AND DEVELOPMENTS ON THE AGRIFOOD AREA**

**Seminar Chair: Zoltán Kálmán, Ministry of Rural Development, Hungary**

### **12.00 Agricultural and Food Innovation and Quality Development – Perspectives for Food Research in FP7**

*Dirk Pottier, European Commission, DG Research, Brussels, Belgium*

#### **Pottier, Dirk (Belgium)**

Dirk Pottier is a senior scientific officer employed by DG RTD since 1997. He is currently working with the Food, Health and Well-being programme of Directorate 'Food, Agriculture, Biotech'. In his present position Mr. Pottier is responsible for the areas of Total Food Chain, Environment, Sustainable Development and Innovation as well as the internationalisation of research and scientific cooperation with Europe's partner regions. His current challenge is to contribute to shaping the food research area of the new Framework Programme under preparation. Trained as an agriculture engineer at the University of Ghent, Belgium (1979), he started as a scientific researcher on pasture agronomy for FAO in the South-Pacific (University of Alafua, Western-Samoa). After this research work he became involved in more development oriented work on tropical irrigated agriculture and agriculture sector planning (Burkina Faso, Suriname). He joined the European Commission in 1994 and was assigned to its overseas delegation in the Republic of Chad. At the end of 1997 he moved to DG RTD's International Cooperation directorate where he promoted "Cooperation activities" especially with developing countries and emerging economies.



# Food, Agriculture and Fisheries and Biotechnology

## Food Innovation and Quality Development in the food sector:

### Perspectives for food research in FP7

Dirk POTTIER

Unit E3 – Food, Health and Well-being  
Directorate E – Biotechnologies, Agriculture, Food  
Directorate-General for Research  
European Commission

Food,  
Agriculture and Fisheries,  
and Biotechnology  
Knowledge-Based Bio-Economy (KBBE)



## Outline of the presentation

- 1) The political context
- 2) Innovation and SMEs
- 3) SMEs and FP7 « Cooperation »
- 4) Food quality
- 5) Perspectives for food research in FP7

- **Align research priorities with industry and society needs**
- **Increase SMEs participation and funding in research projects** by promoting SMEs-targeted collaborative projects (bottom-up approach, earmarked budget, encouraged participation) and by improving the communication with SMEs
- **Foster innovation** by improving dissemination and exploitation of results, knowledge transfer and demonstration activities
- Scientific support for **regulatory aspects**
- **Make your voice heard, your opinion known at MS and EU level**

**F**ood,  
**A**griculture and **F**isheries,  
and **B**iotchnology

Knowledge-Based Bio-Economy (KBBE)

The presentation shall neither be binding nor construed as constituting commitment by the European Commission



## 1) The political context

2) Innovation and SMEs

3) SMEs and FP7 « Cooperation »

4) Food quality

5) Perspectives for food research in FP7

**F**ood,  
**A**griculture and **F**isheries,  
and **B**iotchnology

Knowledge-Based Bio-Economy (KBBE)

The presentation shall neither be binding nor construed as constituting commitment by the European Commission





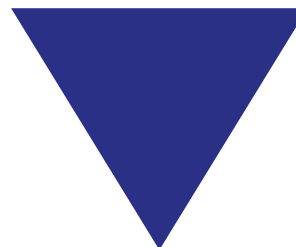
# INDUSTRIAL ACTIVITY CREATES WEALTH AND JOBS...

BUT ALSO HAS UNDESIRABLE EFFECTS... resource depletion, climate change, pollution, waste...



ENVIRONMENT

COMPETITIVENESS



SOCIAL

Some sectors are particularly vulnerable  
• Most effective tools ?



# EU2020

## Three priorities for sustainable growth and jobs

- Growth based on knowledge and innovation  
Education / Innovation / Digital society
- An inclusive high-employment society  
Employment / Skills / Fighting poverty
- Creating green growth: a competitive and sustainable economy  
Combating climate change / Clean and efficient energy / Competitiveness

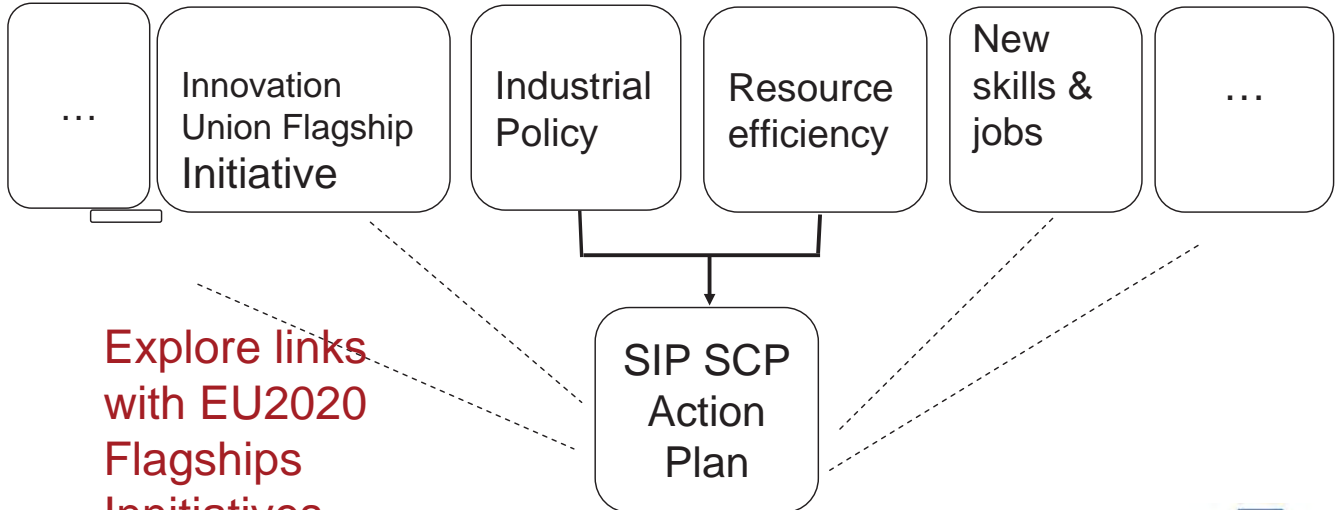


# Sustainable growth and innovation

## Smart Growth

## Sustainable Growth

## Inclusive Growth



Explore links with EU2020 Flagships Initiatives

Food, Agriculture and Fisheries, and Biotechnology  
Knowledge-Based Bio-Economy (KBBE)



# Building the Innovation Union

*Creating knowledge, creating jobs*

- Research focusing on clear economic and societal outcomes:
  - Understanding and tackling Climate change
  - Energy security
  - Food security
  - Health
  - Ageing population



**SMEs in the focus**

They employ 75 million of people

99% of European businesses are SMEs





European  
Research Area

EUROPEAN  
COMMISSION

- 1) The political context
- 2) Innovation and SMEs**
- 3) SMEs and FP7 « Cooperation »
- 4) Food quality
- 5) Perspectives for food research in FP7

**F**ood,  
**A**griculture and **F**isheries,  
and **B**iotchnology

Knowledge-Based Bio-Economy (KBBE)

The presentation shall neither be binding nor construed as constituting commitment by the European Commission



European  
Research Area

EUROPEAN  
COMMISSION

## What does **INNOVATION** mean?

*-Technology adoption*

*-Incremental changes*

*-Reverse engineering*

*-Combining knowledge in new ways*

Adapted from

« **Neglected innovators: How do innovative firms that do not perform R&D innovate ?** »

Results of an analysis of the Innobarometer 2007 survey INNO-Metrics Thematic Paper No. 215

Anthony Arundel, Catalina Bordoy, and Minna Kanerva MERIT March 31, 2008

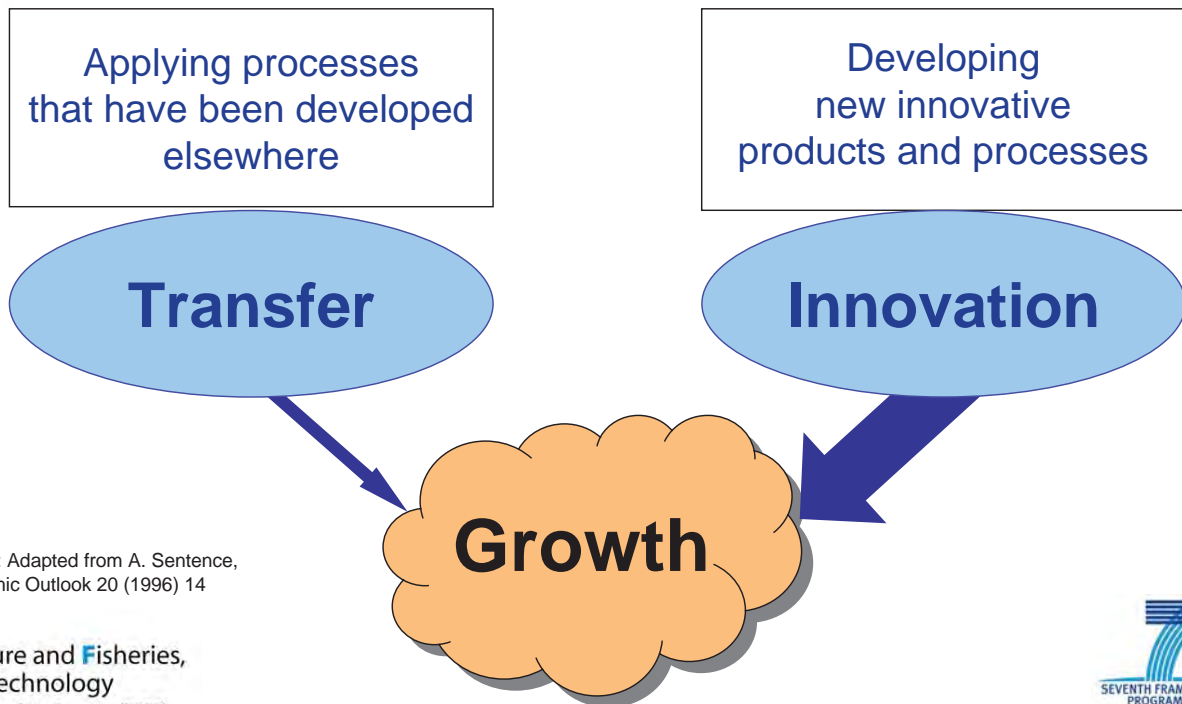
**F**ood,  
**A**griculture and **F**isheries,  
and **B**iotchnology

Knowledge-Based Bio-Economy (KBBE)

The presentation shall neither be binding nor construed as constituting commitment by the European Commission



# Economic strategies



## « DE-COMMODITISATION »

Most of the value is in the processing rather than in the commodity itself .

### Farmer

custodian of land and water resources and an applier of technologies that provide for long-term sustainability.

### Assembler

insurer of origins and safety at all levels of the food chain

### Processor

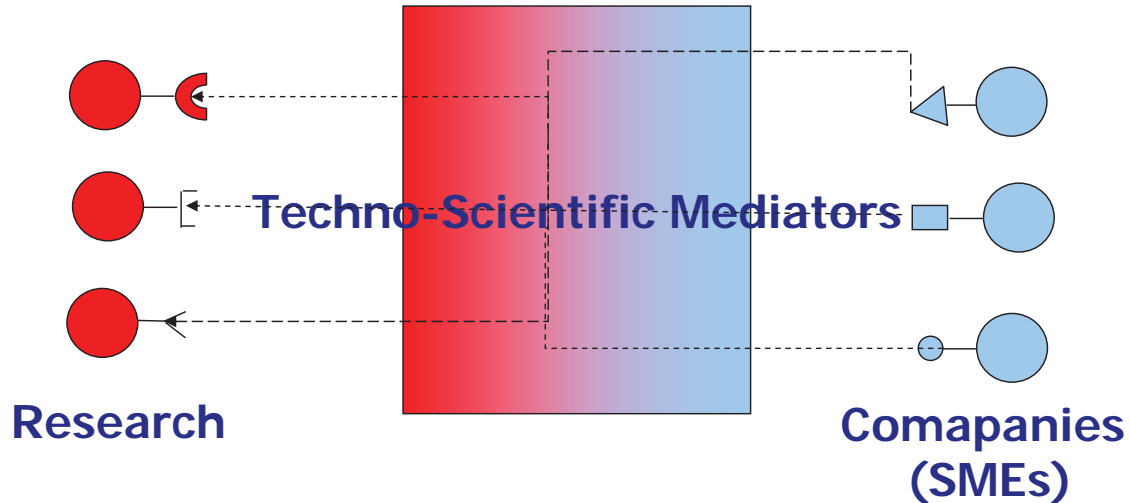
developer of branded and own-label products that now provide not only caloric content but also health and nutrition alternatives

### Distributor

provider of unique foods for people to manage the health and nutrition of the general population.

# Effective and sustainable system of technology transfer

Identify and tackle barriers of innovation



1) The political context

2) Innovation and SMEs

**3) SMEs and FP7 « Cooperation »**

4) Food quality

5) Perspectives for food research in FP7



# SME support in FP7 “Cooperation” programme

- SME are encouraged to participate in collaborative research projects within the theme-driven FP7 “Cooperation” programme
- In order to form a favourable environment, a target of **15%** SME participation has been set
- This represents an amount of about 5 bn € until 2013
- Simplified financial and administrative procedures (e.g. 75% funding rate for SME, reduced requirements for audit certificates, no bank guarantees)
- Identification of areas and specific measures of particular interest to SME in the individual work programmes
- [http://cordis.europa.eu/fp7/home\\_en.html](http://cordis.europa.eu/fp7/home_en.html)

# SMEs in FP7 “Cooperation”

## *The innovation Dimension Work Programme 2011*

- Communication, dissemination and knowledge transfer
- Strengthening SMEs participation
  - Encouraged participation: Topics build to bring results that are expected to be of interest and **potential benefit to SMEs**
  - Compulsory participation: Topics with different budget threshold for SMEs (**35% of total EU contribution to SMEs**)
  - Bottom-up approach
  - **Demonstration Activities**

# Topics targeted to SMEs

## Call 5 – 2011 Activity 2.2: Food (including seafood), health and well being

Bottom-up approach

Development of functional foods and ingredients	-35% of EU contribution to SMEs
Sustainable cleaning and disinfection technologies	-35% of EU contribution to SMEs
Advanced and flexible technologies for active, intelligent and sustainable food packaging	-35% of EU contribution to SMEs -up to 3 projects
Satiety control through food structures made by novel processing	-35% of EU contribution to SMEs
Processed foods with lower salt, fat and sugar content	-35% of EU contribution to SMEs -up to 2 projects
Safety and quality of ready-to-eat foods	-35% of EU contribution to SMEs -up to 3 projects
Environmental sustainability in the European food and drink chain	-35% of EU contribution to SMEs -up to 2 projects

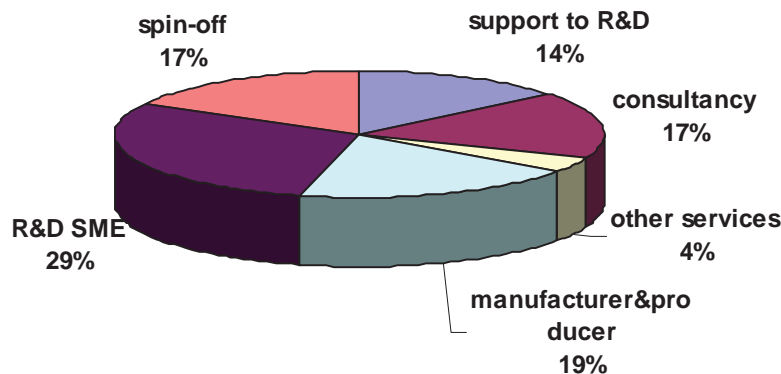
Food, Agriculture and Fisheries, and Biotechnology

Knowledge-Based Bio-Economy (KBBE)

The presentation shall neither be binding nor construed as constituting commitment by the European Commission



# SMEs profile in FP7-KBBE calls



Food, Agriculture and Biotechnology

Knowledge-Based Bio-Economy (KBBE)

The presentation shall neither be binding nor construed as constituting commitment by the European Commission





EUROPEAN  
COMMISSION

European  
Research Area

- 1) The political context
- 2) Innovation and SMEs
- 3) SMEs and FP7 « Cooperation »
- 4) Food quality**
- 5) Perspectives for food research in FP7

**F**ood,  
**A**griculture and **F**isheries,  
and **B**iotchnology

Knowledge-Based Bio-Economy (KBBE)

The presentation shall neither be binding nor construed as constituting commitment by the European Commission



EUROPEAN  
COMMISSION

European  
Research Area

- 1) The political context
- 2) Innovation and SMEs
- 3) SMEs and FP7 « Cooperation »
- 4) Food quality
- 5) Perspectives for food research in FP7**

**F**ood,  
**A**griculture and **F**isheries,  
and **B**iotchnology

Knowledge-Based Bio-Economy (KBBE)

The presentation shall neither be binding nor construed as constituting commitment by the European Commission



# FP7 Structure: Specific Programmes



Food, Agriculture and Fisheries, and Biotechnology  
Knowledge-Based Bio-Economy (KBBE)

<http://cordis.europa.eu/fp7/>



## Theme 2 KBBE: Activities



**KBBE - Activity 2.1**  
Sustainable production and management of biological resources from land, forest and aquatic environments



**KBBE - Activity 2.2**  
“Fork to farm”: Food (including sea-food), health and well being



**KBBE - Activity 2.3**  
Life sciences, biotechnology and biochemistry for sustainable non-food products and processes

Food, Agriculture and Fisheries, and Biotechnology  
Knowledge-Based Bio-Economy (KBBE)

The presentation shall neither be binding nor construed as constituting commitment by the European Commission





## "Fork to farm": Food (including sea-food), health and well being



Food, Agriculture and Fisheries, and Biotechnology



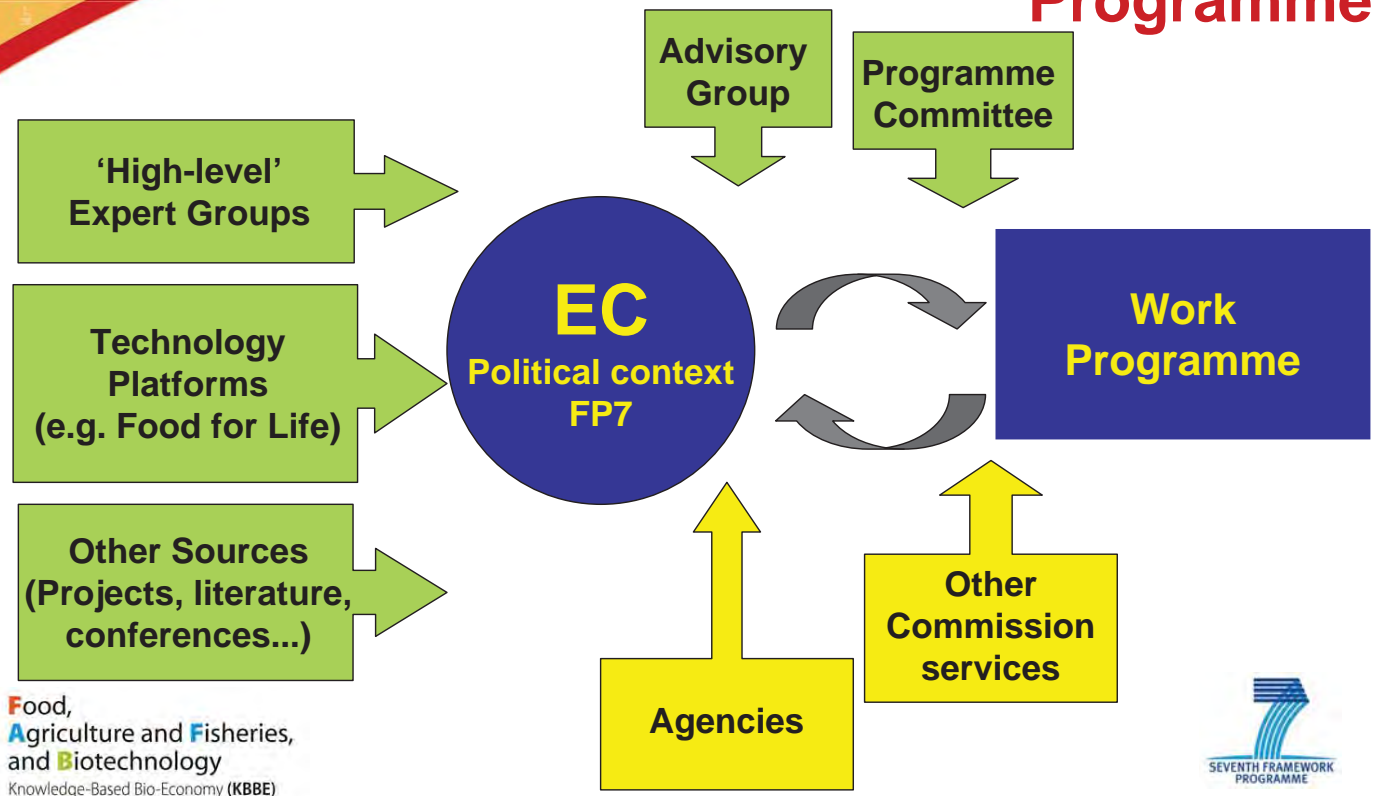
- Consumer, societal, industrial and health aspects of food and feed
- Nutrition, diet-related diseases and disorders
- Innovative food and feed processing
- Improved quality and safety of food, beverage and feed
- Total food chain concept

## Activity 2.2 FOOD WP2012 & WP2013/ / Strategy

### Drivers and Objectives

- > European Scientific Excellence
- > Address Grand Challenges
  - ... Primary production; global change
  - ... Resource efficiency
  - ... Food safety and security
  - ... Socially inclusive healthy Europe
  - ... Oceans and the future
- > ERA, industry competitiveness including SMEs, international cooperation JPI, ...

# Decision Process: From the Political Text to the Work Programme



## WP 2012 – Food Safety and quality

- Main line 1: Safety, quality and traceability along the food chain
- Description: Safety, quality and traceability along the food chain (including feed) will be improved by (a) further developing the understanding of chemical and biological hazards, generating data on those hazards, developing tools for prevention and control of hazards and developing techniques for the reduction or the elimination of hazards at the level of processing (b) advancing methods of detection and monitoring for on-line and off-line screening of undesirable substances (c) developing tools for control of traceability, authenticity, and adulteration (d) developing and harmonising quality standards for food and feedstuffs, (e) further determining the effects of human exposure to residues, contaminants, pathogens, food additives, food supplements, and other substances both intentionally and unintentionally added.

# Research challenges: assessing and characterising food quality

- Beyond safety, European consumers are increasingly demanding quality and diversity in the food they consume. Many public and private food quality initiatives (standards, logos, labels, policies) have already been developed at European, national and regional level. However, the concept of food quality is still rather broad and comprises many different aspects such as aroma, taste, texture and colour (sensory quality), nutritional value, production methods (organic versus conventional farming), origin, authenticity, traceability, sustainability, durability, etc... *Therefore, there is a need for a systematic evaluation of the concept based on scientific principles to define and characterise the various parameters that make up the quality of specific foodstuffs and if possible to harmonise the understanding of food quality on a European level. Furthermore, there is a strong need to develop methods and tools to measure, characterise and control food quality. At the same time the EU believes that food quality standards should promote, not limit choice. The aim is to lay down the fundamental standards for quality to serve as a basis for which quality and excellence can grow and thrive.* This will be beneficial for the European consumers and it will encourage food producers to develop and produce food of a better quality and thus increase the competitiveness of the European food producers.

## Conclusions

- Refocusing of EU research policy on grand challenges
  - meeting changing societal needs
- Scientific support to policies
- Foster innovation
  - knowledge sharing & investments
  - public confidence in science



# Food, Agriculture and Fisheries, and Biotechnology

Knowledge-Based Bio-Economy (KBBE)

[www.cordis.europa.eu/fp7/kbbe/home\\_en.htm](http://www.cordis.europa.eu/fp7/kbbe/home_en.htm)



EU research: [www.europa.eu.int/comm/research](http://www.europa.eu.int/comm/research)

Sixth Framework Programme:

[www.cordis.lu/fp6/home.html](http://www.cordis.lu/fp6/home.html)

[www.cordis.lu/fp6/food.html](http://www.cordis.lu/fp6/food.html)

Seventh Framework Programme:

[www.cordis.europa.eu/fp7/home.html](http://www.cordis.europa.eu/fp7/home.html)

Information requests, Europe Direct

[www.ec.europa.eu/research/index.pg=enquiries](http://www.ec.europa.eu/research/index.pg=enquiries)

DG Research Site:

[www.europa.eu.int/comm/research/index\\_en.html](http://www.europa.eu.int/comm/research/index_en.html)

RTD info magazine:

[www.europa.eu.int/comm/research/rtdinfo/](http://www.europa.eu.int/comm/research/rtdinfo/)

Food,  
Agriculture and Fisheries,  
and Biotechnology  
Knowledge-Based Bio-Economy (KBBE)

<http://bookshop.europa.eu>



Food,  
Agriculture and Fisheries,  
and Biotechnology  
Knowledge-Based Bio-Economy (KBBE)