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# **Innovation in EU Agriculture**

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## **Innovation in EU Agriculture**

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### **Main Points**

#### **1. Policy Developments**

The CAP reform and decoupling offer new opportunities to farmers to react to market signals. Therefore farmers have higher incentives to introduce innovative approaches, responding to emerging market needs, in terms of new products, markets, processes (including more environmentally-friendly ones) and forms of cooperation (stronger links with food chains). This is why the role of research must be strongly supported.

Among the most important elements of the reformed CAP is a single farm payment for EU farmers, independent from production and some limited coupled elements may be maintained to avoid abandonment of production. This payment is linked to the respect of environmental, food safety, animal and plant health and animal welfare standards, as well as the requirement to keep all farmland in good agricultural and environmental condition ("cross-compliance").

Another key factor is a strengthened rural development policy, new measures to promote the environment, quality and animal welfare and to help farmers to meet EU production standards. Also it is worth mentioning a reduction in direct payments ("modulation") for bigger farms to finance the new rural development policy, a mechanism for financial discipline to ensure that the farm budget fixed until 2013 is not overshoot, revisions to the market policy of the CAP.

The Lisbon objectives on growth, employment and competitiveness and on the need for sustainable development must also be realised in the agricultural sector. The CAP and Lisbon Strategy must seek strong economic performance that goes hand in hand with the sustainable use of natural resources.

New technologies, innovation and research are an important way of achieving this goal. During the Finnish Presidency of the EU the Innovation issue has been of very high importance; this has been outlined, among others, by the 13 September 2006 Communication of the Commission "Putting knowledge into practice – a broad based innovation strategy for the EU". In the speech of the Commissioner for Agriculture Mariann Fischer Boel given during the Oulu informal meeting of Agriculture Ministers on 24-26 September 2006 the creation of an innovative, competitive and sustainable Model for European Agriculture was also called for.

The specific handicaps faced by rural areas are the low population density, the reduced size of local markets, the land occupation and the environment concerns. In order to deal with them an adaptation of the general understanding of innovation has to take place.

Innovation is a phenomenon requiring cooperation. Enacting innovative solutions on a given farming company's own may be difficult and costly. The role of communication therefore plays a major role in order to exchange views and ideas concerning innovative approaches.

## 2. Rural Development policies

The new Rural Development Regulation (1698/2005) views innovation as a vital tool for sustainable development, growth, job creation and regeneration of rural areas. Member States develop 'National Strategy Plans' setting out the implementation of the Rural Development Regulation.

Innovation in the Rural Development Regulation is seen:

- in the first axis as a tool to improve competitiveness through the development of new products (i.e. quality products, renewable resources, restructuring of production as a result of decoupling), new methods and processes (i.e. links within the food chain, organic production, compliance with good agricultural practice), new markets (i.e. reorientation of production to consumer demand as a result of decoupling, producer's groups).
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- as implicit in the second axis, through agri-environment payments, Natura 2000, animal welfare and non-productive investments, since all these actions require the development of new technologies and practices.
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- as explicit in the third and fourth axes (diversification of the rural economy and the quality of life, the Leader approach).

Leader+ is one of four initiatives financed by EU structural funds and is designed to help rural actors consider the long-term potential of their local region. Encouraging the implementation of integrated, high-quality and original strategies for sustainable development, it has a strong focus on partnership and networks of exchange of experience. A total of around 5 billion EUR for the period 2000-2006 will be spent, of which over 2 billion EUR is funded by the EAGGF Guidance section and the remainder by public and private contributions.

## 3. The 7<sup>th</sup> Framework Programme for Research and Technological Development

The EU's largest ever funding programme for research and technological development, the Seventh Framework Programme (FP7), was launched on 1 January 2007.

With a total budget of €50.521 billion, FP7 will run for of seven years. An additional €2.7 billion has been earmarked for the Euratom programme on nuclear research, which will run for five years. EU Science and Research Commissioner Janez Potocnik perceives the FP7's approval as an important boost for European science. In financial terms, this is a major improvement over the previous framework programme. In real terms, there are roughly 40 per cent more funds on average per year. FP7 will aim to build on the accomplishments of the previous research framework programme, and will be implemented through four specific programmes. The 'Cooperation' programme will support research cooperation in a number of key thematic areas. 'Ideas' will fund investigator-driven research through a newly created European Research Council (ERC). The 'People' programme will support training and researchers' career development, while 'Capacities' will fund the coordination and development of research infrastructure, regional research clusters, international cooperation and closer ties between science and society. Featuring

simpler instruments and streamlined procedures for funding and participation, FP7 should facilitate the greater participation by and cooperation between universities, research centres, small and medium sized enterprises (SMEs) and companies on a broad range of research areas. In doing so, the new programme should make headway on the goal of creating a European Research Area (ERA) - the equivalent of a 'common market' for research - to become the world's leading research area. Under FP7, the highest portion of the budget will go to information and communication technologies (€9.11 billion), followed by health (€6.05 billion), transport (€4.18 billion) and nanotechnology (€3.5 billion), energy (€2.3 billion), and, most importantly in the context of this paper, to food, agriculture and biotechnology (€1.935 billion). Other budget lines include environmental research (€1.8 billion), space (€1.43 billion), security (€1.35 billion), and social-economic sciences and humanities (€10 million).

In the **7FP**, mainly theme 2: "Food, Agriculture and Biotechnology" and them 6: "Environment" are addressing research priorities to support the **development of a competitive and open rural society** based on culture and traditions, new functions of agriculture, societal values and cultural heritage, typical landscapes. The following research priorities have been identified as strategic and the Commission is committed to delivering them:

- **Sustainable production and management** of biological resources from land, forest, and aquatic environments, i.e. competitive and multifunctional agriculture, improved crops and production systems, including organic farming and quality production schemes, enabling technologies, rural development, policy support)
- **“Fork to farm”:** **Food, health and well being**, i.e. nutrition, diet related diseases and disorders, including obesity; innovative food and feed processing technologies (including packaging); **improved quality and safety**, both chemical and microbiological, of food, beverage and feed; integrity (and control) of the food chain; environmental impacts on and of food/feed chains; total food chain concept (including seafood); traceability
- **Life sciences and biotechnology for sustainable non-food products and processes**
- **Sustainable Management of Resources** - conservation and sustainable management of natural and man-made resources)
- the **SCAR** (Standing Committee on Agricultural Research) is an important consultative body managed by DG RTD. It is a regulatory committee that is consulted on agricultural research matters relating to research carried out by the Member States and through the EC's framework programmes. It is made up of national research directors from the Member States and meets on a regular basis. SCAR provides its delegates with an opportunity to participate directly in the EC's decision-making process and also acts as a forum for debate on the issues of the day. The very important role of SCAR as a tool for increasing competitiveness through innovation must be emphasised. It involves:
  - strategic discussions on the agricultural research agenda in Europe for the long term 7<sup>th</sup> Framework Programme and beyond)
  - enhanced cooperation between Member States and regions on priority research themes (so far 12 themes addressed by collaborative working groups)
  - research agenda for scientific support to the CAP
  - information exchange, with complementary mechanisms under EU Framework programmes.

The SCAR has launched some major initiatives, such as mapping infrastructures and research capacity and a long term foresight process aimed at assessing research needs for European agriculture.

#### 4. Conclusions

- In line with the achievement of the main Lisbon objectives, it is essential **to promote innovation** in the European agriculture, in the framework of the new CAP.
- A first opportunity to launch an in-depth debate with the European public on EU agriculture could be the so-called Health Check of the CAP in 2007-2008. The Health check will be performed over the period 2007 to 2009. The Commission will report on cross-compliance, the consequences of partial decoupling and the choice of model for implementing the Single Payment Scheme, as well as reporting on certain agricultural markets, most notably the dairy sector. This "health check" will essentially be about ensuring that the CAP is working as it should, and simplifying things where this is possible. It won't be about further fundamental reform. But at the same time, the "health check" will also be an ideal opportunity to see whether EU agriculture is more in line with society's needs and expectations. Checking which elements work properly and which ones still need further improvement will help formulate a strengthened innovation policy for EU agriculture.
- A **"one-size-fits-all" agricultural model is no longer the best solution**. Every single region should provide individual solutions. This approach would guarantee that the European model of farming remains **"united in diversity"**. A strong innovation policy can and should be applied to all geographical areas of European agriculture; all regions can benefit from adopting innovations. But innovative actions may be quite different from one rural area to another and between regions and MS, according to their level of development and diversification. It is **important that Member States and Regions understand these differences**, promote adapted approaches to the specific characteristics of their areas and are able to put them together in a coherent national strategy plan.
- **Research** must provide an **innovative framework**. Its results will provide innovations for safe, competitive and environmentally-friendly agricultural production. The new **Rural Development Regulation** offers opportunities and could enhance competitiveness by fostering human capital, permitting innovation and diversifying outside traditional agribusinesses, and responding to society's expectations for a competitive agricultural sector which is environmentally sustainable.
- **Biomass** – renewable energy sources. Opportunities to expand production of biomass and renewable energy sources will not only create new economic opportunities in rural regions, but will help Europe respect its greenhouse gas reduction targets under the Kyoto Protocol. Measures to develop renewable energy raw materials and processing capacity already operate under the CAP: one example is the aid of EUR 45 per hectare available to farmers who produce energy crops.