AKIS –
AGRICULTURAL KNOWLEDGE AND INNOVATION SYSTEMS
IN TRANSITION

AN INTRODUCTION TO THE EU SCAR COLLABORATIVE WORKING GROUP

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CONTENT OF THE PRESENTATION

Background of SCAR and the Collaborative Working Group

Some theoretical notions on:

Innovation Systems,

AKIS

Social innovation
BACKGROUND OF SCAR AND THE CWG: MANDATE

• Standing Committee on Agricultural Research (1974, renewed 2005)
• Representatives of member states that advise the European Commission and Member States on coordination of agricultural research
• Since 2005: coordination in the European Research Area: EU + candidate and associated countries (in total 37 countries)
• 2006, Krems (Austria): “[SCAR to] include questions of advisory services, education, training and innovation in their discussions”
• 2008 Communication: “the Commission intends to make use of SCAR to identify agricultural knowledge structures in each Member State, with a view to eventually creating a corresponding CWG”
• 2009 France and the Netherlands volunteered to set up a CWG
INCREASED RELEVANCE DUE TO EUROPEAN POLICY

- Europe 2020 strategy: growth strategy for the coming decade. It wants the EU to become a smart, sustainable and inclusive economy.

- The Innovation Union is one of the seven flagship initiatives of the Europe 2020 strategy:
  - turn Europe into a world-class science performer;
  - remove obstacles to innovation which currently prevent ideas getting quickly to market; and
  - revolutionise the way the public and private sectors work together, notably through Innovation Partnerships between the European institutions, national and regional authorities and business

- Within the Innovation Union, Horizon 2020 is the financial instrument 2014 to 2020, proposed budget €80 billion (the EU’s new programme for research and innovation)

- CAP post 2013: the EC proposes to reinforce the role of the Farm Advisory Service (FAS) and to create a ‘European Innovation Partnership (EIP) for agricultural productivity and sustainability’.
BACKGROUND OF SCAR AND THE CWG: THE ISSUE

1st SCAR foresight (2007): the mounting challenges facing the agri-food and rural sectors in Europe calls for a review of the links between knowledge production and its use to foster innovation.

2nd SCAR foresight: rather crude light on the current sate of Agricultural Knowledge Systems in Europe:

“currently unable to absorb and internalise the fundamental structural and systemic shifts that have occurred. The remaining publicly funded AKIS appear to be locked into old paradigms based on linear approaches and conventional assumptions.”

WORKING METHODS OF THE CWG

A network of civil servants from the Member States and the European Commission

No budget, except for some experts to write a methodological state of the art paper (prof. Talis Tissenkopf, Anne-Charlotte Dockes, Bettina Bock)

Inventory of national issues and structures, reflection, but no research

Several working packages

- reflection paper state of the science
- AKIS policy
- Social innovation
- Management of complexity and porosity
- Country cases
ACTIVITIES

- Meetings
  - Dublin (3&4 February), Budapest (5&6 May), Tallinn (14&15 October) and in Brussels (14 December)

Output
  - Concept note on AKIS (reflection paper by the experts)
  - Expert report on social innovation
  - Several country/region case studies
  - Final report

Dissemination
  - EURAGRI meeting, Prague, September 2011
  - Conference on AKIS, March 2012
PART II: THEORETICAL NOTIONS

- Two views on innovation policy

AKIS – concepts from the reflection paper
(available online at the SCAR website)

Social Innovation – concepts from the reflection paper
TWO VIEWS ON INNOVATION POLICY (SMITS ET AL, 2010)

-Mainstream macro-economics/Institutional and evolutionary economics

-Main rationale: Market failure/Systemic problems

-Government intervenes to:
provide public goods/solve problems in the system
mitigate externalities/facilitate creation of new systems
reduce barriers to entry/facilitate transition and avoid lock-in
eliminate inefficient market structures/induce changes in the supporting structure for innovation: create institutions and support networking

-Main strengths of policies designed under the new paradigm:
context specific, involvement of all policies related to innovation, holistic approach to innovation

-Main weaknesses of policies designed under this paradigm
lack of indicators for analysis and evaluation of policy
KNOWLEDGE AND INNOVATION SYSTEM: 7 FUNCTIONS

1. Knowledge development and diffusion
2. Influence on direction of search and identification of opportunities
3. Entrepreneurial experimentation and management of risk and uncertainty
4. Market formation
5. Resource mobilisation
6. Legitimation
7. Development of positive externalities

(c) M. Hekkert et al.
AKIS – TERMINOLOGY

- AKS concept originated in 1960s, driven by an interventionist agricultural policy that sought to coordinate knowledge and innovation transfer in order to accelerate agricultural modernization.

In many countries: strong integration of public research, education and extension bodies, often under the control of the Ministry of Agriculture

1970s: “agricultural knowledge and information systems” (AKIS) in policy discourses (OECD, FAO). Later: agricultural knowledge and innovation systems

“a set of agricultural organizations and/or persons, and the links and interactions between them, engaged in the generation, transformation, transmission, storage, retrieval, integration, diffusion and utilization of knowledge and information, with the purpose of working synergistically to support decision making, problem solving and innovation in agriculture” (Röling and Engel, 1991).
Drivers that eroded AKS / Moved it to AKIS

- Research, extension and education have undergone a deep restructuring, transformed by the trend towards liberalization (privatization of service delivery, the multiplication of extension organizations, farmers contributing towards the cost of these services, competitive bidding for research and extension contracts and tighter evaluation procedures).

Policy agenda: increasing concern over the environmental impact of industrial agriculture, the quality of life of rural populations, rural employment and the need to support the positive externalities linked to agricultural production.

The linear model of innovation has progressively been replaced by a participatory or ‘side by side’ network approach, in which innovation is ‘co-produced’ through interactions between all stakeholders in the food chain (and especially for 2nd order change)

The growing disconnection between farmers’ knowledge and research and extension systems.
AGRICULTURAL KNOWLEDGE AND INNOVATION SYSTEMS

An AKIS should be able to propose and develop practical ideas to support innovation, knowledge transfer and information exchange. Policy needs to reflect the manner in which innovation actually occurs today: often through diffuse networks of actors who are not necessarily focused on traditional research and development.
THE FOOD CHAIN PLAYS A ROLE TOO
LEARNING AND INNOVATION NETWORKS

Thematically-focused learning networks that are made up of different actors, within and outside the formal, institutionalized, AKS.

Members can include farmers, extension workers, researchers, government representatives and other stakeholders (Rudman, 2010).

The emphasis is on the process of generating learning and innovation through interactions between the involved actors.

LINSA: LIN for Sustainable Agriculture

The difference between AKS and LINSAs is connected to how knowledge is conceptualized: AKS sees knowledge as a “stock to be transferred”, whereas LINSA emphasizes the processes needed to make knowledge useful and applicable to other actors.
SOCIAL INNOVATION

- The concept of social innovation originates in critiques of traditional innovation theory. By calling for social innovation, new theories point at the need to take the social mechanisms of innovation into account (social mechanisms of innovation).

- In the context of rural development, social innovation refers to the (social) objectives of innovation – that is those changes in the social fabric of rural societies, that are perceived as necessary and desirable in order to strengthening rural societies and addressing the sustainability challenge (social inclusion / equity: the innovation of society as well as the social responsibility of innovations).
THANK YOU FOR YOUR ATTENTION

AND THANKS TO THE COLLABORATIVE WORKING GROUP FOR REALLY BEING A WORKING GROUP!

Merci de votre attention