Proposal for a new CWG on Agriculture Knowledge and Innovation Systems
Submitted to SCAR members by NL and Fr

FR: Pascal Bergeret
NL: Peter Keet

Context

During the Council of agricultural ministers held in Brussels on July 13th, 2009, Commissioner Potocnik addressed the Ministers by stating that “Agricultural practices are now set within the context of achieving sustainability and responding directly to consumer concerns. Agricultural research has to address also a range of related issues and demands, from the need for stable food security and safety systems, environmental criteria, socio-economic changes in rural communities, to the issues such as landscape management, biodiversity and conservation.”

Further on he pointed out that “these challenges will require new, innovative solutions for agriculture and meeting these challenges will require the very best of science and technology and efficient transfer of this knowledge to the actors – farmers, advisory services, and policy makers”.

One key message of the first SCAR foresight exercise widely disseminated by the June 2007 Conference in Brussels indicated that 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. Research could play a stronger role if different actors (farmers, advisory services, consumers, private sector, civil society, policy makers) were better integrated in actual agenda setting and became part of the research process through actions as innovative networks.

The second SCAR foresight exercise has shed a rather crude light on the current state of Agricultural Knowledge Systems in Europe, described as “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.” The report stresses the need for renewed political attention to the effectiveness, relevance and scale of Europe’s AKIS and for a redefinition of AKIS. Although many share this feeling, more evidence-based analysis is needed to develop adequate policy actions.

On October 6-7th, 2008, the French Presidency of the EU organised for SCAR a workshop in Angers entitled “Strengthening the links between knowledge and agricultural innovation in Europe”. The workshop conclusions pointed out that European farming and agro-industry need knowledge from many different sources to compete with quality products in a globalised world. Climate change mitigation and adaptation and recent fears related to food security are new challenges. Compliance with standards concerning the environment, food safety, animal health and welfare need integrated approaches for optimised farm management.
Farming is much more diverse than in the past. It is combined with other activities. New knowledge is generated by farmers, researchers (basic and applied) and private companies. The old linear model of technology transfer (from scientists to the users) is therefore outdated and should be replaced by an interactive model of networking systems, which integrate knowledge production, adaptation, advice and education.

The Angers workshop provided an opportunity to identify the key features of a European AKS and to analyse how shared experience from important reforms in several European countries can lead to potential “best practices”. It highlighted the stakes linked to the need of proper AKIS for Europe:

- How to maintain a sufficient technical and scientific level among actors in order for them to respond to global and local changes and to enhance their entrepreneurial skills
- How to orient development work and to link it to continuous education of the actors
- How to conceive a new CAP that is supported by strong innovation systems in agriculture

The conference on “The Knowledge Triangle: Shaping the Future of Europe”, organised by the Swedish Presidency of the EU on August 31st – September 2nd, 2009 in Gothenburg dwelt on the importance of a well-functioning knowledge triangle (education-research-innovation) for Europe, in a situation where EU’s research and higher education system is perceived as fragmented and calls for intensified interaction between policy areas, notably higher education, research and innovation. A European modernisation agenda is presently stimulating universities to develop their diverse missions and new models for the way they operates. Innovation and entrepreneurship must be integrated while maintaining education and research as core activities. The need to develop further the knowledge based European society creates a strong pressure on universities as central actors of the knowledge triangle.

Complex problems as those presently facing agriculture need wide approaches looking beyond the traditional agricultural boundaries. There is a need for inter- and even trans-disciplinary approaches.

**SCAR mandate**

On the occasion of an informal Council of the ministers of agriculture in Krems, May 28th –30th, 2006, under the Austrian Presidency, the Ministers recommended “that, in the framework of the Lisbon Strategy, the Standing Committee on Agricultural Research (SCAR) should invite EU MSs to include questions of advisory services, education, training and innovation in their discussions.”

Furthermore, the 2008 Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions entitled “Towards a coherent strategy for a European Agriculture Research Agenda” indicates that “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”.

---

Proposal for a new CWG on Agriculture Knowledge and Innovation Systems  draft 2010-01-13
Subsequently, the SCAR plenary meeting of December 2008 endorsed the proposal that “the SCAR-WG will look into the possibility to set up a CWG on this issue (i.e. on the links between knowledge and agriculture innovation in Europe)”. The same idea was expressed during the SCAR plenary meeting of June 2009, during which FR and NL expressed their commitment to explore a possible follow up of the Angers workshop in the form of an ad hoc Collaborative Working Group.

**Collaborative working group**

The Dutch and French Ministries of agriculture represented respectively by the Department of Knowledge (Peter Keet) and the Direction Générale de l’Enseignement et de la Recherche (Pascal Bergeret) would coordinate a collaborative working group under SCAR.

A new SCAR-CWG on agriculture knowledge and innovation systems in Europe will contribute to the fulfilment of SCAR mandate as described in the precedent section. It could provide a starting point to establishing a European monitoring device of the AKIS structures and their evolution, a crucially necessary tool for designing and evaluating AKIS policy formation and implementation, in the perspective of the challenges ahead: to feed the world population in the long run, in a sustainable way.

Furthermore, since advisory and extension services are likely to play a significant role in the development of any future European agricultural knowledge system, the findings of the CWG could be interesting to the Commission, in particular in view of its report on the Farm Advisory System, which has to be submitted to the Council by 2010.

**Suggested work packages**

**Work package 1: reflection paper on AKIS (to be finalised by June 2010)**
- what is AKIS, including inventory of different points of view & used concepts
- strength and weaknesses of AKIS
- drivers and incentives for the knowledge system
- drivers and incentives for innovation
- agricultural and rural policy context
- research, extension, public / private actors, beneficiaries, advisory services
- instruments

This WP would require the input of experts.

**Deliverables:**
- reflection paper;
- presentation of the reflection paper in the June 2010 SCAR plenary meeting;
- Proposal to the Commission for an AKIS monitoring mechanism.

**Work package 2: AKIS policy**
• motives and considerations (including relation with CAP and other policy issues)
• driving forces;
• funding;
• absorptive capacity (the capacity to absorb and apply knowledge produced elsewhere in the world and/or in other sectors or domains);
• set of simple indicators (i.e. length of the knowledge chain, stakeholder involvement in curriculum development and agenda setting, and which ones);
• knowledge chain management and dynamics of different types of knowledge (from science driven to experience based);
• diversity and gender in research, education and extension;
• instruments;
• professional training (communicators, advisers, social organisations and others, lifelong learning);
• drivers for innovation (identifying the role of knowledge but also other drivers for innovation);
• design of European AKIS monitoring system;
• managing linkages with groups operating at more specific themes, like era-nets, CWG's and ETP's;
• building a research agenda for AKIS policy support.

This WP would be conducted with input from the CWG members and additional support from experts

deliverables (September 2011):
• status report describing and analysing, the above mentioned topics;
• conferences addressing a (selection of) these topics, in preparation of status report (also aimed at building an AKIS knowledge community);
• presentations in SCAR plenary (including progress reports).

work package 3: social innovation
• documenting the relevance & importance of social innovation for the food system, agriculture and rural development;
• rural urban relationships;
• peoples attitudes;
• benchmarking;
• relation to AKIS;
• social innovation policy.

This WP would require the support of experts
deliverable: document on social innovation for the food system, agriculture and rural development, facts and figures, options and guidelines.

work package 4: complexity and porosity
• interconnections between the different subsets of larger systems
• explore possibilities of actively combining different types of knowledge, to learn from other approaches and perspectives.
• role of education in educating people able to manage total systems, the physical, the natural, the human and the social aspects involved and the inter-linkages between these
• Relation with other science and education fields: Networking with others from outside the traditional agricultural area can offer new insights which can trigger new opportunities

**deliverable**: document with analytical framework, options and guidelines addressing complexity and porosity.

**work package 5: country and regional case studies**
- the CWG as advisory & digesting board for country case studies;
- call for volunteer countries, so at there own costs;
- see work package 2 for issues to be addressed in the case studies;

**deliverables**: (december 2010)
- case studies
- synthesis report on case studies
- case study presentations in CWG

**Interaction with other research/expert groups**
The CWG cannot achieve all the above-mentioned tasks on its own, because of the complexity and magnitude of the work involved and of the stakes around the future of AKIS. Links with needed expertise has been mentioned in the WP section.

**Calendar**
- Consultations by SCAR secretariat: January - February 2010
- Kick off meeting: March 2010
- WP1: March to September 2010
- WP2, WP3, WP4, WP5: March 2010 to December 2011
  The strategic European Workshop could be planned for September 2011.

**open for non scar members**
The Collaborative working group will be open for countries which are not a member for SCAR, provided that they will participate with an own country study. To promote this participation, this starting document shall be distributed among the members of the OECD co-operative research programme on biological resource management for sustainable agricultural systems.