**Policy Brief AKIS ARCH 6th June 2014**

Best strategies for intercontinental research and innovation partnerships - towards greater impact on global challenges

This Policy Brief has been written based on inputs from experts of the ARCH and AKIS Strategic Working Groups and the discussions and conclusions from a jointly held workshop held in Brussels in May 2014. The paper primarily targets policy-makers and funders in the European Commission, as well as in national funding ministries and agencies.

Introduction

Europe invests substantially in Agricultural Research (AR) and Agricultural Research for Development (ARD) and is a significant global player. Alignment of AR and ARD brings many advantages. Policy makers in the European Commssion and in national ministries and agencies should create the conditions to make that happen.

Historically research and innovation processes for agriculture have been implemented by the EU's Member States rather differently from research for agriculture in development cooperation. Target groups, issues and governance have been quite different. In many member states the Ministries for Development Aid or Foreign Affairs and their agencies are responsible for ARD whereas AR for Europe is mostly driven by Ministries of Science or Agriculture.

There are reasons to revisit the communality between AR and ARD. First of all, it has become clear, especially through the global challenges that the two domains have much in common. Both now address global challenges such as climate change, sustainable agricultural production and use of natural resources, food and nutrition security, poverty and social equity and demands for energy. Secondly, the world has become smaller in recent decades as food systems between the continents are now more integrated by international trade and foreign direct investment.

Research and innovation are different concepts, but need to be strongly interconnected. Links can be strengthened through better collaboration with the private sector (including SMEs), with NGOs and with other relevant players, in both developing countries and in Europe. The process should be driven by bottom-up identification of issues, challenges and needs.

A Joint EIARD SCAR[[1]](#footnote-1) Strategic Working Group – ARCH [European Agricultural Research towards greater impact on global CHallenges] - was set up in 2013 in order to improve linkages between AR and ARD aiming at identifying and working towards ways to increase the contribution of European Agricultural Research investments to the solution of global challenges. ARCH joined forces with the SCAR Strategic Working Group AKIS (Agricultural Knowledge and Innovation Systems) to produce this policy paper addressing linkages between Research and Innovation.

Opportunities to align research themes for AR and ARD

There are several aspects of research and innovation where AR and ARD can reinforce each other. Issues which come to mind are **research themes**, like food and nutrition security, climate change, poverty alleviation and many others. At the farm level these themes are often inter-linked in terms of decision-making, whilst their inter-relationships are less well recognised at the global level. In consequence many policy interventions are considered for individual challenges in isolation.

**Multi-stakeholder collaboration** is necessary to address these complex global research challenges. The global aspect implies that it is not very efficient to try to solve the problem in one continent, if that means a shift of the problem to another continent. This implies that resources should be allocated to the region where the problem can be solved most efficiently.

Many research needs are not limited to one country or continent, but should still be developed in **cooperation** between countries, regions and continents. For example, problems like infectious pests and diseases (e.g. avian flu or African swine fever) are 'cross-border' issues in which the problems in one continent could spread to another. In addition there are themes that are not necessarily a global challenge, but that are relevant in different continents, like rural livelihood issues or family farming.

Besides themes there are other aspects of research and innovation that can be of common interest. One is the **methods** that are used in research and innovation, from genetic research, multi-scale modelling or Information and Communication Technology (ICT) to participatory research and multi-stakeholder processes. In the past, several methods developed in ARD have also been taken up by AR (e.g. systems research, action research) and vice versa.

**Research infrastructures** (like gene banks, expensive technical equipment or soft infrastructures like databases) are other issues in which AR and ARD could reinforce each other.

Last but not least AR and ARD can reinforce each other in **institutional and governance aspects**. In both areas there is increasing attention being paid to new forms of public-private partnerships. Societal aspects of research (as in the GMO debate, asking for social innovation) and discussions on assessing science in terms of excellence, relevance and impact are also communalities between AR and ARD.

Of course there are also important differences, in products and context (institutional, social) and certainly in the fact that in ARD the focus is more on innovation with the poorest, to address the Millennium Development Goals - soon the Sustainable Development Goals, and so bring the developed and developing countries closer than ever before.

Innovation Partnership Approaches

In its statement on the Innovation Union, the European Union has addressed the need for more innovation. In agriculture the Innovation Union has led to the European Innovation Partnership “Agricultural Productivity and Sustainability” (EIP-AGRI) in which links between research and innovation are strengthened. The EIP-AGRI can provide a framework to connect local multi-actor groups via thematic networks on global challenges to research programs with transdisciplinary research approaches. The agricultural policy supports so called Operational Groups (OGs), multi-stakeholder groups that work locally on an innovation. This is comparable to what is done in many multi-stakeholder development projects.

These groups are linked to the interacting global themes and research projects by thematic networks and scale-up the results of Operational Groups by producing end-user material to induce replication of successes (and learn from failures). They also identify new bottlenecks and produce research agendas.

Research projects like in Horizon2020 can often be formulated as multi-stakeholder / transdisciplinary projects in which operational groups and private business (SMEs or larger) take part.



International Innovation Partnership Approaches build on a rich experience of multi-stakeholder and participatory research in ARD. However, a new joint policy framework is needed for research and innovation policies and development cooperation policies, both on national and EU level.

Strategies for aligning funding for research and innovation

Experiences shared by the countries demonstrate that there are important differences in the alignment strategies. While some countries are only taking their first steps to establish a strategy to align funding for research and innovation, there are also examples from member states with a high level of policy coherence (e.g. Netherlands).

Lessons on alignment and stimulation of innovation can also be learned from research projects that have recently been carried out. The FP7 project Jolisaa (Joint Learning in Innovation Systems in African Agriculture, <http://www.jolisaa.net/>) investigated innovation in developing countries and came up with recommendations such as: Build on innovation in practical situations (“innovation in the wild”); Combine local and external knowledge and ideas to enhance innovative capacity; Encourage access to diverse value chains to lower the innovation risks; Support unpredictable innovation processes and Address the multiple dimensions of innovation.

The SOLINSA project (Support of Learning and Innovation Networks for Sustainable agriculture, <http://www.solinsa.net/>) found that innovation is about knowledge creation and exchange, but also about fostering entrepreneurial drive and activity, vision development, resource mobilisation, market formation, building legitimacy for change, and overcoming resistance to change. It demonstrated that, in this context, it is crucial to understand both the process that constitutes innovation as well as the context in which the process takes place. The project recommended supporting emerging learning and innovation networks by improving their organisational capacity (governance, project management, leadership, decision making and coordination), and by recognising the importance of the role innovation brokers (transition partners).

Other projects, like the ESFIM (Empowering Smallholder Farmers In Markets) had similar experiences and observations.

Concluding remarks from the Joint ARCH AKIS Workshop

The participants of the workshop submit the following findings and suggestions to SCAR; EIARD; the Expert Group supporting the High Level Africa Initiative, the European Commission (DG DEVCO, DG AGRI and DG RTD) and the Member States’ governments. These findings should also feed into the SCAR Foresight process.

* Europe is sometimes perceived as being difficult to approach by potential partners in research and innovation and cross-border cooperation has been difficult. There seems to be a lack of unified and coherent thinking between different policies across Europe and a lack of clear vision. Policy makers at national and EU levels should seek for **cross-policy collaboration**.
* Many **areas of joint interest** have been identified and demand for collaboration between the AR and ARD domains. This can be achieved by bringing together farmer’s knowledge and scientific knowledge (technological, social and economic).
* Innovation starts with producers’ and consumers’ needs. New **bottom-up models** have to be designed and technology has to be adapted and sometimes redesigned to target diverse implementation levels and reach desired outcomes.
* The approach to **promote private sector** involvement in developing countries - involving partners from Europe and outside Europe - should be elaborated and diversified. The role of multinationals differs from SMEs. A framework is needed that deals with diversity as an asset of public-private partnerships.
* The **added value of European international research and innovation practices** must be made explicit. The alignment across member states should be strengthened and can feed into national knowledge policy as well and benefit from strategies guided by evidence. Shared visions on research and innovation will lead to more effective partnerships and a higher impact on global challenges.
* Policy makers should discuss the desired flexibility in the application of **funding mechanisms** (competitive calls in Europe, targetted funding to institutes in the tropics, innovation prizes, loans, public-private partnerships, etc.).
* The balance between the criteria for the **evaluation of research projects** (excellence, relevance, impact) should be reassessed to overcome the gap between science-driven research versus innovation-driven research.
* Policy makers, including for example the High Level Policy Dialogue on EU-Africa, and the EU-Mediterranean partnership (PRIMA), could benefit from the **insights of the ARCH and AKIS groups**. New intercontinental innovation partnerships should become part of a policy framework of research and innovation and development cooperation.
1. The European Initiative for Agricultural Research for Development (EIARD) is a **permanent informal ARD policy coordination platform** between the European Commission, Member States of the European Union, Switzerland and Norway. See <http://www.eiard.org/>

The Standing Committee on Agricultural Research (SCAR) was established in 1974 by a Regulation of the Council of the EU to advise the Commission and the Member States on the coordination of agricultural research in Europe. See <http://ec.europa.eu/research/agriculture/scar/index_en.html> [↑](#footnote-ref-1)