

**European Agricultural Research;  
towards a greater impact on global challenges**

**Briefing paper to support the EIARD-SCAR Strategic Working Group  
'ARCH - Agricultural Research on Global Challenges'**

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## ACRONYMS

AR	Agricultural Research
ARD	Agricultural Research for Development
ASARECA	Association for strengthening Agricultural Research in Eastern and Central Africa
CCARDESA	Center for the Coordination of Agricultural Research and Development in Southern Africa
CGIAR	Consultative Group for International Agricultural Research
CRP	CGIAR Research Programmes
DCI	Development Cooperation Instrument
DG AGRI	Directorate General for Agriculture and Rural Development
DG DEVCO	Directorate General Development and Cooperation, formerly DG Development / EuropeAid
DG RTD	Directorate Research and Innovation, formerly DG Research and Technology Development
EC	European Commission
EFARD	European Forum on Agricultural Research for Development
EIARD	European Initiative for Agricultural Research for Development
EU	European Union
FARA	Forum for Agricultural research in Africa
FP7	Framework Programme 7
FSTP	Food Security Thematic Programme
GCARD	Global Conference on Agricultural Research for Development
GFAR	Global Forum for Agricultural Research
HARD	Heads of Agricultural Research for Development
ICPC	International Cooperation Partner Countries
IFAD	International Fund for Agricultural Development
MDG	Millennium Development Goal
MDTF	Multi-Donor Trust Fund
MS	Member State of the European Community
NARS	National Agricultural Research System
PAEPARD	Platform for African European Partnership on Agricultural Research for Development
SCAR	Standing Committee on Agricultural Research
SME	Small or Medium-size Enterprise
SWG	Strategic Working Group

## Introduction

Two types of agricultural research receive public funding from the European Commission (EC) and its Member States (MSs): (1) Agricultural Research *sensu stricto* (AR), focussing on national needs within Europe, and (2) Agricultural Research for Development (ARD) dedicated to collaboration with and in developing countries working towards the Millennium Development Goals (MDGs).

An area of joint interest between AR and ARD exists in terms of the policy issues that are addressed, common research themes, funders and funding mechanisms and the research institutes involved.

Despite positive developments, however, insufficient coordination of European investments in AR and ARD exists. Lack of coordination between different ministries and funding mechanisms at national and at European level represents a hindrance to more effective use of public investments aimed at addressing global challenges and ultimately increasing impact on poverty alleviation.

The Strategic Working Group (SWG) aims to enhance cooperation between funders of agricultural research. The aim of this report is to support the SWG by answering the question of how EC funders of agricultural research can enhance cooperation between donors through (1) funding mechanisms, (2) institutional policy dialogue, and (3) coordination and alliances between AR and ARD institutions and scientists.

In response, a review was made of EC instruments that supported AR and ARD during 2011-2013 and an analysis was made of ten relevant and on-going research programmes.

The EC funds AR and ARD through funding programmes of Directorate General Research and Innovation (DG RTD) and Directorate General Development and Cooperation (DG DEVCO).

The review of DG RTD's Framework Programme 7 (FP7) focused on the Cooperation work programme and in particular on theme 2: *food, agriculture and fisheries, and biotechnology* and theme 6: *environment (including climate change)*.

The review of DG DEVCO's Development Cooperation Instrument (DCI) focused on strategic priority 1 of the Food Security Thematic Programme (FSTP): *Research, technology transfer and innovation to enhance food security*.

Within the scope of agricultural research, DG RTD primarily funds agricultural research focused on Europe and for the benefit of the European Union (EU). DG RTD to a lesser extent funds agricultural research on areas of mutual interest and benefit between Europe and third countries. DG DEVCO primarily funds development activities, among which agricultural development. The focus of research funding by DG DEVCO is on pro-poor and demand-driven agricultural research for development, whilst in addition supporting agricultural extension and innovation.

## Policy goals of FP7 & FSTP

The agricultural research policy goals of FP7 and FSTP largely overlap. Both aim to:

- Address climate change
- Address food security; the growing demand for safer, healthier, higher quality food
- Focus on the ecologically efficient intensification of agriculture
- Promote and facilitate knowledge transfer and the uptake and exploitation of research results by bringing together science, industry and other stakeholders for economic development of the agricultural sector
- Contribute to regional policies on agriculture, food security and fisheries

An additional policy goal of FSTP is coordination and coherence with programmes under FP7.

## Objectives of FP7 & FSTP

In terms of the objectives, there are differences between FP7 and FSTP; FP7 primarily aims to develop an open and competitive European Research Area aimed at securing Europe's global competitiveness while FSTP focuses on resilience of small-scale farmers and rural livelihoods, governance of agriculture and food security and assistance mechanisms for vulnerable population groups in developing countries.

## Research approach of FP7 & FSTP

FP7 and FSTP are rather distinct in the overall research approach, but occasionally seem to use different names for comparable items.

The research approach of FP7 is:

- Full innovation cycle, including demonstration, piloting, and validation
- Dedicating 20% of the budget share to Small or Medium-size Enterprise (SME) involvement
- Global in scope

The research approach of FSTP is to:

- Incorporate a value chain approach for farm modernisation
- Aim for greater participation by civil society, farmer organisations and the private sector
- Aim for South-South and South-North scientific and technical cooperation, as a way to address food security challenges in developing countries
- Focus on food-insecure countries that are furthest from reaching MDG 1, in particular in sub-Sahara Africa, but also in South Asia

## Setting the research agenda of FP7 & FSTP

The research agenda of FP7 is defined through a consultative process that is initiated and managed by DG RTD. It includes a process of stakeholder consultation, the work of a formal advisory group and Standing Committee on Agricultural Research (SCAR) and includes an inter-service consultation through which other EC DGs are asked for revisions and endorsement.

There is no publicly available information about the cooperation between DG RTD and DG AGRI for the period covered by FP7. Within Horizon2020, the successor of FP7 from 2014 to 2020, the Directorate General for Agriculture and Rural Development (DG AGRI) assumes a bigger role and as such cooperation between the two DGs is becoming stronger.

To define the European and global ARD agenda, there are a number of bodies, processes and fora, including:

- The Global Forum for Agricultural Research (GFAR) provides the framework for multi-stakeholder engagement at the global and the regional level. The EC is active in the European Forum on Agricultural Research for Development (EFARD), the European network associated with GFAR. EFARD is an informal and voluntary mechanism.
- The Global Conference on Agricultural Research for Development (GCARD) is a conference for stakeholder involvement in setting research priorities and to make research more demand driven. GCARD replaces the annual general meetings of Consultative Group for International Agricultural Research (CGIAR) and the triennial meetings of GFAR.
- The European Initiative for Agricultural Research for Development (EIARD) is an informal donor policy coordination platform between European MSs, the EC and Switzerland and Norway on policies and programming in ARD. It coordinates investments in the CGIAR and develops common EIARD positions in CGIAR Fund Council Meetings. The EC is represented by DG RTD and DG DEVCO.
- Heads of Agricultural Research for Development (HARD) is a group that includes the MSs' Heads of Agriculture and Rural Development, and DG AGRI, DG RTD and DG DEVCO. It serves as a forum for discussion and exchange on recent developments at the EU level in regards to rural development, food and nutrition security. In this respect, the group also discusses ARD.

The Thematic Strategy and Multiannual Indicative Programme (MIP) of FSTP for the period 2011-2013 was based on lessons learnt from the first phase of FSTP (2007-2010) and the 2010 'EU policy framework to assist developing countries in addressing food security challenges'.

Of the 2011-2013 FSTP budget for agricultural research 44% was used to support the CGIAR's research programmes. The CGIAR Fund Council is the mechanism for coordination of donor support to the CGIAR and takes decisions on the approval or rejection of research proposals.

Annual Action Programmes of FSTP, including support to the CGIAR, undergo an in-house quality check and review before interservice consultations with other DGs and approval by MSs. FSTP explicitly aims for coordination and coherence with programmes under FP7.

## **Funding mechanisms and evaluation guidelines of FP7 & FSTP**

FP7 generally related to co-funding. The FP7 Cooperation work programme issued competitive calls for proposals to implement research on *food, agriculture and fisheries, and biotechnology* and the *environment (including climate change)*. FP7 used a number of funding schemes which had differing requirements relating to the aim, activities, number of legal entities participating in the project, their country of origin and the target audience. All topics under FP7- Cooperation theme 2 and theme 6 were open for participants from International Cooperation Partner Countries (ICPC).

The evaluation guidelines of FP7-Cooperation are based on:

- 1) Scientific and/or technological excellence
- 2) Relevance to the objectives of the specific programmes
- 3) Quality and efficiency of the implementation and management
- 4) The potential impact through the development, dissemination and use of project results

The evaluation procedures to be followed by all programmes under FP7 included an eligibility check, evaluation by independent external experts, a consensus discussion moderated by the Commission and formulation of recommendations to the Commission by the experts. DG RTD took the final funding decisions but other departments and directorates-general were consulted. During six years of FP7 proposals and applicants had an average success rate of 19% and 22% respectively.

Under strategic priority 1 of the second phase of FSTP (2011-2013), the EC provided strategic support to CGIAR and GFAR, Association for Strengthening Agricultural Research in Eastern and Central Africa (ASARECA), Forum for Agricultural research in Africa (FARA), Center for the Coordination of Agricultural Research and Development in Southern Africa (CCARDESA) and Platform for African European Partnership on Agricultural Research for Development (PAEPARD). FSTP directly contracts the African institutions and networks with the purpose of institutional support, to build institutional capacity. FSTP directly contracts the CGIAR because the new Strategy and Results Framework (SRF) of the CGIAR is aligned with the EC policy priorities and objectives.

The DG DEVCO support to CGIAR and GFAR, ASARECA, FARA and CCARDESA is provided through a mechanism called “Joint Management with an international organisation” and each of the organizations has a forum for donor coordination. In the case of support to ASARECA, FARA and CCARDESA, donor support is coordinated and administered through various Multi-Donor Trust Funds (MDTF) managed by the World Bank. An MDTF ensures harmonisation of procedures and reduction of transaction costs through joint monitoring and evaluation missions and follow up of programme implementation. It also facilitates longer-term support to an organization or partnership.

Eligibility or quality criteria for FSTP to directly fund ARD institutions and networks seem not publicly available whilst guidelines appear not to be published. Nevertheless, FSTP does specify expected results of the CGIAR, GFAR, ASARECA, FARA, CCARDESA and PAEPARD.

The EC supports the CGIAR through Joint Management with International Fund for Agricultural Development (IFAD) because the EC cannot pay directly into the CGIAR donor fund. IFAD has a contribution agreement with the CGIAR Fund which specifies how resources are divided between CRPs and Challenge Programmes. IFAD reviews and approves the technical and financial reports submitted by the CGIAR centres; and ensures that adequate monitoring arrangements for the programmes are in place and work towards joint monitoring in collaboration with Fund Council members and the CGIAR Independent Evaluation Arrangement.

## **Research themes and programmes**

Analysing the research topics that are called for under FP7 and the research themes that are covered by the research institutions and networks that are funded through FSTP it is apparent that these research themes largely overlap and can be grouped under six broad themes:

- 1) Climate Change and agriculture
- 2) Agriculture for food security, nutrition and food safety
- 3) Animal health, production and welfare
- 4) Sustainable use of natural resources
- 5) Innovation and dissemination of agricultural knowledge
- 6) Institutions, markets and food chains

Analysing the summaries of the ten selected AR and ARD programmes it is evident that cooperation and coordination between AR and ARD partly exists through an overlap in funders and funding mechanisms, and through the pathways for uptake of research outputs as well as through the participation by research institutes, universities and National Agricultural Research Systems (NARS). In addition, (potential) synergies appear in the objectives and research methodologies of different programmes and potential complementarities in the expected results.

Observations according to the programme selection criteria:

- Total budgets range from €3 million to €3 billion
- Eight programmes have a duration of 3-5 years and seven programmes have longer term ambitions
- One FP7 funded programme explicitly aims to develop the European research community and strengthen the European economy, the other nine programmes have an intercontinental focus
- Eight of the ten programmes aim to contribute to global food security; five programmes aim to optimize the use of natural resources and six programmes address, or are related to, food safety and nutrition.
- All selected programmes make public statements about steps that will be taken to put the research results into practice. Six programmes are quite elaborate and specific in describing these steps.

## **Key findings and recommendations**

This briefing paper endeavours to answer the question of how EC funders of agricultural research can enhance cooperation between donors to improve the efficiency of research investments and increase positive impact on global issues.

The main instruments to enhance synergies between AR and ARD observed in recent years are (A) institutional policy dialogue and cooperation, (B) funding mechanisms, and (C) International cooperation between AR and ARD institutions and scientists.

### **A. Institutional policy dialogue and cooperation**

The questions that were addressed with respect to institutional policy dialogue and cooperation are: What are the policy goals of the Directorates General of the EC that fund AR and ARD? Which processes and structures are used by the EC to set the agricultural research agenda? Is there an overlap between policy goals and the structures used by the different DGs funding AR and ARD that provides scope for harmonisation?

Key observations:

- 1) The policy goals of FP7 and FSTP regarding agricultural research largely overlap. The separation between AR and ARD is historic and irrelevant considering that both aim to address the same global challenges.
- 2) SCAR, HARD and EIARD overlap in focus and activities and involve overlapping MSs Ministries and EC DGs. HARD are not so relevant for the SWG. SCAR is the only group with an official status and has the official mandate to advise the EC. There is scope for improved coordination between SCAR and EIARD, in particular in case joint agricultural research agenda setting can be considered.
- 3) DG DEVCO aims for coordination with DG RTD whilst DG RTD is increasingly coordinating agricultural research funding with DG AGRI. Increased coordination of agricultural research funding should therefore include all three DGs.

Recommendations:

- 1) It is recommended that the SCAR EIARD SWG identifies concrete opportunities for cooperation such as for example involving EIARD in SCAR foresight activities.
- 2) It is recommended that SCAR broadens its scope to include agricultural research that is relevant to the MDGs.
- 3) To increase coordination of agricultural research funding among DG RTD, DG AGRI and DG DEVCO, it is recommended that the three DGs actively seek each other's input, above and beyond existing inter-service consultations.

## **B. Funding mechanisms**

The questions that were addressed with respect to funding mechanisms are: Which funding instruments are used by the EC donors that support AR and ARD? What are the differences and similarities between these funding instruments?

Key observations:

- 1) There are two different funding mechanisms in place for agricultural research managed by DG RTD and DG DEVCO.
- 2) FP7 and FSTP as relevant to agricultural research are different in a number of ways:
  - Funding instrument: FP7 competitive calls focused on excellent science to the benefit of Europe / FSTP strategic support focused on contribution to the MDGs
  - FP7 transparent and structured procedures for consultation and research agenda setting with a focus on Europe / FSTP policies and programming in ARD through EIARD
  - FP7 transparent about requirements for participation by partners from developing countries and other stakeholders; Eligibility criteria are published / FSTP more flexible, supportive of partners to build institutional capacity and partners whose work is aligned with the EC policy priorities. The grounds on which the CGIAR and GFAR, ASARECA, FARA, CCARDESA and PAEPARD receive strategic support through FSTP are not made public and no eligibility criteria are published
  - FP7 ex-ante grant agreement / FSTP ex-ante grant agreement plus ex-post performance monitoring
- 3) The different funding mechanisms have pros and cons. Instruments that allow direct or joint funding, joint management and MDTF provide useful instruments for flexible funding and enhancement of long-term research partnerships. These instruments allow funding of selected research partners and can be used to avoid that certain areas of research are neglected. The experience of DG DEVCO with these instruments can provide valuable lessons learned for funding agricultural research in Europe and with / in developing countries. On the other hand, competitive calls are assumed to enhance cost efficiency and generate novel approaches due to competition among potential research partners. The biggest disadvantage of competitive grants is the time that scientists invest into proposal preparation when only a limited number of the developed proposals will be funded. They also seem to require more up-front donor time than core funding mechanisms, because of the need to conduct rigorous priority setting and evaluation methods.

Recommendations:

- 1) It is recommended that the SWG discusses and identifies the advantages and disadvantages of the different funding instruments and advises SCAR and EIARD about ways to use the different instruments more strategically so that the objectives of different EC donors of agricultural research (excellence as well as impact of research) are achieved and that synergies are increased. Into the future, the envisaged programme IntensAfrica could be a case in point to test a mixed funding approach.
- 2) It is recommended that DG RTD, DG AGRI and DG DEVCO publicise the background to choosing particular funding instruments and eligibility criteria.

## **C. International cooperation between AR and ARD institutions and scientists**

The questions that were addressed with respect to international cooperation between AR and ARD institutions and scientists are: Is there scope for increased cooperation at the level of AR and ARD programmes? What are best practices for cooperation and sharing of resources at the programme level? What could donors of AR and ARD do to enhance cooperation at the programme level?

Key observations:

- 1) FP7 and FSTP address overlapping research challenges
- 2) There are opportunities for synergy between current programmes and partnerships due to:
  - a. significant overlap of objectives and complementarity of expected results
  - b. partial overlap of research partners

- c. shared lessons learnt re dissemination and knowledge transfer
- d. mutual donors and funding mechanisms

- 3) There seems to be a lack of a mechanism that identifies common ground between programmes at an early stage in order to connect from the start.
- 4) Retrospectively it seems that “Quick wins” are possible regarding improved coordination between funders of AR and ARD. However it is appreciated that this requires a significant change in the research funding approach, starting with harmonising research agenda setting and funding instruments, which takes time.

#### Recommendations:

- 1) It is recommended that DG RTD, DG AGRI and DG DEVCO start a dialogue with large non-European donors about increased collaboration. Global funders of agricultural research could establish additional MDTFs to support the prolongation of successful partnerships, and to align and seek synergy with respect to research objectives, methodologies, results and knowledge transfer between programmes. Donors are encouraged to look for “quick wins”, e.g. by jointly generating and funding extraordinary workshop opportunities, for researchers from different scientific programmes that address similar themes, to elaborate joint briefing papers, which add value both to programmes and to end beneficiaries.
- 2) It is recommended that funders of agricultural research require research consortia to exchange between programmes and connect with each other from the start.
- 3) It is recommended that the SWG interacts with FACCE to broaden the network that actively seeks coordination and cooperation.
- 4) It is recommended that the SWG analyses the potential overlap between IntensAfrica and CRPs to coordinate MS funding to African programmes.
- 5) It is recommended that funders of agricultural research create ‘new’ instruments, such as knowledge hubs.

#### Overall

Enhanced cooperation between EC institutions funding agricultural research is possible at different levels and can improve the efficiency of research investments and increase positive impact on global issues. This briefing paper recommends a number of steps that can be taken to capitalize on the lessons learned in the period 2011-2013 and increase cooperation in the period 2014-2020.

The methodology used to implement the study that lead to this briefing paper could be used and replicated going forward. In order to measure change, the SWG may consider replicating this study at 3-year intervals to assess whether coordination and cooperation between EC institutions funding agricultural research has improved and what further improvements can be identified.