



GCARD

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Breakout Session C1.3 North-South and South-South Collaborative Actions – Session Brief Claudio Barriga/Mario Allegri

Context – the problems being addressed

North-South/South-North Cooperation

North-South Cooperation: The United States of America (USA) and Canada provide numerous opportunities to students and young scientists from countries in the South to access state-of-the-art training and acquire highly recognized qualifications (Masters and PhDs) through the training and international research programs in universities, faculties of agriculture and agricultural research centres. The Land Grant Universities (LGU) are active partners in the *Feed the Future Initiative*, the new flagship program of the USA administration in support of food security which include a robust research and innovation component. However, the bulk of USA and Canada investment is not in agricultural research in the South but in aid and support to food security programs coordinated by USAID and the State Department. However, the important contribution of GLUs to capacity building is often affected by brain drain.

Europe has considerable experience and technical expertise in applying Agricultural Research for Development (ARD) to address development challenges. These are not limited to technical innovations, but also include the pioneering of new approaches such as innovation systems to improve research response to farmer demands, capacity strengthening initiatives and knowledge transfer to developing country institutions and individuals. In addition, Europe is the largest regional donor. European countries and the European Commission collectively supply around 60 percent of official development aid. This includes around €1.2 billion annually to support agriculture and rural development. Europe is also the largest contributor to publicly-funded ARD, including to the CGIAR.

South-North Cooperation: Some FGEs like Brazil are investing in building and managing bilateral partnerships with developed countries by sending experienced scientists to work with partners with the twin aim of sharing knowledge and prospecting, using their own competences and making partners discover those of the institute they represent. A remarkable example of S/N collaboration is the *Embrapa* strategy through the 'Labex', virtual laboratories abroad without walls (from *laboratórios no exterior*, in Portuguese), in the USA, Europe and more recently in Asia. Senior scientists are posted to 'cutting-edge' teams to work two-thirds of their time on an ambitious project of joint interest. They use the rest of the time for prospecting and for seeking new opportunities. Information flows from these Labex to Brazilian research institutes. After the first decade in Europe, we can observe a strong increase in collaborative projects.

G20¹ countries are also increasingly mobilizing their national research systems in supporting agricultural research in the South because many global challenges like reducing hunger, alleviating extreme poverty, climate change, desertification, transboundary spread of pests

¹ which includes some FGE: Brazil, China, Russia, India, South Africa

and diseases, the loss of biodiversity and more equitable and fairer international trade in agricultural commodities, go beyond national boundaries. Addressing these global challenges require global collaboration and the recent meeting of G20 Agriculture Chief Scientists (MACS) 24-27 September, 2012, in Guadalajara, has probably opened a new avenue for collaboration in agricultural research in the context of the G20 that should be linked to GFAR processes, as recommended by the G20 ARD meeting of September 2011 in Montpellier, France.

CAADP and CGIAR Alignment and Partnerships

The ongoing CAADP processes in Africa and recent CGIAR reforms present an opportunity for new alignment and expanded partnerships. Several activities are underway to create the synergies needed, supported by African partner institutions, the CGIAR Consortium and development partners. The national and regional agriculture and food security investment plans with their recently established goals, targets and priorities (including commodities and selected technical issues needing attention) provide the backdrop for this work in support of the CAADP vision and framework, as evident in the Framework for African Agricultural Productivity (FAAP).

South-South Collaboration

There is little formal South-South collaboration in agricultural research for development. Most collaborative activities in which South countries participate are around research funded by Northern institutions.

Except for South countries clubbed as the G20, most South countries have very weak National capacities for agricultural research. Their weaknesses are in managing Institutions capacity, science related infrastructure, human skills and the ability to generate, manage, disseminate and use information for agricultural innovation and development.

Some countries that have benefitted from important investments in agricultural research such as Brazil, China, India, Egypt, Ghana, Indonesia, South Africa and Vietnam have comparatively large systems of agricultural research with significant economic reliance on agriculture. Brazil, India and China have notable advanced research capacities in several new trans-disciplinary areas such as biotechnology, nanotechnology, information and communications technology, space technology and materials science that now have increasing contributions to agricultural science and technology.

Several fast growing economies (FGEs) with agricultural research capacities in the South such as the BRICS (Brazil, Russia, India, China, South Africa), and IBSA (India, Brazil, South Africa) have attempted to develop collaboration for agricultural research within themselves. However these have not fructified yet though individually countries such as Brazil, India and China have increased their collaboration with some African and Asia countries. These collaborations are based on different strategies in establishing research programs and projects, building research infrastructure, training and providing University level education and sharing seeds, breeding animals and other germplasm. In a few instances information and knowledge sharing activities have been taken up with use of new ICTs.

GFAR has fostered Regional Organizations and Forums of Research Institutions and, more recently, Farmer and Civil Society Organizations at regional levels and continues to advocate the transformation of National Institutions to National Systems for research and the development of agricultural innovation systems that support inclusiveness of all ARD stakeholders and actors. A major weakness of these organizations lies in their capacities to organize, manage and support collaborative regional and inter-regional agricultural research

and development.

Current activities presented and discussed in the Session

This session will: 1) Take stock of North – South and South – South collaboration in agricultural research for development based on recent dialogues and conferences on the topic 2) Identify the main constraints that have limited both North-South and South – South collaboration in agricultural research for development, and 3) propose collective actions for South-South Collaborations through regional fora and organizations and groupings such as G20, BRICS, IBSA as well as the roles of regional development and the World Bank.

Paolo Sarfatti (EFARD/AGRINATURA) will briefly describe the activities carried out by The Platform for African-European Partnership on Agricultural Development (PAEPARD) PAEPARD is a collaborative project between FARA and EFARD, financed by the EU. Its Phase 2 started in 2009 and run until December 2012. The project seeks to build “Enhanced, more equitable, more demand-driven and mutually beneficial collaboration of Africa and Europe on ARD with the aim of attaining the MDGs”. PAEPARD II is led by FARA, co-coordinated by AGRINATURA (through a network of universities and three research organisations, CIRAD, IAO, and NRI). It is, implemented in partnership with PAFO (Pan African Association of Farmer Organizations and its constituent SRFOs: EAFF, ROPPA, PROPAC and SACAU); RUFORUM (African University Network); FANRPAN (African Policy Analysis Network) and other associate partners in Africa and Europe

Embrapa will present its Brazil/Africa and Brazil Caribbean Innovation Marketplace. The Embrapa Brazil/Africa Marketplace is better known than the most recent Brazil/LAC. Brazil/LAC is a partnership to enhance agricultural innovation for development in LAC through the establishment and strengthening of partnerships between Latin American and Caribbean research-oriented organizations and Embrapa.

The Marketplace aims to benefit primarily smallholders and will focus on agricultural innovation thus potentially engaging the full range of actors involved in the generation of agricultural knowledge (research, academia, extension, private sector, NGOs, producers, policy makers). It is expected to lead to the generation of concrete and productive partnerships between agricultural research and development organizations in LAC, initially through Embrapa, supporting smallholders. Ultimately, it will support the development of a mutually agreed framework for sustainable LAC-Brazil collaborations. The Marketplace opens a new source of expertise to Latin American and Caribbean countries to identify and target pro-poor, smallholder-based projects utilizing Brazilian innovation and research. It will be implemented through call for proposals whose first round was launched from December 12th 2011 - February 29th 2012 .

The Market Place governance consists of two committees:

1. An Executive Committee (EC) with three members (Embrapa, IICA and FAO) co-chaired by Embrapa and IICA, in charge of all executive decisions related to the Marketplace; and
2. an Innovation Marketplace Steering Committee (SC) serving as a sounding board to the Executive Committee, in charge of pre-proposal and full proposal assessment and approval, on a competitive basis. The SC will be comprised of representatives from Embrapa, IICA and MCTI, IDB, IFAD, ABC/MRE, CIAT, DFID, FAO and the World Bank. The SC will be co-chaired by Embrapa and IICA.

Funds are hosted and initially managed by the Fundação Arthur Bernardes (FUNARBE), in

Brazil, utilizing the same model developed for the Africa-Brazil Marketplace.

CAADP- CGIAR Alignment

The presentation will focus on recent progress made under the CAADP-CGIAR alignment coordinated by FARA with the support of The World Bank and USAID. Highlights and benchmark activities carried out since the two Dublin meetings will be presented, including the information platform, *CAADP-CGIAR AgKnowledge*, designed as a prototype with technical support from IFPRI to be scaled up over the next several months.

With a second meeting in Ireland September 17-19, 2012, the Dublin Process has laid the groundwork for an expanded engagement within the broad CAADP and CGIAR communities.

The goal of the Dublin Process is to explore how African country and regional agriculture and food security investment plans to advance CAADP will inform and guide CGIAR, African country and regional agriculture research programs and identify opportunities to leverage existing relationships – to better align around a science agenda for African agriculture.

A. Njoya (CORAF/WECARD) will present CIRAD and IRD collaborative research platforms in West and Central Africa, an example of concrete achievements of the two institutions which contribute to partnership research programmes in the region, and the implementation of CORAF/WECARD Long Term Strategy. These formalized partnership instruments have enabled the renewal of CIRAD & IRD scientific offer to better meet the needs of the local and regional actors in the South and establish long-term collective scientific projects between national and regional institutions while building strong multidisciplinary scientific communities which together can address major global development challenges of development.

The presentation will provide a quick overview of the current achievements in West and Central Africa of the two new partnerships mechanisms: the Dry Zone Pastoral Pole (PPZS) created in 2001 by the ISRA, the UCAD, the CSE and the CIRAD, and the more recently established International Joint Laboratory "Ecological Intensification of Cultivated Soil in West Africa" (LMI IESOL) resulting from a long-standing partnership between ISRA, INERA, the university of Dakar and of Ouagadougou, and IRD.

Intended outcomes

PAEPARD:

- Increasingly engage European and African agricultural research and development actors in ARD initiatives targeting African-European priorities of mutual interest and benefit;
- African-European partnerships on agricultural research for development are increasingly driven by users demand;
- European and African funding mechanisms support more effectively the integrated research and non-research actions necessary for development-oriented agricultural innovation supporting achievement of the MDGs.

CAADP- CGIAR Alignment

Participants will be briefed on the CAADP-CGIAR activities and a demonstration of the information platform designed by IFPRI and partners to improve alignment conducted. National and regional research participants in particular will be offered to sign on revisited and/or new activities involving greater partnership and closer alignment of CAADP and CGIAR scientists and program managers and targeting tangible and clearly identified indicators for increasing productivity in African agriculture.

Embrapa Brazil/Africa and Brazil/LAC

The objective of the latter is to enhance agricultural innovation for development in LAC through the establishment and strengthening of partnerships between Latin American and Caribbean research-oriented organizations and Embrapa. The aim of the Marketplace is to benefit primarily smallholders.

It will focus on agricultural innovation thus potentially engaging the full range of actors involved in the generation of agricultural knowledge (research, academia, extension, private sector, NGOs, producers, policy makers).

The initiative is expected to lead to the generation of concrete and productive partnerships between agricultural research and development organizations in LAC, initially through Embrapa, supporting smallholders. Ultimately, it will support the development of a mutually agreed framework for sustainable LAC-Brazil collaborations. The Marketplace will open a new source of expertise to Latin American and Caribbean countries to identify and target pro-poor, smallholder-based projects utilizing Brazilian innovation and research.

The Marketplace is an initial partnership between Embrapa, IICA, FAO and MCTI, IFAD, ABC/MRE, CIAT, IDB, DFID and the World Bank. Special partnerships will be established, as needed. Additionally, IICA will closely interact with sub-regional agricultural research organizations and entities such as FORAGRO and FONTAGRO.

It is a process composed of three pillars:

1. A policy dialogue between policy-makers and research and development institutions including meetings between Brazilian President and Brazilian diplomats to the countries in Latin America and Caribbean, and between their ministers of agriculture and Brazilian government officials. The launch of the Marketplace, took place on October 20, 2011 at the ministerial meeting organized by IICA in Costa Rica ñ *Encuentro de Ministros de Agricultura de las Américas 2011*.
2. Support and implementation of LAC-Brazil collaborative projects in agriculture in four thematic areas through a 2-step competitive selection of LAC-Brazil collaborative projects under which applicants are requested to submit pre-proposal for evaluation and, if selected, a full proposal.
3. Based on pre-defined assessment criteria, the top proposals are selected by a Steering Committee for funding and implementation. Projects will have a maximum duration of 2 years, with a total budget not to exceed US\$80 000. A forum for presentation and discussion of collaborative ideas the main Marketplace event was held in Brasilia, in August, 2012.

CIRAD/IRD:

- Development of innovative research projects
- Structuring of scientific communities in the North and South regions and particularly of scientific expertise in the South with strong linkages with higher education and training
- Develop agricultural practices impact in the South and their benefits to people

South South:

The potential of greater impact of regional and inter-regional collaboration in agricultural research that benefits all littoral countries in a region is illustrated by documented evidence of significant regional spillovers in spread of agricultural technologies in East Asia, South East Asia, South Asia, the Pacific, East, South and West Africa and in South America .

A review of the practice of South-South collaboration in agricultural research indicates that there is a huge potential for greater impact of agricultural science and technology globally through improved South-South collaboration.

In fast growing countries (FGEs) agricultural research for development has not only contributed to reducing hunger and alleviating rural poverty but also to overall economic development. FGEs have gone through various stages of ARD Systems development. Despite complexity and asymmetries and their still ongoing struggle in applying science and technology for the resource poor smallholder, the FGEs are stressing the need for partnerships with other countries in the South, through networking and partnerships. These partnerships would focus on:

- Capacity development of national systems through regional and sub-regional actions in making them more inclusive of all ARD stakeholders, improve research management and governance and sharing of skills, information, knowledge and technology;
- Facilitate and support new groupings of Emerging Economies for greater South – South Collaboration;
- Advocacy by GFAR and Regional Forums for greater sub-regional, regional and inter-regional collaboration.

Commitments to collective actions in 2012-2014 (national, regional or international)

i. With existing resources

PAEPARD

With funding of approximately two million Euros (tentative figure) until the end of 2013 PAEPARD will continue to develop a number of activities contributing to the implementation of the GCARD Road Map, in ensuring equitable partnership and accountability among all stakeholders of agricultural innovation and developmental change, experimenting and documenting for out-scaling effective multi-stakeholder partnership. It will :

- Mobilize European stakeholders, including African Diaspora associations, and African stakeholders, in a demand-led process;
- Document, share and monitor information and knowledge exchange among partners;
- Update information and communication systems to make its access friendlier and organize continued training on content management and on platform uses by partners and strengthen and improve the stakeholders;
- Involve partners in building the capacity of end users led process, organizing inception and write-shops to respond to calls launched by developing proposals.

These capacity building interventions and mentoring will concern some of the 19 current consortia by revising concept notes to respond to specific calls for proposals and lobby for the reform of traditional research funding mechanisms.

CAADP- CGIAR Alignment

- Improved alignment by identifying/fine-tuning research priorities, and gaps in information and in research and investment, based on data from CAADP investment

plans and CGIAR CRPs;

- CRPs action plans and partnership strategies aligned with national and regional research programs in Africa – through closer alignment of CAADP and CGIAR scientists and program managers in focusing on productivity increases in African agriculture

Embrapa Brazil/Africa

The first wave of selected projects that will be funded and implemented are :

- Regulation of the flowering of *Jatropha curcas* to improve the sustainability of biofuel feedstock production by farmers in Latin America and the Caribbean, Nicaragua;
- Plant health through soil health management: boosting soils for increasing plant defenses and suppressiveness to reduce losses caused by *Fusarium* wilt on bananas, Costa Rica;
- Restoration and assisted migration of threatened populations of wild peanut species to ensure their in situ survival and long-term availability for crop improvement in the face of climate change, Bolivia;
- Cryopreservation technology applicable to the Pineapple Germplasm Collection using droplet vitrification of pieces for long term conservation and safety duplication, Cuba;
- Thermotherapy chamber: A rapid and eco-efficient method for cleaning and massive propagation of cassava and plantain seed, Colombia.

CIRAD/IRD -CORAF:

In 2013-2014 PPZS and IESOL will continue their ongoing activities promoting scientific knowledge, team work and training while leveraging additional funding from national and international donors, and from new partners in the North as well as in the South. They will also reassess their research activities, particularly in training and capacity building with national partners and CORAF/WECARD to prioritize additional activities with new levels of human resources and funding availability. All partners are committed to providing long-term human, material and financial support for the projects, according to contractual terms :

PPZS research activities will continue to produce knowledge and management tools for pastoral ecosystems, as well as identify indicators for monitoring resources. New joint projects will be submitted to donors, building on opportunities offered by existing calls for proposals including the one recently launched in the context of the CSIRO/CORAF collaboration. Training modules on pastoralism (supported by FAO) will be finalized and the implementation of the master UCAD "ecology, agroforestry, adaptation" will be continued.

Outcomes expected the LMI IESOL work program are the development of ecological intensification practices of soils in West Africa and the publication of technical leaflet and publications dedicated to farmers. LMI partners are committed to support the research team in terms of human resources, equipment and to co-finance these activities. Also the LMI IESOL research projects , based on this innovating partnership and a strong North-south research community aim at raising additional funds from national and international funders. They also ambition to attract new scientific partners from north and south countries interested in supporting this area of research.

South South:

Greater coordination for joint initiatives should be developed by the South related regional fora such as FORAGRO – FARA – AAPARI- etc. In order to speed up their development

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| efforts based in results of agricultural research. |
| ii. With additional support |
| <p>1. PAEPARD: Additional support from other funding sources (e.g. bi-lateral, private sector, etc.) is crucial to support the partnerships/consortia which have been facilitated and supported so far. PAEPARD is monitoring the calls/opportunity and providing support to consortia to present proposals to on-going calls.</p> <p>2. Regarding South-South collaboration and in addition to the above: support sub-regional and regional activities in Asia, Pacific, Caribbean and South America as is being done in Sub-Saharan Africa through FARA, ASARECA, SACCAR and CORAF, in implementing GFAR inter-regional collaboration principle.</p> <p>3. CAADP- CGIAR Alignment</p> |
| iii. With specific large scale programme investment |
| <p>The PAEPARD Mid-Term Review (MTR) which was completed in April 2012 recommended the formulation of a third phase of five years for PAEPARD, which would capitalise on the investment in capacity and partnerships in PAEPARD II, but also explore better matching of research proposals to sources of funding.</p> <p>Many lessons have been learned from the PAEPARD experience and have been included in considering the need, interest and feasibility of similar platforms in Asia and Latin America. When building up platforms between these regions and Europe, lessons from PAEPARD should be carefully taken into account for the bi-regional collaboration.</p> <p>The benefits of this type of within-region collaboration are potentially high. If the bilateral platforms with Asia and Latin America are established they would likely involve 3-way interactions as implemented in SS Africa, especially in sharing information and lessons.</p> <p>South- South:</p> <ul style="list-style-type: none"> ▪ Create a new Institutional facility to support sub-regional, regional and inter-regional collaboration in forward thinking, capacity development, skills, technology and information sharing. ▪ Establish an initiative of a group of FGE countries that have substantial investment, human capital and experiences in AR4D such as Brazil, China, India to participate jointly in global dialogues and decision making related to AR4D. This would include: <ul style="list-style-type: none"> ○ Advocacy, sensitization and awareness building on the contribution of AR4D to economic, social, environmental and technological development; ○ Institutions and Systems development for AR and innovation, education and advisory services; ○ A knowledge sharing revolution working jointly with family farmers and agribusiness companies that will facilitate access to markets, and more value added products leading to increased; ○ Making full use of GFAR to enable FGEs play a greater role in global AR4D processes. |