Facilitating innovation in agricultural research for development: Brokering as the vital link
Key lessons learned

Multi-stakeholder ARD partnerships offer a forum for knowledge co-creation, learning and innovation. However, the time required to build trust and establish effective communication is a challenge. Other important lessons include:

> **The need for an inclusive approach**
  Comprehensive support mechanisms are needed for ensuring participation of all partners, which include building capacities, creating networks, stimulating communication, and assisting with financing. This inclusive approach supports locally-led change, innovation and entrepreneurship.

> **Research users are central to defining priorities**
  The potential for farmers and researchers to work together can be enhanced. PAEPARD’s users led process (ULP) has supported farmer organizations in defining research questions and themes based on their needs and priorities. The ULP gives research users ownership and allows them to bring in other actors – including researchers – whenever they are needed in the process.

> **The need to maintain the momentum of multi-stakeholder ARD partners**
  Financial investment in inception workshops and writeshops builds the foundation for more successful European-African research consortia. As a result of this approach, the capacity of African partners has been notably strengthened and the quality of ARD proposals submitted for PAEPARD funding has increased.

> **The brokerage role of consortia co-ordinators and agricultural innovation facilitators is central to effective communication, achieving consensus and building trust.**
  Whilst PAEPARD’s expectations with regard to agricultural innovation facilitators (AIFs) has not been entirely fulfilled, valuable experience has been garnered and lessons learned about the brokerage role of agricultural innovation facilitators (AIFs) and consortia intermediaries play an important brokerage role. Refining the selection criteria of AIFs – to include greater experience of agricultural innovation and further capacity building in effective internal and external communication and collaboration processes – would undoubtedly enhance the effectiveness of their brokerage role.

> **The engagement of European researchers can be improved**
  Individual targeted support is needed to mobilize European researchers to participate more actively in multi-stakeholder ARD partnerships. The key constraints to their engagement need to be better identified.

> **Need to tap multiple funding windows for ARD.**
  Targeting one funding window is not an ideal strategy for multi-stakeholder research consortia; the broader aim should be to diversify sources of funding, including own contributions and venture capital, for scaling up and out the research initiative. The role of the broker is essential not only to identify funding opportunities, but also to minimize financial risk for sustainable ARD partnerships for innovation and impact.
The Platform for African European Partnership on Agricultural Research for Development (PAEPARD) supports the development of sustainable African-European multi-stakeholder partnerships in agricultural innovation. Since 2009, PAEPARD has been working to:

- build multi-actor research partnerships involving farmer organizations, civil society groups, research and education institutes, private companies and policy networks;
- strengthen capacity and improve communication, trust and mutual understanding between partners;
- increase access to funding opportunities and build capacity to develop strong research proposals that address the needs of farmers and entrepreneurs;
- advocate for increased support for demand-led, multi-actor agricultural research.

PAEPARD has undertaken a diversity of brokerage activities in support of demand-driven research. This brief highlights lessons learned from the development of PAEPARD-supported consortia, and provides insights for policy and decision-makers to build and develop users-led demand-driven multi-stakeholder partnerships in agricultural research for development (ARD).

1. PAEPARD and partners as brokers

In its role as a broker, PAEPARD connects different actors with common interests who would rarely interact with one another to share and exchange knowledge. The PAEPARD partnership does so by intervening in a chain of existing brokerage activities. For example, in the case of the mango industry in West Africa, farmers and researchers concentrated on fruit fly control but had ignored the economic value of the large amount of fruit waste until the cosmetic industry entered the partnership. Based on the observations of their African colleagues, European researchers have also been able to validate the value of turning locally produced vegetables, soya beans and Trichoderma strains (a soil borne bio-fertilizer and bio-protectant), into new business opportunities.

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Identifying the right partners is undoubtedly the major challenge when developing innovation projects
2. An inclusive needs-based approach

Since 2010, PAEPARD has been working alongside grassroots farmer organizations, enterprises and NGOs to gather in-depth experience of what these partners need, and provide crucial evidence for policymakers. PAEPARD has come to appreciate the need to nurture and combine the efforts of business, civil society, government, and academia for the benefit of societies and the environment.

In 2011, PAEPARD organized two calls for applications to support the development of multi-stakeholder partnerships to promote demand-driven ARD and innovation. From 153 concept notes submitted, 19 were selected to form consortia. However, with insight from partners, PAEPARD came to realize that despite its initial progress in orientating ARD towards demand-driven partnerships, approaches still remained rather ‘top down’. In particular, farmer organizations were failing to adequately benefit, with very few taking part in this initial call for proposals.

The appreciation that each consortium is unique – from its individual internal needs to its contrasting and challenging environments – led PAEPARD to adopt a needs-based approach known as the users led process (ULP), which aimed to provide a platform for the ‘research user’ partners (especially farmer organizations and the private sector) to lead in the management of brokerage activities. This new brokering procedure, predominantly involved ‘brokerage workshops’ around a united research priority/federating theme chosen by the professional organization network. The objective of this approach was to: a) reinforce existing dynamics at national/regional level; b) improve existing multi-stakeholder partnerships; and c) promote research based on user needs/challenges (Figure 1).

There is room to enhance the potential for researchers to work with farmers and the private sector

The most critical defining step of the process is the multi-stakeholder research question (MSHRQ) inception workshop. The main objective is to help in partnership building, validate the desk review report, prioritize and translate development challenges to research questions; analyze existing capacities and identify gaps; and identify potential additional partners needed in the partnership to help address gaps. Finally, core group members are identified to take the platform forward, develop the proposed concept notes, and help form a (African-European) partnership to jointly develop full proposals and participate in the resulting research.

Through the ULP process, the foundation for effective partnerships has been successfully established and five platforms have been created and involved in the process around a federating theme. The ULP platforms were led by: the Eastern Africa Farmers Federation (EAFF); the Plate-forme Régionale des Organizations Paysannes de l’Afrique Centrale (PROPAC); the Réseau des Organisations des Producteurs de l’Afrique de l’Ouest (ROPPA); the Food, Agriculture and Natural Resources Policy Analysis Network (FANRPAN); and a European private sector-based organization, COLEACP (Comité de Liaison Europe-Afrique-Caraïbes-Pacifique pour la promotion des exportations horticoles) (Table 1).

The ULP experience demonstrates that there are changing attitudes – including among research institutes – towards the innovation capacities of farmer organizations and the private sector (food processors, etc.). In addition, most ULPs have used PAEPARD support to initiate (e.g. PROPAC), finalize (EAFF and ROPPA), or strengthen (FANRPAN) a formal framework for a sustainable farmer organization-research dialogue.

3. Co-ordination vs facilitation: An interesting challenge

A key aspect of developing PAEPARD partnerships was the role of the agricultural innovation facilitators (AIFs). Their responsibility was to ensure that all stages of the partnerships’ development process were based on consensus, common vision, mutual interest and commitment, and to assist with developing the concept note into a formal proposal for submitting to specific financing agencies. For multi-stakeholder partners, addressing a common challenge seldom happens spontaneously or smoothly. The process requires brokerage to

Figure 1. The User’s Led Process steps (Mugabe J., 2012).

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<tr>
<th>USERS LED PROCESS ULP</th>
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<tr>
<td>Federating Theme</td>
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<td>Desk review</td>
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<td>Concept Note Development</td>
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<td>MSHRQ Inception workshop</td>
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<td>Full Proposal Development</td>
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<td>Introduction Workshop</td>
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Table 1. Examples of ULP platforms led by organizations.
bring the partners together, and facilitation to build relationships, which need to be based on shared objectives, efficient task distribution, effective communication and mutual trust.

Initially, facilitators were proposed by consortium partners, such as an NGO leader for PROPAC-ULP’s urban vegetable theme, but these were often also the consortium coordinator, as in the pepper consortium in Togo, or the citrus consortium in Ghana. This led PAEPARD to determine that, where possible, neutral or external facilitators were needed. In 2012, PAEPARD created a pool of AIFs from a call of experts. Twenty AIFs were selected with the majority, not surprisingly, having a research background. The AIFs were then appointed by PAEPARD to specific consortia, mainly according to facilitator country of residence and consortium country. However, for the ULP, it is important to note that the regional farmer organizations nominated their own AIFs to steer the process.

At an AIF workshop in November 2012, it was decided that the consortium coordinator should also take the lead and be responsible for output and direction of the proposal. In contrast, the AIF’s role was to bring people together to help them reach a consensus. Their role was to remain neutral and ensure that the discussion was balanced, that power was shared and that all participants input was respected.

However, a 2013 survey revealed that whilst some consortia were happy with the AIFs assigned to them, some had challenges; some consortia felt that the AIFs did not always have a clear understanding of their problems or priorities. In addition, only a few AIFs explicitly engaged in supporting institutional change, particularly with regard to policy, or stimulating the interface between scientists and practitioners. The majority of AIFs limited their contribution to the facilitation of inception workshops.

While almost all AIFs were involved in facilitating innovation networks or configurations, and supporting learning processes within these networks, they did not address the underlying institutional issues, such as organizational incentives and cognitive differences between the diverse actors that were likely to hamper demand-driven approaches to ways of working. This may be one of the reasons, including the absence of a sustainable funding mechanism, why the facilitation role was taken over – in most of the PAEPARD-supported consortia – by consortium coordinators. This was a key learning process for PAEPARD, as the pool of AIFs was selected for consortium creation and support and not based on their expertise in, for example, facilitating proposal writeshops.

Nevertheless, the Burkina Faso bio-fertilizer consortium (Effects of organic soil enriched with Trichoderma spp. applied to vegetable production in the sub-Saharan region) provided an interesting example of a coordinator/facilitator who focused on agribusiness or enterprise development, guided by market demands. The value added by this coordinator/facilitator was in bringing together the two worlds of agricultural entrepreneurs and agricultural and non-agricultural business service providers.

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<tr>
<th>LEAD INSTITUTION</th>
<th>ULP FEDERATING THEME</th>
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<tr>
<td>EAFF</td>
<td>Extensive livestock value chains in Eastern Africa</td>
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<td>PROPAC</td>
<td>Vegetable garden crops in urban areas in Central Africa</td>
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<td>ROPPA</td>
<td>Rice value chain in West-Africa</td>
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<td>FANRPAN</td>
<td>Groundnut value chain in Malawi and Zambia</td>
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<tr>
<td>COLEACP</td>
<td>Adding value to mango non-food uses in West-Africa</td>
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Table 1. List of the ULPs according to their federating theme.
4. Brokerage in funding innovation: A major change in mindset

The initial concept of PAEPARD (originally set up in 2007) was to question why agricultural research partnerships were often not balanced. When the second phase of PAEPARD was started (end of 2009), partners from Africa and Europe – who previously had only a limited experience of working together – found themselves in a new platform funded by the European Commission Directorate General for International Cooperation and Development. This ‘forced cooperation’ of researchers, private sector, farmer organizations and non-governmental organizations was to demonstrate that it was possible to develop a new approach in ARD and to measure its impacts.

The aim of PAEPARD is to increase preparedness to respond well before a funding opportunity or a call for proposals is made public. However, most European researchers are reluctant to be part of a partnership in a vacuum. For a European researcher to join a partnership, PAEPARD’s experience demonstrates that there needs to be an open call for which the consortium will develop a proposal. This was probably the biggest challenge to engaging European research scientists in PAEPARD-supported consortia. And, as of early 2016, 21 submitted proposals have been selected for a call organized by a diverse group of donors. For example, from a total of 11 proposals submitted in May 2014, four received funding and were launched in Benin, Burkina Faso, Malawi-Zambia and Uganda in October 2014.

Several PAEPARD-supported consortia involve the private sector (Benin/soya, Burkina Faso/organic soil fertilization, Malawi/aquaculture, West Africa/mango exports) and global value chains in innovation for small-scale farmers. COLEACP has organized private sector actors in four West African countries (Burkina Faso, Côte d’Ivoire, Mali and Senegal) to define the research priorities of the agribusiness players towards the use of mango waste as a consequence of fruit fly infestation. The inclusion of poor consumers as an accessible mass market was the scope of a number of consortia (e.g. soya products in Benin, innovative chicken feed in Nigeria). One consortium involved innovative information and communication technologies such as GIS1 cattle-tracking systems in South Africa for tackling aflatoxin feed issues in Africa2.

broker’s role is to identify funding opportunities and to minimize financial risk

available for staff time is insufficient), whereas the development of new capacity, including new organizational and alliance mechanisms, is an important aspect of ARD partnership sustainability. There is therefore a clear need to target more than one funding window; the challenge for PAEPARD going forward is that not all other bilateral donors may be interested in funding EU partners.

Bringing partners together for the consortium inception workshops and for concept note writeshops has considerably increased the quality of the submitted proposals. Since 2010, some 55 concept notes and proposals have been submitted by PAEPARD-supported consortia. And, as of early 2016, 21 submitted proposals have been selected for a call organized by a diverse group of donors. For example, from a total of 11 proposals submitted in May 2014, four received funding and were launched in Benin, Burkina Faso, Malawi-Zambia and Uganda in October 2014.

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The rice corner at the EXPO MILANO, Italy: Food and agriculture innovation aligned on the sustainable development goals.

Photo credit: R. Kahane, Agrinatura/CIRAD

1 Geographic information system, using satellite imaging technology.
2 PAEPARD Policy Brief N°1, October 2015. Available at www.paepard.org
5. Conclusion

Whilst the PAEPARD project portfolio is still relatively immature, as more multi-stakeholder consortia mature and move to scale over coming years the development impact of PAEPARD-funded research projects is expected to grow substantially.

Identifying partners is undoubtedly a major challenge for developing research and innovation partnerships. However, understanding the value chain that underpins innovative partnerships for example, informs which innovation actors to be targeted and the activities to be undertaken. Integrated support for multi-stakeholder ARD partnership, at all stages of their development, can support existing or new entrepreneurial initiatives, notably initiated by women. For example, in the case of consortia working with rural smallholder farmers as suppliers, the profits the smallholders accrue as a result of the research project would be captured as a financial benefit to the household, rather than as jobs created (e.g. Benin/soya, Burkina Faso/bio-fertilizer). In addition, local economies can be stimulated and communities empowered, thereby facilitating farmers’ access and linkages to markets, and mitigating climate change impacts.

Crucial to its approach is that PAEPARD does not roll out a pre-designed program, but PAEPARD partners, consortium coordinators and AIFs, together cultivate support actions to develop an innovation systems framework. It is this approach to brokering knowledge and facilitating learning that should form the basis of transforming agricultural research and innovation for inclusive growth, food and nutrition security and sustainable development in sub-Saharan Africa.

As more multi-stakeholder consortia move to scale over the years, the development impact of PAEPARD-brokered research projects is expected to grow substantially.
The Platform for Africa-Europe Partnership in Agricultural Research for Development (PAEPARD) is an 8-year project sponsored by the European Commission (80%) and partners’ own contribution (20%). It is coordinated by the Forum for Agricultural Research in Africa (FARA) since December 2009, and extended until end of 2017. It aims at building joint African-European multi-stakeholder partnerships in agricultural research for development (ARD) contributing to achieving the Millennium Development Goals. On the European side, the partners are AGRINATURA (The European Alliance on Agriculture Knowledge for Development, coordinating the European partners), COLEACP (representing the private sector), CSA (representing the NGOs), ICRA, specialized in capacity building in ARD, and the Technical Centre for Agricultural and Rural Cooperation (CTA). On the African side and in addition to FARA, the partners are the Pan-African Farmers Organization (PAFO), the Regional Universities Forum for Capacity Building in Agriculture (RUFORUM) based in Kampala, and the Food, Agriculture and Natural Resources Policy Analysis Network (FANRPAN) based in Pretoria. PAFO involves its members that are the Eastern Africa Farmers Federation (EAFF) based in Nairobi, the Réseaux des Organisations Paysannes et des Producteurs d’Afrique de l’Ouest (ROPPA) based in Ouagadougou, and the Plate-forme Régionale des Organisations Paysannes d’Afrique Centrale (PROPAC) based in Yaoundé. The Southern African Confederation of Agricultural Unions (SACAU) is an associate partner of PAEPARD.

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