Chapter 10

DEALING WITH CRITICAL CHALLENGES IN AFRICAN INNOVATION PLATFORMS: LESSONS FOR FACILITATION[1]

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Introduction

There is growing scientific recognition of innovation platforms (IPs) and the role of facilitation in catalyzing agricultural innovation (see Klerkx and Gildemacher 2011; Hounkonnou et al. 2012; Klerkx, Mierlo, and Leeuwis 2012), with increasing documentation of experiences from practitioners (see Hawkins et al. 2009; Nederlof, Wongtschowski, and Van der Lee 2011; Nederlof and Pyburn 2012; Mbabu and Hall 2012). IPs have become increasingly popular, and run the risk of becoming a void concept or misunderstood—for example, because they are taken as merely mechanisms to regulate value chains or to extend new technologies to large numbers of farmers (PAEPARD 2013; Darbas and Sumberg 2013); still, the discussion whether or not IPs are useful and effective is a relevant one. In this chapter, we argue that the success of an IP depends on the attitude and skills of the facilitator. Indeed, one of the most frequent questions from practitioners is: How do we best facilitate IPs?

IPs are composed of a range of actors, often with very different backgrounds, who discuss and address challenges and opportunities around a particular issue or area (Nederlof, Wongtschowski, and Van der Lee 2011). IPs may operate at local or national level; sometimes linking actors at different scales. Often, the actors have divergent and sometimes competing and conflicting interests and values, and they do not naturally want to cooperate or share information with each other. Experience has shown that skillful facilitation is needed to enable the platform members to reach a shared

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understanding of the issues at hand, agree on common goals, communicate, cooperate, coordinate activities to address their challenges, and take advantage of opportunities.

In this chapter, we reflect on some of the key challenges emerging from our experiences of facilitating IPs in Africa. The challenges are derived from discussions among researchers and practitioners during a "writeshop" on IPs in Nairobi, May 2013, in which most of the authors participated (see Gonsalves and Armonia 2010 for further information about writeshops). The identified issues related to IP facilitation are recognized challenges within development practice; despite this, however, they often do not receive the attention they deserve among IP practitioners.

The Process of Identifying Key Issues and Challenges

The idea for this chapter was first born during a writeshop organized in May 2013 at the International Livestock Research Institute (ILRI) in Nairobi, Kenya. During the writeshop, 20 individuals worked together, with expert facilitation and artistic support, to produce "practice briefs." The writeshop hosted two types of participants: (1) IP "practitioners" with significant experience of managing a diverse range of platforms; and (2) "researchers" studying innovation systems and IP processes, who could link practice with theory, and help refine and critique the products. Some of the participants bridged these two categories and could be described as "researcher–practitioners." This group of experts, facilitators, and artists worked together intensively for three days. One of the key issues identified by the writeshop participants was "platform facilitation." The participants observed the need for solid lessons on facilitation that could be utilized by brokers. To ensure that a wide range of experiences were included, additional authors were invited to participate. The current authors reflect a diversity of "IP initiatives" in Africa.

This chapter is based on qualitative research using a case-study approach. The cases were selected from agricultural-extension and research-for-development (R4D) projects. These projects were all implemented in southern, East, and West Africa in the past decade, and focused on agricultural production, value-chain development, and/or natural-resource management (see Box 10.1). Different IPs were taken as cases and systematically checked for consistency on the lessons derived. The authors used critical reflexivity to obtain the main lessons on facilitation (see Schön 1983).

BOX 10.1 Selection of agricultural extension and research-for-development projects across Africa with authors' involvement

Fodder Adoption Project (FAP): The project aimed to strengthen the capacity of poor livestock keepers to select and adopt fodder options and access market opportunities to enable them to improve their livelihoods; for this purpose the project engaged with a wide range of actors through IPs (Ethiopia, Syria, Vietnam) (2008–2010).

Nile Basin Development Challenge (NBDC): Program to improve the resilience of rural livelihoods in the Ethiopian highlands through a landscape approach to rainwater management; district-level IPs were established to address natural-resource management issues at the local level (Ethiopia) (2010–2013).

Volta Basin Development Challenge (VBDC): Program on integrated management of rainwater and small reservoirs for multiple uses; district-level IPs were established to improve rainwater management and increase production and market access at the local level (Burkina Faso, Ghana) (2010–2013).

Small ruminant value chains as platforms for reducing poverty and increasing food security in dryland areas of India and Mozambique (imGoats): The project aimed to increase income and food security through a pro-poor value chain for goats using an IP approach (India and Mozambique) (2011–2013).

Livestock Livelihood and Markets Project (LILI Markets): The project aimed to improve market participation by small goat and cattle growers in semiarid regions of southern Africa using IPs (Mozambique, Namibia, Zimbabwe) (2007–2010).

Increasing food security and household income through small-stock market development in Zimbabwe (ZimGoats): Project to increase food security and income for small-scale goat keepers through increased production, market development, and through the testing and use of an IP approach (Zimbabwe) (2011–2013).

Sustainable management of globally significant endemic ruminant livestock of West Africa (PROGEBE): Program on conservation of indigenous cattle in West Africa; local IPs were formed for value-chain development on specific commodities to increase interest among farmers (The Gambia, Guinea, Mali, Senegal) (2003–2013; IPs since 2011).

Building livelihoods resilience to alleviate poverty in semiarid areas of West Africa (PLM): Program to build livelihood resilience of smallholder farmers through the establishment of community-level IPs for dairy and/or vegetable value chains (Mali, Niger, Togo) (2010–2013).

Sub-Saharan Africa Challenge Programme (SSA CP): Response to the need to dramatically increase the development impact of agricultural research on livelihoods in Africa by developing, testing, and promoting an IP approach for conducting agricultural research for development (AR4D) in Africa (throughout East, West, southern Africa) (2005–2010).

Convergence of Sciences—Strengthening Agricultural Innovation Systems (COS-SIS): Program to carry out interdisciplinary policy and institutional experiments with a view to elaborate, apply, and assess a development approach to sustainable rural-poverty alleviation and food security, based on innovation-systems thinking (Benin, Ghana, and Mali) (first phase 2001–2006; second phase 2008–2013).

Broadening Agricultural Service and Extension Delivery (BASED): Bilateral program between Deutsche Gesellschaft für Internationale Zusammenarbeit (then Deutsche Gesellschaft für Technische Zusammenarbeit) and the Limpopo Department of Agriculture aimed at transforming the extension service-delivery system (South Africa) (1998–2006).

Source: Authors.

To strengthen the quality of the analysis and synthesis, triangulation of several methods is applied. The first method is a literature review on facilitation of IPs. Emerging findings were cross-checked and verified through literature. The second method entailed informal conversations and group discussions with practitioners, researchers, and researcher–practitioners in the field of facilitating IPs. These took place during the writeshop consultation process to identify key issues and challenges. As the writeshop participants began evaluating their various experiences of IP facilitation, certain patterns began to emerge—often across different programs working in different regions. A third method used was that of self-reflection by the authors as "researcher–practitioners" of IP facilitation themselves. Key issues and challenges identified during the writeshop were further reflected upon, prioritized, and synthesized by the authors based on their personal experiences with IP facilitation across Africa (see Schön 1983 for an elaborative discussion on the "reflective practitioner"). When possible, this information was further substantiated by referring to secondary literature.

The approach we have taken to gathering and analyzing the information included in this chapter has both strengths and weaknesses. Most of the authors and writeshop participants are "researcher–practitioners" with first-hand experience of IP facilitation. The experiences of such people, particularly those more involved in practice, often remain undocumented or are only

partially captured in reports and unpublished documents. The writeshop approach and critical reflexivity were used because they are specifically designed to capture and document the experiential, tacit knowledge of the practitioner (Schön 1983). The writeshop approach is particularly valuable considering the pressure that researcher–practitioners increasingly face to generate "key lessons" and recommendations for "best practice" (Patton 2001).

The methodology used allowed for analysis of a broad range of cases in Africa, including many well-known examples. We did not, however, analyze cases from other parts of the world. Yet, many interesting experiences exist in other parts of the world, such as those described for Papua New Guinea by Mbabu and Hall (2012), and experiences of the International Center for Tropical Agriculture (CIAT) with learning alliances in Latin America (see Lundy, Gottret, and Ashby 2005). In addition, most of the platforms referred to in this chapter have been established within AR4D projects and may not be representative of approaches being taken by organizations working in other sectors. We may also have missed examples of more locally emergent platforms.

Key Issues in Facilitating Innovation Platforms

To frame the discussion on key challenges in facilitating IPs, we briefly reflect on what IPs are, the implications for facilitation, and who is best suited to facilitate these platforms, drawing from practice and current theory.

Innovation Platforms—Forums for Learning and Action

In this chapter, we adopt Homann-Kee Tui et al. (2013)'s—practical—definition of IPs:

> A forum for learning and action involving a group of actors with different backgrounds and interests: farmers, agricultural input suppliers, traders, food processors, researchers, government officials, etc. These actors come together to develop a common vision and find ways to achieve their goals. They may design and implement activities as a group or coordinate activities by individual actors (p. 1)

IPs are based on innovation-systems thinking: a holistic and comprehensive framework for understanding innovation (new products, new processes, and new forms of organization) as emerging from a broad network of dynamically linked actors within a particular institutional and policy context (Hall et al. 2006).

Within agriculture, IPs can be useful to explore strategies that can boost productivity, sustainably manage natural resources, improve value chains, or influence policies; these strategies often include biophysical, socioeconomic, and political elements, and concern various formal and informal institutions[2] (Homann-Kee Tui et al. 2013). By bringing together actors from various sectors and from different administrative levels, and by acknowledging and making use of their diverse capacity (knowledge, skills, capabilities, interests, resources), IPs may be able to identify and address existing barriers or challenges to innovation and/or take advantage of potential opportunities.

From Facilitation to Innovation Brokering

The task of a facilitator in the context of IPs goes beyond merely facilitating meetings and managing dynamics between a bounded group of actors. Rather, "innovation brokering" is required, which involves stimulating interactions with a wide range of actors, often operating at different levels, with diverse interests (see Klerkx, Hall, and Leeuwis 2009; Kilelu, Klerkx, and Sitima 2011). *Innovation brokers* are defined as the persons or organizations that catalyze innovation by bringing actors together and facilitating their interaction (Klerkx, Hall, and Leeuwis 2009). To achieve this, brokers perform a variety of functions, ranging from facilitating interactions between actors, through linking and strategic networking, technical backstopping, mediation, advocacy, capacity building, and management, to documenting learning (see Box 10.2).

As we can see, the role of an innovation broker is diverse and challenging, and demands a particular set of skills. Effective innovation brokers are flexible and natural networkers, have a knack for developing cooperation and partnerships, a strong and wide personal network, a capacity to manage relations effectively over time, a good sense of power dynamics, the ability to manage conflict, a listening ear, group-facilitation skills, and the ability to consider broader system dynamics. They may also need to encourage actors within a given system to change entrenched practices and question the ways in which the system functions. This raises questions about who is best placed to fulfill this role.

2 By *institutions* we mean the informal and formal rules and regulations that govern human action (Douglas 1986).

BOX 10.2 Brokering functions

Facilitation: The facilitator convenes and manages regular meetings to identify key constraints and strategies, and ensures that all members can express their views. He or she safeguards the overall process and nurtures relationships among the members, coordinates interactions, negotiates where required, and facilitates collective learning based on increased insight.

Linking and strategic networking: The facilitator builds relationships with other relevant actors and invites them to collaborate with the platform; this may include mobilizing support and resources for activities undertaken by the platform.

Technical backstopping: The facilitator may provide technical advice or link the platform to others who can provide that information; he or she may also solicit further studies or consultations to identify or confirm problems and information needs.

Mediation actors may perceive others as competitors, who want to monopolize the process and prevent others from receiving crucial information. The facilitator prevents such power struggles and addresses them if they arise. He or she tries to help the platform members realize they all have an interest in finding solutions and creating opportunities.

Advocacy innovation requires an enabling environment. The facilitator may help the platform to advocate for policy changes, generate new business models, or stimulate new relationships among the actors, and get the buy-in and support of those who matter to the platform.

Capacity building: Most platform members are not equipped with the technical, organizational, and management skills to play their role in the platform effectively. The facilitator may link the platform to training institutes and organize exchange and exposure visits; he or she may also help actors to organize themselves better.

Management refers to the financial management, reporting, and communication with the donor. Sometimes the facilitator combines the function of broker with that of manager.

Documenting learning: The facilitator ensures that the meetings and the process are well documented and reported to relevant actors and other parties; it is used to stimulate reflection and learning based on actions initiated, as well as the overall innovation process.

Source: Authors, based on Heemskerk, Klerkx, and Sitima (2011).

Who Are the Brokers?

There are different ways of categorizing innovation brokers (for example, see Klerkx, Hall, and Leeuwis 2009), but generally brokers can either be

organizations or individuals who can be members of the platform or independent from the platform (Tennyson 2005; see Table 10.1).

As Klerkx, Hall, and Leeuwis (2009) point out, the role of innovation broker in Western countries is often fulfilled by intermediary organizations that are independent from the platform and specialized in brokering (for example, innovation consultants). However, such specialist brokers are not common in developing-country contexts. As a result, the role of innovation broker is often fulfilled by those who instigate platform processes (for example, research or development organizations). Representatives from these organizations may not only be responsible for establishing platforms, they may also be platform members. In some cases, "insiders" from a given system may be selected to play the role of broker (for example, extension agents or government representatives).

Voices from the Field: Challenges Faced

Although much has been written from a theoretical perspective on innovation systems and there are many guidelines for facilitating platforms, the challenges facing innovation brokers only become evident through practice. We highlight seven key issues here.

Dynamic and Evolving Platforms—A Need for Highly Skilled Innovation Brokers

Ideally, an agricultural IP addresses social, technical, and institutional issues affecting the farm level as well as the wider context. Therefore, the ability of the facilitator to enhance interaction across different levels, with a view to enabling the enhanced functioning of the whole system, is of critical importance. This includes changes in attitudes, skills, and practice of individual actors, as well as the relations between them, all of which need to be carefully facilitated.

TABLE 10.1 Different types of brokers

	Individual	Organization
Internal	An individual operating from within one of the partner organizations with a designated role to build and /or develop the partnership	A team or department located within a partner organization specifically tasked with building and/or developing partnership relations on its behalf
External	An individual working externally to the partner organizations, appointed by either one (or more, or all) of the partners to build or develop some aspects of the partnership	An independent organization or mechanism created specifically to promote partnerships and/or to undertake a brokering function on behalf of different partnerships

Source: Tennyson (2005).

For example, in a small-ruminant livestock project utilizing IPs in southwestern Zimbabwe (LILI Markets/ZimGoats), local actors initially identified production and marketing issues as key challenges. After verification, the platform members agreed that market access was the most limiting factor; the IP members then sought to involve actors associated with marketing, including buyers, transporters, and auctioneers, as well as representatives from the local government responsible for regulating livestock marketing in the district. Once local markets were established and the sales modalities developed, the IP shifted to include processors, namely abattoirs, and focused on improving production, by linking farmers to commercial feed suppliers. This illustrates how the agenda of the IP, and in turn the composition of relevant actors, evolved and changed over time. Flexibility in facilitation of the innovation process and in the management of platform dynamics was vital to ensure that the IP focused on appropriate issues for achieving impact.

This example does not stand alone, and is typical for many IPs (see Duncan et al. 2011 for an example of how planted forage was used as an entry point for catalyzing innovation on broader livestock value-chain issues in Ethiopia). Based on an analysis of various case studies, Nederlof and Pyburn (2012) argue that a flexible approach to platform structure and membership is useful in case new topics arise, priorities change, or unexpected problems emerge. Sometimes the real issues only emerge after the process has begun. It may also take some time to determine the best level for the platform to operate in support of institutional change. Navigating these dynamics requires tact and diplomacy, and the innovation broker's role in orchestrating this is critical. While innovation brokers can be provided with how-to guidelines for facilitating IPs, it is much more complicated to equip them with the skills to manage change. As process-oriented approaches are by nature not a blueprint with fixed goals and time frames, it is important that facilitators have a clear understanding of the need for flexibility and have the skills to work in an iterative way with relevant actors to achieve desired outcomes (see Ngwenya and Hagmann 2009).

Power and Platforms—Risk of Reinforcing the Status Quo

Although issues surrounding power dynamics are widely recognized within the "participation" literature (see Chambers 1997; Cooke and Kothari 2001), they have received scant attention[3] in research on IPs (Zannou et al. 2012; Cullen et al. 2014). It is tempting to think that bringing different actors

3 Dealing with power dynamics in multistakeholder settings receives further attention in a recently published paper of Brouwer et al. (2013).

together may address key constraints for value chains, managing natural resources, and policy development, but bringing actors together may not address the underlying reasons for weak actor linkages. If these issues are not taken into account, IPs may be used to reinforce existing dynamics, or be misused by powerful actors to achieve their own goals.

Experiences with district-level platforms as part of a natural-resource management project in the Ethiopian highlands suggest that careful attention should be given to power asymmetries. During a series of exercises to identify natural-resource management entry points in one of the districts, termite infestation was identified as a priority issue by farmers, due to their impact on grazing lands, crops, and infrastructure. However, local government representatives insisted that soil erosion should be prioritized—in order to meet national government targets for soil and water conservation. Government actors were overrepresented within the platform, and facilitators realized that if the government agenda dominated the process it was likely to reinforce the status quo, in which farmers have limited voice in decisionmaking processes, and lead to lack of engagement and "buy-in" on the part of community members. Platform facilitators played a critical role in mediating between these different interests. Together with researchers, they identified an intervention that could serve as a compromise between farmers and government decisionmakers: a termite-resistant fodder species called Chomo grass. This would help to conserve soils, rehabilitate grazing areas destroyed by termites, and provide livestock feed.

However, achieving a compromise should not always be a priority for platforms. It is important to point out that the focus IPs place on identifying and solving common problems through a process of consensus building often ignores the fact that conflict can be an important catalyst for change. Pushing actors to achieve consensus may also lead to "solutions" that are not ideal for all of the actors involved, particularly those who have less of a voice. With this in mind, although platform-facilitation guidelines often state that the innovation broker should be relatively neutral and objective, there may be situations—particularly when there are power inequalities—when brokers may need to advocate on behalf of certain groups. There is growing evidence that suggests that such multiactor processes may not be advantageous for marginalized groups, who may be overruled or manipulated by more powerful actors (Edmunds and Wollenberg 2002). Those who take this view argue that measures should be taken to empower weaker groups before they engage in collective dialog within a platform space.

Although care should be taken to ensure that those with more power do not dominate the platform space, there can be advantages to working with powerful actors. The COS-SIS program facilitated the creation of a cocoa IP which aimed to secure higher prices for cocoa farmers. The cocoa sector is composed of powerful actors, many of whom were represented in the IP. One of the IP members was formerly an adviser to the minister of finance and economic planning, with responsibility for cocoa affairs. The IP members asked this influential member to represent their interests, and in doing so probably played a role in convincing the minister to raise the producer price of cocoa for all farmers (see also Nederlof and Pyburn 2012; Zannou et al. 2012).

Gender—Promoting Equitable Opportunities

Gender is a critical factor in achieving development objectives, and evidence suggests that disparities between the sexes limit the effectiveness of development programs (Word Bank 2001, 2011). Evaluating IPs from a gendered perspective can serve to highlight imbalances between men and women in terms of power and representation. However, when we look at the recent literature on IPs, gender only seems to feature in the margins. Moreover, if we look at all the R4D projects we are and have been involved in, only a few have given attention to roles played by men and women, the relationships between them, and how this influences innovation.

When reviewing the R4D projects, we found that women are frequently underrepresented in IP processes, despite the fact that in many project locations women are often the primary producers and processors of agricultural products. There are often limited numbers of women included in platform meetings, which in certain locations may reflect the wider cultural context. Platform facilitators and members may fail to take into consideration the constraints that women face in attending and being able to actively participate in platforms. Women's ability to participate may depend on the timing and location of meetings, the multiple demands on women's time, and social expectations. Even if women are present in the platform they may not be able to voice their views. In certain parts of Africa, women are constrained from expressing their opinions due to cultural attitudes toward women speaking in public. This can result in platforms prioritizing issues that either do not reflect women's concerns, or could have a negative impact on them. For example, NBDC's IPs working on fodder development did not consider the extra demands on female labor and time that the new interventions required. Having said this, merely focusing on assessing women's participation in such public spaces may

ignore the influence that women have over decisionmaking processes "behind the scenes."

Nonetheless, it should be recognized that the recent focus on the use of multiactor processes to link the poor, especially women, to economic and social benefits, does not always lead to desired effects. This is particularly evident in value-chain processes where increasing women's participation in market-oriented production can either increase or decrease their access to and control over income, depending upon the character of their involvement and the specific characteristics of the chain (Coles and Mitchell 2011; KIT, Agri-ProFocus, and IIRR 2012). For example, commercialization of small ruminants—which in many places are traditionally the responsibility of women—may lead to a loss of control over household resources for women unless provisions are put in place to protect female interests. This may be difficult to address because it entails interfering with power dynamics at a household level, which may have unpredictable and unintended consequences.

The use of a gender lens to critically look at the design, operating modalities, focus of the platform, key constraints, strategies, and resulting outcomes may avoid some of the adverse effects mentioned above. However, gender relations are usually deeply entrenched, so transforming them may not be always be something that a platform is able to address, particularly if they are operating in a short time frame. In addition, concepts of gender equality are often imposed from a Western point of view, and may need to be reconfigured to take into account what men and women want in specific contexts.

Internal Versus External Facilitation—Pros and Cons

When reviewing the IPs described in Box 10.1, it was observed that almost all were facilitated by international and national research organizations; some were facilitated by NGOs, and occasionally extension officers were involved in brokering innovation. According to the scheme of Tennyson (2005), most of these individuals and organizations would be classified as "internal" brokers, as they often have a direct stake in the process.[4] This raises questions about their ability to facilitate platform processes as they may have a vested interest in platform activities. This issue is of fundamental importance to IP processes, as those who establish and facilitate the platform often set the broad objectives, and this may significantly influence the selection of platform members, identification of key

4 In the case of COS-SIS (see Box 10.1), the program paid the facilitators, who often came from universities or research organizations, to act as innovation brokers. But they did not have a stake in the objective of the IP.

issues, and subsequent entry points (see Nederlof, Wongtschowski, and Van der Lee 2011). For example, organizations that instigate platforms may have their own institutional agendas, such as an emphasis on commercialization and value-chain development, which may not always reflect the interests of the main beneficiaries.

Although innovation processes are based on participatory principles which include ensuring equal representation, flexibility, and adaptive management, those who manage and facilitate the process may not always get the organizational support to undertake such an approach, and individual facilitators may have a narrow understanding of the function and purpose of the IPs. For example, many IPs are currently driven by national research organizations in response to the low uptake of technologies developed by them, such as the Research Into Use (RIU) program funded by the UK Department for International Development (DFID) (see Mur and Nederlof 2012) and the Dissemination of New Agricultural Technologies in Africa (DONATA) program coordinated by the Forum for Agricultural Research in Africa (FARA).[5] Some merely use platforms as a dissemination mechanism for existing technologies, instead of exploring the underlying reasons for low adoption.

In the case where international research centers and NGOs facilitate the process, there is a risk that members of the platform associate the platform with the funding organization. This may lead to members choosing issues that reflect the mandate of the funding organization, rather than expressing more genuine concerns. An alternative is to seek facilitators who are more closely aligned with the existing agricultural system, for example, agricultural extension workers. However, such actors often have a limited mandate, which restricts their ability to act effectively as innovation brokers (see Leeuwis 2004). Moreover, in utilizing such actors, government agendas may come to dominate the discussion, as we have seen in the case of natural-resource management in the Ethiopian highlands. For these reasons it is important that both brokers and platform members clearly state their position and areas of interest.

A solution may be to involve specialized brokers, who have innovation brokering as their main task and are external to the membership of the platform. But this would require further experimentation to identify who could play this role, as well as willingness on the part of donor organizations to fund such arrangements. It is also important to bear in mind that, although external brokers may

5 RIU is a DFID-funded program aimed at catalyzing agricultural innovation; DONATA is a six-year program run by FARA to accelerate the dissemination of agricultural technologies across the region.

have advantages in terms of perceived neutrality and objectivity, there may also be certain advantages to engaging internal brokers. Internal actors are often better positioned as they can use existing relationships, networks, and local knowledge, this is particularly important in contexts where there are poorly functioning institutional frameworks which external actors may find difficult to navigate (see Klerkx, Hall, and Leeuwis 2009).

While the identification of actors as "internal" and "external" can be a useful way of identifying the pros and cons of different brokering arrangements, these categories may not be as fixed as they initially appear. So-called internal brokers may initiate a platform process, but then gradually take more of an external role as the platform develops, and vice versa. There is also potential for designing brokering arrangements that involve cooperation and collaboration between both internal and external actors. Ultimately, the type of brokering will depend on the specific context, the purpose of the platform, the availability of actors, and the skills required.

Issues of Sustainability: Toward Self-Organization

IPs exist only as long as they are useful: their composition is likely to change over time as different issues emerge, they may be reconfigured to address a new set of problems, and ultimately they may evolve into a more permanent entity, such as a producers' association, cooperative, or even business. Platforms may serve to build the innovative capacity of actors within the system, but the platforms themselves may cease to function.

Although most IPs are facilitated by research organizations or NGOs, which themselves have a stake in the process, these organizations are often perceived as relative outsiders by the other actors in the platform; they often reside outside the project area and operate on behalf of a specific project and donor. In order to sustain the innovation process, it would be important to make other actors in the platform capable of taking over some of the critical innovation brokering tasks after project funding comes to an end. However, handing over facilitation may be a complicated process. For example, relative outsiders may be more accepted as facilitators by other actors—especially where there are power inequalities or conflicting agendas between platform members—leading to potential resistance to internal actors taking over this role. In some cases it may be easier for external actors to convene the process and to keep the overall objective of the platform in mind; insiders may need capacity building to take on this role. Facilitation by so-called insiders may encourage ownership of the process among local actors, making it easier for the implementing organization(s) to phase out, but there can be problems with lack of trust, particularly regarding finances.

Experiences from projects that have instigated platforms and then tried to "hand over the stick" illustrate some of the challenges that may be encountered. As part of a two-year project on goat production and marketing in dryland areas of Mozambique (imGoats), an international NGO was identified to take up the innovation-broker role. Although a project team from the NGO took the lead, they realized the need to identify local actors who could take over the role of innovation broker in order to sustain the process. The platform members elected a committee of four members, representing different actor groups. Throughout the process, the project team provided on-the-spot support and backstopping. Although the committee gradually took over responsibilities for facilitation and coordination, they faced two big challenges: linking with different actors outside the platform, and strategic networking with government agencies. One constraint was the low capacity among the committee members at the start of the project, but committee members' competing commitments and the short time frame of the project played a role as well. However, there are also positive examples of platform sustainability, such as the case of the SSA CP—whereby 36 platforms were set up throughout Africa. Many have become established within the local or district government administrations. Support to farmers from local policymakers has strengthened the platforms. According to Mokwunye and Ellis-Jones (2010), the sustainability of the IPs has become apparent where farmer organizations, commercial people, and local governments have become drivers and champions.[6]

We find it difficult to draw conclusions regarding the most effective brokerage arrangements for the sustainability of platforms. Generally speaking, as the main focus of any IP is to stimulate and support actors to start working as a self-organized and self-managed innovation system, handing over the task to local innovation brokers should be a central part of the process.

Issues of Scale: How to Ensure the Quality of the Process

Recently, FARA was approached by the Minister of Agriculture of Sierra Leone, who wanted to establish 230 IPs (Adekunle, pers. comm.). In addition to this, The Gambia, having been persuaded to try the approach, decided to commence by setting up 22 platforms.[7] However, working at this kind of scale

6 Champions are highly motivated actors that can play a role to mobilize peers of their groups, promote contact between the platform members and their constituencies, and often set an example (see Heemskerk, Klerkx, and Sitima 2011).

7 It is important to realize that IPs are not a blueprint solution; instead of starting with IPs, it is better to start with the identification of opportunities through a scoping exercise and then to take advantage of these opportunities, through establishment of actor linkages or an IP.

demands that a new generation of innovation brokers is trained and armed with the basic tools for effective platform facilitation.

FARA has started undertaking such capacity-building activities through a range of programs, including the SSA CP and the Platform for African–European Partnerships for Agricultural Research and Development (PAEPARD).[8] The PAEPARD project in particular places an emphasis on training "Agricultural Innovation Facilitators." FARA is also working with partners to enrich the curriculum of universities to include soft skills that are essential for the successful facilitation of innovation processes. In addition, the Kenya Agricultural Research Institute (KARI) and the Australian Centre for International Agricultural Research (ACIAR) recently developed an initiative to train people from national research organizations across Africa in the facilitation of IPs (Makini et al. 2013).

Such endeavors are highly encouraging, but it is important that they are not one-off activities. Developing skills in innovation brokering requires an iterative learning process which cannot be dealt with through modular training, but requires learning by doing and reflection on the process (Ngwenya, Hagman, and Ramaru 2008; Ngwenya and Hagmann 2009, 2011). Moreover, institutional and policy support may be required over a sufficient time frame in order for such initiatives to have long-lasting impact. For example, those who are trained are likely to need support and possibly incentives from their organizations to address systemic and underlying constraints. Experience has shown that building facilitation capacity without investing in the institutional reform necessary to support process-oriented approaches is unlikely to succeed. In South Africa, for example, a Participatory Extension Approach (PEA) with facilitation for change embedded in it was implemented through the BASED program (see Ngwenya, Hagman, and Ramaru 2008). The program was successful in training quality facilitators among selected extension officers and managers. However, in order for these new emerging professionals to be successful, a radical transformation of government structures was required to provide an enabling institutional environment. At the beginning, some senior managers backed the approach and initiated the process of integrating PEA into the mainstream system. However, the process collapsed due to a change of management. As a result, many of the trained facilitators left the government system to form an independent NGO.

8 PAEPARD seeks to strengthen African agricultural research and development actors' capacity to participate in European-led development initiatives for Africa and to create more responsive development programs for Africa.

With these examples in mind, it is clear that developing facilitation capacity requires a much more systematic approach that pays attention to the broader supporting structure. Scaling out of IPs to other areas and locations needs to be accompanied by institutional and political support for different ways of working and for the newly emerging professionals who help guide these processes.

Monitoring and Evaluation: A Role for Facilitators?

Monitoring and evaluation (M&E) is particularly important for IPs given the growing demand for evidence that innovation-system approaches lead to impact on the ground. However, facilitators of IPs often struggle to develop appropriate M&E formats. Traditional research and development approaches have a tendency to employ a linear M&E model based on an assumption that change can be planned, easily identified, and controlled (Prasad Pant 2010). However, such theoretical approaches and the associated tools are not necessarily suitable for an innovation-system approach due to its complex, nonlinear, and participatory nature. Due to their nature, the impacts of IP processes are not always tangible and can be difficult to monitor. IPs therefore require an M&E framework and set of tools that take into consideration the complexities of innovation systems, and which can document and assess process as well as outcomes (see Njuki 2010).

The objective of M&E in the context of R4D projects is twofold: first, it may serve as a tool to generate research-based evidence for the effectiveness of IPs across different contexts; second, it is meant for joint learning among project teams and the actors by assessing their performance and to gain a better insight into the underlying issues to adapt the course of action. Although researchers may play an important role in the first objective, innovation brokers play a critical role in the second one through facilitating and documenting a systematic process of action, monitoring, reflection, and adaptation. In our experience, however, innovation brokers often do not consider M&E as part of their role, which makes implementation difficult. Based on the SSA CP, a set of tools to document IP processes and outcomes was adapted for use by innovation brokers in several R4D programs in West Africa (see Pali and Swaans 2013; initially adapted for PROGEBE, some tools were used for the PLM project and VBDC). However, the tools were applied with mixed success. After further training, research-focused platforms—which often assigned specific persons to document lessons—applied the tools successfully; however, facilitators of development-focused platforms either did not always understand what was expected in terms of M&E, or struggled to use the tools and found them cumbersome.

In one of the other projects (imGoats), outcome mapping—an alternative approach to planning, monitoring, and evaluating development impact developed by Canada's International Development Research Centre (IDRC) (Earl, Carden, and Smutylo 2001), was adopted for M&E.[9] Project partners and innovation brokers used this approach to track changes in behavior (that is, actions, relations, activities) among actors in the platform and the wider environment. Although their experience was generally positive, the documentation and analysis was perceived as highly resource intensive. Overall, whether outcome mapping or other approaches were used, innovation brokers and project partners found it easier to apply and use the tools than to design the overall framework. This suggests a need for process-light, simple, and accessible formats for M&E.

While more resource-intensive approaches may work in more research- and learning-focused platforms, in more development-focused projects, the use of relatively simple participatory tools may be more appropriate to monitor progress. This could be a task of the innovation broker, but it should be borne in mind that joint observation, documentation, and analysis may also stimulate ownership of the process and outcomes among platform members. There are examples, such as the SSA CP, where farmers and other players on the platform helped in the monitoring process after having been trained. However, from our experience it seems that assistance and support from M&E specialists may be required for the development of an overall M&E framework and the tools themselves, particularly if the M&E goals are focused on collecting evidence for external donors or researchers rather than for platform members themselves.

Conclusion

IPs are increasingly being used in research and development initiatives. However, the dynamic nature of innovation processes, and the differences in interest, capacity, and power among the actors involved, makes the role of facilitation or innovation brokering particularly challenging. We believe that the key to success of an IP is very much linked to the attitude, skills, and capacities of the innovation broker. This chapter has highlighted seven key issues which, in our view, are critical to effective platform facilitation and have

9 Outcome mapping is one of the more popular M&E approaches for the purpose of learning, but there are also other approaches and tools, for example Causal Process Tracing (Crane and Richards 2009), which was tested in the COS-SIS program.

not received the attention they deserve. They range from the dynamic and evolving nature of IPs to issues of power and gender, the problematic role of innovation brokers, issues of sustainability and scaling, and monitoring and evaluation for learning.

For maximum benefit of IPs, facilitators with a flexible attitude and process skills are needed. Both internal and external actors can act as facilitators and there is potential for brokerage arrangements which draw on both actor groups. For example, we have seen from many cases that with external support, farmers or other local actors can grow slowly into facilitation roles. It is also important to realize that not all brokering functions need to be fulfilled by one person or organization; so-called champions, that is, highly motivated actors in the platform, can play a role to mobilize peers of their groups, and promote contact between the platform members and their constituencies (see Heemskerk, Klerkx, and Sitima 2011; Klerkx and Aarts 2013). It is clear that capacity building for facilitators is of critical importance, and steps being taken by agencies including FARA and KARI are heading in the right direction for enhancing brokering skills at a larger scale.

Although IPs offer a potential way of achieving institutional change and a means for facilitating interaction and learning among different actors, this may be complicated in contexts where there are entrenched inequalities and political sensitivities and where informal (local) institutions play an important role (Cullen et al. 2014). A group-based approach provides an opportunity for different actors to interact, build trust, and engage in joint learning, and can potentially provide an opportunity to transform underlying values and patterns of interaction that may hinder innovation. However, this may work better in homogeneous settings where people are free to express themselves, than in heterogeneous settings such as IPs (Swaans et al. 2008). Under such circumstances, combining multiactor platforms with subgroups which can focus on the needs of specific actors should be considered.

The context and the aim of the platform may also determine who is best placed to take on the role of innovation broker. As IPs have evolving agendas, fluid brokerage arrangements may be required that also evolve over time to draw on the skills and resources of both "insider" and "outsider" brokers. This requires sufficient flexibility on behalf of the facilitating organization and an understanding that actor roles may need to shift depending on the trajectory of the platform. More research is needed to explore the effectiveness of different types of innovation brokers across different contexts, how their roles change over time, and the implications for the innovation process, as well as how different brokering arrangements can be institutionalized so that

innovation processes can be sustained after projects, or organizations instigating the process, phase out.

Despite the positive developments that are already taking place, significant changes to institutional arrangements and incentive mechanisms are required if IPs are to be successfully scaled up. This implies an emphasis on developing facilitation and management competencies among a range of actors that are systems based and process oriented, as well as the political will to support such new ways of working. Achieving socioeconomic impact among small-scale farmers will be critical to justify such time- and resource-intensive processes. IPs will also require critical monitoring and assessment to ensure that they adequately target and address the problems of the poor.

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