Dossier "Agricultural innovation (AI) coaching"

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Scope

Al coaching stands for Agricultural Innovation coaching and is used when we talk about facilitating innovation in agriculture. It is very much related to concepts such as innovation brokerage, about which Laurens Klerkx et al have done extensive research in the European context. This dossier aims to provide insight into the Al coaching concept and how this concept can be put into practice. First, some attention is given to the underlying theoretical concepts in the in-depth section of this dossier. Then, under KIT's involvement, you can read about KIT's activities with regard to Al-coaching. Information about organizations working in the field of facilitating agricultural innovation are highlighted under the resources chapter, next to vital publications on the topic. Here you will find audiovisual material as well to get a better understanding and a more lively picture of the context in which the Al-coaching is placed. Key terms, concepts and buzz words are given in the glossary section.

KIT's research and activities in this field are ongoing and therefore we very much welcome feedback and input to update our work in progress. If you would like to make any comments on this dossier or add new resources, please contact us at j.sluijs@kit.nl

In-Depth

Introduction
Innovation in the Dutch agricultural context
Agricultural innovation in developing countries
An enabling environment for continuous innovation
Innovation process facilitators

Introduction

Is innovation a question of having the right people at the right positions at the right time? The facilitation of processes of agricultural innovation has been topic of research among many organizations actively involved in Research & Development (R&D) with regard to Agricultural Innovation Systems (AIS). Over the years, one sees shifts in innovation thinking. First, a more technical approach prevailed, now the role of individuals has been given important asset. Whereas formerly science and technology transfer was said to be setting innovation into motion, over time, one sees shifts towards more inclusive views of Agricultural Knowledge and Information Systems (AKIS) or Agricultural Innovation Systems (AIS), which focus on innovation as an iterative process between individuals and organizations with different kinds of knowledge within a particular context (Worldbank, 2007). Today, the focal question is on how to facilitate agricultural innovation processes. And who should be doing that? Or, is it coincidental that innovation takes place because the right people are on the right positions at the right time? These and other questions have resulted into (action) research (proposals), discussions and sharing of ideas on new concepts that capture the role of innovation process facilitators in jointly written working papers, thematic notes, etc. (New) partnerships are established. KIT, for instance, partners with LINK (Learning INnovation Knowledge) to promote the innovation systems approach in agricultural and rural development. Research into Use (RIU) is another example aiming at sharing lessons to enable innovation in agriculture. Digital era proof initiatives are founded: lessons are shared on virtual platforms, organizational Facebook pages and Twitter accounts. Online publishing – and more so open source publishing- makes academia able to meet the whole world by sharing R&D results. Audiovisual channels such as YouTube, slide share, Blip TV, make research and projects easy to visualize and as such accessible to anyone who has Internet connectivity within reach.

KIT, RIU, LINK, WUR, to name a few on the European continent, have all been involved in research and publishing about AI coaching and brokering. Below, some few thoughts on these concepts are given based on writings by Klerkx et al. and work in progress by KIT.

Innovation in the Dutch agricultural context

Klerkx, Leeuwis, van den Ban, Hall, and others have been doing extensive research on agricultural innovation processes in the European and more specifically in the Dutch context, resulting in a number of publications. Klerkx et al. (2008) demonstrated lack of coordination as a serious bottleneck for innovation in highly commercial farming systems in the Netherlands. Klerkx, together with Hall and Leeuwis (2009) ask whether innovation brokers could be the answer to strengthening agricultural innovation capacity. They examine the role of innovation system brokers in stimulating innovation system interaction. Below, some of their conclusions published in the working paper series of the United Nations University are highlighted. Klerkx, Hall and Leeuwis place the emergence and role of innovation

brokers in the Netherlands in a historical perspective and discuss the main findings of several studies that have looked at the contribution of innovation brokers for the Dutch agricultural innovation system. The Dutch experience shows that innovation brokers need to be contextually embedded and are unlikely to become effective through centrally-imposed design (Klerkx et al, 2009).

The authors draw a picture of how the Dutch public agricultural research and extension system was characterized by a high degree of interconnections among its main actors. Key factor in the development of innovation capacity within Dutch agriculture was the Research-Extension-Education (REE) triptych which worked well until the mid-seventies. Then, political, cultural, institutional and economic forces made the triangle unstable from the eighties onwards. There was a growing public concern on health issues, production surpluses, and an increasing environmental awareness. Combined with serious food production scandals like BSE, swine fever and foot-and-mouth disease this led to a reduced support for the industrial productivity increase paradigm dominant in the REE triptych (2009, p.13.). A need was felt to reconsider agricultural production in the Netherlands that could deal with new societal, economical and ecological demands. How could the knowledge infrastructure be shaped to respond and support these demands. The interests of policymakers and farmers, once aligned, started to diverge. Publicly funded research and extension was now getting more oriented to reducing environmental impact of farming for instance. And this did not align well with farmers' economic motives and caused loyalty conflicts among extensionists who wanted to be loyal to their paymaster (government) as well as their clients (the entrepreneurial farmers). All these changes led to organized and less organized (i.e. more self-organized) attempts to establish innovation brokers to challenge knowledge flows with all the bumps and hurdles met along the way to come to a description of seven distinct types of agricultural innovation brokers that can now be seen in the Netherlands: innovation consultants; peer network academies; systemic instruments (e.g., often a civil society organization reflecting its interest in innovation and policies issues that go beyond the conventional domain of government or the private sector); internet portals, e.g. the Agri-logistics Knowledge portal for linking actors and knowledge developed in projects related to agri-logistics); research councils with innovation agency; and, education brokers. The authors further sketch out the contributions that these innovation brokers made or can be making but also pay attention to the vulnerabilities they meet.

They conclude that innovation brokers have helped farmers and other agri-food stakeholders to think about new possibilities to sustain their businesses and supported in network building. They appear to provide a fresh look in diagnosing constraints and opportunities of farmers, production chains, or with regard to regions or sub-sectors. Further, they are good performers of innovation process management and act as translators between different worlds and play mediating roles in case of conflicts. Vulnerabilities met consist of: neutrality tensions (e.g. they risk to be seen as vehicles to realize policy objectives of financiers); functional ambiguity tensions (like the response of established players, for instance established R&D and extension providers who may not fully understand and support the role of innovation brokers); and, tensions concerning funding and willingness to pay, for instance, low private willingness to pay and public funding impatience. The authors state that overall however, after 15 years of experimenting, there appears to be a growing recognition of the value of innovation brokers in the new AIS of the Netherlands. But of course, the incorporation of these brokers into the overall agricultural innovation capacity of a country is dependent on a process of institutional and policy learning and is likely to be a long term process (ibid, 2009). In the remainder of their paper the authors chalk out some practical implications of the Dutch case for developing countries which are also looking into strengthening their innovation capacity. A literature review showed that there are already many parties playing innovation brokerage roles among which: (inter)national NGOs; donor agencies; special projects; farmer and industry organizations etc. The authors give some pointers for further research of the roles and shape of innovation brokers in emerging economies whereby they state that the Dutch

innovation brokers may be seen as an inspiration rather than a blueprint, as a ones-size-fits-all approach is not appropriate.

Sources

Klerkx, L. and Leeuwis, C. 2008. Matching demand and supply in the agricultural knowledge infrastructure: Experiences with innovation intermediaries. *Food Policy* 33(3): 260-276 Laurens Klerkx, Andy Hall and Cees Leeuwis, 2009, Strenthening agricultural innovation capacity: are innovations brokers the answer? United Nations University UNU Merit, 2009, 47pp.

Agricultural innovation in developing countries

Research on how to enhance innovation in developing countries has been taken place for quite some time. The World Bank has been supporting national innovation systems and strategies to reduce rural poverty and remains committed to assisting its client countries in strengthening their agricultural extension and rural information systems. In a World Bank publication of 2007 an innovation system is defined as: "the network of organizations, enterprises, and individuals focused on bringing new products, new processes and new forms of organization into economic use together with the institutions and policies that affect the system's behaviour and performance. Innovation systems help to create knowledge, provide access to knowledge, share knowledge and foster learning. The innovation systems concept embraces not only the science suppliers but the totality and interaction of actors involved in innovation".

The authors recognize the dominance of a diagnostic use of the innovation systems concept. To go beyond the diagnostics they categorize broad phases of development for innovation systems. On this basis 'intervention principles and options' are being suggested that the authors deem appropriate to consider when intervening to stimulate the development of a 'dynamic system of innovation'. In doing so, they have taken an important step in linking innovation system analysis to agricultural development planning. They have shown how innovation system analysis could be a first step towards targeted intervention to improve agricultural innovation system functioning. As such they have demystified the, till then fairly abstract, notion of innovation system improvement, and have specifically provoked professionals in the field of agricultural development to go beyond high level policy recommendations to a more pragmatic intervention. Through this the innovation system concept has become an important framework for intervention in agricultural systems in developing countries (and was as such given a new interpretation to its meaning in the original context: policy making for industrial development in advanced economies) (Worldbank, 2007).

Rajalathi et al. (2008) identify the establishment of networks and partnerships as important activities to improve innovation system functioning. The need to apply innovation system thinking in agricultural development practice has been acknowledged widely in the community of international development experts in a reaction to the above mentioned World bank publication (Rajalahti et al., 2008). In agricultural innovation systems important system actors are producers, service providers as research and extension workers, traders and transporters, the agro-industry and retailers. Actors are often referred to in a fairly abstract way, like firms', 'government' and 'intermediary bodies', which gives the discussion on improving innovation systems a rather abstract character. Furthermore the strong focus on the role of 'institutions' (Edquist and Johnson, 1997), although justified, adds to the abstract nature of the discussion.

What would be required in addition to concise and accurate diagnosis of innovation system failures, are effective instruments for shaping the collaboration and interaction between innovation system actors. In agricultural development many different approaches and methods can actually be identified that focus on facilitating multi-stakeholder action. These approaches and methods hold important entry

points for thinking about opportunities to facilitate stakeholder interaction with a specific focus to stimulate agricultural innovation, e.g., multi-stakeholder interaction, value chain facilitation (VCA), enabling rural innovation (ERI), participatory market chain approach (PMCA), free actors in network (FAN), client-oriented research management approach of which explanations can be found under the glossary section of this dossier.

An enabling environment for continuous innovation

The stimulation of innovation in rural areas is an important vehicle for rural development and reduction of poverty in Sub-Sahara Africa. Through the facilitation of innovation new marketing opportunities can arise, new technology gets developed and into use and new arrangements for effective collaboration between stakeholders evolve. Increasingly, the development community is coming to realize that rural development cannot be imposed through simple project interventions or one-off infrastructure support. Instead, the entire innovation system needs to change to a more enabling environment allowing for continuous innovation. This is instigated through network building and assuring that relevant stakeholders have the clout and organization to articulate their own interests and perspectives. Targeting and coordinating financial and knowledge based services to the innovation systems can also be improved in this process. Furthermore, a better coordinated innovation system allows for more effective lobbying of the relevant decision makers.

The Participatory Market Chain Approach (Bernet et al., 2006) does stimulate the interaction between the private sector and producers with the objective of product innovation. Value chain approaches also focus predominantly on market innovation, and the relationship between value chain actors. The FAN approach does focus specifically on facilitating innovation, but does not do so through multi-stakeholder interaction, and has a technical innovation focus. The CORMA approach (Heemskerk et al., 2003) focuses on organizational and institutional change to improve research performance. The ERI approach is different in the sense that it does focus simultaneously on market and technical innovation (Sanginga et al., 2004). The authors describing the ERI approach conclude that the key to successful enterprise development is the combination of building and sustaining quality partnerships between agricultural sector stakeholders, while building human and social capital required to assure effective collaboration.

Building on the identified need for interaction between stakeholders, and the notion that this interaction will not take place easily and effectively without brokering by an intermediary, it can be surmised that providing these services could greatly contribute to the 'propensity to innovate' or the development of a 'dynamic system of innovation'. This idea is based on the notion that a large part of the true bottlenecks for innovation are in the interactions between stakeholders in a value chain or commodity based innovation system, rather than in a lack of opportunities, financial resources, infrastructure or incentives.

Successful efforts to improve the enabling environment for innovation pivot on leadership. Having an objective 'champion' of the innovation system improvement process, who acts as an impartial broker, facilitator, initiator and coordinator of collaborative action could be a major catalyst for change. Often, this initiator or engine of collaboration is the major missing component for system change towards more dynamic collaboration between system actors such as public institutes, private sector, producers, consumers, policy makers and others.

As the provision of services such as initiation, organization and brokerage of interaction, as well as the guidance of a joint innovation trajectory between stakeholders are typically processes that require building the trust of and between the agricultural system stakeholders, this job could become the specific mandate of an individual, which we would like to baptise Agricultural Innovation coach, or Al-

coach. Through the efforts of an 'innovation coach' the system functioning and dynamics could be improved by creating an environment in which innovation is more likely to occur. This role of 'spider in the web', spinning relations between stakeholders, will become ever more essential with the increasing privatization of agricultural research and extension services available to the agricultural system as Klerkx and Leeuwis (2008) showed in the context of the Netherlands. Clearly, there is a demand for intermediaries who are able to serve as 'interim managers' or coordinators to make innovation systems more dynamic and more robust.

Innovation process facilitators

Agricultural Innovation coaches are proposed to become the interim managers to practically initiate and guide the process of innovation through facilitating the interaction between agricultural system stakeholders. Not at an abstract level of organization managers, but at a basic level where new ideas can be implemented and tested by development practitioners, agricultural producers and private entrepreneurs. This is in line with what Leeuwis and Van den Ban (2004) consider the main role of agricultural service providers: contributing to innovation processes. Building a class of skilled innovation process facilitators who are able to perform this role under different circumstances would be an important asset, and can improve the contribution of other actors to the process of innovation. What is currently lacking, however, are development practitioners who can effectively play this role of innovation process facilitator. Most development professionals are formally educated and hold academic degrees based on training that focuses on internalization of ideas and the application of theory. In addition, development research and extension professionals are accustomed to a different mode of working that tends to focus on specialized technical problems. These professionals are therefore not equipped with the skills, experience and competencies required to manage multistakeholder processes, to lobby effectively with policy makers, or to lead in conflict resolution and system analysis; all of which are important for innovation system coordination. KIT has been working out ideas and concepts in an attempt to come with answers and practical tools to answer the focal question we started this in-depth section with: how to facilitate agricultural innovation processes. More about KIT's activities herein are described in the next section of this dossier: KIT's involvement.

- Bernet, T., Thiele, G., and Zschocke, T. 2006. Participatory Market Chain Approach (PMCA) –
 User Guide. Lima, Peru: International Potato Center (CIP) Papa Andina
- Edquist, C. and Johnson, B. 1997. Institutions and Organizations in Systems of Innovation. In: Systems of innovation; technologies, institutions and organizations 41-63. London; Washington:
- Heemskerk, W., Ninatubu, L., Guindo, D., Schouten, C., Semgalawe, Z., Verkuiyl, H., Steenhuijsen-Piters, B.d., and Penninkhof, P. 2003. A guide to demand-driven agricultural research; the Client Oriented Research Management Approach. Amsterdam: KIT.
- Klerkx, L. and Leeuwis, C. 2008. Matching demand and supply in the agricultural knowledge infrastructure: Experiences with innovation intermediaries. Food Policy 33(3): 260-276
- Leeuwis, C. and van den Ban, A. 2004. *Communication for rural innovation : rethinking agricultural extension*. Oxford [etc.]: Blackwell Science.
- Rajalahti, R., Janssen, W., and Pehu, E. 2008. *Agricultural innovation systems: from diagnostics toward operational practice*. Washington: World Bank.
- Sanginga, P., Best, R., Chitsike, C., Delve, R., Kaaria, S., and Kirkby, R. 2004. Enabling rural
 innovation in Africa: An approach fr integrating farmer participatory research and market
 orientation for building the assets of rural poor. *Uganda journal of agricultural sciences* 9(2004):
 942-957
- Worldbank. 2007. Enhancing agricultural innovation; how to go beyond the strengthening of research systems. Washington: World Bank.

KIT's Involvement

Introduction
KIT & Al-coaching
Success factors
Challenges
Projects

Introduction

While a lot of research has been and will be kept being done on innovation processes, KIT is also rethinking innovation processes in developing countries and is –like others- even more so, trying to find answers to the question on *how* to facilitate such processes. KIT always aims at bringing research and reality closer together. In this regard, KIT will thus look into how agricultural innovation processes can be set into actual motion. Laurens Klerkx et al write about innovation brokers - as sketched out in the indepth section - as possible solutions to strengthening agricultural innovation capacity. Their findings are mainly based on research in the Netherlands. In line with research on brokers in the European agricultural context, KIT is exploring ways of stimulating and supporting agricultural innovation and wonders whether Agricultural Innovation Coaches could be starting and supporting innovation processes in a developing or transitional environment.

KIT & Al-coaching

Innovation 'brokering' has been identified and is functioning in a recognized and legitimized way in Europe. In the Netherlands, for example, the privatization of extension services has led to the emergence of a variety of innovation brokering forms. In developing countries, we often see entrepreneurs playing this role. Others are private consultants, researchers, and individuals working in national extension services. At the Royal Tropical Institute in Amsterdam, we refer to people playing this role as agricultural innovation coaches – Al-Coaches, for short.

Coaching, brokering, what is in a name? What is the difference? Where are the similarities? These and many other questions were raised during a workshop hosted by KIT in December 2008 (for the workshop report: click on the second item under the picture on the right). Eight de facto Al-Coaches were invited to join us in Amsterdam for a week to think through a capacity development programme – what capacities are required? Who is best situated to play this kind of a role? What conditions are required to make it possible? These were amongst the guiding questions. In addition to the 8 de facto Al-coaches, we also invited two staff from each of two Africa-based organizations working on similar themes – IIRR (Kenya) and IFDC (Mali) (Rhiannon Pyburn, 2010). After the December 2008 workshop, we have been continuing our Al-coaching efforts for the last 2 years. Presentations have been held, partnerships created, contributions to training have been given and papers, concept notes and a planned publication are in the pipeline. Find below some of the success factors and challenges met so far during our working process.

Success factors

What we have found is that several factors are quite essential for success in playing a brokering role:

- A good understanding of innovation systems theory and the differences between institutional, technical and organizational innovation
- Strong MSP facilitation skills
- Credibility and recognition as leaders/negotiators/knowledge holders in the sector

- Resources, most importantly TIME to dedicate to coaxing the actors towards concerted action
- Organizational support to do this largely 'invisible' work

Challenges

By far the greatest challenge in establishing innovation brokers 'on the ground' is the lack of basic understanding of Innovation Systems thinking, also among those with many years of exposure to the subject. This field is largely couched in scientific language, using abstract terms that assume a thorough grasp of sometimes very abstract notions. This lack of communicability is a major constraint. It simply should not take an MSc program or more to get professionals acquainted and operational within the terminology.

The second challenge lies with those who understand the concepts but are then faced with the functionality (or lack thereof) of innovation systems thinking. We tempt to agree with Andy Hall who says that Innovations Systems thinking is a good diagnostic tool, but is limited. What do we do once the diagnosis is done and it is time to act? AIS is manageable when used in a way to understand actors and their relationships, but the jump to how that understanding can be used to generate change, is a big one. It needs to be made practical and understandable to get used.

Language is a third challenge. "Networks" suggest loosely connected, changing, dynamic webs. By contrast, platforms or groups – other terms used interchangeably - conjure up a much longer lasting, static, membership-basis constructions. Language is important. We need to give enough foundation and clarity to allow practitioners to use this stuff! Institutional innovation is a particular challenge and case in point. Technological innovation is relatively straightforward to understand – a farmer starts to use a new variety of sorghum or a new way of harvesting. Easy enough. Likewise, organizational innovation is conceivable – people organize themselves in a new configuration with new results. But institutions in the sense of norms, values, rules and 'rules of the game' is harder to grasp. And it is even tougher to get one's head around how to stimulate this in practice – what does it look like to stimulate institutional change? We need to give practitioners more support in putting all the concepts and abstractions to work.

Projects

Convergence of Sciences: agricultural innovation in West Africa

January 2008 - December 2013

The Convergence of Sciences programme aims to improve the livelihoods of farmers by exploring new pathways for agricultural innovation. Please click here for more information about this project.

Resources

Audio-visuals Organizations - making use of ICT tools ePublications Websites

Audio-visuals

<u>Bill Gates on Agricultural Innovations</u>
 Learn more about how Bill Gates wants to support agricultural innovation in Africa. He talks

about the importance of education, partnerships and its interrelations towards the end of the 2:44 minutes slideshow.

- Agricultural innovation needs investment in S&T and R&D
 - Dr. Gebisa Ejega, winner of the UN-FAO World Food Prize, speaks about agricultural innovation and development. He emphasizes the need to invest in S&T and acknowledges that science and R&D is a long, painstakingly process but very much needed.
- Andy Hall wants to go beyond investment in research and research systems
 In this 20 minutes slideshow Hall emphasizes that for developing agricultural innovation capacity needs we should go beyond strengthening research. Priorities lie in building linkages and new ways of working that promote interaction between research, enterprise and developmental players. Interventions need to have a long term perspective and give sufficient emphasis to facilitating institutional learning. Hall shows lessons drawn from Indian case studies on how to build agricultural innovation capacity.
- New strategy to support agricultural research support farmers to innovate

 John Barrett, DFID Senior Livelihoods Adviser notes that one of the 'key changes' in the new strategy is that it is not just 'delivering research products but supporting developing countries themselves in terms of their own capacity to innovate to research and through them to support farmers to innovate.' Farmers by nature of what they do have always been innovative. The new strategy also puts a lot of emphasis on 'putting research into use', and the building of regional research networks.
- Millions Fed Farmer-led innovation in Burkina Faso and Niger
 From success of high science to triumph of barefoot science. This video shows how farmers from Burkina Faso change the arid landscape into productive farmland through traditional faming methods. They began innovating on simple practices, such as protecting and managing indigenous trees and shrub among crops to provide animal feed and firewood but also to improve soil fertility by digging pits in barren and degraded land, to concentrate organic manure and rainwater for planting, laying stones to control rainfall and combat erosion with technical
- Success stories from farmers who have used the LifeLines services
 LifeLines is a novel initiative for information services delivery, which uses an innovative mix of internet and telephony to provide critical and timely information to communities in rural India on a range of livelihood and related issues. LifeLines today reaches out to rural communities in over 4600 villages across India with information services in the Agriculture as well as Education sector. This video features 6 farmers who have used the LifeLines Agriculture service and have benefited out of the agri-advisory received from it.

Organizations - making use of ICT tools

- Digital Green tapping local social networks to connect farmers with experts
 - Digital Green aims to raise the livelihoods of smallholder farmers across the developing world through the targeted production and dissemination of agricultural information via participatory video and mediated instruction through grassroots-level partnerships. Video is the focus, it is people and social dynamics that ultimately make Digital Green work. Local social networks are tapped to connect farmers with experts. Digital Green was shown to be ten times more effective per dollar spent.
- <u>Lifelines knowledge services just on the dial of a phone</u>
 LifeLines is a novel initiative providing essential and demand-based information, advice and guidance to remote and rural communities in India through the medium of "voice, in the local language and within 24 hours.". Lifelines uses an innovative mix of internet and telephony.

ePublications

• Brokering innovation for sustainable development: the Papa Andina case Andre Devaux, et al. (2010)

The international Papa Andina Partnership Program, based at the International Potato Center, functions as an innovation broker in South America. It operates as a "second-level innovation broker," backstopping national partners who facilitate local innovation processes in their respective countries. Papa Andina works to strengthen local innovation capacity and to foster "innovations in innovation".

Fostering innovation networks: the missing piece in rural development?

Hartwich, Frank; Scheidegger, Urs (2010)

This article explores new inroads for the understanding of rural innovation (RI) processes, emphasizing the role of social networks. Applying the concept of networking for innovation to smallholder farming in developing countries seems promising to further our understanding of RI processes.

Enhancing performance of agricultural innovation systems

Daane, Jon (2010)

Enhancing agricultural innovation capacity requires a broad range of actions in the public, private and civil society sectors; at the national level; within and between organisations; and, at the level of teams and individuals.

• Strengthening agricultural innovation capacity: are innovation brokers the answer?

Klerkx, Laurens; Hall, Andy; Leeuwis, Cees (2009)

The role of innovation brokers in stimulating innovation capacity building is examined, using the case of Dutch agriculture. Subsequently, it reflects upon their potential role in developing countries' agriculture.

Creating and sustaining successful innovation networks

Marques, Maria Jose; Carvalho Alves, Jorge; Saur, Irina Adriana (2005)

The factors that maintain cooperative attitudes in multisectoral innovation networks are examined. Intangible factors may be decisive in the maintenance of inter-firm innovation networks, underlining the need for persistent network management.

• <u>Initial problems in the establishment of technology and innovation</u> <u>brokerage structures in emerging markets – an applied case from Mexico</u>

Hayo Siemsen (2005)

Lessons are learned from the establishment of technology and innovation brokerage structures (TIBS) in Mexico. Despite difficulties, the initial results of TIBS-building indicate the potential for emulation elsewhere.

• Enabling Rural Innovation in Africa: An approach for empowering smallholder farmers to access market opportunities for improved Livelihoods

Susan Kaaria, Pascal Sanginga, Jemimah Njuki, Robert Delve, Colletah Chitsike, and Rupert Best | 2005

This paper presents lessons from applying the Enabling Rural Innovation (ERI) approach for linking smallholder farmers to markets. Experiences and challenges from testing the approach with a range of research and development partners in eastern and southern Africa are presented. The paper gives a general overview of the approach, the guiding principles, conceptual framework and steps in the ERI process. And it gives detailed examples of the five key components: participatory market research, farmer participatory research and its links to natural resource management, social and human capital, gender equity and participatory monitoring and evaluation.

• The Brokering Guidebook – navigating effective sustainable development partnerships Ros Tennyson | The International Business Leaders Forum (IBLF) | 2005

The Brokering Guidebook, which is a sister publication of The partnering Toolbook, focuses on partnership 'brokering'. Partnership brokering is that essential intermediary function that enables partners to work well together and ensure the maximum effectiveness of their partnership. This and more toolbooks and other publications on related themes can be found at the publication section of The partnering initiative's website

Please find below more links to websites of organizations dealing with agricultural innovation and which are looking into promoting innovation through brokering, networking, or by making use of intermediaries.

Websites

- LINK Learning INnovation Knowledge
- RIU Research Into Use
- COS Convergence of Sciences
- CDI Centre for Development Innovation (WUR)
- IIRR Kenya International Institute of Rural Reconstruction
- FARA Forum for Agricultural Research in Africa
- CIP International Potato Center
- LEI WUR
- IFDC Mali International Fertilizer Development Center
- ICRA International Centre for development oriented Research in Agriculture

Glossary

FAN approach - Free Actors in Networks

The concept is used when encouraging sustainable innovation. It has actors focusing on energy and connections to steer things along. A free actor has the capacity, insight and the position to do what is necessary to help the network overcome the major obstacles (source: Networks with free actors - Encouraging sustainable innovations in animal husbandry by using the FAN approach (Free Actors in Networks | H.E. Wielinga, B.W. Zaalmink, et al. | 2008 | Wageningen UR).

Action research

Action research is a particular approach to research that aims to improve practice or have a real world application. It aims to make a real change or impact in society, and is not simply research in and of itself. It is generally understood that 'action research' contributes to improving the welfare of marginalised communities and those working for progressive social change, and not the interests of powerful elites, including those within higher education. Action research involves an ongoing cycle of planning --> acting --> observing --> reflecting. Critical reflection is an important step in each cycle.

Action learning

Action learning involves a group of people coming together regularly to help each other learn from their experiences. The group works together on problems in their community, workplace or project, in order to improve the problem. The people involved increase their skills and knowledge by learning with and from each other, working on real issues or problems, reflecting on their experiences, and taking action

based on group decisions. Values associated with action learning include respect for others, honesty and integrity, collaboration, and developing trusting relationships with others.

Innovation intermediary

Innovation intermediary (Howells, 2006, 720) – "an organization or body that acts as an agent or broker in any aspect of the innovation process between two or more parties. Intermediary activities comprise helping to provide information about potential collaborators; brokering a transaction between two or more parties; acting as a mediator, or go-between; bodies or organisations already working together; and helping find advice, funding and support for innovation outcomes of such collaborations".

Innovation broker

Innovation broker (Winch and Courtney, 2007, 751) – "an organization acting as a member of a network of actors that is focused neither on the organization nor the implementation of innovations, but on enabling other organisations to innovate".

ERI - Enabling Rural Innovation

The enabling rural innovation (ERI) approach - developed and implemented by CIAT in collaboration with national research organizations - can be seen as an attempt to capture the different elements required for effective and continuous innovation (Sanginga et al., 2004), and encompasses specific interventions to build capacity and collaboration for technological, organizational and market innovation.

PMCA - Participatory Market Chain Approach

The Participatory Market Chain Approach (Bernet et al., 2006), focuses on the development of niche market products in collaboration between producers and private sector, while simultaneously addressing technical constraints.

CORMA - Client-Oriented Research Management Approach