

Exploring the emerging ‘intermediation’ (facilitation and brokerage) roles in agricultural extension

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Abstract: This piece of work aims at an early exploration of the meaning and use of two types of ‘intermediaries’, namely of ‘facilitators’ and ‘brokers’, in agricultural literature. Thus, first, the concepts of facilitation and brokerage are briefly explored. Following, the (need for the) emergence of such an approach in agricultural literature and practice is discussed, illustrated by a number of examples. This review points to the fact that, at least as far as agriculture-related theory and practice are concerned, intermediaries as co-learning facilitators signify rather new roles requiring specific and, to a large degree, unexplored skills. Given that there is still a number of issues threatening the efficacy of intermediaries (facilitators and brokers), it is argued that there is an urgent need for facilitation and brokerage to be better described, operationally defined and well-evaluated so as to allow for both a better interpretation and guidance of practice.

Keywords: extension, innovation, intermediaries, facilitators, brokers

Introduction

Over the years, ideas about the generation and dissemination of innovation have changed. The once dominant linear model according to which scientists/researchers are in control of the production of technological devices is nowadays severely challenged. The systems of innovations (SoI) approach, for example, emphasises the multiplicity of determinants which influence innovations’ generation, diffusion, and use; innovation thus emerges from networks of actors as a social (and institutional) as well as a technical process, which is nonlinear and based on interactive learning. Subsequently the focus is on processes with knowledge conceived as being constructed through social interaction. Thus particular attention is given to (social) co-ordination and networking (see: Cristóvão et al. 2012). Moreover, in order to avoid or overcome gaps and failures (infrastructural, institutional, network, capabilities or market; Klerkx and Leeuwis 2009a; Klerkx et al. 2012a) growing attention is given to various types of (process) ‘(systemic) intermediaries’, i.e. of actors working mainly at the system or network level to facilitate interactions (Van Lente et al. 2003); or of ‘mediators’ or ‘brokers’ as ‘independent players’ to orchestrate networking (Haga 2009). ‘Intermediaries’ are increasingly found in literature as third parties, (knowledge/technology) brokers, bridging organizations, intermediaries, boundary organizations and so on. According to Howells (2006:720) they concern: “*An organization or body that acts as an agent or broker in any aspect of the innovation process between two or more parties. Such intermediary activities include: helping to provide information about potential collaborators; brokering a transaction between two or more parties; acting as a mediator, or go-between, bodies or organizations that are already collaborating; and helping find advice, funding and support for the innovation outcomes of such collaborations.*” It is thus quite clear that such ‘intermediaries’ are involved, taking an independent systemic role, in ‘indirect’ rather than in ‘direct’ innovation processes (Haga 2005).

Aim and Methodology

Despite the fact that ‘intermediaries’ are increasingly recognised as playing a significant role in the wider innovation system, the topic has not been extensively dealt with in agricultural literature (Klerkx and Leeuwis 2008a). This piece of work aims at an early exploration of the meaning and use of two types of ‘intermediaries’, namely of ‘facilitators’ and ‘brokers’, in agricultural literature. Thus, first, the concepts of facilitation and brokerage are briefly explored. Following, the (need for the) emergence of such an approach in agricultural literature and practice is discussed, illustrated by a number of examples. The paper concludes with reference to the potential as well as some of the main problems identified with the ‘intermediation’ function.

Intermediation

Facilitation

Auvine et al. (2002:54) note that facilitation ‘is designed to help make groups perform more effectively’ and that ‘a facilitator’s job is to focus on how well people work together’. According to Thompson et al. (2006:694) the facilitators’ overarching role is ‘to assist (individuals or groups) through the process of implementing a change in practice’; their distinctive role relates to the use of ‘the dynamics of a group and their skills to assist persons to move towards change’. For Murray and Blackman (2006:239) facilitation aims at ‘*supporting the work of different types of teams in solving mostly complex problems and in developing decision solutions. The point is that facilitation enablers allow learners to be confronted with different kinds of participation.*’ Therefore, facilitation relates to the Habermasian perspective, in the sense that “*a facilitator tries to create an ideal speech situation and through the appropriate intervention strategies helps the participants to engage in a communicative dialogue that results in consensual decision-making*” (Savage and Hilton 2001:48)

Brokerage

Brokerage in the form of ‘knowledge brokers’ has emerged, within the Knowledge Management literature, as the facilitation of the spread of knowledge within and between organisations and thus as a means to stimulate innovation. Dobbins et al. (2009) stress the importance of Knowledge Brokers in facilitating and improving knowledge sharing and learning between stakeholders. In ‘Knowledge Translation’ (Kitson 2009) brokers intervene with the aim to manipulate contextual factors and support experiential learning in managing new knowledge. But when attention shifts particularly to innovation genesis, an ‘innovation broker’ is defined as “*an organization acting as a member of a network ... that is focused neither on the organization nor the implementation of innovations, but on enabling other organizations to innovate*” (Winch and Courtney 2007:751) or “*a type of boundary organization that specializes in brokering or facilitating innovation processes involving several other parties, but does not itself engage in the innovation process*” (Devaux et al. 2010) (see also Klerkx et al. 2012b). Innovation brokers thus take an independent systemic role, in process facilitation rather than in the production (i.e., source) or dissemination (i.e., carrier) of innovation (Van Lente et al. 2003).

The turn to ‘Intermediaries’ in agricultural theory (and practice)

Agricultural literature is rather familiar with the topic of ‘intermediaries’ in the sense of state/public funded bodies aiming at bridging the gap between agronomy-science and farming practice, i.e. mainstream or ‘conventional’ extension. The linear (diffusion of innovations - technology or knowledge transfer) model, claims that innovations originate from scientists, are transferred by extension agents (‘intermediaries’) and are adopted/applied by farmers (Rogers, 2004). For Rogers (2004) a *change (extension) agent* is someone influencing clients’ innovation decisions, yet in a direction deemed desirable by a change agency. However, nowadays, a new understanding of ‘intermediaries’ emerges since the turn a) from reductionist to systemic science and prac-

tice (see: Ison 2010) and b) from the expert syndrome (top-down approach) towards participatory (bottom-up) processes; in parallel, the ‘diffusion of innovations’ model has been heavily criticised, as it fails to respond to complex challenges and rapidly changing contexts, including the shift to sustainable development (Chambers and Jiggins 1986; Röling 1988; Röling and Jiggins 1998).

Important in this respect has been the emergence of Farming Systems Research/Extension (FSR/E) approaches (Collinson 2000; Darnhofer et al., 2012). An important evolution in this respect has been the turn from Rapid/RRA to Participatory Rural Appraisal/PRA. As a result the need for interaction and dialogue between different actors and networks forcefully emerged (Chambers 1993, 1994; Scoones and Thompson 1994). Furthermore, the advent of sustainability thinking further underlined multi-stakeholder processes (Dalal-Clayton and Bass 2002; Hemmati 2002). Thus, Röling and Jiggins (1998) argue for the move from a praxeology of ‘transfer of knowledge’ to a ‘facilitating knowledge’ while also stressing that the shift to sustainable agriculture requires ‘double loop’ learning⁷⁶. In parallel, agricultural innovation systems (AIS) thinking (see: Klerkx and Leeuwis 2008a; Klerkx et al. 2010; Klerkx et al. 2012; Leeuwis 2004) claims that the process of innovation is messy and complex; new ideas are developed and implemented by people who engage in networks and make adjustments in order to achieve desired outcomes. Hence, the focus on learning itself and the emphasis on the facilitation of learning processes (LEARN Group 2000; Röling and Wagemakers 1988). Social learning (SL), i.e. the collective action and reflection that occurs among stakeholders as they work towards mutually acceptable solution to a problem (Keen et al. 2005; Wals 2007) lies at the heart of such processes/praxeology (see Leeuwis and Pyburn 2002). Extension for sustainable agriculture therefore implies a (social) mechanism for facilitating SL (Allahyari et al. 2009) i.e. participatory processes of social change, through shared learning, collaboration, and the development of consensus about the action to be taken; thus the view of extension as ‘communication for innovation’ (Leeuwis 2004; Leeuwis and Aarts 2011).

Overall, such changes in innovation thinking, along with changes in the agricultural knowledge infrastructure as well as on the demand and supply side (Klerkx and Leeuwis 2008a, 2008b, 2009a; Klerkx et al. 2006), imply that extension has to be transformed. ‘Conventional’ extension, identified with the linear model of innovation, has to do with ‘exploitation’, i.e. with the capturing, transfer and deployment of knowledge in other similar situations, and thus belongs to the old type of KIBS (knowledge intensive business services; Muller and Zenker 2001). On the contrary, nowadays new KIBS operating on the systems perspective and aiming at enhancing the interaction between a variety of actors (including old KIBS), focusing on ‘exploration’, i.e. with the sharing and synthesising thus with the creation of new knowledge (Levinthal and March 1993; Murray and Blackman, 2006), emerge. A major role of the new KIBS is that of the co-learning facilitator (usually found in literature as ‘facilitators’ or ‘brokers’) aiming at the development of shared meaning and language between dialogue partners in order to stimulate change and develop solutions and innovation. The engagement of stakeholders in dialogue, despite its difficulties and its time consuming nature (since (social) learning and change are gradual), is necessary so that critical self-inquiry and collaboration will be achieved. According to Sriskandarajah et al. (2006:27), ‘*Learning among heterogeneous groups of stakeholders, and among different epistemologies has become one of the most central issues today*’.

⁷⁶ Extension workers were often taking the role of group facilitators since group methods are a basic pillar of (conventional) extension (communication) methodology. However, the claim that extension should turn to a co-learning facilitation mechanism is rather revolutionary an idea.

Indicative Examples of ‘Intermediation’

Facilitation examples

A well-known, early reference to facilitation is found in Oakley et al. (1991) where facilitation concerns the provision of assistance to rural people (such as the acquisition of technical skills, gaining access to available resources or translation of their own ideas into projects) in order to undertake actions aiming at strengthening their participation in development. Among the most well-known cases advocating facilitation is the Australian Landcare movement. According to Campbell (1997:146) “*Landcare group facilitation is about fomenting group synergy, about helping groups to make best use of the human resources available, about helping to develop a shared sense of direction among the relevant actors (within and beyond the Landcare group), about skilled listening, asking the right questions of the right people at the right time, providing occasions, organising encounters and stimulating interaction among target stakeholders*”.

Another example is FFS (farmer field schools) initially developed in order to facilitate farmer understanding and application of IPM through learning-by-doing and social learning (Röling and van de Fliert 1994, 1998; van de Fliert et al. 1995) or discovery learning (Tripp et al. 2005). For Braun et al. (2000) FFS sum up to participatory platforms for improving decision-making capacity and stimulating local innovation for sustainable agriculture. Facilitation here concerns a process assisting farmers to explore and discover key agroecological concepts and develop IPM skills. Further, Van den Berg and Jiggins (2007:679) argue that ‘the FFS has triggered further development beyond IPM, in the field of experimentation, collective action, leadership, planning, and organization.’ The Participatory Extension Approach (PEA) practiced by GTZ is another interesting example of an alternative approach to innovation service delivery (Hagman et al. 1997; Moyo and Hagman 2000). PEA is people-centred, learning oriented and participatory; it combines ‘social extension’ and ‘technical advisory services’ in an effort to enhance people’s adaptive capacities and establish a common platform for trying out new things. Within the approach, facilitation for change (F4C) aims at stimulating people’s ‘creative orientation’ both at individual and organisation levels; emphasis is given to the facilitators competencies (process related skills and facilitation techniques).

Ingram (2008), discriminates between various agronomists’ roles in knowledge exchange encounters (KEE) in relation to best management practices (BMPs) for a more responsible and sustainable agriculture. Her research points to the existence of one, among four, distinct type of agronomists who see themselves and act as facilitators. These agronomists help ‘farmers to understand the problems and opportunities within their own farming systems’ through farmers’ empowerment ‘in terms of raising general awareness about problems as well as teaching [explaining] certain principles and practices’ which ‘provides the basis for facilitation of use of BMPs.’ (2008:413). Therefore, facilitative KEEs ‘are built on dialogue, mutual respect and shared expectations and this provides the right context for joint learning’ (2008:414). Furthermore, such facilitators-agronomists have ‘to have good communication skills, the ability to empathize and listen, impartial, technically capable, and they value farmers’ insights’. Her findings, stress especially the need for the development, in parallel with technical training, of the ‘interactional expertise’/ interpersonal skills of advisors (see also: Cerf et al. 2011; Ison and Russell 2000; Leeuwis 2000; Sheath and Webby 2000). In the same vein, Leeuwis (2004) has summarised the facilitator’s tasks as a) to facilitate the group process, b) to teach and c) to be an expert on technical aspects of farming; therefore facilitation in extension education departs from the conventional understanding of facilitation to include technical expertise (and advice). Finally, a review of papers dealing with facilitation (in the proceedings of the IFSA/European Group symposia) is provided by Cristóvão et al. (2012) who conclude that the work on facilitation is rather restricted with facilitation being underdeveloped on the part of European extension services.

Brokerage examples

Innovation brokers are, in general, seen as beneficial to the innovation process by closing system gaps and contributing to several of the innovation systems functions; however the topic has not been embraced by the agricultural academic and research community (Hekkert et al. 2007). The topic has been dealt with in a number of papers especially concerning the Dutch agriculture (e.g. Hermans et al. 2013; Klerkx and Leeuwis 2008b, 2009a, 2009b; Klerkx and Nettle 2013; Klerkx et al. 2010; Wielinga and Vrolijk 2009) in which authors explore the emergence and the functions of brokers. Therefore, Klerkx and Leeuwis (op. cit.) identify three major functions of an innovation broker: a) demand articulation, b) network formation and c) innovation process management (see Kilelu et al., 2011; Juho and Mainela, 2009).

A number of examples of innovation brokering is also found in Nederlof et al. (2011) in which, within the framework of innovation platforms, Heemesrck et al. (2011) identify and discuss a number of brokering functions: facilitation, linking and strategic networking, technical backstopping, mediation, advocacy, capacity building, management, documenting learning, championing. Brokers thus provide three lines of support, i.e. developing a common vision and articulating related demands; scoping, scanning, filtering and strategic networking; and innovation process management. The authors notwithstanding the identification of a number of training instances for brokers stress that a good broker goes beyond training as well as that it takes time and interaction for brokers to develop their skills; they also underline that brokering is a time-demanding and costly job, thus concluding that the brokering is “[E]asier said than done” (p. 52). Furthermore, Klerkx and Gildemacher (2012) provide a typology of innovation brokers while also identifying key policy issues and providing a number of recommendations for practitioners, policy makers and project leaders. Nevertheless, it is quite clear that the broker role is still very new.

On the other hand, the EU-Commission, for the programming period 2014-2020 (Regulation (EC) N° 1305/2013), besides the support provided to (more traditional) knowledge transfer/training and information actions (Article 14) and FAS (Article 15), introduced an innovation-partnership measure dedicated to the generation and dissemination of innovations in farming systems and rural territories and thus of innovation brokers (Article 35).

Discussion and Conclusions

Given the aforementioned changes new ‘intermediating’ or/and ‘enabling’ roles for extension emerge, i.e. a need for extension to move from an ‘old’ to a ‘new KIBS’ role. At the same time, some points of concern also emerge. For example, the experience of Landcare groups, has shown that (Campbell 1997:147): a) in many instances ‘[L]andcare facilitation often looks anything but strategic, and its purpose is often lost’; b) although the key premise is that facilitators (and brokers) hold an impartial-independent position, ‘there is no such thing as a neutral, detached, value-free facilitator’ (see also: Drennon and Cervero 2002) and c) a facilitator should have both facilitation skills and appropriate technical background (see also the call for the training of ‘social agronomists’; Leeuwis 2000, 2004). Furthermore, the issue of sustainability is also of crucial importance; the withdrawal of ‘external’, i.e. project supported facilitators/brokers, results in the end of such work (see Cristóvão et al. 2012; Devaux et al. 2010; Klerkx and Leeuwis 2008a, 2009). In this respect, Klerkx and Leeuwis (2009) note that, thus far, there does not appear to be a coherent policy and thus funding of innovation brokers (see also Ekboir 2012). Finally, the dilemma of ‘top-down’ vs. ‘bottom-up’ roles of an intermediary should be pointed out. For Harvey et al. (2002), under certain circumstances the task-oriented, practical approach is also effective while for Stetler et al. (2006) depending on the circumstances the flexible facilitator may take either a directive or a non-directive style.

Overall, the field of ‘intermediation is still theoretically fragmented, not well-grounded and largely practice oriented; intermediation has yet to be thoroughly described, operationally defined, or well-evaluated (Stetler et al. 2006). Therefore, on the one hand, there is a need for conceptual clarity since the current abundance of terminology and the use of the same terms but with different meanings complicate the scene. Explicit attention has thus to be given to theoretical developments; without nuanced a understanding of the concepts, terminology, and controversies, study findings will be difficult to interpret and guidance to practice change may become untenable. Klerkx and Leeuwis (2008b, 2009) underline that, despite inherent difficulties, there is a need to identify typologies of intermediaries and measure their added value in the innovation system. This way their contribution will become explicit and thus recognised in the knowledge infrastructure. Such an agenda will help in further highlighting gaps in our knowledge as well as strategies to address such gaps and, thus, in building a solid knowledge base which will be valuable for policymakers, academics and researchers, and practitioners.

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