# **GUIDING MULTI-ACTOR INNOVATION AND EDUCATION PROJECTS**

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#### 1. Introduction

Global change creates a widespread need for innovation, which is also felt in agriculture. While formerly extension workers would distribute new knowledge to farmers in order to foster innovation, nowadays such a linear approach is no longer viable (Kibwika, 2006): existing knowledge is increasingly scarce and uncertain, and the associated issues have strong value-implications and impact wide sets of existing interests (Koutsouris, 2008). To meet these challenges, knowledge, values and interests from multiple actors need to be combined and integrated. As a consequence, complex societal problems are increasingly addressed in multi-actor innovation projects, which can combine knowledge, values and interests (Veldkamp et al., 2009). However, such projects are no guarantee for innovation.

Multi-actor diversity can be a source of innovation, but also a source of conflict, especially when every actor has his/her own interests, perspectives, and goals. In order to collaboratively produce solutions, members of a multi-actor project-team need to overcome their differences, to see the problem at hand from the other's perspective. They need to have a willingness to learn from each other. When such a process of social learning is successful, different actors come to see their problems in new ways, and proceed to collaboratively deal with the challenges they share, while at the same time respecting their mutual differences (Wals, 2007). While it is impossible to guarantee a successful social learning-process, still some methods exist to keep it from stagnation, and to give it a push when needed.

Fostering innovation with multi-actor approaches changes the extension worker from being the "bringer of new knowledge" to being the "guide to multi-actor innovation projects": How can multi-actor innovation processes be guided? In this paper we use an action learning approach to draw upon our own experiences in the Dutch Westerkwartier region to discuss the role of social learning in multi-actor innovation processes, and the ways in which extension workers may guide this process.

#### 2. Multi-actor processes and innovation

A multi-actor innovation project is a carefully arranged group of actors, that share a complex problem which requires new knowledge and new practice for it to be dealt with. Its team members are actors from different societal sectors, such as education, government, research, trade, NGO's and primary production, and generally include researchers, entrepreneurs, educators, government workers, and NGO representatives. Each is involved through their interests and goals, which in turn can lead them to commit further knowledge, creativity, resources and talents to the innovation project.

Besides their personal interests and goals, actors in a multi-actor innovation project also bring their institutional background to the table, often involving a further strategic agenda; organisational goals may not coincide with the participant's personal goals. To what extent is a participation constrained by his/her organisational/institutional background? Which interests are open for discussion? The complexity of multi-actor innovation projects is characterised by differences in goals and interests, and the interplay between the personal and organisational levels. The process of social learning is embedded in a web of power- and trust-relationships.

In the optimal case, a multi-actor innovation project becomes a community with a unique problem perspective, creating innovative solutions to shared problems. In the worst case, mutually exclusive perspectives divide the participants, who cease listening to each other (Van Eeten, 1999).

# 3. Social learning in multi-actor innovation projects

Our theoretical perspective on social learning involves three main aspects: shared frame, mutual trust, and commitment (see Figure 1). Participants in multi-actor innovation processes embark on a process of reflection on their knowledge and values. If this is successful, and original perspectives (frames) shift, or become substituted by new points of view, we call this process reframing (Schön & Rein, 1994). Reframing lies at the heart of social learning. A safe environment (Edmondson, 1999), in which people can trust each other, is an important learning context. Mutual trust develops faster when participants invest in the projects and in each other, when they show their willingness to share knowledge and information, and when they prove to their project partners that they dare to take risks for the project. Trust often is higher in groups which share some history of positive mutual experiences; it gives group dynamics some resistance to problems. Commitment is the third aspect of social learning, and refers to how, and the extent to which participants and their organisational backgrounds are involved in the goals of the project. Commitment can concern passion, motivation, but also resources like time and money. Commitment originates from strong interests and values with regard to the problem at hand and the goals of the innovation project, and results in high willingness to contribute, both in thought and in action.

We see social learning as the dynamic interplay between these factors. An increase in commitment can result in higher mutual trust, which in turn may afford additional reframing. Reframing, commitment and trust can both strengthen and weaken each other mutually.

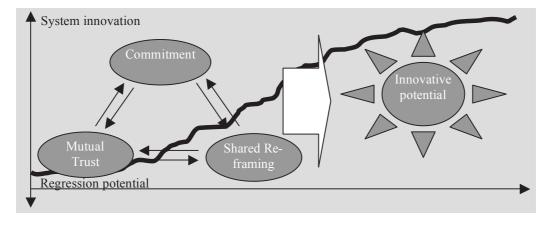


Figure 1: Social learning is the dynamic interplay of shared frame, mutual trust and commitment.

### 4. Options for guiding multi-actor innovation projects

Where social learning becomes problematic, the extension worker as a "guide to multi-actor innovation projects" can contribute to innovation. By guiding the social learning process, an extension worker can facilitate the creation of the right boundary conditions for commitment, trust, and reframing. This way, the extension worker acts like an innovation broker (Klerkx & Leeuwis, In Press), involved with the social learning process, but without direct interests in the goals of the innovation project. This contributes to the other participants' trust in the process. The main research question in this paper is:

How can we guide social learning in multi-actor innovation projects, in order to foster their innovative potential?

Below, we describe the experiences we drew from a Dutch multi-actor innovation process in the region called the Zuidelijk Westerkwartier (the South-West Quarter; SWQ) of the province of Groningen, in which one of the authors acted as a facilitator and action researcher (also see Derkzen, In Press). An action researcher is both part of an innovation process, and by reflecting on it, learns from his/her experiences. The action researcher uses four questions as an analytical focus point for reflection:

- Why did the social learning process stall?
- How did I intervene?
- What did I expected to result from my intervention?
- What actually happened?

These questions were aimed to derive some do's and dont's for extension workers, and to shed light on the underlying mechanisms. We describe a couple of crucial episodes in the social learning process of the SWQ multi-actor innovation project, in which the facilitator (together with the project team) intervened to prevent or overcome a breakdown in the social learning process. We first introduce the SWQ-case, and then we describe three critical episodes, from which we draw conclusions for guiding multi-actor innovation projects.

### 5. Case and Short History

In the year 2003, a couple of different people independently conclude that a need exists for integrated development and planning in the SWQ, with synergies between agriculture, nature, and quality of life. The actors involved are some Wageningen University lecturers looking for an area for an education pilot themed "New agriculture", an agricultural entrepreneur from the organisation "Boer en Natuur" (Farmer and Nature, F&N), a worker at "Staatsbosbeheer" (an NGO managing a large part of Dutch nature reserves), and a government official at the province of Groningen. After they learn that they share the same agenda for the SWQ, they decide to work together towards sustainable regional development, with the inclusion of having students at work in the area. Here multi-actor collaboration begins to formalise.

In an official kick-off, the various parties involved commit themselves to sustainable development of the SWQ. Both the organisations that form the institutional background of the core group-members, and new actors are invited. This quickly gives rise to increasing enthusiasm about sustainable development of the SWQ. Students get an important role: throughout spring 2004, they carry out numerous small-scale studies on nature, agriculture and quality of life, and their interrelations. They visit farmers, citizens, and government workers, who in turn spread the buzz of the core group ambitions. In November 2004, a go/no go-meeting is held, at which all actors involved—lecturers, entrepreneurs, government—are present. It becomes clear that all share the same SWQ vision. An official working group "SWQ" is established, for regional effectuate sustainable development.

# 6. Start of the process

As of December 2003, the core group is "official": all directly involved people have committed themselves to the SWQ problems, and want to work towards sustainable development. However, the positions of their respective backgrounds and organisations (e.g. employers, farmers' organisations, electorate) are not known. This first challenge is gaining the commitment of each of the core group members' background institutions, and the resources they have for action. To that end, the core group organises a kick-off, which results in high enthusiasm and student activity. Especially the students increase the regional social cohesion, because they visit people from all different parts of society. They involve actors in the sustainability issues. It is clear that *reframing* is taking place among the core group members' institutional backgrounds (Staatsbosbeheer, WUR, F&N). The background organisations come to recognise the region's potential for innovation. The core group itself can now be seen as

an emerging multi-actor innovation project. However, none of the background come to commit resources to the area. Although the social learning process has yielded a lot of lessons learned, it has not led to a similar yield of organisational *commitment*.

# 7. First challenges

The first experiences in the area are shared at a seminar in June 2004. Several administrative bodies (the farmers board, the Province, Municipalities) become associated closer with the multi-actor innovation project. From then on, they'll receive the agenda to project meetings, and other relevant documents, but have no obligations to the project. They still have the option to commit themselves in both word and deed. The province and municipalities incidentally join the core group meetings, but are not intrinsically motivated. They'll first await the project yields. Meanwhile, having noticed the increased awareness of sustainable development in the SWQ, the entrepreneur judges the time ripe to proceed with real action. He wants to change his own business processes toward the SWQ aims. However, the project itself is not ready for such commitments. In addition, the role of the administrative partners is still ambivalent. Thus tensions are revealed between the ambitions and goals of the individual members, and the goals and resources of the project as a whole—two months without activity follow.

In November 2004, a go/no go-meeting is held with all involved parties—lecturers, entrepreneurs, administrative organisations.

### 8. Reframe, (erase and) rewind

The project leader thinks that enough intrinsic motivation should exist to continue with the project, and decides to make this possible. Her intervention is aimed at diagnosing to what extent the future visions for the SWQ are *shared* between the project members, in other words, to what extent the project members have a *shared frame* on the SWQ. She assumes the following: *shared frame* is a condition for the project to continue, and if it is met, then trust and *commitment* are bound to follow. During the go/no go-meeting, it becomes clear that a shared frame for the SWQ indeed exists, despite some frustrations about the results up until then. The first action, to reassert the collectiveness of the project, is to establish the Working Group South-West Quarter, with government approval.

This phase is marked by an on-going process of *reframing*, with collaborative work on a new and common plan. The Working Group essentially becomes the embodiment of the goals of the multi-actor innovation project, and an anchor point for the members to identify with. It becomes more of a community, with its own history and shared experiences. This happens to be sufficient for continuation; members are sufficiently committed, and the explicit government approval indicates an increase in the commitment of the organisational periphery.

Furthermore, mutual trust and *shared frame* have been reasserted. However, the establishment of the Working Group does not yield the expected financial and labour force *commitments*.

### 9. Patience is a virtue

This is where we leave our multi-actor innovation project for some reflection on the role of guidance. But not before with give the reader a view of what happened after. The Working Group proceeded on its own, without government financial means. With its perseverance and all its contributions to local initiatives in the SWQ, the Working Group effected a number of changes already in the years 2005-2007. In the face of such success, government finally have allotted resources to the project. A long way to go, but successful in the end.

# 10. Do's and Dont's for Extension in Multi-Actor Innovation Projects

About commitment—Membership of a multi-actor innovation project doesn't entail commitment from one's organisational background. Institutional actors might agree with the goals of the innovation project, but that doesn't mean that they'll participate formally, let alone commit themselves. But commitment can grow over time, especially when the projects achieves concrete results. The multi-actor innovation project itself thus is a dynamic "community-to-be." Participation only becomes sustained on the longer term.

The facilitator must be aware of the goals and wishes of the participants, because they can give some insight in the participants' personal frames. Frame awareness can help shape mutual expectations, prevent future disappointments, and thus foster mutual trust. Beware that social learning can suffer from uncommitted participants, but that their exclusion negates any chance of future commitment. In our experience, patience pays. "Official" events (establishing a working group, kick-off meetings) can explicate actors' goals and values, because they force them to word their *commitment* and their position with regard to the project. Addressing uncertainties can strengthen social learning. About shared frames and trust—Sometimes *trust* needs to increase before *reframing* can occur. An open atmosphere in which people make mistakes and offer "crazy" ideas offers an opportunity for people's perceptions to shift—they *dare* to temporarily put their frames aside and ponder new, shared frames. Group activities, having a good time, and sharing an experience with each other can facilitate mutual trust. Organising them is easy, low-profile, and allows participants to get to know each other. This also helps judging if and to what extent further collaboration is wanted.

About reframing—How and why do actors come change their perspective? The facilitator can make an important contribution by putting the project members at ease. Looking back at past successes together fosters trust and self-efficacy, and the courage to change frames. Another way to contribute to reframing is looking to the future and the changes people want to make together. Do not focus on current mutual differences.

Sometimes it's necessary to make differences explicit, but for the long term, common values, perceptions and experiences offer a more fertile basis for the growth of trust and commitment.

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