Living territories
to transform the world

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Territorial development reshapes public action by involving citizens in the choice, management and monitoring of public services, and by promoting the representation of populations that are usually excluded (Tonneau et al., 2011). The corollary is an engagement by citizens that goes beyond the traditional reliance on political or administrative representatives. However, local actors do not always wish to participate in the territorial governance that decentralization is gradually establishing, nor do they think they have the legitimacy or even the competence to do so. Nevertheless, the appropriation of territorial governance by local actors is essential for the emergence and implementation of dynamic, innovative and sustainable territorial projects. How can they be motivated or convinced to go down this path? Based on the literature and our field experience, we posit that this involvement in development has to be learned and that the research community has an important role to play in this learning process.

**LEARNING FOR TERRITORIAL DEVELOPMENT**

Learning, by which we mean the acquisition of new know-how and knowledge that actors can use in the decision-making process (Vitry and Chia, 2016), often takes place in collective contexts. We thus refer to organizational or social learning, which goes beyond the individuals. Research on social learning (Leeuwis and Pyburn, 2002) has shown the importance of creating learning situations, in which actors can go beyond their defensive routines, share their positions, develop unifying ideas, define new common values together and then collectively put them into practice (Coudel et al., 2011; Daré et al., 2010).
Diversity of territorial functions and approaches

To illustrate how social learning enables the inclusion of actors in territorial development, we will draw on two experiences in accompaniment undertaken by CIRAD, in the semi-arid region of north-eastern Brazil and in the mountains of Bhutan (Boxes 25.1 and 25.2). They have resulted in a collective and long-term engagement by the actors in territorial governance mechanisms. Their contexts may be different but common lessons can be drawn from these two case studies.

Figure 25.1A. Action research at UniCamp in Brazil.

Figure 25.1B. Role playing in Bhutan.
Box 25.1. A farmer university (UniCampo) in the Brazilian semi-arid.

In north-eastern Brazil, in the Cariri Paraibano, part of the marginalized region of the sertão, UniCampo gradually established, between 2003 and 2006, a training process through action research for 35 rural community leaders, farmers, teachers and agricultural technicians. The objective was to enable them to implement projects adapted to the semi-arid context and to integrate themselves into the new territorial arenas being promoted by the Lula government. By encouraging them to ask key questions such as ‘Who am I?’, ‘What do I want to do?’ and ‘How do we organize?’, the pedagogical path led the participants to progressively construct their individual projects, linked to a group project and a project for the territory. However, after the training, despite significant progress in individual learning, participants found it difficult to get involved into political arenas to defend their projects and their vision of development. The UniCampo Student Association, originally created to ensure the continuation of training, progressively turned into a technical assistance NGO. This gave it a recognized status within the territorial arena consisting of the 31 municipalities of the Cariri region. The links established with the researchers enabled the association to pursue research on its own, in particular in support of the work of agricultural technicians.
(Based on Coudel et al., 2009, 2014)

Box 25.2. A process of companion modelling in west-central Bhutan.

In the Lingmuteychu mountain sub-watershed, a Companion Modelling process (ComMod) (see Chapter 31) was conducted between 2003 and 2005, in two consecutive cycles with first two, and then seven villages, in order to resolve conflicts of access to irrigation water during transplanting of rice. Two participatory modelling and simulation workshops based on role playing first allowed the different types of farmers from the two villages that were most upstream to call into question the water sharing rule in use, given the recent intensification of cropping systems. Nevertheless, in the absence of any formalization, the farmers of the upstream village did not apply the agreement proposed for the transplanting of 2004. The local research community then proposed an extension of the process to the next seven villages. A second round of simulation workshops, based on a second role playing game and a multi-agent computer simulator playing it in silico, explored the possible scenarios. Encouraged by a strong political will to decentralize water management, the interactions between village officials and the local research community resulted in the creation in 2005 of a sub-watershed management committee, formalized through a statute and hard-fought regulations. This inter-village institution, supported by the local branch of the Council for Renewable Natural Resources Research of Bhutan, has gradually been empowered and has diversified its action plan with funding from the United Nations Development Program.
(Based on Gurung et al., 2006)
**SOME LESSONS LEARNT**

**Learning through a research process: expliciting knowledge, feeling valued, developing reflexivity**

Learning was fostered by the existence of heterogeneous collectives in which the actors were engaged in reflexivity throughout the accompaniment process. Through contacts with the researchers, the actors were able to explicit their local knowledge or uses, assumed critical postures and stimulated their collective imagination. In the case of UniCampo, the key questions helped farmers problematize their reality, conduct research and experiment. In Bhutan, two role playing games and then a multi-agent computer model enabled a discussion on the different representations of reality, and then simulated the effects of potential new management rules. In this way, the actors discovered that their knowledge is wide-ranging and legitimate, they felt valued by the attention of the researchers and were pleased to build new complex knowledge (zoning of the territory, multi-agent model).

**Promoting communication and exchange to build a shared vision**

The assessment that followed the accompaniment revealed that the actors found the learning related to communicational and relational aspects especially valuable: understanding the other participants’ vision, knowing how to position one’s own vision, knowing how to discuss topics with others and how to build a shared vision. It was this pathway, the process to achieve a common goal, which was emphasized. Indeed, the actors, although all farmers, had quite varied concerns. Discovering the point of view of the others led them to a better perception of the territorial issues and possible solutions, sometimes observed elsewhere in the territory, including issues of water management, practices to limit erosion or insertion in particular supply chains.

**Putting learning to the test of time and territory**

Although the shared vision was swiftly translated into concrete proposals, implementation was more difficult. Initially, at the end of the first training or modelling cycles, the actors were frustrated by their inability to implement their learning on a territorial scale. But, thanks to the knowledge acquired during the accompaniment by the research community, they learned to organize themselves to assert their positions. For example, the UniCampo association helped former participants disseminate within the territory the technical knowledge they had co-constructed with the researchers. These organizations did not resolve all the difficulties, but they did help actors seize opportunities offered by decentralization and new legislation.

**Overcoming difficulties is an integral part of learning**

Social learning is a dynamic and cyclical process, born in action and in the alternation of phases of problem framing, knowledge sharing, experimentation and observation of results. In fact, dealing with difficulties was of fundamental importance in stimulating learning 'by reaction' and in engendering a real engagement of the actors in the territory. But this learning was possible only because it could rely on knowledge that
was explicitly formalized (key questions in Brazil, modelling in Bhutan), on improved abilities of sharing, on the common vision that emerged and, above all, on the new legitimacy of the actors which has endowed them with a 'power to propose' solutions for the management of their territory (Balandier, 1988).

**Relying on networks to legitimize solutions for the territory**

Thus, the network that the participants created during the accompaniment process, between themselves and with different research and development institutions, facilitates their involvement in the life of the territory. In the case of UniCampo, the legitimacy of the proposed technical models is based on scientific knowledge, built with the researchers, and on the social demand conveyed by the farmer leaders. In the case of Bhutan, the research community enabled contact with the United Nations Development Program (UNDP), which financed their first action plan and guaranteed the sustainability of a microcredit institution.

**OUTLOOK: INCREASING THE CAPACITY OF LEARNING FOR TERRITORIAL DEVELOPMENT**

The social learning that emerged in these two experiences made it possible to perpetuate the dynamics initiated beyond the involvement of the researchers. However, it must be noted that this involvement lasted three years, a period necessary for actions of accompaniment and for carrying out a complete learning cycle.

If the accompaniment is insufficiently anchored in the territory’s realities, there is a high risk of falling short of expectations and of demotivating the actors, which is inconsistent with the objective of their integration into territorial dynamics. By positioning themselves with regards to the other participants and interest groups, actors learn to manage the inevitable tensions and conflicts that are part of any territorial process.

To facilitate such anchoring over the long term, favourable learning conditions have to be created through, on the one hand, a close relationship with researchers, leading to trust, scientific rigour, reflexivity, cross-legitimization of knowledge and the setting up of networks of various actors (Jankowski and Le Marec, 2014), and, on the other hand, the insertion into situations in which the learning is put to the test of reality. These conditions favour the progressive integration of the actors in territorial development and its institutionalization, through the legitimacy they have in creating organizations and proposing solutions. Accompaniment efforts can then continue within the governing and administrative bodies in order to extend learning situations to them (Tonneau et al., 2011, Daré and Venot, 2016).

**References**


Diversity of territorial functions and approaches


