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How may Research take part in innovation processes involving multiple stakeholder partnerships? Lessons, challenges and opportunities

Authors:

Bernard Triomphe*, CIRAD, UMR Innovation et Développement, Montpellier, F-34090, France

Henri Hocdé, CIRAD, UPR Action collective, marché, et rénovation des politiques publiques, Montpellier, F-34090, France

Guy Faure, CIRAD, UMR Innovation et Développement, Montpellier, F-34090, France

** Corresponding author:*

Mailing address: CIRAD, TA C-85 34 398 Montpellier Cedex 5, France

Tel : (33) 4 67 61 56 14 E-mail : bernard.triomphe@cirad.fr

Abstract

Approaches to innovation development based on action-research principles and involving partnerships among multiple stakeholders have become common place in the last 10 years. But many lessons have yet to be learnt about such approaches. To contribute to fill the gap, a study was launched by CIRAD in 2005 to systematize and compare a series of contrasting experiences in which research has been conducted with local actors (such as farmers and farmers' organizations, extension services, governments, private sector, etc.). The main objectives of this study were (i) to draw lessons in terms of research approaches, modalities, methods, tools, and results and (ii) to propose guidelines for improving the design and conduct of research projects focusing on the conception of innovations in partnership among multiple stakeholders. Cross-analysis of the case studies was pursued in three directions: (1) the balance reached between problem resolution, knowledge generation and empowerment of local actors, (2) the formalization of partnerships and (3) the modalities adopted for steering activities and for partnership governance.

Preliminary results confirm the role of 3 factors in shaping the efficacy and efficiency of multiple stakeholder partnership between researchers and other actors. One is that values and goals are among the items about which common ground needs to be identified, negotiated among stakeholders if the partnership is to prosper. Another lesson is to recognize that the diverse set-ups co-constructed among stakeholders are not only means to achieve common objectives, but they also embody high-stake challenges throughout the project life. Finally, one should be aware of the asymmetries among stakeholders in any given partnership, and the necessity to build the capacity of the weakest partners. Taking on board such lessons has important consequences for research at the individual and institutional levels.

Key words:

Action research, partnerships, case studies, innovation, methodology

Introduction

Top-down approaches to innovation development are still frequent or even dominant in many circles. Among other features, they are characterized by the typically sovereign role of researchers in diagnosing problems, developing hypotheses and designing a research process. These results are then typically passed over to specialized agencies (such as extension) to disseminate the technologies and other solutions imagined by researchers. However, such linear approaches have long ceased to be the only paradigm for designing and delivering the innovations needed to help agriculture, and most notably farmers, adapt to rapidly evolving demands and a changing natural and socio-economic environment. Starting in the 1970s, a series of consecutive, mostly complementary approaches have been developed allowing research to better understand and effectively collaborate with a range of stakeholders to solve problems, generate knowledge and learn together with the aim of fostering sustainable development. These approaches include Farming Systems research (“Systèmes Agraires” in the francophone sphere) and a host of participatory approaches from Research-development paradigms (Jouve et Mercoiret 1987), to Participatory Rural Appraisal (Chambers 1988), Participatory Technology Development (Ashby and Sperling, 1995; Veldhuizen and al., 1997), Participatory Learning Action (Scoones et al., 1994), Action-Research (Liu, 1992; Albaladejo and Casabianca, 1997; Lavoie et al., 2003; Soulard et al., 2007) and Empowerment approaches (Gonzalves and al., 2005). Each one of these stresses different aspects or different stakeholders in the innovation and capacity-development process continuum. A further development has recently been proposed in the form of the Innovation Systems (IS) perspective (Hall et al., 2006). The IS perspective complements the above-mentioned approaches by insisting on the need for careful coordination among the many stakeholders involved in innovation processes to help these latter take root and evolve in a dynamic fashion.

Despite the many resistances and hurdles facing the mainstreaming and institutionalization of these novel paradigms (coming more often than not from within research institutions themselves), a number of researchers today are keenly aware of and actively engaged in developing these new approaches and methodologies. By contributing to improving the innovation process, they hope that rural societies and other actors will be in a better position to foster sustainable development and better living conditions.

This paper looks at the lessons extracted from a series of experiences in which francophone researchers have been involved over the past 10 years or so with local actors. It discusses three key lessons extracted from a cross-analysis of the results: the importance and role of values and goals, the characteristics of the governance and operational set-ups, and the role of asymmetries among stakeholders. It then analyzes key consequences of such approaches on the way research is conducted.

Materials and methods

Material for this paper was extracted from experiences gained by researchers from CIRAD and INRA over the past decade or so, when conducting research to develop innovations using a diversity of approaches. The corresponding insights come from the cross-analysis of a series of ten case studies which was launched in 2005 (Hocdé et al., in press). The objective of the case studies was to systematize and compare contrasting past and on-going experiences in which research has been conducted with local actors (such as farmers and farmers’ organizations, extension services, governments, private sector, etc.) (Table 1).

The main objectives of this study were (i) to draw lessons in terms of research approaches, modalities, methods, tools, and results, and (ii) to propose guidelines to improve the design

and conduct of research projects focusing innovations in partnership among multiple stakeholders. Cross-analysis of the case studies focused on three areas: (1) the balance reached between problem resolution, knowledge generation and empowerment of local actors, (2) the formalization of partnerships and (3) the modalities adopted for steering activities and for partnership governance.

Results

Preliminary results provide insights and lessons about a number of key issues (Hocdé et al., in press). One of them is that each experience is the result of an encounter among specific individuals, who purposefully broke away from paradigms reigning locally or institutionally for effecting change. Another lesson is that research and innovation processes are not a linear process with different well planned phases and cycles. Rather they result from *how projects deal with tensions between stakeholders and how they generate the adjustments necessary to achieve success in problem-solving and generating knowledge.*

For the purpose of this paper, three specific issues are being highlighted: (1) the need to identify common ground for innovation by negotiating on values & goals, (2) the crucial role of operational and governance set-ups in allowing the smooth functioning of partnerships over time, and (3) the need to take into account the multiple asymmetries among partners.

Values and goals come first

The desire to innovate does not by itself provide sufficient ground to unite stakeholders. Innovation should be seen as a means to achieve higher-order **goals**. In the Brazilian Cerrados case study for example, what brings partners together is their common goal of contributing to making family farms viable within the agrarian reform context. Many types of innovations may contribute to this goal -- facilitating access to markets, improving production processes, or educating the youth.

Beyond the need to identify common goals, one has to reflect on what brings people together (or apart). Many underlying and intertwined factors play a role. While attitudes toward partnering are often cited as the main factor, there is a direct link between attitudes/practices and underlying **values** and **perceptions**. For example, what a specific stakeholder thinks about democracy and access by small holders to decision sharing? What is the value attached to local knowledge and experience? What is the role of science in society?

Cementing lasting partnerships depends heavily on how much common ground there is among partners. Frequently partnership agreements falter because there is not “enough” common ground – not enough in the sense of shared values, visions and goals, not enough recognition by partners that the problems can best, or only, be solved together. One cannot overemphasize the role trust plays in allowing heterogeneous actors (who do not necessarily know each other initially) to work together over extended periods of time. Yet trust is hardly there when collaboration starts. It has to be built up gradually, and achieving success in trust development is the consequence of each partner being open about his /her own values and interests, and also of perceiving consistency in, and hence respecting other actors’ values and actions.

One of the best ways to create common ground and to develop trust is for partners to engage in recurrent negotiations among themselves. Negotiations, formal and informal, bi-lateral and multi-lateral, are essential for understanding each other and for maintaining fruitful relationships over time. They need to focus on multiple issues: goals, values, approach, making sense of results obtained, sharing of resources and credits, set-ups, tension resolution, etc. Each set of negotiations must try to produce win-win, concrete arrangements allowing the

partnership to move forward. Initial negotiations and their outcomes are key to how the partnership may function and behave over time. That said, one has to be aware that many partners (including Research) do not necessarily possess a well-developed negotiation culture or practice when they enter the negotiation arena. In that sense, negotiation skills need to be learnt over time, and the weakest partners need special support to help them negotiate in their best interests.

Building the set-ups necessary for meaningful interactions among partners

Set-ups (or devices - "dispositifs" in French) encompass all the activities, resources, rules, relationships and mechanisms with which a set of actors agree to work together toward attaining a shared goal.

There are 2 main types of set-ups which need to be differentiated:

- Governance set-ups, which deal with decision-making, coordination, steering, conflict management, etc. They may typically involve setting steering or oversight committees, scientific committees, charts, etc.
- Operational set-ups, which deal mainly with the implementation of activities (diagnostic or monitoring/evaluation, training, exchange visits, trials, experiments, farmer focus group, workshops, etc) (see Table 2 for a description of key characteristics of operational devices in the 10 case studies)

It is frequent for set-ups to remain largely unformalized, or that their formalization is a gradual process, the pace of which depends on stakeholders getting to know and trust each other (see earlier). For example, in the Mexican case, it took 2 years to formalize commitments by different stakeholders, which then took place by creating a non-for-profit organization in which each partner played a formal role.

Paying close attention to set-up design and management is crucial for effective partnerships. Among others, the following aspects need to be looked at very carefully:

- Formalization of rules, definition of an ethical framework, concerted distribution of tasks and responsibilities;
- Building up enough flexibility to allow for dynamic adjustments and unpredictable, non-linear evolutions over time;
- Devising robust mechanisms for tension / conflict resolution;
- Monitoring & Evaluation of both results and process;
- Facilitating the gradual empowerment of the weakest partners.

When negotiating about set-ups, being as transparent as possible is essential for creating trust and minimizing potential negative interferences. Also, partners should be careful that no agreement becomes rigid to the point that it may eventually undermine the viability of the partnership and its operational capacity. This may happen when procedures are too complicated (such as how consensus may be reached or how decisions are validated) or when they tend to focus on the letter rather than the spirit of agreements. This is all the more important because over time, specific objectives may change, stakeholders (individuals or institutional ones) come in and out, while roles and rules evolve according to the specific phase, the learning that is taking place and the changing opportunities. Another characteristic of effective partnerships is the non-linearity and low predictability of their trajectory over time.

Because of the dynamic nature of arrangements and set-ups, a key function of governance set-up is to ensure that effective mutual learning among partners is taking place and reflected in the way the partnership operates. This in turn implies that adequate communication mechanisms be devised both for responding to the internal needs of partners and for interacting with the external world.

Finally, one cannot overemphasize the importance of inter-personal relationships in these processes (above and beyond the effects linked to the nature and behaviours of institutions and organizations).

Dealing with asymmetries among partners

The impact of asymmetries among partners in the functioning of partnerships cannot be overemphasized. The nature of asymmetries is highly variable, as it can involve information and knowledge, economic strength and resources, political power, institutional and organisational strength, negotiation skills, or simply motivation and the capacity to take initiative.

Not surprisingly when dealing with smallholder agriculture, farmers and their organizations are frequently one of the weakest members in a partnership involving formal, well-established institutions from the public or private sector. How under such conditions to make sure that farmers' needs, viewpoints and proposals are actually heard and taken into account? How can research learn not to abuse its oft dominant position when it comes to taking initiatives, getting access to resources, or articulating the views of others? In the Costa Rican case, researchers had to learn to take a back seat when the process was uneasy, which eventually allowed some farmers to propose an alternative vision for moving forward with the partnership process.

The existence of strong asymmetries is a major reason why any multiple stakeholder partnership that sincerely aims for long-term sustainability beyond the usual short-term project time frame should strive to strengthen the capacity and skills of farmers' organizations during the process of working in partnership. This represents a gradual, long-term process, and includes a host of capacity-building activities, which ideally should rely a lot on learning by doing.

Consequences for research

The observations above illustrate that there are significant consequences research institutions and individual researchers face when embarking on action-research in partnership. These include learning new roles and functions, such as negotiation or facilitation, and paying due attention to qualitative processes. Researchers also need to maintain an uneasy balance, as best as they can, between two opposite poles: conducting quality research on one hand (with the potential to be published in refereed journals, a major criterion imposed by research institutions on their staff), while simultaneously engaging in capacity-building activities. An urgent need -- if researchers want to increase the willingness and commitment of their institutions to embark on research in partnership mode -- is to assess the efficacy and efficiency of such approaches through well-documented case studies, based on relevant indicators of performance and on a thorough cost-benefit analysis.

But case studies will not be enough to change the well-embedded practices and routines of most research institutions and individual researchers (Kuhn, 1962). Research institutions need urgently to put in place adequate motivations and signals for their staff and teams, adapted to the nature and reality of action-research. Also, negotiations need to be conducted with donors to develop or increase adequate funding schemes for action-research and projects conducted

in partnerships, through revamped terms of references, including the ability not to predefine how a project will operate or what it may deliver in terms of outputs, which ideally should only be designed and negotiated on the go among partners, once the project has started to operate. Finally, one should not forget that changing research practices requires that researchers, as other stakeholders, get properly educated and trained in innovation systems, action-research in partnership and other relevant concepts, approaches and practices. This may take many forms and involve a lot of learning by doing.

Conclusions and perspectives

Working in partnership implies in many ways a paradigm change for many stakeholders involved in rural and agricultural development. For their part, researchers have still a long way to go if they want to become effective partners in local and larger scale innovation processes. Some of these changes can be implemented at the level of individuals, others at the institutional level. But they will not take place unless a strong political will, allied to solid documentation of the benefits of such approaches, is present and shared by those convinced that partnership is the way of the future.

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Tables

Table 1: Selected characteristics of the ten case studies used for comparative analysis

Sites	Main focus	Major stakeholders involved (*)				Period of Operation	References
		Research	F.O. (**)	Extension	Misc.(**)		
<i>Central Cameroon</i>	<i>Diffusion of banana transplants</i>	XXX		X		1997-2002	Mengue, 2000
<i>Nicaragua</i>	<i>Participatory sorghum breeding</i>	XXX	X	X		2003-.....	Trouche and al. 2005
<i>Northern Cameroon</i>	<i>Farm management advice</i>	XXX		XXX		1999-2003	Djamen Nana and al 2005
<i>France -Reunion Island</i>	<i>Territorial Development</i>	XXX	X		X	1999-2000	Dulcire and al 2005
<i>Mexico</i>	<i>Conservation Agriculture & Irrigation</i>	XXX	XX	XXX	X (Input supplier)	2000-2004	Triomphe and al. 2006
<i>Brazil – Northeast</i>	<i>Innovations to cope with drought</i>	XXX (ONG)	XXX	X		1992-2003	Sabourin and al 2006
<i>Brazil –Cerrados</i>	<i>Sustainable Development in Agrarian Reform Sector</i>	XXX	XX	X	X (Education)	2002 -	Scopel et al., 2005
<i>Equator</i>	<i>Quality Cocoa Supply chain</i>	X	XX		XXX (Agro-industry)	2000-	Dulcire and Roche 2006
<i>Southern France</i>	<i>Participatory organic durum wheat breeding</i>	XXX	XX			2003-	Desclaux and al 2005
<i>Costa Rica</i>	<i>Imagining the future of smallholder agriculture</i>	XXX	XXX	X		2004-2005	Faure and al (in press)

Notes: (*) Importance of involvement is qualified on a scale ranging from some (X), medium (XX) to very strong / leading role (XXX)
(**) F.O. farmer organizations. Misc = miscellaneous

Table 2: Components of operational set-ups implemented in the 10 case studies

	Surveys (*)		Training	Exchange Visits	Trials, experiments and other devices (nurseries) (**)					Farmer focus groups	Workshops		
	Diag-nostic	M&E			On-station	On-farm	Farmer innov.	Particip. Exp.	Nurse-r		Data analysis	Result assessment	Planning of activities
Central Cameroon	X	X	XX			X			X				
Nicaragua			X				XXX	X			XXX	XX	X
Northern Cameroon	XX		XX				X				XX		
France - Reunion Island	XXX	X		X								XX	XXX
Mexico	X	X	X	XX	X	X	(X)	XX			X	X	XXX
Bresil - Cerrados	X		XX	X	X		X	XX		XX	XX		
Brasil - Northeast	XX	X	X	XX		X	XX			XX	XX	XX	XX
Equator	X		XX	XXX	X		X	XX	X		X	XX	X
Southern France	X			X	X	X	X	X			X		
Costa Rica	XX		X	X							XXX		XX

Notes: Importance of the component throughout the project: X= some XX : medium XXX very important
 (*) Types of surveys: **diagnostic-** (both comprehensive farming system surveys, or thematic ones), **M&E:** monitoring and evaluation surveys
 (**) **on-farm:** research-designed experiments on farmers fields; **Farmer innov:** experiments conducted autonomously by farmer-innovators , **Particip. Exp:** jointly designed and managed trials between farmers and researchers