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Opening the TATA-BOX to Raise New Questions on Agroecological Transition



Jean-Marc Touzard, Jean-Marc Barbier, and Laure Hossard

Abstract This chapter is written by researchers at UMR Innovation (Montpellier) who propose an external critical analysis of the TATA-BOX project. Firstly, we highlight the main contributions of both the project and the book, which cover different stages of a participatory research project, by crossing several disciplinary viewpoints. We note multiple outputs that can strengthen the capacities of farmers and researchers. We then develop three questions that echo our own works on innovations and agroecological transition: (i) How to associate agroecological issues with the diversity of practices and projects in a given area which is not necessary in a transition towards "strong ecological modernization"?; (ii) What are the conditions for disseminating/outscaling the TATA-BOX approach? In particular, can the project be replicated without the support of researchers? (iii) How to best integrate the political dimensions of ecological transition at different scales? We conclude that TATA-BOX could become a "political object" that promotes agroecological transition to local authorities, national policy makers and media, and international networks.

Introduction

The urgency of ecological challenges not only calls for changing the ways we produce, exchange and consume our food, but also the ways we are doing research and supporting the processes of change in agriculture. The TATA-BOX project is in line with these perspectives by proposing, experimenting and evaluating a participatory approach to support local actors towards agroecological transition (AET). This project has mobilised a multidisciplinary research team, including agronomists, economists, sociologists, geographers, etc. In this book the team reports its common

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analytical frameworks, its results and its evaluations, going as far as integrating external critical analysis. This is the aim of our paper, written by researchers at UMR Innovation (Montpellier) who study innovations in agricultural and agro-food systems (Faure et al. 2018) and have discovered the TATA-BOX project by reading the other chapters of this book. Firstly, we will highlight the contributions of the book and then develop three questions that echo our own work on innovations and AET: How to associate agroecological issues with the diversity of practices and projects in a given area? What are the conditions for disseminating or outscaling the TATA-BOX approach? How to better integrate the political dimensions of agroecological transition?

Strengthening the Capacities of Farmers and Researchers

First of all, reading this book generates much interest. The contributions cover different stages of a participatory research project, by crossing several disciplinary viewpoints. Few studies in this area have taken the time to report and analyse their approach with such precision and reflexivity: an updated survey of the issues and principles of AET; a conceptual framework to analyse this transition by combining three systems, usually mobilised separately (farming systems, Socio Ecological Systems, Socio Technical Systems); the proposal of a five-step approach to support the stakeholders of a territory; the operationalization of this approach in two local areas with feedback on the participatory process; a focus on several tools used during the project (surveys, network analysis, graphical tools, etc.); and an evaluation of both local participatory processes and research management.

These contributions refer to recent theoretical and methodological knowledge that fuel the increasing number of participatory research projects dedicated to transitions and innovations in agriculture, particularly in the SAD department of INRA (Barbier and Elzen 2012; Meynard et al. 2012; Prost et al. 2017): the reaffirmation of a systemic framework; the taking into account of the knowledge, the judgments and the interactions of the stakeholders; the articulation of several scales and fields of action; the attention given to pathways more than to the states of the systems; the application of design theory to agriculture; the perspective of "adaptive management", etc. The book is thus a resource to better understand the current research on AETs.

Admittedly, each contribution is not necessarily original and the project remains focused on the co-design phase of an action plan, without going so far as to analyse the actions implemented afterwards. But the combination of these contributions, their confrontations and their reflective dimension offer a precious source of knowledge for all the categories of actors potentially involved in AET: researchers and research managers, farmers, policy makers, local development organizations, etc. The TATA-BOX project thus appears as a real laboratory for the development of participatory research responding to agroecological issues at a local scale. The uncompromising evaluation

of the experience (Chap. 11) shows that the project has clearly strengthened the capacity of the stakeholders participating to the local participatory processes. By providing tools, references and ideas, the book may also strengthen the capacity of its readers, and thus contribute to scaling up local initiatives of AET (De Tourdonnet and Brives 2018). But more than that, the interest of the book is also to raise questions that are sometimes evacuated by other researches on AET.

Which Agroecological Transition?

The first question is about the way in which the vision of a sustainable agriculture in a territory can be designed as well as the AET that can lead to it. The TATA-BOX project assumes the objective of favoring a "strong ecological modernization" based on "radical redesign of agricultural systems". This option gives a normative dimension to the participatory process promoted by the researchers, even if it relies on maieutic principles. The objective is indeed to help stakeholders co-design – or "discover"- through their interactions with researchers (i) a shared diagnosis of the current situation, (ii) a common vision of a territorial agroecological system, and (iii) a pathway for the transition. The implementation of such an approach then calls for several remarks:

The approach is applied in two local areas where agriculture still plays an important role and is already well engaged in AET. Indeed some actors and organizations carry individual and collective initiatives that refer to strong agroecology, for instance the development of organic agriculture. They also seem to have a consistent role in the two territories and in the workshops of the project. But what about territories where agriculture is less present or dominated by conventional agriculture or weak agroecology? Should we then support activist groups, though they be marginalized or in conflict in the territory? Should we instead propose work oriented more towards a weak form of agroecology? Should the approach be integrated in a wider territorial approach that takes more into account the evolution of non-agricultural dynamics, whether economic or ecological? In any case, the TATA-BOX approach deserves to be tested in more contrasted territories in terms of their commitment to agroecological transition.

The proposed approach has the merit of taking into account the plurality of views on agroecology (cf. Chap. 3), the uncertainties (cf. Chap. 6) and the diversity of current practices and projects in local agriculture and food systems. Studies in the Tarn French *département* (FADN NUTS III, http://ec.europa.eu/agriculture/rica/) show that many farmers hybridise strong and weak agroecology, or integrate strong agroecology into their practices, networks and conventional agriculture organizations (cf. Chaps. 7 and 8). But the challenge of TATA-BOX is ultimately to obtain convergence on a desirable and shared future, and then to propose an action plan. This future certainly includes the coexistence of a diversity of projects and prac-

tices, more or less close to strong agroecology, but it remains linked to the search for a compromise that can limit the range of proposals. This methodological choice is shared with many participatory research projects and facilitates reflections on "the" transition. But we can also follow a prospective approach that holds several scenarios and several possible paths (Delmotte et al. 2017). It can maintain comparability of different options, not necessarily dominated by strong agroecology.

In fact, there is a possible contradiction between the need for a strong Ecological Modernization of Agriculture and the ambition to develop participatory approaches. The TATA-BOX approach begins with a diagnosis of the territory and its agriculture, but participation could well result in more than just the capture of knowledge and data from the stakeholders. What happens if they want to deal with "their" problems and propose solutions that are not referring to "strong ecology" or even "weak ecology"? What happens if there is no possible convergence towards a "Territorial Agroecological System"? We agree that AET cannot be promoted without participation, even with more punitive and coercive public policies, but participation does not necessarily create an AET.

Can TATA-BOX Be Used Without Researchers?

Promoting the development of "strong agroecology" through a participatory approach raises a second question: what is the reproducibility of the approach proposed by TATA-BOX and what are the conditions for its adoption by other groups of local stakeholders?

The characteristics of local agriculture, its territory and its more or less "receptive" and innovating actors have already been mentioned. But we must emphasise another condition for the success of TATA-BOX: the very strong involvement of research. More than 40 researchers have been mobilised around the project and their role has been multiple, as Chaps. 10 and 11 show. Researchers are indeed at the initiative of the process, have set up groups and workshops, have strongly contributed to the diagnosis, have supported stakeholders towards the search of consensus, have ensured the follow-up, the evaluation and capitalizing on the project. The researchers who implemented the TATA-BOX project were themselves accompanied by other researchers who supported them in their reflexivity and analysed the impacts on stakeholders. These circumstances are exceptional, and even a luxury for research. But the implementation of such a device may be expensive, time-consuming, and thus difficult to reproduce. How to ensure that the TATA-BOX approach can be "decoupled" from the networks of actors who created and applied it, and in the first place from the researchers? This question can be addressed by analysing three major contributions of researchers to the project.

An initial contribution of researchers has been the production of references, methods and knowledge on local agriculture, ecosystems and food-chains. This

cognitive function contributed to the initial diagnosis and the analysis of the diversity of strategies. It also played a role to legitimise the implementation of the approach and to provide references used by stakeholders during the workshops including during the discussions on action plans. This function could be extended in the longer term through the organization of an "action research project" (Faure et al. 2014). What is the possibility of launching the TATA-BOX approach in other territories without this contribution of scientific knowledge? The introduction of "self-diagnosis" methods and the use of collaboration through student training are often proposed solutions.

A second contribution of researchers is the design and implementation of a combination of tools, methods and actions constituting the global TATA-BOX approach. In fact, these tools and methods already exist separately. The stakeholders themselves considered them "unoriginal" at the end of the three workshops (Chap. 11). But at the same time, they recognized as "very stimulating" the TATA-BOX experience as a whole, because it stimulated collective learning processes. Researchers then played a role of "animation for local development". This function must be implemented autonomously by other actors to ensure the dissemination of the approach. A guide has been produced for this purpose (Audouin et al. 2018). But what is the capacity or willingness of these animators and their organizations to mobilise the TATA-BOX process and, if necessary, readjust the combination of tools according to new local conditions? This question applies to the duplication of design approaches in other territories, but also for the implementation of action plans. Because once conceived, it is not the researchers who will support all the local changes.

The third main contribution from the researchers refers to the evaluation of the approach. TATA-BOX has been monitored and evaluated by researchers, with in particular a survey of a sample of participants. This external evaluation cannot be done each time and could be largely integrated into the participatory process. Indeed the empowerment of the approach calls for proposing a participatory evaluation where the stakeholders could define the objectives, criteria and evaluation methods for the future agroecological systems, the actions they propose and their collective process of design. Here, we can draw attention to the risk that the assessment could be limited to the impacts on local agriculture and ecosystems, whereas all the dimensions of sustainability must be considered, as well as the possible impacts outside the territory (Andrieu et al. 2018).

The diffusion of the TATA-BOX approach without the participation of researchers refers to the principle of autonomy, put forward by agroecology (cf. Chap. 4). AET should not hide a new form of "dependence" on research! The importance of links with research and universities has already been shown in several emblematic examples of agroecology, including to ensure their economic viability, for example by hosting trainees and projects or by providing training (Morel 2016). As suggested by the authors of this book, we must consider the TATA-BOX approach neither as a reproducible "turnkey" solution, nor as a pure product of research not

reproducible as it stands, but as a living lab, which allows methods and tools to be tested, provides references and shows clearly that the essential thing is to create spaces of debate and exchange in the territories where agroecology is ongoing.

To Highlight the Political Dimensions of Ecological Transition

Finally, the TATA-BOX project and the book that reports this experience lead us to question and better understand the political dimensions of AET.

First of all it is clear that TATA-BOX results from a political project. By announcing a "preferential option" for strong agroecology and bottom-up/participatory development, the researchers' perspective is to go beyond the mere understanding of the world, to engage in a transformation of the world. In France, in scientific practices, including in social sciences, this political dimension is often overshadowed, for fear that political commitment could call into question the scientific nature of an approach. But as soon as the political purpose is clarified and contextualized, and that the social categories that can benefit from the project are debated, there is room for "research capable of engaging and disengaging" (Callon 1999). In this sense, the research presented in this book goes beyond the vision of an agroecology "detached from political action" that INRA puts forward (i.e. defining it as the study of relations between ecosystems and agriculture). At the same time, this research does not enclose itself in a vision that is undoubtedly too "committed" that Altieri (1995) advocates, even if the defense of family farming makes sense through the TATA-BOX project. At the same time it does not just focus on the defense of organic farming (Lamine 2015). The political project of TATA-BOX tends towards "territorial agroecology", which opens spaces of dialogue and negotiation and leads to the elaboration of an action plan. But to fully assume the political dimensions of this "territorial agroecology", several points undoubtedly deserve to be developed.

Firstly, the inscription of the TATA-BOX process and workshops in the local political system can be discussed. The project has implemented ad hoc groups, bringing together a diversity of stakeholders, but not necessarily having a strong political legitimacy. Another option would have been to work more directly with an existing political body, such as a steering group of mayors or representatives dealing with the agricultural and ecological issues within their different municipalities. This is the choice that has been made by the UMR Innovation in support of the agroecological and food policy of the Montpellier metropolis (Soulard et al. 2017). The political impact is stronger, but probably with less debate; less agronomic knowledge and a lower degree of detail on agricultural specificities. This could compromise the final implementation. It's about finding a tradeoff between political impact and political debate.

Moreover, as noted by the authors of the book, the process of political design calls for continuing the experiment, following the evolution of local political action.

In this respect, one can think that the "weak" ties of TATA-BOX with local political authorities can limit the commitment of concrete actions. One could imagine that the project could play a more diffuse role within the local community, promoting the emergence of solutions, and strengthening local capacity to maintain pressure on policy makers. In any case, there is room for complementary work in political science aimed at analysing and supporting the future evolution of political actions and tools for the AET of these territories. Highlighting the notions of "local resource governance" and "socio-technical systems" provides a favorable framework for inviting political science in the wake of this project.

Lastly, the TATA-BOX approach could be considered as a political object that can be mobilised by researchers and stakeholders for action at different scales. The experience can thus lead to the writing of "policy briefs" for national or European policy makers. The presentation of the lessons of the approach in conferences or professional media is to be continued, in agricultural as well as scientific circles. In fact scientists have also to integrate these approaches to participate in AET. The challenge is then to amplify debates, feedback and questioning in the political field. This is also what can be done at the level of other countries through the promotion of this book which is a reference for all those who want to build an "international AET".

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