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> PARTICIPATORY DEVELOPMENT OF COLLECTIVE RULES
FOR NATURAL RESOURCE AND LAND MANAGEMENT

**Lasting effects
from the local
to the national level**

Patrick D'AQUINO

Although participatory approaches are increasingly recognised as necessary for involving local people in resource and land management, their impacts often remain limited in the long term, whether at the local level or on broader scales. Based on this observation, a CIRAD team developed a methodology, Self Land Policies, whose effects at the local and national levels can still be seen 15 years after its implementation in Senegal.

Applied to the management of local territories, then beyond, to the definition of national land and environmental regulations, this methodology has launched collective dynamics driven by the stakeholders themselves, who implement them according to their own requirements.

Since the 1980s, participatory approaches have been used to support local initiatives. However, the analytical tools they use are more suited to expressing scientific knowledge than to promoting the concerns and knowledge of local populations. Consequently, they are generally no more than a tool for dialogue – sometimes a dialogue of the deaf – between scientists and local people. However, it is still imperative that these local people are

more closely involved in the management of their territory and that their points of view are better integrated into analyses made. Based on this observation, a team from CIRAD has developed a methodology, Self Land Policies (see box p. 4), which provides populations with tools for participatory analysis and foresight that they can use on their own, in order to co-develop and simulate their own proposals for territorial management.

perspective

Through *Perspective*, CIRAD provides the opportunity to explore new avenues for discussion and action based on research, without presenting an institutional position.

A generic methodology for participatory simulation...

> Collective rules and uncertainty scenarios defined by participants; a key role given to improvisation.

Self Land Policies is based on a strategic hypothesis: in order to obtain lasting, wide-ranging impacts, stakeholders must be empowered to implement the process as independently as possible in their local territory, but also, more broadly, nationwide.

Self Land Policies is one of the results of CIRAD's 20 years of experience in participatory simulation methodologies (see commod.org). It provides a simulation game (called Play Grounds™) into which environmental, economic and social uncertainties are introduced, which people can use to develop their own operational rules for the management of a territory. The design of Self Land Policies involved two phases. In the late 1990s, it was created to support the collaborative management of local territories. Then, in the late 2000s, the methodology was refined to also enable a collaborative nationwide definition of collective national regulations.

... to meet local challenges...

In Senegal in the late 1990s, the local authorities were faced with two challenges. First, although decentralisation had transferred territorial management responsibilities to them, they were not recognised by most national stakeholders – from technical services to local people – as being sufficiently competent to undertake these responsibilities. Another challenge was to mitigate conflicts between agriculture and livestock farming. With the expansion of agricultural land, areas available for livestock were shrinking and it was becoming crucial to reserve land for this activity. Yet the population and national policy makers alike were convinced that livestock farming should continue to make do with unused areas.

> The ability to control and redesign the process until implementation encourages stakeholder commitment.

To meet these challenges, in 1998 and 1999 a team composed of members of CIRAD, SAED (Société Nationale d'Aménagement et d'Exploitation du Delta du Fleuve Sénégal) and ISRA (Institut Sénégalais de Recherches Agricoles) tested Self Land Policies in Ross Béthio, a local authority in the Senegal River Delta covering an area of 2 500 km². With this support, in less than a year, this local authority had set its own collective land use rules, formalised as a Plan d'Occupation et d'Affectation des Sols (POAS, land use plan),

using participatory maps that it had learnt to produce with local people. The effects of this process are still visible 15 years on at the local, national and even sub-regional levels.

Then, following the departure of the support team, the local authority succeeded in mobilising funds to carry out the work identified with local people in order to support the new organisation of its territory (see Photo 1). On a broader scale, local stakeholders (local officials and SAED) reproduced this POAS in other Senegal River communities; officials from Ross Béthio took this approach to neighbouring countries; and an interministerial council validated the approach at the national level. Ad hoc support was thus sufficient to establish an autonomous and therefore sustainable dynamic.

The Ross Béthio POAS was also the first Senegalese document in which specific zones were officially set aside for transhumance, a process replicated in the other POAS documents in Senegal. This new recognition of specific areas for livestock farming thus spread throughout the country. In 2014, the president of the Commission Foncière Nationale said that transhumance in Senegal should be eligible for “pastoral leases”, which was an important development.

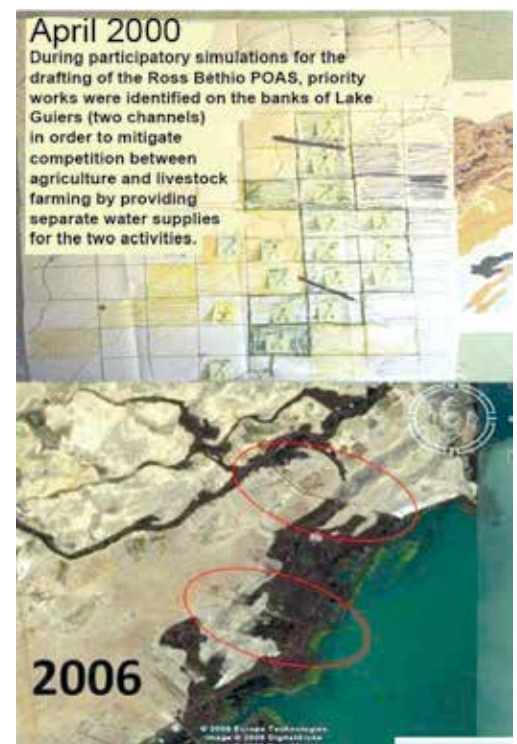


Photo 1. From game to reality: the works simulated in the game were built six years later. © P. d'Aquino Source: d'Aquino and Papazian, 2014.

... or national challenges...

In the late 2000s, the simulation tool was improved so that it could be used on a large scale in multiple communities within a country, thereby enabling its national use for collaborative policy making (land reforms, environmental codes, sector organisation, etc.).



Photo 2. The platform is designed to enable complex foresight simulations based on simple modelling elements that anyone can use. © J. Bourgoïn.

First, a platform was developed that could be used in any territorial context and at different scales. It is made up of several wooden boards that participants use to represent a range of different territories, which they can then integrate into the rules they simulate. On these boards, the participants introduce the collective territorial management rules they desire, which they will apply when they simulate their activities (see Photo 2,). They also introduce uncertainties, such as growing climate variability, a bushfire, or the arrival of transhumant pastoralists or of a foreign investor. The platform can thus be used at the country level, with each board representing a part of the country, or at very local levels, with each board symbolising a few farms – this is how it was used by a farm insurance programme in order to define with farmers several options for public support for agriculture.

This platform therefore retains the first innovations from participatory simulations conducted in Ross Béthio (participants' definition of collective rules and uncertainty scenarios; key role given to improvisation), while presenting them in an easily reproducible material form. Workshops can thus be held all over the country at different organisational levels and on different territorial scales. To support this large-scale implementation, a learning-

by-doing programme for facilitators, taking several weeks, was set up.

In 2014, a civil society framework for research and action on land tenure in Senegal, CRAFS, used this methodology to implement a new bottom-up process for the collaborative drafting of farming principles for land reform. The NGO members of the framework themselves organised, financed and facilitated workshops throughout the country, then sought assistance from national experts to draft their conclusions, and finally implemented a political support strategy among decision-makers in charge of the land reform. After one year, this process has spread considerably, both horizontally (with around 20 workshops organised throughout the country) and vertically (three national workshops), all thanks to funds mobilised by civil society itself. The effects are therefore national, as these “farming land reform directives” have been under discussion with the Commission Nationale de Réforme Foncière since early 2015. They are also local, with participants in communities where workshops were held applying some of the rules envisaged to their land (contracts with agribusiness, zoning of activities, access to land for women, etc.).

... primarily aimed at stakeholder independence

Whether they are farmers, local officials or civil society leaders, the stakeholders targeted rapidly understand that support remains technical and does not impose development choices, and that they are very much in control of the process. Indeed, early on in the process, they are the ones who choose the priority subject to be considered with the support of the approach. Next, the foresight “game” offered is designed in such a way as to enable stakeholders to control and modify all of its elements. Finally, later on, the implementation of the resolutions they make is entirely their own responsibility. This is what prompts their wholehearted commitment to the process. It is also what prompts the – often voluntary – mobilisation of the local technicians, experts and academics who hope for greater recognition of local stakeholders. Driven by their shared belief in the ability of this methodology to support and operationalise endogenous visions of development, they give their own time and energy to organise simulation workshops, and to then

> Two principles: flexibility for participants; and a socio-institutional strategy developed with stakeholders.

A few words about...

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• develop the best strategies for implementing resolutions made. This is what explains these large-scale impacts.

• To achieve this, two principles are what make this approach original. First, the workshop materials are designed to give participants maximum flexibility, by putting them in action situations in which they can express any ideas they wish, without the need for formal discussions or written documents (including maps). The elements of the game are only intended to encourage participants to refine their proposals at the operational level. This high level of flexibility helps to reveal the reality of participants' behaviours, transcending discussions on this reality and the usual rules of freedom of speech. For example, participants often improvise situations of corruption that no element of the game suggests they should take into account.

• Second, the approach is based on a socio-institutional empowerment strategy that can be developed with stakeholders thanks to a strategy design framework called Rainbow Spiral. This tool helps to prioritise the constraints to be removed (improving knowledge, learning new skills, altering the balance of power, changing attitudes, etc.), according to an origi-

nal principle of pragmatism: think small, do big (see Grounded Change hypothesis). The challenge is to identify the minimum level of progress that can reasonably be expected in the given context, then to undertake the specific key actions needed to achieve this, whatever their nature and whatever the scale at which they are situated: training, lobbying, signing a convention, publicity, partnership networks, etc. If necessary, investment can even go as far as the creation of an interdisciplinary academic group to support decentralisation (the POAS operation in Senegal), the formation of a national network of instructors in this approach (Sahel), or a professional Masters course (SiSup operation in New Caledonia). The methodology has been replicated since 2014 by new teams (in Burkina Faso, Haiti, etc.), and a website has been created to pool all the resources needed for its use (<http://www.groundedchange.org/>).

The success of Self Land Policies raises new challenges: how can the regulatory mechanisms of institutions be modified to ensure that these bottom-up dynamics can be effectively integrated into them? Developments are required across a whole range of regulatory frameworks, practices and behaviours. <

The methodology presented in this *Perspective* was developed within the GREEN research unit. It has been applied in Senegal, New Caledonia and Laos. It has resulted in several publications, including:

d'Aquino P., Papazian H., 2014. An inclusionary strategy reaching empowering outcomes ten years after a two-year participatory land uses management. *Environmental Management and Sustainable Development*, 3, 2.

<http://dx.doi.org/10.5296/emsd.v3i2.6595>

d'Aquino P., Bah A., 2014. Multi-level participatory design of land use policies in African drylands: a method to embed adaptability skills of drylands societies in a policy framework. *Journal of Environmental Management* 132, 207-219.

<http://www.sciencedirect.com/science/journal/03014797/132>

d'Aquino P., 2009. La participation comme élément d'une stratégie globale d'intervention : l'approche « gestion autonome progressive ». *Cahiers Agri-cultures*, 18. 5, 433-440.

http://www.jle.com/fr/revues/agr/e-docs/la_participation_comme_element_dune_strategie_globale_dintervention_lapproche_gestion_autonome_progressive__282197/article.phtml?tab=texte

Bousquet F., Barreteau O., d'Aquino P., Étienne M., Boissau S., Aubert S., Le Page C., Babin D., Castella J.-C. 2002. Multi-agent systems and role games: Collective learning processes for ecosystem management. In: Janssen Marco A. (ed.). *Complexity and ecosystem management: The theory and practice of multi-agent systems*. Cheltenham: E. Elgar, p. 249-285.

And also a short film:

Default Q., 2014. Du terroir au pouvoir. Short film, 26 minutes. Comité Foncier Technique et Développement, Paris, Ministry of Foreign Affairs and International Development (MAEDI), Agence Française de Développement (AFD), Paris. http://www.dailymotion.com/video/x28rttd_du-terroir-au-pouvoir_creation



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• Michel Étienne (coord.), 2010. *La modélisation d'accompagnement*. Éd. Quae, 384 p.

• Touré O., Seck S.M., 2013. Amélioration de la gouvernance foncière au Sénégal. Fiche Pays, 3, Comité technique Foncier et Développement, 29 p.

• <http://www.foncier-developpement.fr/publication/amelioration-de-la-gouvernance-fonciere-au-senegal-enjeux-actuels-et-defis-pour-lavenir/>