

12th Biennial Conference of the International Society for Ecological Economics

Conference theme: The Political Economy of Green Development

Sub-theme: Challenges of community resource governance

Title: From individual innovation to collective capabilities for community resource management

Jérôme Pelenc^{1,2} and Didier Bazile³

Keywords: innovation, collective action, collective agency, collective capability, biosphere reserve, community resources management, cooperation

¹ Institute of Advanced Studies on Latin America (IHEAL), Paris III University (Sorbonne Nouvelle), France.

² Fontainebleau-Gâtinais UNESCO Biosphere Reserve, France. jerome.pelenc@gmail.com.

³ Agricultural Research Centre for International Development (CIRAD), UR GREEN, TA C-47/F, 34398 Montpellier cedex 5, France and Instituto de Geografia / PUC Valparaiso, Avenida Brasil 2241, Valparaiso, Chile. didier.bazile@cirad.fr.

Twenty years after the first Rio Earth Summit sustainable practices are still very rare, and not very widespread. Biosphere Reserves are sites designated by the Unesco where new and optimal practices to manage nature and human activities should be tested and demonstrated through participative governance. Within this framework it is important to identify the innovative actors within the Biosphere Reserves whose activities contribute to the values of sustainable development.

The research reported here was conducted in the La Campana-Penuelas Biosphere Reserve in Chile. The aim of study was to identify innovative actors within the Biosphere Reserve (BR), and to demonstrate how collective action can be used not only to share “sustainable practices” but also to spread “values”.

To do this, we started from a theoretical background derived from social learning and community of “practices” and we introduced new concepts derived from human development through “collective agency and capabilities” into the field of community resource governance. We demonstrate that the concepts of agency and capability which embrace people’s values and offer a broad analytical framework of the “agent” which goes far beyond *homo economicus*, can help to explain the underpinning of collective action. Indeed, collective agency could be defined as “*a group of individuals acting as agents not only to improve their own living conditions but also to bring about changes in their societies thus transcending the limits of their individual well-being concerns (Ibrahim 2008: 67)*”. Collective capabilities emerge from social interactions guided by a shared perception of responsibility enabling the interacting group of persons to carry out things and achieve states of being that would not be possible when acting alone.

Innovative actors are inventing tomorrow’s sustainable lifestyles by adapting themselves to global change. They are, therefore, key stakeholders who should be supported by the BR so that “green” development can be implemented. However, these actors are often invisible individuals who are neither organized, nor empowered. Consequently, they are not represented on the BR management committee and their voices are not heard alongside those of powerful institutions and interest groups. Individually they may have a good level of education, income, etc... but in isolation they are vulnerable, especially in the adverse, neo-liberal socio-economic context of Chile.

Drawing on this basis we formulate the following hypothesis: “*if actors who develop innovative practices for sustainable development remain isolated, only collective action will allow their innovations to achieve the recognition and consolidation required to propagate the values that underlie their development*”.

Material and methods

We first conducted a sociological survey in order to identify the innovative actors within the BR. We then organized an experimental workshop involving the individuals identified (30 people, involved in sectors such as alternative agriculture, eco-tourism, recycling, education, civil society and eco-building, etc.). The workshop involved 4 steps: first, the participants collaborated to formulate their own definition of innovation; they then collectively constructed a tree of the problems they are facing in the field of innovation; next, they characterized their relationships with the BR, and finally they devised an “exchange of capabilities,” i.e. each participant identified three products, services, or knowledge that s/he could exchange with the others.

Results

The construction by the group of a definition of the generic term of “innovation” enabled a common identity to emerge, thus strengthening the identity of the group; the collective construction of the tree of problems allowed the group to identify the obstacles preventing

them from being agents of change in terms of access to ecosystem services and substitutable goods and services, entitlements, internal and external conversion factors, and values.

The exploration of their relationships with the BR allowed them think about reciprocal interactions (or benefits); the organization of a “exchange of capabilities” made them realize that a lot of the problems could be solved through internal cooperation.

Discussion

The group as a whole, and the individuals composing it, were empowered because they realized that the solutions to many of the problems facing them were already in their own hands. They gained visibility and the ability to access the governance body of the BR. However, it was not possible to designate or elect a person to represent the group on the BR board of management, because the participants were all very suspicious about conventional forms of organization, which according to them encourages relationships of domination. A new form of social organization has to be found to give sustainability to this brand new group.

Selected bibliography

Blackmore, C., 2007, “What kinds of knowledge, knowing and learning are required for addressing resource dilemmas?: a theoretical overview”. *Environmental Science & Policy*, 10(6), p.p. 512-525.

Chia E., Rey-Vallette H., Torre A., 2009, Vers une «technologie» de la gouvernance territoriale ! Plaidoyer pour un programme de recherche sur les instruments et dispositifs de la gouvernance des territoires. *Norois* 4/2008 (n° 209), p. 167-177.

Coudel E., 2009, Formation et apprentissages pour le développement territorial : regards croisés entre économie de la connaissance et sciences de gestion. Thèse Université de Montpellier 3. 443 p.

Fabricius, C., C. Folke, G. Cundill, and L. Schultz. 2007, “Powerless spectators, coping actors, and adaptive co-managers: a synthesis of the role of communities in ecosystem management” *Ecology and Society* 12(1): 29. [online] URL:<http://www.ecologyandsociety.org/vol12/iss1/art29/>

Ibrahim S, 2008, Collective agency: wider freedoms and new capabilities through self-help in REPENSER L'ACTION COLLECTIVE : Une approche par les capacités, Sous la direction de Bakhshi Parul, Brouillet Anne-Sophie, Duray-Soundron Chantal, Dubois Jean-Luc, Réseau Impact, [Ethique Economique](#).

Pelenc, J., 2009. Linking empowerment, collective capabilities and environmental functions: toward a new conceptual framework to assess co-management of socio-ecological systems, paper presented at the HDCA 2009 conference, panel Empowerment and Collective Capabilities.

Pelenc, J and Dubois, J L., 2011. Relating Capability and Sustainability: The Role of Critical Natural Capital for Sustainable Human Development. In Crabtree A, Tiwari, M (eds), “Capability and Sustainability”, Palgrave MacMillan (In corrected proof).

Rauschmayer F, Omann I., Frühmanet J. (eds), 2011, *Sustainable development : Capabilities, needs and well-being*. Routledge Studies in Ecological Economics, London.

Westley F, Olsson P, Folke C, Homer-Dixon T, Vredenburg H, Loorbach D, Thompson J, Nilsson M, Lambin E, Sendzimir J, Banerjee B, Galaz V, van der Leeuw S, 2011, "Tipping Toward Sustainability: Emerging Pathways of Transformation", *AMBIO*, 40, pp762-780.