

## **Process and Methods for Participatory M&E of Biodiversity: A Southern Reconnaissance**

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Introduction to theme 3 of the PAMEB workshop: Processes, methods and tools

There is no single tool for monitoring biodiversity. In the development process a reasonable range is already in use. The problem in participatory M&E of biodiversity is that sometimes there is much focus on the methods and processes, whereas there is no clarity on the objectives; at other times it is vice versa. M&E of biodiversity is often focused on methods, whereas advocacy for participation often lacks the tools. Both methods and objectives need to be tuned to each other, which is a challenge as they are represented by two broad disciplinary frames: biological and social. While the biologists have a tendency to feel self-contained, social scientists do not make adequate efforts to understand the biological perspective. Few biologists try to communicate their knowledge to social scientists. I consider exercises such as this workshop as an effort to bring the two together.

'Participation' involves various dimensions of power; we need to consider elements of power between the disciplines as well as amongst people of different social strata. An important process should therefore be to let everybody across the power-span, whether that of knowledge or otherwise, accept that biodiversity is vital for the existence of humankind. This I consider is the major bottleneck. Thereafter, it is easier to set the objectives. In this process, all kinds of disparities come up between people who do not have physical means of survival and people who have (access to) plenty of resources. This disparity, cut across the globe between the North and South, between rural and urban areas within nations, rural elites and marginalised farmers, is expressed in a variety of ways although some dualities may be stronger than others. In this process of positioning ourselves we should face a number of questions:

- Who are you and whose participation are you talking about?
- Why do you need the participants? Why are you talking about it?
- What benefits can PAMEB bring to people?
- What is the scale of participation?

There are well-established norms in anthropological and sociological disciplines as well as in development studies, philosophy and so on, which brought this perspective to the surface.

Biodiversity is not a simple term either. Despite the high quantity of scientific work, scientists still have to determine the role of diversity in conservation. The most scientific answer probably is that diversity enhances the resilience of nature through which nature is better able to cope with abrupt disturbances. The view that nature contains a number of species that may provide solutions to many human problems is to a large extent based on utilitarian values. For a large population of the world these species provide a wide range of direct uses for survival. The precise role of diversity in maintaining ecological services such as the hydrological cycle is yet not known. An even less discussed perspective is the importance of genetic diversity. Nobody knows to what extent, but it can be deduced that the higher the diversity, the wider the variety in functions.

Dominant current understanding of biodiversity is focused on species richness. In the South where most of the biodiversity 'hot-spots' are located, most work focuses on inventories (compiling species lists). People are generally less interested in assessing biodiversity when it's utility cannot be described; particularly at local level. If we intend to involve people living amongst the diversity to participate in monitoring the changes of diversity, expressed in the language many people can understand, the following should be some key questions:

- Assessing biodiversity on whose terms?
- Do we want 'people' to help 'us' in doing what we want or do we want 'their' understanding?
- Are 'we' going to tell people the systematics or do we want 'their' systematics?
- How we can help establish 'their' systematics?

Anthropological studies have spearheaded the human perspective of biological. New disciplines are in the process of becoming established and sub-disciplines are emerging from biological sciences, such as applied ecology, ethnobiology with multi-faceted branches of which ethnobotany is the most prominent one (for reason of signifier-signified fixes (the researcher and the studied)- anthropobotany would be a better word).

Increasing interest is found among scientists in assessing people's knowledge about biology, even accepting alternative world visions differing from the Western, science-based vision. However, the wheel is often re-invented as far as the methods and approaches are concerned, due to lack of review of literature from the social disciplines. Intra-disciplinary students have difficulty finding an academic job. Ecological Economics perhaps is one of the most spearheading ones. Partly because of its name, broader social approaches still do not see themselves included in this discipline. In essence, both Ecology and Economics have the same roots. In the South however, development work has gradually led to the establishment of many faculties in many institutions, and it encompasses wider perspectives in applying biodiversity conservation and participation. Here they are building more on people's perspective than classical social science does, apparently because of their applied nature.

In order to build on and to further the discussion on the topic, the following is a summary of the process for participatory biodiversity monitoring, from a Southern perspective:

- Description of the context
- Definition of terms
- Determination of objectives
- Agreeing on the methodologies
- Conventional scientific and participatory tools can be used
- Setting the indicators
- Inventory of baseline indicators
- Agreement on the methods of analysis (including conventional methods)
- Fixing monitoring frequencies and comparing the indicators
- Follow-up

Some confirmatory methods that have been used are mentioned below:

- Contest of collecting specimen in the schools
- Contest of collecting landraces/cultivars with adults
- Sighting reports by individuals or a community
- Observer participant techniques in identifying organisms for use and processes
- Function-based participant interviews/group discussions: what is used for what purpose: for food, for constructions, poisoning, as medicine, for rituals and magic
- Para-taxonomists – or employee participants

The above methods cannot be categorised as participatory because participation is not the intention of the work. Possibly full participatory biodiversity monitoring occurs in the situation where people participate in raising financial and non-financial resources to monitor and evaluate biodiversity or are willing to invest available resources for this purpose (including the allocation of funds by the government). Of course, it is an evolving process and I will summarise below the stages of mindset of 'outsiders' (defined for this purpose as not living in the vicinity of and affected by the diversity in the given area - although everybody is an insider from a global perspective). These different stages have different impact on the development, selection and adoption of the processes and approaches.

## Stages

they know nothing; we just use them as servants or helpers

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of course we know better, but they know the way and location better

?

we know better but by asking them it will speed up our work; they also serve us

?

we undoubtedly know better, but they also know few things that may help our work

?

they know as good as we do, but their perception is different; let us consult each another

?

they know few things much better; let us work together because what we study concerns us all;  
belongs to everyone.

This writing has made an attempt to view biodiversity from the side of the local people, without professing that this represents all local people's perspective.

I look forward to everybody's comments.