

## **Biocultural Diversity, Community-Based Conservation and Sustainability Assessment. A Comparative Anthropological Perspective.**

Maarten Van Opstal (1 & 2)

1. Public Health Department, Faculty of Medicine and Pharmacy [Vrije Universiteit Brussel, Belgium]
2. Laboratory of Systems Ecology and Resource Management (Biocomplexity) & Department of Cultural Anthropology, Faculty of Sciences & Faculty of Social and Political Sciences [Université Libre de Bruxelles, Belgium]

[Maarten.Van.Opstal@vub.ac.be](mailto:Maarten.Van.Opstal@vub.ac.be)

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### **Introduction**

As processes embedded in specific local contexts and involving the integration of a diversity of interpretations, assessments have to be more than checklists for policy-makers. Rising cultural particularisms and the complex consequences of *global change* increasingly shape what Heisbourg calls the stratification of the world. In our globalizing world a change is needed to cope with this emerging *super-diversity*. It is of capital importance that these changes are recognized as factual changes of society to avoid alienation of societal reality. One of the main challenges is the conciliation of different worldviews in management strategies. This paper addresses the topic of ‘assessing community-based management strategies’ through an analysis of sustainability indicators as a means for assessment.

### **Worldviews and sustainable biodiversity conservation**

An underestimated influence of our socio-cultural context is the construction of a specific *worldview*. Our view on our own existence is partially deduced from our vision on reality as a whole, and our answers on ‘ethical’ questions concerning humanity depend on our worldview. Conservation proponents rarely admit that they might hold a specific worldview, from within which their ideas and ethics emerge (Worldviews group 1994).

Societies that have long traditions of largely unchanged resource use patterns tend to depend heavily on resources of their own localities. Such peoples are motivated to use resources prudently, but also to conserve them. This requires social restraints in resource use that might be against short-term interests. From a worldviews perspective, it is clear that what people do about their ecology depends on what people think about themselves in relation to surrounding things. Conservation-oriented practices of these *ecosystem people*<sup>1</sup> tend to be grounded in their human-as-part-of-nature worldview which requires respect for other beings even as they are disturbed, cut, killed or consumed (Berkes, Folke & Gadgil 1995). This respect is manifested in a variety of cultural practices that link cultural and

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<sup>1</sup> contrasting them with what Dassman calls *biosphere people*

biological diversity in a web of relationships.

The contemporary Western assumptions that the human relationship with nature is one of separation and dominance is not shared by many. An alternative worldview - involving a web of relationships - is significant for conservation approaches because it resembles the systems view in modern ecology (Bell & Morse 2000). The popularity of the sustainability debate also reflects this awareness of societal dependence on environments. The scientific way of thinking in terms of objectiveness and truth is shifting towards acknowledgement of growing complexity and uncertainty. This implies a need for better qualitative judgements and integration of worldview issues.

### **Participation or collaboration ?**

The enormous diversity and the dynamics of worldviews make the description of a particular perfectly balanced worldview impracticable or even undesirable. This makes their integration in methodologies difficult. But given that worldviews remain 'unfinished', the possibility for change remains available.

One attempt to integrate worldviews in community-based conservation is through the application of in-depth participatory methods, which seek to improve livelihoods and conservation by working together. Participation in decision-making is increasingly seen as essential for conservation, but scientists argue that a lack of public understanding of conservation is a barrier to effective participation. Fischer (2007) shows that these arguments often use scientific knowledge as the sole measure of public understanding<sup>2</sup> and fail to account for individuals' constructs of, for example, biodiversity.

Moreover, when it is applied, participation can easily become cosmetic surgery. In order to implement real and meaningful participation, the study of mental constructs surrounding conservation is necessary as it avoids the transformation of diverse *visions* into one mediocre interpretation based on a mono-cultural science-based worldview. In the specific contexts of community-based conservation, all visions concerned must be fully taken into account and understood in order to ensure participation in a more *participatory* sense. I therefore propose that conservation initiatives be implemented in a fully collaborative manner, emphasising the amalgamation of different views and knowledges. The following case study of resource management in Australia illustrates this argument.

Hawley, Sherry & Johnson (2004) state that the science-based worldview - which underlies resource management - and a traditional Aboriginal worldview are different. Co-management arrangements have been viewed as mechanisms to achieve full participation of Aboriginal people in management, but have had limited success due to the failure to accommodate differences in worldviews. When aboriginal peoples' worldviews are not taken into account, they might be inhibited from fully committing to joint endeavours; simultaneously, scepticism among conservation managers regarding the importance of including indigenous perspectives in management arrangements inhibits the latter's full commitment to joint endeavours. Hawley et al. suggest that there are six main obstacles to co-management: cultural imperialism; the cultural *shadowland*; the place of specific views on management in society; characteristics of information and knowledge; language and interpretation; & views on management of the environment and people. The authors believe

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<sup>2</sup> qualifying knowledge as 'correct' or 'incorrect' in relation to scientific definitions

that effective co-operative resource management requires the accommodation of all underlying worldviews. They identify six areas of emphasis in pursuing amalgamated management:

- **Respect** for different worldviews
- **Respect** for different knowledge
- **Communication** as the most fundamental aspect of knowledge sharing
- **Learning** arising from good communication
- **Identifying shared goals**

### Assessment through Sustainability Indicators

In this final section, I will apply the former reflection to sustainable development (SD). I propose to assess the effectiveness of community-based conservation by using sustainability indicators (SI's).

SD asks for an integration of 'shared' goals - a 'holistic' view - encompassing 'all' aspects of development. Many worldviews already incorporate a holistic approach with inherent links between human and ecological systems. If SD wants to evolve towards constructing a global *worldview* - to overcome being a mere collection of isolated fragments - an integrated *worldviews perspective* is needed, one that seeks to connect universal goals with acceptable and specific views. However, as researchers we must compromise between a sincere concern to promote participatory SD and our obligation to integrate it with scientific data for practical policy-making. Complete assessments are rarely practicable: this has led to the development of indicators as tools for simplifying data to bridge the gap between scientists and decision-makers.

In my opinion SI's are an useful tool to communicate scientific insights on sustainability towards decision-makers, but they suffer from a lack of integration with anthropological insights. The necessary selection of particular indicators for application makes SI processes very subjective and true community-based assessments almost unpractical.<sup>3</sup> A short reflection on current shortcomings of existing indicator sets:

- Cultural SI's are hard to find. In Belgium most indicator-sets are limited to three pillars (social, economic and environmental).
- The dimension of culture is often narrowed down / made irrelevant for the wider development discourse.
- A multidimensional approach to SD leads to its split into different institutional *pillars*, divided in 'subdimensions'. This approach - when applied in assessments - requires selection or exclusion of particular dimensions. This subjective process raises questions about (choice of) emphases<sup>4</sup>; integration of, for example, culture in one specific pillar<sup>5</sup>; and contradictory indicator selections within particular indicator sets<sup>6</sup>.
- Indicator-sets still suffer from these pillar-approach problems e.g. hegemony;

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<sup>3</sup> modified Delphi techniques might be especially useful in this regard

<sup>4</sup> An ecological approach of SD puts too much stress on an essentially biological human being; economic aspects are mainly interpreted in terms of basic human needs; and a social set-up aims more at a redistribution of wealth than at a qualitative and productive relationship between peoples.

<sup>5</sup> risk of, for example, *utilitarianism*: culture reduced to an instrument for economic development

<sup>6</sup> for example, the blend of economic *development* and the idea of *limits to growth*

absence of links between parameters; neglect of complementary aspects; reductionism.

- Many of the SD frameworks used nowadays in assessment strategies or for policy purposes are focused on the integration of three dimensions of SD: economic, environmental & social. This *triple-bottom-line* approach emphasizes competing interests rather than linkages and interdependencies, making integration very difficult and promoting trade-offs.<sup>7</sup>

- The above-mentioned problems contradict the *holistic* character of SD and raise questions on impacts of reductionism.<sup>8</sup>

- One of the main concerns remains the dominance of economic conceptions.

The main challenge for SD sits at these interfaces (synergies and trade-offs) between its dimensions: SD assessments therefore must emphasize the *interactions* between these dimensions. Rather than limiting assessments to checklist-audits or snapshot-visits, a potential solution lies within community-based participatory methodologies. Bell & Morse clarify the advantages of taking a more qualitative approach and summarized 5 challenges for further use of SIs in evidence-based policy in the EU: *Disconnect* with current use of SIs; *Dominance* of (economic) indicators; *Dissemination* (need for education on SD); *Disambiguation* (opaqueness of SIs making them difficult to appreciate); *Dictum* (A grammar is needed) (Bell & Morse 2010).

To conclude, I would like to raise some important questions for discussion on SIs:

-(How) can we integrate worldviews and their dynamics into indicator sets in order to ensure translation of these aspects to policy-makers?

-What are potential 'biocultural' indicators?

-An indicator approach starts from a science-based worldview. Can this approach integrate different worldviews without automatically contradicting them (cf. holism, synergies, ...)? Or is an indicator approach *per se* contra-productive from a worldviews perspective? Does it automatically imply cultural imperialism?

-Can we integrate the *process* of sustainability assessments in indicator sets, so that true collaboration and conciliation of different worldviews is guaranteed throughout the assessment process?

-Can we make aspects like social cohesion, social exclusion, tranquillity, etc. measurable or do we *reduce* them to meaningless concepts by doing so?

## **Conclusion**

There is an urgent need for cross-referencing between apparently separate cultures and paradigms of understanding. Part of the problem of SIs is the inability of different agencies / individuals to espouse different worldviews and assumptions about how the world works (Bell & Morse 2000). This often results in the development of antipathies, incomprehensions or conflict between stakeholder groups. We need a 'culture change' and a comparative consciousness in which one's culture is more inclusive and tolerant of other

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<sup>7</sup> The pillars reflect mostly conventional disciplinary categories, whereas sustainability should be in my opinion necessarily an attack on conventional thinking.

<sup>8</sup> Nevertheless the 'pillars' approach allows to structure complexity.

viewpoints, recognizing that variety functions as basis of sustainability (Nader 1993). The biggest challenge for integrating biocultural diversity in the umbrella-concept of SD lies in ensuring policy-impact and at the same time enabling empowerment of communities and individuals.

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