

An IIED Briefing

Biodiversity for the Millennium Development Goals: What local organisations can do

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Given that biodiversity underpins the provision of ecosystem services, which in turn affects human well-being, long-term sustainable achievement of the MDGs requires that biodiversity loss is controlled as part of MDG7. (Millennium Ecosystem Assessment 2005a 15)

In 2002 the Convention on Biological Diversity (CBD) adopted a target to significantly reduce biodiversity loss by 2010 'as a contribution to poverty alleviation'. In 2005, the Millennium Ecosystem Assessment (MA) offered compelling evidence of the positive links between biodiversity conservation and human well-being. In practice, however, biodiversity conservation and local people's livelihoods often compete – particularly in some 'top-down' approaches to conservation such as certain national parks. Can 'bottom-up' approaches to conservation – decentralisation and community management – provide the answer? A recent review shows that community-led conservation can contribute to human well-being and to the achievement of many Millennium Development Goals (MDGs), but in the majority of cases, it remains small-scale, isolated and not integrated within the formal conservation sector. We suggest that, given appropriate support, community conservation could achieve much more for poverty reduction. Indeed, without further local action, the international targets set within the CBD and the MDGs are likely to be unattainable. We suggest a range of actions for donor and government agencies to help unleash this potential – including payments for ecosystem services, mainstreaming biodiversity into sector-wide initiatives, and better integration of biodiversity within the MDG framework.

Biodiversity conservation and poverty elimination

Biodiversity loss is occurring at an unprecedented rate. In 2002 the Conference of Parties to the Convention on Biological Diversity (CBD) adopted a target to 'achieve by 2010 a significant reduction of the current rate of biodiversity loss' which was endorsed by the World Summit on Sustainable Development (WSSD) later that year. What is often overlooked is the second part of the 2010 target wording which provides the reason for addressing biodiversity loss: 'as a contribution to poverty alleviation and to the benefit of all life on earth'.

The conceptual framework employed by the Millennium Ecosystem Assessment (MA) emphasises the positive links between biodiversity conservation and human well-being. Ecosystem goods and services provide security, health, basic material for a good life, good social relations and freedom of choice and action, and are particularly important for the poor and vulnerable who do not have access to alternatives. Biological resources underpin the delivery of these ecosystem services and hence biodiversity conservation¹ is essential for securing human well-being.

One of the conclusions of the MA was that 15 out of 25 of the ecosystem services upon which human well-being

¹By which we mean the conservation of diversity itself as well as the conservation of individual components of biodiversity

depends were disturbed to such an extent that reaching both the CBD target by 2010 and the MDGs by 2015 could prove impossible unless remedial action is taken urgently. The imperative to restore and/or prevent further degradation of ecosystem services implies an urgent need for conserving the biodiversity upon which they depend. One dilemma is immediately apparent: while biodiversity conservation is essential for maintaining ecosystem services over the long-term, the restoration/prevention costs are short-term and can clash with other needs of society – most critically, the immediate livelihood needs of poor people in developing countries, or the growth plans of many economic sectors in such nations.

What does resolving this dilemma mean for the governance of natural resources? Is decentralisation and community management the answer, so that local groups can gain from involvement in short-term restoration/prevention activity but also face incentives to ensure long-term secure access to ecosystem services? While agreeing with the principle of subsidiarity, the MA is not convinced that it has always worked in practice, noting that ‘the principle that biodiversity should be managed at the lowest appropriate level has led to decentralisation in many parts of the world, with variable results’ (MA 2005a: 72). At the same time, however, the MA notes that centralised approaches have also been shown to be inadequate: ‘existing national and global institutions are not well designed to deal with the management of common pool resources, a characteristic of many ecosystem services’ (MA 2005b: 20). The failure is not in the principle, but in the institutions: what appears to be required is an approach where local level efforts are backed by central government providing an appropriate, enabling framework for security of tenure and management authority at the local level (MA 2005b).

How can local management of biodiversity help achieve the MDGs?

A recent review (Roe *et al.* 2006) shows that local management of biodiversity can contribute to human well-being – and thus the achievement of the MDGs – both directly (for example, through income-earning opportunities, local empowerment, and increased security of resource access) and indirectly (through improved conservation practice and the impact this has on ecosystem services):

- **Cash income** generated by community activities can be substantial at the community level, if not as significant at the individual or household level e.g. returns from wildlife management were US\$350,000 in 2002 for the Sankuyo community in Botswana and US\$154,000 in 2003 for the Nyae Nyae community in Namibia; each village Forest Protection Committee for Joint Forest Management in West Bengal, India earned US\$1500 in 2000-01.

- **Small, local enterprises** can be developed based around biodiversity – ecotourism, charcoal making, handicrafts, etc. Where these can be integrated with well-established markets, returns can be substantial. In the Caprivi region of Namibia, for example, craft sales between 1999 and 2001 amounted to more than N\$333,000 (approx. US\$41,000) and most of this income went to poor women (Murphy and Roe 2004).
- **Jobs** associated with community conservation are limited in number but may often be the only formal employment opportunities available in remote rural areas.
- **Food security and nutrition** can be sustained by many wild plants and animals, which often play a critical role for the poorest groups, particularly during times of drought or food insecurity. The South African Millennium Ecosystem Assessment estimates, for example, that the value of day-to-day wild resource consumption is around US\$800 million per annum (Biggs *et al.* 2005).
- **Water and soil fertility** can be secured by revitalising those traditional practices of land and watershed management that sustain both high biomass and high biodiversity. These can have a positive knock-on effect on agricultural productivity and hence food security.
- **Communities can be empowered** by devolving authority over resource management to the local level – strengthening local organisations and empowering previously marginalised sectors of society. Many commentators argue that community empowerment is one of the greatest impacts of community conservation – far exceeding any economic or environmental benefits (WRI 2005).

How significant are the impacts of community conservation?

Biodiversity benefits: In many cases, local level approaches have demonstrated considerable success in biodiversity conservation – restoring previously degraded habitats, reintroducing locally extinct species, and supporting state-run protected areas – as well as capturing benefits for local communities as illustrated above. In the majority of cases, however, these initiatives – and thus the benefits – remain at a small scale, are isolated, and are not normal practice within the formal conservation sector of wildlife authorities and major NGOs. Not only is community participation limited within formal conservation, but conservation is rarely integrated with other natural resource sectors – including agriculture, fisheries and forestry – although promising signs are shown in the increasing number of co-management arrangements that are beginning to emerge². Yet, there

² See Borrini-Feyerabend *et al.* (2004) for a detailed review of co-management

remains much potential to scale up community conservation in practice, and hence its benefits.

Underlying causes of biodiversity and poverty problems: At the local level, community conservation can help address the direct drivers of both biodiversity loss and poverty through more equitable and sustainable norms of resource management. At the national and global level however, other drivers are way beyond the reach of community action. These include demographic pressure; globalisation processes; economic and trade policies; and so on (and the implications these have for urbanisation, resource consumption and food production). Without adequate attention to these issues, of course, community conservation will only ever be a marginal activity. This reinforces the need for local action to be backed by strong institutions at the national and global level – and not just those involved with conservation but also those that influence macro-economic and trade policy.

How can community conservation be more effective?

Improved governance is required at several levels. International action is needed to link biodiversity and poverty reduction initiatives through aid and investment frameworks. National action is needed to empower local groups and to ensure the cross-sectoral policy coherence that is necessary to tackle the underlying causes of biodiversity loss and poverty. Without local action, however, the international targets set within the CBD and the MDGs are likely to be at best irrelevant and most likely, unattainable. A number of recent studies have identified the links between poverty reduction and biodiversity loss and have highlighted the role of effective governance in addressing both (e.g. see Bass et al. 2005, WRI 2005, UNDP 2005, MA 2005a,b). With improved governance, and given appropriate support, community conservation could undoubtedly achieve more than currently. Unleashing this potential and moving beyond the small, the isolated and the site-specific will, however, require considerable reorientation of both donor and government policy including:

1. Recognition of the role of biodiversity conservation in general, and community conservation in particular, in achieving the MDGs. The alignment of the 2010 biodiversity target with MDG7 ('Ensure environmental sustainability') provides a new opportunity to expand the current set of indicators beyond those concerned with land area under protection or forest cover to address biodiversity-poverty linkages. Far greater attention will also be needed to broaden the current concepts of community conservation from a series of externally driven projects, and to recognise the many traditional practices of local communities that contribute to ecosystem management.
2. Better integration of community efforts within the formal conservation sector and other natural resource sectors. Community conserved areas – including indigenous territories, communal lands and sacred groves – should be given the necessary recognition and support to complement more conventional protected areas. Effective local organisations that have managed to balance conservation and development priorities should be supported.
3. National mechanisms for enabling community participation in decision-making processes within the CBD (and other Multilateral Environmental Agreements). Community conservation is not just about the practical involvement of communities in on-the-ground conservation activities, but also their full and active participation in conservation planning and policy-making.
4. Clearer donor roles in community conservation. Given the changes in aid modalities towards direct budget support, this might mean exploring how community approaches can be integrated into sector-wide initiatives or what mechanisms can best facilitate investment in local environmental assets.
5. Sectoral coordination so that conservation policy is not undermined by other national policies. Ministries controlling land and natural resources such as forests and fisheries are rarely involved in CBD processes, for example, and/or initiatives on poverty reduction. Likewise, the impacts of national trade, aid and investment policies are often such that they undermine national commitments to biodiversity conservation.
6. Integrating community conservation into conservation education. Natural resource management training institutes need to offer multi-disciplinary courses or modules that give participants a breadth of understanding about community conservation, its potential and challenges in order to produce skilled facilitators and administrators.
7. Fair returns on investment in community conservation. This requires eliminating perverse incentives including market-distorting subsidies and other trade interventions. Payments for ecosystem services – including biodiversity, watersheds, and carbon – show significant potential in providing positive, direct incentives for conservation – but require more attention (particularly to equity impacts such as the transaction costs for poorer groups), experimentation and support. Expanding the scope of the Kyoto Protocol's Clean Development Mechanism to include avoided deforestation as a mechanism for tackling greenhouse gas emissions could be a huge step forward – but attention will be needed to ensure poor people are able to participate in these new markets.

The rural landscape is coming under increasing pressure. On the one hand, protected areas alone will not achieve the 2010 target to reduce biodiversity loss, with an increasing imperative to conserve biodiversity on the farms, rangelands and woodlands in which people make their livelihoods. On the other hand, farming is an increasingly vulnerable livelihood in many environments, particularly for the poor who cannot access many external inputs, raising the importance of identifying sources of resilience. If rural landscapes are not to become increasingly pressured biodiversity-livelihood battlegrounds, institutions and incentives will have to be established to enable community-based conservation to thrive alongside more ecologically viable forms of agriculture. One thing is clear: there is no 'one size fits all' solution. Site-specific situations and circumstances need site-specific rules, regulations and institutions. This points towards a system of conservation where decisions about *who* manages the resources, *how* and *why*, depend on the local situation rather than uniform national legal requirements.

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