Decentralisation of Natural Resource Management: Some Themes and Unresolved Issues

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Abstract

This paper discusses several aspects of the decentralization process of natural resource management. It focuses on several themes and issues that are characteristic of such a process, which often lead to various forms of co-management (co-management). Themes and issues are drawn from experiences in several countries, especially from the Philippines where decentralization was started more than 10 years before it was implemented in Indonesia. Themes and issues that are focused on include differences in perspectives over time, the relationship between the characteristics of natural resources and social boundaries, community concepts and management, the weakening of state responsibility in the context of local interests, the role of third parties in co-management, the characteristics of contracts in resource management, several aspects related to local residents, and ideas about success and failure in co-management. With these issues in mind, we hope to provide an anthropological perspective on the very interesting process of decentralization of natural resource management.

Keywords: decentralization; co-management; natural resource management.

Introduction

In Indonesia, as in many other Asian countries, a major impetus for decentralization and regional autonomy has been the demand for greater local control of natural resources. Both within and outside Asia, co-management of natural resources epitomises this broad trend of decentralisation in the context of environmental conservation. Co-management is loosely defined as ‘the sharing of power, responsibilities and benefits with respect to the management of natural resources (including their exploitation) with the participation of local residents and other stakeholders’ (Sajise and Persoon, 2003).


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ploitation and conservation) among government and individual collective users’. Other terms in the literature are: joint management, adaptive management and collaborative management. In recent years, co-management programmes, policies and projects have been widely promoted. In Asia co-management has become far more than an abstract idea. Community boundaries are being mapped and across the continent many experiments in local resource management are in progress.

A number of collections of case studies have been published recently on projects with a wide variety of co-management arrangements, some successful, others not (see e.g. West and Brechin 1991; Kemf 1993; Pomeroy 1994; Lynch and Talbott 1995; Western 1994; Kothari et al 1996; IUCN 1996; Stevens 1997; Zerner 2000; Maffi 2001; and Vira and Jeffery 2001). Some of these case studies, like the CAMPFIRE project in Zimbabwe and the extractive reserves in Latin America, are posited as almost ideal models for co-management arrangements. These and other cases tell stories of local people, non-governmental organisations and field officials of government institutions trying to creatively overcome situations of growing environmental degradation and poverty. Their successes and failures, however measured, provide interesting material for those who wish to learn from past failures in order to come up with better alternatives.

On the other hand, co-management arrangements, however well designed and implemented by committed people, can never solve the whole gamut of environmental problems. Different management structures are still necessary for certain types of resources, user groups and circumstances. In general, though, co-management arrangements have proven to be a helpful instrument in overcoming a variety of problems formerly associated with state and centralised styles of management. This does not imply that co-management projects are always successful, nor that implementation of these new management regimes is unproblematic (see Pimbert and Pretty 1995; Western 1994; Leach et al. 1997). In fact, we are still in a learning-by-doing stage (Borrini-Feyerabend et al. 2004).

This paper will therefore examine a number of themes and issues that so far are unresolved in the sense that they require further attention in the future by all those involved in the new forms of arrangements with respect to the management of natural resources. They are taken from various discourses and experiences in a number projects and countries. In particular they are inspired by the present situation in the Philippines where the process of decentralisation was started more than ten years ago and where the indigenous peoples’ movement has played a major role in changing the discourse on resource management. We believe however that many of these issues also bear direct relevance to the present day situation in Indonesia. The themes and issues raised here are by no means meant as an exhaustive list but just as way to look at a number of important aspects of present trends in resource management.

Differences in time perspectives

Images of time, that is views about the past, present and future, play an important role in the management of natural resources. For some the past is taken as a basis for claiming and recognising rights to natural resources, while for others events in the past provide a basis for urgent action in an effort to redirect the present course of events.

Although the global sustainability debate emphasises ‘the future’ and ‘future generations’, hardly any attention has been explicitly paid to the dimension of time and the future, either in this debate in general or in the co-
management debate in particular. Multiple time perspectives co-exist within the ‘real’ world of nature conservation and co-management arrangements. They are used by a variety of people—nature conservationists, donor agencies and development bureaucracies, economists, anthropologists and local people and their advocates—representing different institutions from various spatial contexts. They operate from diverse, often implicit, normative viewpoints and different time-order or time-value systems. To understand the way these views coalesce in the real world of co-management, it is necessary to consider these different timescapes (Adam 1998) and render them more explicit.

Nature conservationists’ time perspective can be summarised as ‘acting now for tomorrow’s world’ and ‘extinction is for ever’. Certainly, that is the conception that informed attempts to set up biosphere reserves and national parks in the (recent) past. Conservation-minded ecologists are by definition very much future-oriented. They want to conserve species, plants and animals or even entire ecosystems and landscapes. They base their plans of action on lessons learned from the past. In their writings, two very different kinds of images of the future prevail. Trends over the past few decades indicate that the areas covered with natural habitats are in rapid decline, that the number of species sliding into extinction is on the rise and that factors contributing to environmental degradation (population growth and growing volumes of consumption) are increasing. These trends lead to pessimistic, calamitous or even apocalyptic projections for the future (see e.g. Western 1994; McNeely 1996). These images, often supported by powerful symbols or metaphors, serve as negative points of reference, to be avoided at all costs. Plans of action are based on an alternative vision for the future, a world in which things can change for the better. This vision of a better world is seen in terms of the maintenance of biodiversity and protected areas and the sustainable use of available natural resources. The benefits are intended for unspecified ‘future generations’.

In order to generate sufficient support for these alternative visions, a variety of policy instruments (varying from economic incentives to environmental master plans) are being developed to turn these alternatives into reality. Although conservation explicitly addresses the long-term future, project-type activities are generally narrowly instrumental and planned in short-term episodes governed by the project rhythm of donor agencies. There is consequently a need to ‘unpack’ the time perspective of development bureaucracies, both national and international, both in general and in specific cases. These bureaucracies, with their multiple aims and internal contradictions, have time perspectives that are organised predominantly around the ‘timing of project cycles’. These project formats of two to five years are repeated again and again, each time reflecting trends in development discourse. The time perspectives of development bureaucracies are linked closely and in multiple ways to the rise and fall of politicians and bureaucrats. This is also the case for institutions engaged in nature conservation, which have generally adopted the style of development agencies.

Economists can also be said to have a dominant way of perceiving time and the future: ‘the timing of money’. The most important conceptual instrument at their disposal for expressing the present and future value of goods, including natural resources and services, is that of ‘discount rates’. Present-day satisfaction of needs is thereby ascribed a higher value than the satisfaction of needs in the future. Natural resources are generally assigned a market value, broadly equivalent to the present market value. This raises problems of market im-

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perfections and difficulties in the pricing of ecological functions. One result of these problems is that the future in all its dimensions (satisfaction of needs, rights of future generations, future value of biodiversity) is accorded a lower priority than the present. As a consequence of this powerful discounting logic, investments in the long-term productivity of forests or the conservation of nature as an ‘heroic sacrifice’ (Passmore 1980) are automatically deemed uneconomic, irrational ventures. This may be partly solved by introducing appropriate pricing mechanisms for the environmental functions of natural resources, but this is not yet the case. The horizon of economists in relation to the exploitation of natural resources is not generally a long-term one; the further removed in time the benefits and problems are, the less they will be taken into account. The economic perspective leads to a kind of free-market environmentalism, to use Eckersley’s term, characterised by an attitude of scepticism towards limits to growth and non-economic uses and an emphasis on quantifiable material values and a maximised economic output.

Generally speaking, the future is remarkably absent as a topic of research in the anthropological literature (Wallman 1992; van Dijk 1997). While in the field, anthropologists are more interested in the present and its genesis. In other words they stand with their back to the future. Even in some studies dealing explicitly with the anthropology of time, the future is considered to be of only minor importance (e.g. Gell 1996:314).

**The ecological basis of natural resources under co-management arrangements**

An important issue in relation to the discourse on resource management that often draws little explicit attention is the ecological nature of the resource in question and the managerial consequences that follow from the ecological characteristics. Natural resources are very heterogeneous. Co-management of resources such as timber, non-timber forests products, water and fish require different types of conservation practices. The management of directly utilised resources yielding immediate value to those extracting them from nature, while others provide only indirect, delayed or cultural and symbolic value (Uphoff 1998:3). Highly mobile stocks of fish or marine mammals with territories far beyond the jurisdiction of particular communities cannot be managed along similar lines to localised, and immobile non-timber forest products or animals that are much more territorially bound. Effective management of water resources requires clear and rapid procedures, in times of both scarcity and abundance. Conflicts over scarce irrigation water, for instance, cannot linger on, for otherwise the resource loses its value to the disadvantaged party. Similarly rapid procedures are necessary when flooding threatens. Conflicts over access to land and other immobile resources, in contrast, require less urgent action.

Resources also require specific knowledge and are subject to specific management aims, and because of differences in regenerative capacity they also require different time perspectives if they are to be adequately managed. In successful management projects, ecological realities are matched with the social and cultural facts of life. Uphoff suggests that we interrogate ourselves as to whether or not a resource is ‘bounded’ (known and predictable) and whether the resource users are a ‘bounded’ set: identifiable and coherent or lacking group identity and structure (1998:13). Ecological and socio-cultural (or administrative and political) boundaries rarely coincide.

In general, however, we feel that in present discussions on resource management there is
too little on the ecological dimension of the resources to be managed. This is to be attributed partly to the ecological 'naiveté' of those engaged in relevant discussions and partly to the fact that natural scientists have not been able to bring forward with sufficient clarity the ecological characteristics of particular resources. A truly interdisciplinary approach to this problem is often lacking. While state-controlled management and protection of nature used to be dominated by biologists and ecologists, under the new management arrangements the role of these disciplines has been diminished. In our opinion, greater importance should be attached to the role of other disciplines and the contribution of interdisciplinary research in the debate on co-management and in the design and implementation of co-management projects.

‘Community’ and ‘management’ in ‘community-based management’

Although the concepts of community and management are crucially important to a proper understanding of co-management, these terms are often used extremely loosely and their actual meaning in the field it is not always entirely clear. What kind of phenomena does ‘community-based management’ cover, then, and what is the meaning of the term with respect to the actions of real men and women dealing with particular resources in particular places?

Community

It may be inquired how this emphasis on ‘the community’ originated in relation to decentralisation of resource management. It is assumed that the support and commitment of rural people emerged as being indispensable for halting resource degradation (Cernea 1985). Because of their knowledge and skills, local and indigenous communities were regarded as victims of degradation as well as the possible ‘savers’ of the environment (WWF 1996; IUCN 1997). In a sense, nature conservation and lifestyles in indigenous communities were considered more or less synonymous. Indigenous or tribal people and nature conservationists were often thought of as natural allies. The success stories of particular instances of local management from across the world spread rapidly, furthermore, prompting a certain shift in environmental policies. Projects and donors began to focus on local communities on the assumption that they would induce their members to plant trees, mobilise labour and protect ‘their’ natural resources. It was further assumed that communities could ensure the distribution of benefits among the inhabitants (Cernea 1985:280). Often communities were equated with villages as social units.

The word ‘community’ is always, as Williams put it, a warmly persuasive one. Unlike all the other terms of social organisation (state, nation, society) it seems never to be used unfavourably (Williams 1983:76). This ‘cosy’ term also tends to imply something synonymous with internal solidarity and mutual care. In a certain sense, then, as Crehan puts it, “a community can be treated as a single entity with a single set of interests” (Crehan 1997:227). Reality is far more complex, however. For example, Von Benda-Beckmann and Brouwer (1992) consider this conception of community highly problematic, stating that there is no such thing as ‘the community as a whole’. One must always make due and thorough allowance for specific local realities such as power dynamics and differences in access to resources among men and women, ethnic groups, age groups and  

2 Murray-Li comments that it is not only outsiders that like to idealise communities. For their part ‘communities’ (represented by a village council) are also often keen to convey images of solidarity and cooperation to outsiders (1993:3).
individuals. This idea of fractured communities is elaborated by Kate Crehan (1997). She makes clear that it is necessary to distinguish between the ideal definition of what constitutes a community, and communities as substantive realities, i.e. what actually happens in them? The fact that ideals differ from reality when it comes to 'communities' has important practical implications for resource management. This is also evident from the kind of events that occur in relation to resource allocation to indigenous peoples (see also below). In many cases they do not form socially integrated units that can handle the allocated resources in an effective manner because of their lack of international checks and balances. Group formation based on other criteria (in addition to being 'indigenous') proves necessary. Communities may, as Murray-Li (1993:3) states, have culturally based practices relating to resource use and management, but this does not imply that all individuals and groups within the community have equal access.

This criticism vis-a-vis the community concept in relation to community-based management should not close our eyes to the fact that in some cases and under certain conditions, people do unite and collaborate in order to achieve a common good. What is important here is to determine under what conditions and for what kind of purpose people start organising themselves. It is obvious that communities cannot be predefined: boundaries, internal cohesion and collective action and interests should be topics for research and not for postulation. This means that we need to place 'community' in an analytical context and look beyond it.

Management

The environmental discourse has trickled down from the international arena to the national and local levels. Before discussing the influence of these supra-local values on the various other levels, however, let us examine the notion of local management more closely. Researchers differentiate between the use and the management of a resource, the latter implying that measures are taken to increase and sustain the resource and its yield. We would add that there are also forms of resource use that do sustain resources, though not as a result of clear, explicit measures. They are the outcome of cultural restrictions (often related to gender, age and clans) or local power relations. These regulations might restrain resource use, but should not be misconstrued in terms of local people aiming to conserve nature as a purpose in itself, as if it were based on a traditional conservation ethic (Polunin 1991). One often encounters this type of misunderstanding among romanticising environmental activists. Wiersum (1996) argues that the term (forest) management is a concept used to refer to a variety of empirical situations ranging from controlled utilisation, protection and maintenance to purposeful regeneration. It also includes transitions from one type of management to another.

The influence of the aforementioned, supra-local values on the various other levels is dominant but not without complexities. We have seen that the meaning of the term (sustainable) management differs from one interest group to another. Interest groups may range from international, through national to local levels. Supra-local resource interests relate to the conservation of biodiversity, while for local people resource use relates to daily needs (material and cultural), which are not sustainable per se. The state has the highly complex task of combining economic growth and environmental health, which in the south may lead to a range of contradictions, as natural resources often serve as the countries 'green gold'. However, the international community dominates the management debate at the various levels, including the local and regional and
in this configuration several problems arise in matching supra-local values with specific local understandings and forms of management. This is specifically the case for the conservation of protected areas, which include tropical forests, national parks and wildlife sanctuaries. Here, the object of management is state property and the propagated management form is known as co-management.

Dissolving state responsibilities and non-local interests

In many discussions about the failure of state-controlled management of natural resources, local, or community-based management is proposed as a more viable alternative. In many case studies the state and its institutions are seen as the embodiment of an evil outside force, misappropriating what is considered to be intrinsically local. In many Asian countries processes of decentralisation have come about as a result of an awareness of the inadequacy of centralised forms of government. Local people, frequently supported by dissident politicians, the media, NGOs and scientists, have been successful in acquiring greater political power. In recent years international donors have adopted a similar position, now preferring to work together with local organisations. In their implementation of programmes and projects, government institutions have shown themselves prone to corruption, inefficient bureaucracy and other problems. This movement towards decentralisation raises a number of questions. Can supra-local interests, like those of downstream farmers and fishermen, of urban people, or even the global community now and in the future, be entrusted to the care of local communities? The emphasis on stakeholder involvement is certainly problematic if the process is dominated by aversion against the state, the collective representative of all those interests that cannot be heard at the local level. Somehow, checks and balances must be built into the process to avoid the denial of interests beyond the merely local interests (see e.g. Hanna et al. 1996; Zerner 2000).

Contractual arrangements

Under conditions of good governance the devolution of power from central to local authorities usually takes the form of contracts between governmental institutions and (representatives of) local communities. Examples are so-called stewardship contracts, contracts regulating extractive reserves (like the ones for rubber tappers in Latin America, or the ancestral domain management plans for the indigenous peoples in the Philippines) and lease contracts through which the management of a resource can be handed over by the legal owners to another authority on certain conditions.

The use of contracts in these cases involves a number of assumptions and a whole set of rules and regulations. It also has some interesting aspects. First of all a contract presupposes some kind of equality between the contract partners, as if negotiations about terms and conditions take place in a ‘free market’ situation in which partners enjoy substantial freedom as to whether or not to come to an agreement. This is rarely the case.

Co-management contracts are usually drawn up in a legalistic fashion, stipulating at great length, the definition of terms and the contract partners (Who are they? By whom are they represented?) and in particular the rights and obligations of the respective partners. Although it may be common practice for government institutions to formally live and act on the basis of carefully formulated and authorised written documents, this is rarely the case for local fishermen or groups of upland farmers in their daily struggle for survival having to adapt to all kinds of changing conditions (such as market changes, and environmental changes).
Contracts often limit flexibility and adaptability which are crucial for people living largely on the extraction on natural resources.

A contract between two parties should also include provisions on how to deal with violations of the norms (or responsibilities) laid down in the contract. In the case of inadequate compliance with contract obligations, proceedings against government institutions or civil servants are not readily instituted, and if they are, governments generally claim a lack of staff, financial means or infrastructure for monitoring, control or providing the services stipulated in the contract.

Co-management arrangements are predominantly future and outcome oriented with respect to the aims of the government. The contract is an instrument to achieve a particular end: the protection of animals, plants or a particular aspect of an ecosystem. For local groups it is a license to do something, to harvest, to exploit, or to take on the basis of historical rights. Restrictions in resource use as stipulated in the contract are seldom wholeheartedly supported. This difference in emphasis in what the contract is taken to be, is crucial for the actual outcome.

And finally contracts are usually between well-defined parties. This leads to the exclusion of so-called ‘outsiders’. Although this form works perfectly well in a free market, it may create deep feelings of social injustice among those who are excluded from the arrangement because they do not meet particular requirements. It may be especially strong among people who live amongst or near the resources of which the management is covered by the contract.

Third parties in co-management arrangements

In principle co-management arrangements are between individual or collective users of resources and governmental institutions. However in many cases third parties play a crucial role in the creation and facilitation of these arrangements. International organisations like IUCN, WWF, Conservation International, but also the national non-governmental organisations often assume such an intermediate role. The organisations claim to be instrumental in the implementation of such arrangements. By their presence and actions they become an important actor in the social and political context. They do so on the basis of their own programme of action and they seek for opportunities to take up this position. In many cases they assume such a role because of the relatively weak governmental representation in the area.

This intermediate role brings about a delicate position because of the complex interests at stake. First, the organisation is bound to the regulations of the government and the available legal instruments. Second, it is necessary for the organisation to ensure the confidence of the local population in order to perform well. Third, it is necessary to satisfy the constituency of the organisation, that is the donor agency or the supporters of the organisation. This third aspect might conflict with the required instrumental nature of the performance of the organisations as the constituency of the organisation might require clear visibility in the local context and successes within relatively short periods of time in order to ensure continued support for the activities. The organisations might be tempted to assume a stronger role if the performance of the governmental organisations is weak. But this situation might lead to a susceptibility to criticism and tensions from both sides: the local population might identify the organisation with the governmental institutions and thus question its reliability, while on the other hand criticism might also come from the government once employees of the organisation take on govern-
mental roles or identify too strongly with local interests. Finally there is a certain time constraint connected to the presence of the organisation: duration of projects by these organisations can rarely go beyond a limited number of years. Success stories and new challenges or new battles to fight in other places are necessary to retain the interest of the constituencies and their willingness to continue the support for the organisation. The departure of the organisation from the local scene might lead to flaws in the implementation of the activities as a smooth and complete transfer of responsibilities is rarely ensured.

The specific role of indigenous peoples in co-management arrangements

Within discussions on decentralisation of the management of natural resources, over the past decades, substantial attention has been devoted to the specific role of indigenous peoples in this context. Examples of forums that discuss these issues at the international level are the Convention on Biological Diversity, the UN and the ILO. In addition, multilateral organisations such as the World Bank and the Asian Development Bank have over the past years come up with specific guidelines regarding indigenous peoples. At the national level, discussions take place on whether or not indigenous peoples are to be included in state legislation and policies. Some countries, like the Philippines and Colombia, are trend-setters within this debate, while others, like Indonesia, are more hesitant. Lastly, the ‘indigenous peoples world’ itself is becoming more vocal, organised and interconnected, thereby constituting a strong lobby for indigenous rights with a considerable impact on policy makers at all levels.

However, due to the fact that in the international policy arena decisions are usually taken by means of consensus, there are quite a few unresolved issues. Within the framework of this paper it is impossible to mention all of these dilemmas. However, based on recent experience from a number of these meetings as well as from several difficulties encountered in the field, the following issues may be mentioned (see also Persoon et al. 2004).

First, a large part of the international discussions regarding indigenous peoples takes place without a clear definition of the core concept in this discourse. In most cases the description of indigenous peoples is rather vague. For example, in the Convention on Biological Diversity, reference to the concept of peoples is explicitly avoided. Instead, reference is made to ‘indigenous and local communities’. This is largely done in order not to upset countries which do not want to refer to segments of their state citizens in terms of ‘peoples’. They consider it to be a threat to the nation’s unity and they fear it may create the need to recognise collective instead of individual rights. Other concepts that are applied in this context are ‘tribal’ or ‘upland communities’, ‘cultural’ or ‘ethnic communities’. In particular contexts the concept of ‘first nations’ or ‘first peoples’ is used. Despite the political sensitivity of the concept of indigenous peoples, in the international debates there has nevertheless been a tendency to, for the time being, accept the definition proposed by the UN rapporteur José Martínez Cobo. The indigenous peoples’ movement however, does not stop to insist on their recognition as ‘peoples’ instead of communities, or minorities.3

An interesting historical aspect of the classification of ethnic groups is that in many cases the colonial administration has been instrumental in the naming of ethnic groups and formalising official boundaries between them in an effort to divide-and-rule or to bring more unity is what seemed to be extremely amorphous social groups. What now seems to be stressed as ethnic units ‘since times immemorial’ are in many cases only relatively recent social units.
Second, due to this lack of a clear definition, it is debatable who can and who cannot claim membership to an indigenous people or community. Although indigenous peoples themselves are strongly in favour of self determination, it is not entirely clear how self identification actually works in everyday life. There may be rules and practices to decide whether a person belongs to a particular ethnic group or whether he or she is accepted as such by fellow members, however, this does not automatically imply that the ethnic group is also accepted as an indigenous people. So the question to be asked here is: who is the ‘self’ referred to in the concept of self determination? Is it the individual person, the ethnic group, or its leaders? Another question that needs to be answered is what the position of people of mixed ethnic origin is.

Third, in the granting of rights to indigenous peoples and communities various principles are used in the justification of these rights. In most cases these rights are based on a history of injustice done to these peoples through all kinds of processes such as marginalisation, removal from lands, slavery and various forms of exploitation and appropriation of natural resources in their environment. It can also be argued that indigenous people need special protection because of their present disadvantaged position within the nation state. Commonly, indigenous people classify among the poorest groups within many countries in terms of education, access of health facilities, life expectancy, and employment rates, while they still suffer from all kinds of discriminatory attitudes. However, if emphasis is put on the present and previous inequality, the justification of granting special rights to indigenous peoples would no longer hold once general conditions have improved and various indicators regarding the quality of life and societal well-being, are brought to a comparable level with other parts of the population. In other words, special rights would only be granted on a temporary basis and as long as the indigenous peoples are in a disadvantaged position. Still, the indigenous peoples’ movement usually expresses its claims in terms of permanent rights for the future. Numerous countries however, have indicated that this position is unacceptable for them.

In Indonesia this discourse is phrased in a particular idiom that is: the heated debate about the role of adat (and adapt communities) in relation to natural resource management. Adat often is used as an argument to (re)claim land that for a long time have been appropriated by outsiders or for the state has issued logging or mining concessions or allowed private companies to establish plantations. Reference to traditional adat land by local communities is used as an instrument to resist external interventions. In many cases such claims are highly contested as it is unclear who do and who do not belong to such communities. The production of maps through whatever simple or sophisticated techniques has become a powerful weapon in this discourse. As yet it is unclear to in which direction this complex process will develop. Calls for a certain degree of recentralisation are sometimes voiced but this at this stage it seems highly unlikely that this will be acceptable, and for that reason also implementable, at the lower level.

Failure and success in co-management

Indicators and perceptions of the success or failure of co-management projects differ widely. The parties involved in such projects—fishermen or forest dwellers, project staff, donor agencies or ecologists—evaluate them with different terms of reference in mind. In particular, the spatial and temporal contexts in which the projects are evaluated may also differ. Because projects directed towards resource mana-
Management do not materialise in ‘empty’ time or space, they are evaluated by local people on their own terms. Projects may be perceived as resources in their own right, because they bring direct gains in terms of material benefits, paid labour, increased access to resources and new opportunities. In some cases these benefits, intended as incentives in relation to overall project aims, are valued in themselves, irrespective of the purpose they are supposed to serve. Project evaluators usually seek sustainability of project organisations and devote less attention to the trickle-down effects and internal changes occurring within communities. Ideally, there should be better clarification of the evaluation criteria for these projects (Harkes 2001). For the time being, more comparative studies should be addressed to comparing the outcomes of different management regimes (see e.g. Gilbert and Janssen 1998).

One general problem with project evaluation is the tendency to adopt a rather isolated perspective on the project thereby forgetting its wider context, which may be of crucial relevance for understanding the results and achievements. Factors external to the projects are of crucial importance and are at the same time more difficult to evaluate.

Conclusion

The general picture of Indonesia’s national resources is very critical. Numerous overviews are rather pessimistic about the future. Reports about illegal logging, the establishment of large oil palm plantations, badly managed national parks, and over-fished coral reefs are abundant. Projections of what the state of the environment will be in 2010, 2020 or 2050 are generally very pessimistic with respect to forest cover, biodiversity and intact coral reefs and populations of fish. At the same time numerous initiatives are taken, many under the banner of co-management or community-based management. Sometimes successes are reported about local interventions to protect or manage local resources with the dual aim of reducing rural poverty and sustainable management of the natural resources. Promising as some of these examples may be, it will not be sufficient. Local initiatives alone will never be able to fight powerful forces from outside, while internal differences with respect to which direction to take, might add to the general problem.

Large scale initiatives will be needed too, involving governmental agencies, stakeholders representing local communities but also the private sector. One such initiative is the Heart of Borneo campaign, launched in early 2005, for the safeguarding of the mountainous heartland of the island. It involves the national governments of Indonesia, Malaysia and Brunei, provincial and local governments and the local communities. But also the private sector, occupying various positions at the market chain that links producers of timber, palm oil etc. with the end users at distant locations, plays an important role just like ‘third parties’ such as WWF and other conservation agencies. Building up a kind of consensus with respect to the aims and the methods to achieve effective protection of biodiversity and sustainable use of resources, will require mechanisms and procedures, taking the work-in-progress or learning-by-doing that co-management still is, to the appropriate scale and social-political contexts. We believe that linking on the ground initiatives to larger over-arching conservation and development programmes will prove to be crucial in times to come.
References

Adam, B.

Von Benda-Beckmann, F. and A. Brouwer

Borini-Feyerabend, G., M. Pimbert, M. Farvar, A. Kothari and Y. Renard
2004 Sharing power. Learning by doing in co-management of natural resources throughout the world. London: IIED.

Cernea, M.

Crehan, K.

van Dijk, R.

Gell, A.

Gilbert, A.J. and R. Janssen

Hanna, S., C. Folke and K.G. Mäler (eds)

Harkes, I.

IUCN
Kemf, E. (ed.)

Kothari, A., N. Singh and S. Suri (eds)

Leach, M., R. Mearns and I. Scoones

Lynch, O. and K. Talbott

Maffi, L. (ed.)

McNeely, J.A.

Murray-Li, T.

Passmore, J.

Persoon, G., D. van Est and P.E. Sajise (eds)
2003 *Co-management of Natural Resources in Asia: A Comparative Perspective.* Copenhagen: NIAS Press.

Persoon, G., T. Minter, B. Slee and C. van der Hammen

Pimbert, M.P. and J.N. Pretty
1995 *Parks, People and Professionals: Putting Participation into Protected Area Management.* UNRISD Discussion Paper No 57.

Polunin, N.V.C.

*Persoon, van Est, and Minter, Decentralisation of Natural Resource Management*
Pomeroy, R.S. (ed.)  

Stevens, S. (ed.)  

Uphoff, N.  

Vira, B. and R. Jeffery (eds)  

Wallman, S. (ed.)  

West, P.C. and S.R. Brechin (eds)  

Western, D.  

Wiersum, F.  

Williams, R.  

WWF  

Zerner, C. (ed.)  