Protected Areas Programme

parks

Vol 12 No 2 **LOCAL COMMUNITIES AND PROTECTED AREAS** 2002

IUCN

The World Conservation Union

Protected Areas Programme

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Vol 12 No 2 **LOCAL COMMUNITIES AND PROTECTED AREAS** 2002

The international journal for protected area managers

ISSN: 0960-233X

Published three times a year by the World Commission on Protected Areas (WCPA) of IUCN – The World Conservation Union.

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- maintaining and improving an effective network of protected area managers throughout the world, building on the established network of WCPA;
- serving as a leading global forum for the exchange of information on issues relating to protected area establishment and management;
- ensuring that protected areas are placed at the forefront of contemporary environmental issues such as biodiversity conservation and ecologically sustainable development.

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Cover: Specialist wildlife viewing opportunities are outside of what most park agencies would provide, but they must still closely manage how tourism operators provide experiences like 'swimming with dolphins', as managed by the Department of Conservation in a marine protected area of New Zealand. Photo: The Black Cat Group.

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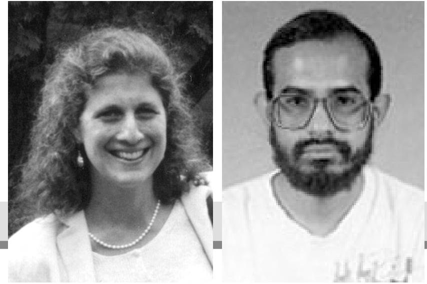
Production of Parks *is supported by the Taiwan Council of Agriculture and the United States National Park Service.*

Editorial



JESSICA BROWN AND ASHISH KOTHARI

THERE IS NO IGNORING IT: protected areas simply cannot be viewed in isolation from the communities within and near them. This is true of the broad spectrum of protected areas, including those established by governments during the last century according to a "conventional" national park model. And it is, of course, inherent in the idea of "community-conserved areas," which communities have been creating for millennia to protect the natural and cultural resources of importance to them.

It is not simply that by ignoring local communities we imperil the security of existing protected areas. We also risk continuing a range of injustices that have been perpetuated on communities, in ways that include forced displacement, restrictions on access to livelihood resources and cultural erosion. At the same time, those people closest to the resource can bring their rich experience to bear when they are encouraged or merely permitted to take responsibility for their stewardship. We need to tap the wealth of knowledge, traditional management systems, innovation and love of place that so many communities could bring.

That local communities can and must play a critical role in protected areas is not new; what is new, is the way that, in practice, their role is being accepted, encouraged and, indeed, embraced in very different parts of the world. Community involvement is central to an emerging new paradigm for protected areas (PAs) worldwide.

This issue of *PARKS* comes out at a time when the importance of community involvement in protected areas is being increasingly recognised by the PA constituency. The World Commission on Protected Areas now considers it one of its five key themes, and important enough to become a cross-cutting theme at next year's Vth World Parks Congress in Durban, South Africa. It is a theme that runs through recent and upcoming issues of *PARKS* focusing on topics such as *Integrated Conservation and Development Projects*, *Population and Protected Areas* and *Protected Landscapes*. At the same time, the role of communities is the focus of a lively debate at national and international levels. An example is the on-line discussion initiated by the IUCN Theme Working Group on Local Communities, Equity and Protected Areas (www.cee.envirodebate.org) which is debating the question of how community-conserved areas should be recognised within

This issue of PARKS is one in a series of publications to be produced by IUCN's joint WCPA/CEESP Theme on Indigenous/Local Communities, Equity and Protected Areas (TILCEPA) and by the Collaborative Management Working Group (CMWG) – the oldest working group of CEESP. The theme on Indigenous and Local Communities, Equity and Protected Areas is co-chaired by Ashish Kothari and Grazia Borrini-Feyerabend. It is currently working on a number of publications including a volume of *Guidelines on Indigenous and Local Communities, Equity and Protected Areas* (provisional title), a compendium of cases in community-based PA management and community-conserved areas, a compendium of innovative policies and legislation on this subject from around the world, and reviews on topics such as participatory assessment of PA governance and material and non-material benefits of protected areas. TILCEPA is also engaged in field assessments, workshops and exchange programmes, (in particular as part of the WCPA Ecosystems, Protected Areas, and People project) and in planning for specific workshops and events to be held at the 2003 World Parks Congress in Durban. A joint objective of TILCEPA and CMWG for the World Parks Congress is to document and argue for the legitimate, central role of community-managed areas in conservation.

the IUCN system of protected areas categories, including the possibility of modifying the system to accommodate these areas.

This issue of *PARKS* aims to showcase the different roles that local communities are playing in protected areas, highlight some emerging issues and challenges, and advance the debate on the state of community involvement in conservation. The papers included in this issue draw on experience from diverse regions and situations. They present a range of viewpoints and collectively pose some provocative questions.

Whose protected area is it? In the article at the beginning of this issue, Grazia Borrini-Feyerabend contends that this question lies at the root of the different relationships between protected areas and communities. She points out that for thousands of years indigenous and local communities have developed conservation regimes, while the role of national governments in establishing protected areas extends back only a century or so. Her interview article with Tariq Banuri, Taghi Farvar, Kenton Miller, and Adrian Phillips brings out five distinct viewpoints in the discussion on community involvement in protected areas. It proposes a typology for governance of protected areas (see Figure 3, page 14) that will doubtless be a useful tool in the aforementioned debate on community-conserved areas and the IUCN management categories.

Noting that the ground rules have changed – that no protected area is an island – Edmund Barrow and Christo Fabricius write that if protected areas are to continue to be important for biodiversity conservation, they must become integrated into wider landscape planning and must forge linkages with people based on equity, linked rights and responsibilities. In their review of recent experience in southern and eastern Africa, Barrow and Fabricius observe that protected areas will survive only if they address human concerns and gain the support of local people. This recognition has led to the emergence of community-based approaches to conservation in the region, as elsewhere in the world. Included in this issue of PARKS are many examples of how this is working, as well as the challenges that are emerging as these new approaches are put into practice.

Experience from the insular Caribbean outlined by Tighe Geoghan and Yves Renard illustrates the potential for community participation in planning and management of protected areas. For example, in St Lucia, a participatory process that has included the broad range of local stakeholders has enhanced management effectiveness in the Soufriere Marine Management Area. Deepening the discussion, the authors challenge the common view that local communities are homogenous, stressing the need to understand and reconcile the interests, needs and expectations of a wide range of stakeholders as well as the complexity of their relationships with the resource and one another. They point out the importance also of institutional arrangements and transparent, negotiated processes for decision-making.

Participatory planning involving diverse stakeholders has proven effective in efforts to establish the Meso-American Biological Corridor (MBC) in countries such as Costa Rica and Belize, as Vivienne Solis and her colleagues describe in their article. Over the past decade the Talamanca Caribe Biological Corridor (Costa Rica) has provided a forum for diverse community associations to discuss their concerns, and has helped to consolidate establishment of the MBC in the Talamanca region. In Belize, a process of public consultation at the local level that was launched during the feasibility study for the MBC has resulted in communities coming together to create and manage several micro-corridors.

Customary laws and social practices can complement legislation, and the resulting innovative governance offers tremendous potential to improve management of resources inside and outside of protected areas. Janet Chernela and colleagues present three case studies from diverse regions where communities have developed innovative approaches to conserve aquatic resources in protected areas. The experience from Silves (Amazonian Brazil), Misali island (Zanzibar, Tanzania) and Kowanyama in the Mitchell River delta (northeastern Australia) illustrates how innovative governance can develop when there is strong community support for better resource

management, especially in the face of external threats. The authors argue that traditional groups with high stakes in resource sustainability will invest creativity and effort, with the result of promoting sustainable resource use, as well as encouraging local self-determination.

In the United States and Canada, while the national park model continues to play an important role, there is increasing emphasis on community outreach, participation in planning and management, and long-term partnerships as Nora Mitchell, Barbara Slaiby and Mark Benedict write. This shift in approach is exemplified by the growth in the numbers of new protected areas built on partnerships, such as Heritage Areas, and by recent collaborative management agreements with indigenous peoples. Other examples described in their paper include outreach to "gateway communities" bordering national parks, and a programme of the US National Park Service that supports community-led efforts to protect rivers and open space and create trails.

One of the most exciting breakthroughs in the debate on community-based conservation, is the realisation that there is already in place a very large network of sites that are conserved and managed by communities, most of them outside officially recognised PA systems, and many of them managed in this way over many years. Community-conserved areas are found in every region of the world and take a wide variety of forms, including indigenous reserves, community-managed ecosystems, managed landscapes, sacred forests and springs, partnership areas, and many privately or NGO protected lands. These areas form a complementary protected area system that, until recently, has gone unrecognised. A box by Neema Pathak on Community-conserved Areas (see article by Sejal Worah) presents the diversity of experience with community-conserved areas in South Asia and highlights the need for these areas to receive recognition and support.

However, many challenges remain. In their review of the Meso-American Biological Corridor, Solis *et al.* contend that while the initiative has the potential to serve as a regional strategy for sustainable development, more must be done to create opportunities for local communities to participate in decision-making. Barrow and Fabricius identify a number of emerging challenges to advancing community conservation in eastern and southern Africa. The devolution of meaningful authority to the local level is an important prerequisite. At the same time, local communities must be willing and have the capacity to share responsibility. They observe that *though community conservation remains the most effective and viable option, it also remains elusive.*

Worah, in her article, agrees, and expresses concern that community-based conservation, as practiced by many official agencies, is progressing too slowly to be convincing to sceptics. She argues for the importance of developing combinations of social, policy and economic incentives that will encourage local stewardship of resources. Other needs include facilitating equitable negotiations among interest groups, developing a supportive policy environment, and strengthening the capacity of local-level institutions. These conditions must be put in place to enable community-based conservation to be initiated and sustained and, she writes, they must have the resilience to adapt and evolve.

Barrow and Fabricius argue that international and national policies must be revised to allow protected area categories to embrace community involvement in conservation. This, in turn, will require the devolution of meaningful authority, and ensuring that the benefits from conservation outweigh the costs to communities.

An important part of the discussion that is so far under-represented, is the relationship of protected areas to mobile peoples. At the end of this volume, we have included a declaration on "Mobile Peoples and Conservation," which came out of a recent meeting on the topic at the Wadi Dana Nature Reserve in Jordan. It proposes a series of principles aimed at fostering a mutually reinforcing partnership among mobile peoples and those concerned with conservation.

As Taghi Farvar observes in this issue of *PARKS*, *cultural and biological diversity are natural, powerful allies and it is only this alliance that may eventually succeed in saving both.* The articles in this

volume illustrate the successes and challenges emerging from the field. It is our hope that this publication will contribute meaningfully to the ongoing debate on community involvement in protected areas, and will stimulate further discussion of community-conserved areas as an approach that is complementary to, and overlapping with, the official protected areas network. At the same time, we hope the experience presented in this collection will help those engaged in this work to hone new ways to forge alliances between protected areas and the communities inside and near them.

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The guest editors of this issue of PARKS gratefully acknowledge the assistance of Neema Pathak, Manisha Sheth Gutman, Virginia Tschopp and Stephanie Tuxill. They further acknowledge the support of the IUCN World Commission on Protected Areas, the Commission on Environmental, Economic and Social Policy, the IUCN Programme on Protected Areas, the Conservation Study Institute, QLF/Atlantic Center for the Environment and Kalpavriksh.

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Indigenous and local communities and protected areas: rethinking the relationship

GRAZIA BORRINI-FEYERABEND INTERVIEWS TARIQ BANURI, TAGHI FARVAR, KENTON MILLER AND ADRIAN PHILLIPS[1]

The relationship between communities and protected areas is a marriage of heaven and hell. The concept of "protected area" is most often associated with the government-established parks that came into being only relatively recently. Seldom does one think of sacred community areas that date back centuries and keep harbouring unique biodiversity resources. Even more rarely does one consider the vast conservation contribution of indigenous productive landscapes or communally-managed natural resources. In all, community conservation is hardly ever acknowledged, and local people are too often erroneously perceived as the enemy of nature.

This interview – a "conversation at a distance" – illustrates the opportunities and obstacles involved in forging a new alliance between communities and conservation. The debate covers practical initiatives and statements of inalienable rights, emerging concepts and their political consequences, the legitimacy/legality dichotomy and the increasing number of social actors involved in protected area management. A new taxonomic dimension for protected areas—governance type—is illustrated in view of the debate at the World Parks Congress of September 2003. Everyone seems convinced that time is ripe for it, and everyone seems to agree that "cultural and biological diversity are natural, powerful allies" and that "only their alliance may eventually succeed in saving both."

SOME LOCAL COMMUNITIES love the protected areas (PAs) in their midst. Others hate them. Some communities benefit from protected areas and their local economies are geared around them. Others cannot count the physical and economic damage they suffer because of their presence. Some communities enjoy a stronger sense of identity because of their PAs. Others feel impoverished and oppressed by them.

What lies at the roots of these different relationships? To begin, we should ask a simple question: *whose* protected area is it? The concept and practice of placing a land or sea territory under a particular regime – from absolute seclusion and protection to controlled and regulated use of its natural resources – is anything but new. Indigenous and local communities have devised and implemented conservation regimes for millennia, the relevant mechanisms ranging from sacred prohibitions to detailed rules for access. In contrast it was only during the last century that national governments all over the world[2] began to identify, regulate and protect territories with natural resources of particular value – although they did so with great determination and might. The first fundamental distinction between community-conserved and government-conserved areas is thus the historical dimension: whilst the former can be traced back a long way in time, most of the latter have existed for only a few decades[3] (see Figure 1).

Natural resources under community control are usually managed according to rules that privilege livelihood sustainability, risk-aversion, flexibility, social reciprocities and use-values. Within such broad terms, relatively contained but very strictly protected elements of the territory – such as sacred groves, lakes and springs – could, until recently, be found virtually everywhere on inhabited land. The typical landscape resulting from this is a mosaic pattern of resource units under different uses and regulations. In contrast, government protected areas privilege biodiversity conservation, habitat site and stability, legal authority and market values

1. Grazia Borrini-Feyerabend: gbf@cenesta.org, Tariq Banuri: banuri@tellus.org, Taghi Farrar: taghi@cenesta.org, Kenton Miller: kenton@wri.org, Adrian Phillips: adrianp@wcpa.demon.co.uk
2. With substantial promotion and support from international conservation organisations and aid agencies, as well as private entrepreneurs.
3. Some state protected areas continued the conservation practices of earlier rulers who had set aside private hunting grounds.

(e.g. mega-fauna species). Unfortunately, and at times blindly, in their efforts to secure those values[4] they sometimes displaced and dispossessed local communities and even set ancestral territories off-limits from those who had protected them for centuries.

National governments all over the world have also been intent upon "developing" their countries. To this end, they granted concessions for timber, hunting, mining operations and infrastructure and encouraged in-migration, often in the very areas that local communities had reserved as their own living, working and sacred, protected grounds. Market demands for natural resources have even prompted some governments to decommission part of their own protected area systems. Today, one of the most serious threats to official protected areas in India is the rising international demand for granite. In the USA, it is the domestic demand for oil.

No wonder, then, that many indigenous and local communities are in open conflict with protected area management and national governments. Governments, however, make claims of their own, stating that official protected areas have saved many unique environments and natural resources. Left to themselves—they maintain—those environments and resources would have been exhausted long ago by the growing demands of locals and incomers.

In summary, at the root of the relationship between indigenous/local communities, national governments and conservation lies a combination of historical, cultural and socio-political factors (see Figure 2). *Whose* protected areas are we talking about? When were those established, *why* and by whom? If the areas are community-conserved, has the national government recognised them? Is it helping the communities to maintain their conservation practices or undermining them by subjecting the areas to other priorities? If the PAs are government-declared, have the indigenous and local communities recognised and accepted them? Was there any imposition over their will and traditional practices? Subsequently, have such communities been involved in managing the protected territories and resources? If yes, was this done through

4. More prosaic profit motives are also at the root of establishing official protected areas, from Yosemite (1864) to the present day. Among the main promoters of Yosemite National Park were the railroad companies hoping to attract passengers to the West. Many African protected areas are especially valued and protected as sources of tourist and hunting revenues. And many protected areas in Europe are established as a way to foster the economic development of a region.

Figure 1. *Timeline of protected areas.*

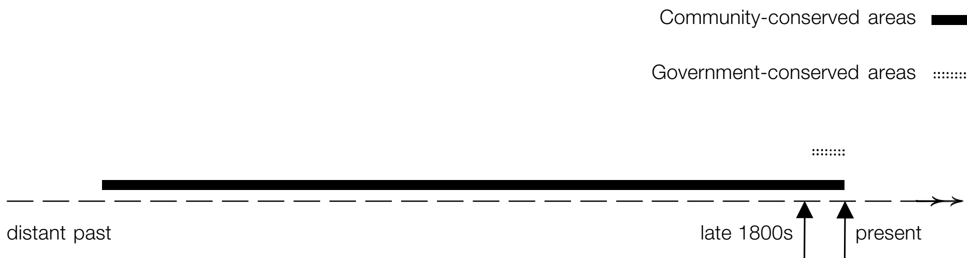
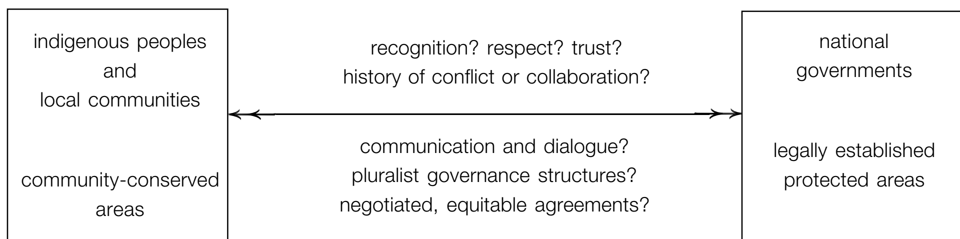


Figure 2. *Key issues in the community-government-conservation relationship.*



benevolent gestures or because of an officially recognised *partake of rights and responsibilities* (joint or collaborative management)? Are there now *pluralist governance structures* in place to foster dialogue and negotiated agreements? Are there mechanisms by which *local/traditional and mainstream knowledge and practices* can be used in a *complementary and respectful* way? Are there mechanisms that foster an *equitable sharing of the benefits and costs* of conservation?

The joint WCPA/CEESP Theme on Indigenous and Local Communities, Equity and Protected Areas provides a space within the World Conservation Union to discuss these issues and develop new thinking and practices on the subject[5]. The following "conversation at a distance" between Kenton Miller and Adrian Phillips (present and immediate past Chairs of the World Commission on Protected Areas – WCPA) and Taghi Farvar and Tariq Banuri (present and immediate past Chairs of the IUCN Commission on Environmental, Economic and Social Policy – CEESP) demonstrates that IUCN takes the subject very seriously and invites its protected area constituency to get involved.

What are the most important issues to deal with, today, in the debate and action about indigenous and local communities and protected areas?

Adrian Phillips: What matters most is the willingness of governments to recognise that local communities are vital actors in the delivery of conservation objectives. Governments that have not already done so need to move from an implicit assumption that they manage *against* local communities to one where they recognise that PAs should be managed *for*, *with*, and often *by* local communities. This is not to say that every whim of local opinion is right or should always prevail, but that any approach that marginalises the local community in decision-making is doomed to failure, if not in the short term, then certainly in the longer term. Beneath this overriding requirement, there is a series of second order questions, such as the need for tools (guidelines, standards, practical advice, etc.) to help those in authority to embark on a more trusting relationship with local communities and to empower them to take greater responsibility for protected areas. We need demonstration initiatives that show how communities can be the drivers in protected areas establishment and management; we need to build capacity, both among professional protected area managers in working with local communities, and among the communities themselves so that they can take on the responsibilities which co-management and community management imply.

Kenton Miller: I am impressed by the emerging concepts and practices associated with values and economics of protected areas. Thirty years ago the key thrust was towards preparing management plans. Twenty years ago, at the Parks Congress in Bali, we focused on developing systems of PAs to obtain bio-geographic coverage. At the Congress in Caracas, ten years ago, we emphasised expanding the constituency of partners engaged in management. At Durban, in 2003, we will see considerable concerns about how to define values from ecosystem services and goods, how to capture these benefits to help sustain management and provide equitable benefits to neighbours. We will discuss business planning and sustainable finance but also how local communities can be empowered and take on the responsibility for capturing and distributing PA benefits. Financial management and marketing of protected area services and goods are great opportunities to foster long-term security for ecosystem services and improving equity for local, national, and global communities. Protected areas are central to sustainable development. These vital organs of the living planet provide water, air, genetic resources, spiritual and cultural identity and social well-being. Whether managed by government agencies or communities, with

5. Everyone interested is invited to contact the Theme Co-chairs: Ashish Kothari (ashish@nda.vsnl.net.in) and Grazia Borrini-Feyerabend (gbf@cenesta.org) and offer their experiences and suggestions.

Sacred prohibitions. This complex construction around the trunk of a tree signals a set of sacred prohibitions, perfectly understood by the residents of the Bijagos archipelago (Guinea Bissau). Photo: Grazia Borrini-Feyerabend.

full time professionals in uniform or local residents as volunteers, protected areas are needed for securing people's livelihoods and well-being. Our challenge is to develop and employ the right tools and approaches for the job.

Tariq Banuri: I see an ideological impasse fuelled by sterile debates over the state versus the market or over state management versus community management. This type of debate ends up obscuring the central issue of how decisions are made in practice. While most institutions can be subjected to social and participatory control, even the most ideal system is subject to misuse. As Michel Foucault put it, nothing is evil in itself, but everything is dangerous. I am tired of hearing that the state is intrinsically evil or that communities are fragmented by class and identity restrictions, or that the private sector is inherently violent and corrupt, the intellectuals are socially irresponsible, and so on. These are just unhelpful stereotypes. I would rather ask how these groups could collaborate and help overcome the weakness, corruption and inefficiency to be found in each. Naturally, the basis of such collaboration would be different in different places. In this sense, co-management seems to me a way out, a rejection of the modernist hubris that underpins much development thinking, both on the right and left. The hubris is best characterised by the Bauhaus slogan: "start from zero". Development and conservation thinkers of all types too often believe they build entirely new societies, excising all the diseased elements of old societies. After the painful experiences of the last century we should be far more humble, we should realise that we have to build upon what exists.

Taghi Farvar: Our starting point must be the recognition that community-conserved areas have been around since the beginning of human societies. They are an essential component of governance of natural resources and human survival. The very concept of protecting nature has been so integral to the survival of traditional human communities that it has often been embedded in their sacred beliefs. Those of us modern conservationists who are lucky enough to have had experience with traditional societies realise that it was certainly not us who invented the concept of conservation or even protected areas. In fact, most of my own work and that of my colleagues is an attempt to undo the damage caused by ignoring, limiting, upsetting, and eroding the original (indigenous) natural resource management systems.

Secondly, whether governments are involved in them or not, recognise them or not, community-conserved areas exist and will continue to do so. For example, sacred groves: there are innumerable such areas, from Kenya to India, from Ghana to Kurdistan. To be blunt, I believe we ought to maintain the primacy of community-conserved areas over *any* other kind. In other words, the real question is: "In which contexts is it appropriate to involve other actors in a co-management process, rather than keeping the indigenous or local community as the sole manager?"

Finally, there are a number of important rights and needs that should guide us through these issues, including:

- the right of indigenous and local communities to have their own conserved areas and have them officially recognised (concomitantly with that, the need to have customary law in natural resource management recognised on a par with – if not over and above – "modern" law);
- the need for a supra-national body to assess, recognise and offer legitimacy to such community-conserved areas without the immediate need for the approval of their own national government;
- the need for separating the recognition process, based on criteria developed jointly with communities, from the issue of recognition by a national government (legitimacy versus legality); and
- the need for communities to share in the authority and responsibility regarding projects, programmes, strategies, policies, and any other activity that affects the conservation and development of natural resources, including protected areas.

We ought to use every opportunity to help indigenous and local communities to take action on these rights and needs. One such occasion will present itself during the World Summit for Sustainable Development (WSSD or Rio + 10) when participants from many communities will be gathering to learn from each other's experience to ensure sustainable livelihoods and the protection of biological diversity.

What is IUCN doing about what you consider to be the key, most important issues? What more should it do?

Adrian Phillips: A great deal is being done by the various IUCN constituencies to promote community involvement on the ground. For example, WCPA has published a number of documents[6] to support capacity building and policy development on the subject, and more will be published prior to the Parks Congress in Durban[7]. A practical task that could prove very useful would be to produce a set of case studies to show how co-management approaches can be reflected in a number of the IUCN protected area categories. IUCN is also actively involved in several international conventions that affect protected areas, notably the World Heritage Convention and the Convention on Biological Diversity. Through our contribution to these, we can and do promote management approaches that involve collaboration with indigenous and local communities. IUCN should also help communities working for protected areas in different parts of the world to network among themselves and learn from each other. Communities in wealthier countries could sponsor exchanges with others in the developing world. IUCN could play a switchboard role – putting them in touch with each other, as it does already with professional staff. IUCN could also develop advice for protected area managers other than from the government sector on how to work with indigenous and local communities – and especially

6. For example, the titles in IUCN/Cardiff Best Practice Guideline Series dealing with indigenous peoples and marine protected areas, available at http://www.iucn.org/bookstore/index.html.
7. For example, this issue of *PARKS* and the forthcoming IUCN/Cardiff Best Practice Guidelines on Indigenous and Local Communities and Equity, and on Category V Protected Areas.

advice for NGOs and the private sector. Finally, perhaps we need to change our language. When we (and I am guilty as anyone) use the word "manager" to mean professional staff, we imply at once that skills, knowledge and above all *responsibility* reside exclusively with that group. But full community involvement, and certainly so in a lived-in landscape such as those in Category V, means that the real managers of the protected area are the local people. It would be refreshingly different if we began to use the word manager in that novel way.

Taghi Farvar: I believe that much of what Adrian is calling for can best be achieved by making good use of one of IUCN's less exploited strengths – inter-commission collaboration! For example, CEESP has long had a strong working group on collaborative management of natural resources and another one on sustainable livelihoods. Both have had in-depth experiences in working with communities and in organising training programmes for PA actors ranging from local communities to high level government officials. The joint CEESP/WCPA Theme on Indigenous and Local Communities, Equity and Protected Areas therefore offers a great opportunity. In the past, many of these issues were matters of conflict even among the IUCN Commissions. Now we have a place for debate, dialogue and common work both on the ground and at the policy level. The Theme should work very closely with indigenous and local communities, give them technical support, and elaborate with them new criteria for assessing their own conserved areas and, as needed, recommend certification or recognition. Greater care should be taken not to fall into situations in which bureaucracy proliferates and opportunities appear for control by external actors (such as government, NGOs, international organisations and the private sector).

Adrian Phillips: Yes, I really welcome the work of the joint CEESP/WCPA Theme, which has become a lively and challenging part of the protected areas debate and promises to make an exciting contribution to the World Parks Congress in September 2003. In particular it is doing a great service by introducing a sense of social responsibility into the planning and management of protected areas, and championing the cause of community-based and community-driven protected areas. But I think there is a bit of a gap between those who see *the* issue in protected areas management to be that of empowerment for indigenous and local communities and those who see this as one among several important trends.

Kenton Miller: IUCN and WCPA and many partner organisations work with local communities, NGOs, indigenous groups and private organisations to establish and support management of specific protected areas. For example, you may look at current initiatives to establish ecosystem-scale protection in the Pantanal of Brazil and Bolivia or in the International Peace Park "La Amistad" between Costa Rica and Panama. These are well recognised, large-scale endeavours that benefit from the support of major mechanisms such as the Global Environment Facility (GEF). Other examples are progressing on the ground and still lack full government recognition, including that of tenure rights, especially in Central America. IUCN and WCPA need to get these issues into debate at the Vth World Park Congress in Durban. We will have papers arraying the issues, we will debate in the workshops and, should the Congress participants so desire, we will seek a recommendation to the Union for defined action. Ideally, this should include a push for recognition of local tenure rights, defining and recognising standards and criteria for minimum levels and quality of management, and for co-management options.

Tariq Banuri: Governments, local communities and indeed institutions such as IUCN are not monolithic but porous and diverse entities. All groups contain people who support change and others who resist it. Our task is to strengthen the hand of the enlightened groups. In this connection there is a genuine case for concern. Sudden or large-scale changes, which haven't

been thought through fully, will inevitably backfire. People will not understand the changes, rules and regulations will be ambiguous and all sorts of bounty hunters will try to take advantage of the confusion to defraud the weakest actors in the system. This is why I favour an approach that builds the momentum from the grassroots upwards and from specific cases to general policies, so that people will have time to experience and absorb the changes and conduct informed debate about their desirability.

If you had to single out one key lesson from the past few decades of interactions between indigenous and local communities and others in charge of managing protected areas, what would that be?

Adrian Phillips: Very simple: the iron rule that no protected area can succeed for long in the teeth of local opposition.

Taghi Farvar: It is two things. First, still far too many protected areas are managed with little participation by stakeholders other than government. Second, indigenous and local communities have been alienated from the sustainable management of their own natural resources, particularly in protected areas, and this must be redressed with urgency if we are to bring back large masses of humanity into caring for conservation and sustainable use of biological diversity. For this to happen, we may start with improving the way in which IUCN recognises and categorises protected areas.

Kenton Miller: I believe we learned that a greater clarity of goals, criteria, standards and definitions is needed around the whole issue of communities and PAs. One starting point is to clarify the reason for providing a special category of protection to an area. If the aim is to secure the values and ecological functioning of the area for the use and enjoyment of all citizens, future generations included, then the central government may best take on such a commitment. Where issues of inequity arise as a result of this approach, arrangements need to be established to ensure appropriate compensation. If, on the other hand, the reason is to secure a watershed that supplies water to local farms, villages, or irrigation works, then local or regional communities or NGOs might well be the most appropriate managers. But, how do we deal with multiple and contrasting values? This is perhaps the greatest source of inequity with respect to protected areas. A hierarchy of values needs to be agreed upon, as well as mechanisms to ensure that each actor fostering specific values shares appropriately in the relevant costs and benefits, authority and responsibility.

Taghi Farvar: Kenton, let me take issue with the assertion that only national governments are qualified to think about long-term inter-generational interests. Experience shows that communities are often much better at this. Only when indigenous and local communities are taken seriously may we get assurance that a protected area will survive. Government officials often think only about their own civil service objectives. Elected politicians tend not to plan beyond their term of office. Private owners are too often in pursuit of profits above all. All are likely to be far more corruptible than community elders and traditional authorities who base their status on solidarity and social standing and respect at the local level.

Tariq Banuri: I believe the key issue is the legitimacy of *any* governance type. And this involves the accountability questions. Who is bearing the consequences of management? Who is responsible for the decisions that are taken? Much PA management consists of putting additional constraints on those whose lives are already constrained in every possible way. In addition, this is normally done by "managers" whose lives are comparatively unconstrained. This is clearly not acceptable.

The only justifiable interventions are by those who will share in the costs of any decisions taken on the basis of their advice.

Adrian Phillips: I see the responsibilities of civil society increasing for many aspects of the shaping and delivery of public policy in general. Many governments now rely on privatisation, contracting the private sector for the delivery of public policy objectives. Many countries are embarking on decentralisation policies, transferring power from central government to regional, provincial, municipal and other local tiers of government. In fact, governments no longer seek to "do it alone" but are working with other sectors of society (public, private, civil society, community) for the delivery of services. Conservation is affected by these trends. Thus, here too we see more involvement of lower tiers of government, NGOs, the private sector and others, plus a marked increase in the use of partnership approaches. So, the answer to the question "who is responsible for this protected area, or protected area system?" has become much more complex than it used to be. Personally I think the acceleration in the number of different actors now involved in managing protected areas is the single most encouraging development over the past 10 years or so.

Kenton Miller: The IUCN Category system was developed to promote clarity in the rationale for establishing a protected area. Originally we were dealing with few large areas of national-level interest and the protected areas classified in the IUCN system and registered in the UNEP/WCMC database were mostly declared by national governments. Now, there is an opportunity to recognise areas of local interest and commitment, established and managed by indigenous peoples, local communities, NGOs and local governments. One option is to add an additional dimension to the IUCN category system, to recognise *who* manages the area. Conceptually, the existing categories can capture any and all purposes for which PAs are established, but the new dimension will tell us also who did and who now holds authority, responsibility and accountability for its management, including how they do so. One of the difficulties here lies in the relationship between local communities and central governments. Will the latter accept and endorse the action of the former? I would like to see this potential clarification form part of a proposal for discussion at the World Parks Congress at Durban, with the aim of seeking an amendment to the existing IUCN system. After that, we would have to take any proposed change to the next World Conservation Congress as part of a resolution since the existing system has IUCN-wide endorsement.

Grazia Borrini-Feyerabend: *Your suggestion, Kenton, brings substantial clarity into the discussion on the subject of "community-conserved areas", which has been lively for a while*[8]*. Most of the proponents of that discussion did not wish to alter the IUCN category system, which is based on management objectives, but, like you, wanted to bring in an "added dimension", namely the fact that protected areas can be established and run by indigenous peoples and local communities and not only by a state government. Some years ago I was myself responsible for proposing a continuum of mechanisms by which various social actors could be partners of a government agency in managing a PA*[9]*. At one extreme of the spectrum, the indigenous or local community would have total self-management. At the other extreme, a government agency would have sole and full control. In the middle, there would be various possibilities for sharing management authority and responsibility. The work just fell short of your proposal, namely that governance is considered as another dimension in a matrix system with the management categories. Recently, Bruce Amos and Jim Johnston of Parks Canada have proposed a list of governance types*[10]*, which*

8. Please see some of that debate recorded in the site http://www.cee.envirodebate.org/.
9. See Borrini-Feyerabend, G., *Collaborative Management of Protected Areas: Tailoring the Approach to the Context*, IUCN, Gland (Switzerland), 1996 (available also in French, Spanish and Portuguese and at http://www.iucn.org/themes/spg/Tailor/index.html)
10. This was done via e-mail as part of a discussion on the forthcoming governance workshop at the World Parks Congress in Durban.

clearly recognises the existence of community-conserved areas as well as of PAs managed through various kinds of partnerships among different actors. I very much appreciated their model and, in particular, their distinction among different kinds of multi-stakeholder management. In a broad sense, however, I believe that four main "governance types" could be made to stand out:

- *community management;*
- *government management;*
- *private or delegated management; and*
- *multi-stakeholder management.*

Following on Adrian's prior comment, this distinction could help us use the word "manager" in a "refreshingly different" way ...

Adrian Phillips: This is a very good area for debate, and I hope that we will keep on discussing from here to the Durban Congress, when we should all be able to agree on a convincing model. May I now make just a couple of points? First, in defence of the existing IUCN categories system, we need to recognise that it is fast becoming better known. A proposal to modify the system could therefore disrupt an emerging but still very fragile dialogue in which IUCN is investing quite a lot of time and effort. I urge the IUCN constituencies to think how they can develop their invaluable work *within* the existing management categories system, rather than seeking to change it. Second, regarding the four broad "management types" that Grazia has suggested, I do welcome the notion of a complementary categorisation of protected areas according to a management "axis" rather than replacing or modifying the existing objective-based system. But lumping together distinct types, such as private conserved areas and delegated management options, like management by NGOs, seems rather odd to me. Private management often implies little accountability and is frequently driven by a strong profit motive. The four main types also say nothing about less conventional management arrangements run by natural resource services such as water authorities, by business or industry, by research and educational institutions, or even by defence departments. Further, they neglect to recognise the important development whereby the provincial, regional, local and municipal tiers of government are taking over (or just taking) more responsibility for protected areas in many countries. In my view, the "management types" need to be finer and capable of recognising these different options.

Taghi Farvar: Adrian, I would also stress that community management needs to occupy a *privileged* position in any model we end up concocting in Durban. Indigenous and local communities should not be considered merely on an equal footing with other actors, notwithstanding the poor recognition of their potential for conservation and discrimination suffered today. Indeed, they need to *move from being discriminated against to becoming the holders of a privileged status*. That said, I believe that both Grazia's main management categories and your finer points can be accommodated in a matrix form, as illustrated in Figure 3. Such a graphic summary would help us continue our analysis and discussion.

Many thanks for your views, gentlemen, and please let me close this conversation with a last question. Are there some "hot spots" (thematically, geographically, policy-wise, otherwise) to keep an eye on in the near future? Do you see any clear problem to overcome or opportunity to seize?

Tariq Banuri: Management systems need to combine local (indigenous) and global (scientific) knowledge in a non-hierarchical manner. This is a political issue. The custodians of global (scientific) knowledge have greater access to political power and are supported by the power inequalities between the North and the South, so they gain the upper hand. But it has been demonstrated that the best management systems combine these forms of knowledge – they are

	Governance type								
	A Community Management		B Government Management		C Private or Delegated Management			D Multi-stakeholder Management	
IUCN Category	Indigenous peoples	Local communities	Central or provincial ministry or agency	Local/municipal ministry or agency	Individual/corporate landowners	NGO/Foundations	Research inst., university, etc.	Joint Management	Collaborative Management
I Strict nature reserve/ wilderness area									
II National park									
III Natural Monument									
IV Habitat/species management area									
V Protected landscape/ seascape									
VI Managed resource protected area									

Figure 3. *A possible PA descriptive matrix, including the IUCN category (defining the main management objective) and a governance typology. The matrix is in a draft form and offered only to stimulate discussion and comments.*

Notes.

A. Community management – Authority, responsibility and accountability for management of the PA rest with representatives of indigenous peoples and/or local communities with customary claims over the land and natural resources. The community customarily (and/or legally) owning the land and natural resources has formally subjected them to a conservation objective in the IUCN category.

B. Government management – Authority, responsibility and accountability for managing the PA rest with a government ministry or agency that has formally subjected it to a conservation objective in the IUCN category. The government level in charge may be the national (provincial in case of a federal country) or the local/municipal. The government may or may not have a legal obligation to inform or consult other identified stakeholders prior to making or enforcing management decisions. "Consultation" may be made explicit in the process by which the stakeholders are provided all the relevant background and decision information in the forms and by the means agreed with the government agency in charge.

C. Private or delegated management – Authority, responsibility and accountability for managing the PA rest with one or more private or corporate landowners or are delegated by the legal owner (including the government) to one or more clearly designated organisations. The latter may encompass environmental NGOs and foundations (not-for-profit institutions of the civil society, possessing specific expertise and management capacity), research institutions, universities, private management operators, military agencies and many other relevant bodies. The owners or delegated managers subject the land to a specific conservation objective in the IUCN category.

D. Multi-stakeholder management – Authority, responsibility and accountability for managing the PA are shared in various ways among a plurality of actors, likely to include one or more governmental agencies, local communities, private landowners and other stakeholders. The actors recognise the legitimacy of their respective, if partial, entitlements to manage the PA, and agree on subjecting it to a specific conservation objective in the IUCN category. Distinct sub-types may be identified. In collaborative management, formal authority, responsibility and accountability still rest with one agency (often a national governmental agency), but the agency is required to collaborate with other stakeholders. "Collaboration" may mean that a multi-stakeholder body develops and approves by *consensus* a number of technical proposals for PA regulation and management, to be later submitted to the decision-making authority. In joint management, various actors sit on a management body with joint decision-making authority. (The requirements for joint management are made stronger by the specification of a modality of decision by *consensus*. When this is not the case, the balance of power reflected in the composition of the body in charge may *de facto* transform a joint management into a collaborative management situation).

not dependent only on one or the other. This is a challenge for the management of all protected areas.

Adrian Phillips: Tough issues will continue to confront anyone engaged in conservation, and there may be a reaction against some aspects of co-management as its novelty wears off. In particular, I foresee a reaction against what is sometimes seen as the special position that some indigenous peoples have now secured. The indigenous cause can be rather exclusive – for example, descendants of mixed European-native peoples may resent the (often hard-fought) privileges secured by indigenous peoples at their expense, leaving them further marginalised. Such trends may be evident in parts of Canada and Australia, and elsewhere in the Americas. A dismissive attitude towards indigenous peoples' issues is also apparent among some African, European and Asian leaders. The refusal of the World Heritage Committee to sanction further work on a World Heritage Indigenous Peoples Council of Experts, in December 2001, is evidence of this position. Some conservationists' high hopes of co-management are also likely to fade where it goes wrong, as in some community-based wildlife management schemes. Finally, I fear that some local communities who set out on a co-management programme with enthusiasm will find that they are vulnerable to outside pressures to exploit natural resources. This can create divisive internal tensions and seriously undermine the conservation cause.

Taghi Farvar: The hottest forthcoming venue for our debate on communities and conservation will be the Durban conference. For me this IUCN and world event is a pivotal one, since it comes at a crucial time in human history – a time of integration of concerns. Both conservationists and development workers should define their short, medium, and long term agendas in this light and address nothing short of a restructuring of human governance. Neither the survival of human communities nor that of natural systems will be assured as long as huge disparities in wealth, power and privilege continue to exist; and as long as the greatest efforts of governments are spent not on caring for the earth and its people, but on destroying both. Development professionals should agree that nature has a right to survive in all its wondrous complexity and diversity. Conservationists should embrace the concerns of sustainable livelihoods and realise that human communities have been fundamentally conserving natural environments, when allowed to do so. Cultural and biological diversity are natural, powerful allies and it is only this alliance that may eventually succeed in saving both.

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Beyond community involvement: lessons from the insular Caribbean

TIGHE GEOGHEGAN AND YVES RENARD

This article provides a brief conceptual framework that sets the background to and proposes a rationale for community involvement in the planning and management of protected areas. It challenges common misconceptions about the homogeneity of *local communities*, in the light of the need to understand and reconcile the interests and expectations of a wide range of stakeholders. It summarises the insular Caribbean's experience in participatory planning and management of protected areas, using examples from several countries in the region.

An analysis of these case studies identifies four key points: (i) the need to recognise the diversity of stakeholders and take into account the full complexity of their interests and relationships with the resource and with one another, (ii) the importance of suitable institutional arrangements to the long-term success of participatory management, (iii) the need for transparent, negotiated processes for determining priorities in the face of inadequate resources, and (iv) the relationship between successful participatory management and the provision of appreciable benefits for local communities.

THE WORLDWIDE GROWTH of environmental consciousness over the past three decades has been accompanied by the gradual realisation that conventional, top-down and purely technical approaches to natural resource conservation have often been detrimental to the people most dependent upon those resources for their livelihoods. As a result, debates and actions have focused on reconciling conservation and development objectives, and integrating people and their institutions into processes of development and natural resource management. It is now widely recognised that "ordinary" people have a central role to play in protected area management, especially those local communities reliant upon the natural resources they contain (Borrini-Feyerabend *et al.* 2000; Kothari *et al.* 1996; McNeely and Miller 1984; Wells *et al.* 1992; West and Brechin 1991; Western and Wright 1994).

The Caribbean region has been a part of these debates and the focus of much practical work testing and demonstrating links between people and protected areas (Barzetti 1993; Geoghegan and Barzetti 1994; Renard 1991). In this region the forces contributing to the adoption of new and more participatory approaches to protected area management have included: the failure of many protected areas to fulfil their initial conservation objectives, the negative impacts that some protected areas have had on people and the severe conflicts they have generated or exacerbated, e.g. the case of *Los Haitises* in the Dominican Republic (Stycos and Duarte 1994).

This paper reviews this Caribbean experience in order to extract lessons of relevance to protected area management for this and other regions of the globe. It draws in part on the experiences and reflections of Caribbean resource managers and development workers who have participated in courses and seminars organised by the Caribbean Natural Resources Institute (CANARI) over the past few years. This group of individuals has been at the forefront of efforts to integrate conservation and development, and to place the needs and concerns of people and communities at the centre of protected area management.

Conceptual framework

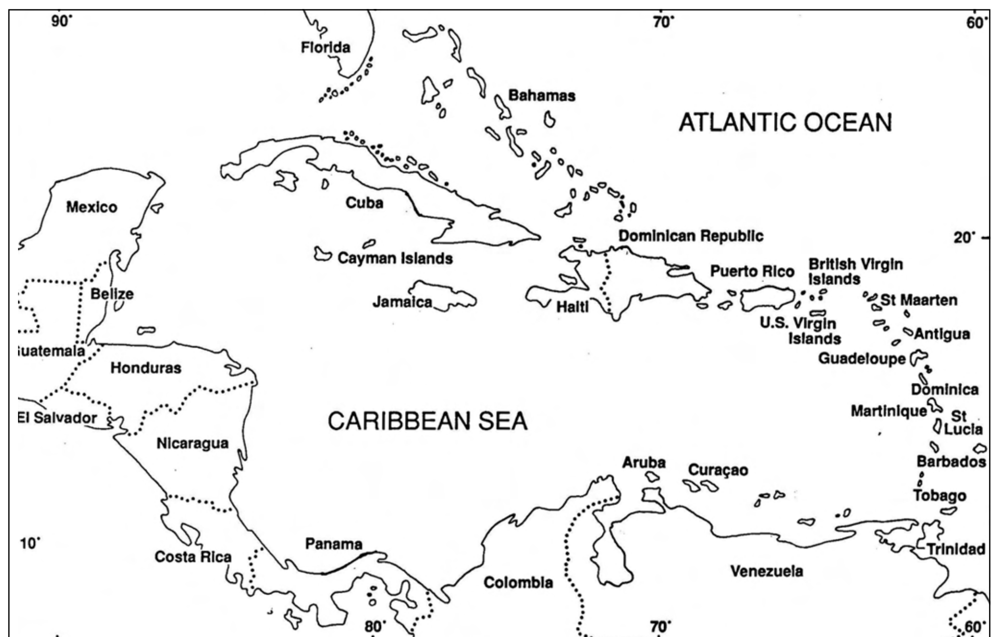
This paper uses the following conceptual framework as the basis for discussion on the relationship between local communities and protected area management:

- Every protected area impacts on people, either as direct users of its resources, or as beneficiaries of the goods and services it provides. Even when a protected area's resources are not directly used, its management is, above all, the management of the relationship (whether economic, cultural or spiritual; permanent or sporadic; immediate or distant)

between people and the area's resources, as well as of the human interactions that are engendered.

- The concept of *local community* helps managers to focus on the needs and rights of categories of users who have in the past been marginalised by conservation efforts. However, it can be ill-suited to the analysis and understanding of the place of people in complex natural resource use systems, because it suggests a homogeneity that does not exist at all levels, and it ignores those people who cannot be identified with a local, geographic community. The concept of *stakeholder* has gained prominence in development and natural resource management circles because of its usefulness in the identification and definition of those who have influence on, or can be affected by, the management process. It recognises, for example, that poor people in urban areas potentially affected by flooding and erosion have a direct stake in the management of upper watersheds; but although stakeholders, they cannot be termed *local*.
- The relationships among and between stakeholders and their uses of/relations with natural resources, are governed by institutions, both formal and informal, which are almost always complex, fluid and dynamic. These institutions, including rules, norms, laws, policies and organisations, regulate and guide the lives and actions of people.
- Management, including protected area management, is the task of transforming these institutions to meet defined goals. Increasingly these include social and economic goals, such as the provision of human needs, the elimination of poverty, social justice, and equity, in addition to environmental sustainability and biodiversity conservation.
- The process of transforming these institutions must recognise the complexity and coherence of existing institutions and the diversity and interests of the various stakeholders. It therefore must give stakeholders the opportunity to participate in the design of new arrangements, instead of providing external and technocratic answers. It should also embrace the range of development and natural resource management issues, instead of confining itself to narrow conservation objectives.

Figure 1. *Map of the Caribbean.*



- The rationale for stakeholder participation in planning includes (a) the quality of management decisions that integrate the knowledge, needs and aspirations of all parties; (b) the feasibility of management decisions that are accepted and owned by stakeholders; and (c) the empowerment and democratisation that result from the involvement of people and their organisations in formulating and implementing policy and management decisions.
- Despite this strong rationale for participation, stakeholders cannot all and always be involved in management. Indeed, it would be naïve to believe that management authority can be shared among a myriad of state and civil society actors, or that all government responsibilities could or should be delegated to local groups and organisations.

Within this framework, the challenge for protected area planners and managers is to design and implement planning processes and institutional arrangements that use the tools of participation to achieve objectives as diverse as environmental sustainability and biodiversity conservation, poverty reduction and provision of basic human needs, and equity and social justice. It is this challenge that a number of Caribbean initiatives are attempting to meet, in several ways.

The diversity of the insular Caribbean experience in PA management

The insular Caribbean is a region of great ecological, cultural and social diversity. At the same time, there are similarities of experience that give its people a shared sense of history and identity, despite political and linguistic barriers. The region contains a wide range of protected natural and cultural resources of international importance, from the rain forests and volcanic features of the Morne Trois Pitons National Park and World Heritage Site in Dominica; to the Marine Mammals Sanctuary on the Silver Banks in the Dominican Republic, where most of the Atlantic's humpback whales congregate each winter; the pristine coral reefs of the Saba Marine Park in the Netherlands Antilles, which attract divers from around the world; and the fortifications in the San Juan National Historic Site that have looked over San Juan Harbor in Puerto Rico for more than four hundred years.

Diversity is also found in the region's approaches to protected area management, reflecting a spectrum of opportunities for, as well as constraints to, the participation of stakeholders in the management process. These approaches can be catalogued roughly as follows:

- management governed by a standard system-wide regulatory and policy framework and implemented by a national government agency (e.g. the protected areas of the French departments of Guadeloupe and Martinique and US territories of Puerto Rico and the US Virgin Islands);
- management governed by a standard regulatory and policy framework, but implemented through a variety of governmental and non-governmental agencies and inter-agency arrangements (e.g. Cuba, the Dominican Republic, Jamaica);
- management through legislative and policy frameworks tailored to the individual protected areas, though sometimes within the context of a broader national system plan, and implemented through a diversity of agencies and institutional arrangements (e.g. St Lucia, Netherlands Antilles).

This diversity of approaches makes the region particularly interesting to study, allowing for the comparison of approaches and results and the development of both theory and practice. In addition, in many countries of the region the institutional and policy frameworks for protected area management are not yet set in stone but continue to evolve, providing opportunities for testing and refinement of participatory approaches.

Experiences in participatory policy formulation

Over the past decade, two initiatives have demonstrated that in the development of policy regarding important natural resources, an entire country can be part of the "local community". The development of a national plan for a system of protected areas for St Lucia, in the early 1990s

(Hudson *et al*. 1992) had the peculiarity of seeking a range of conservation and development objectives and of following a rigorous consultative process that led to the formulation of a comprehensive national plan for protected areas. Recently, Grenada employed a participatory approach to the development of a new national forest policy that would among other things guide the management of the nation's forest reserves and national parks (Bass 2000). A "Forest Policy Development Committee" that included representatives of a diverse range of governmental and non-governmental stakeholders guided the policy review process. Techniques employed to incorporate the interests and views of all sectors of society were both broad (radio call-in programmes and questionnaires distributed through the national press) and specific (community and sectoral consultations). The process resulted in a policy document that had widespread public support and was quickly approved by the government. It also resulted in the need to transform the institutional landscape for forest management as well as the structure, operations and culture of the lead management agencies to make them more participatory and responsive to the interests and needs of stakeholders. This difficult process of institutional change is now underway.

Experiences in participatory planning

In planning for individual protected areas, input from stakeholders is generally solicited in one way or another. Although some consultations remain perfunctory and their results largely ignored, the trend in the region has been towards more inclusive planning processes. The following cases from Puerto Rico, St Lucia, and Jamaica (Geoghegan *et al.* 1999) illustrate some of the approaches used.

A university-led process to establish a marine reserve on the southwest coast of Puerto Rico involved the local fishing community of La Parguera in the selection of sites. The fishermen recommended a nearby reef where they did not themselves fish, but where persons from another, more distant community, who were not consulted, did. Following protests from affected fishers from the other community, the planning process was aborted.

With their intensity and diversity of resource uses, Caribbean coastal areas demonstrate the need for integrating protected areas in broader management frameworks. Photo: Allan H. Smith.

Seaweed farming now provides additional income opportunities to coastal communities in and near several marine protected areas in the Caribbean. Photo: Chris Huxley.

In Soufriere, St Lucia, competition and conflicts over the use of coastal and marine resources, particularly between fishers, hoteliers, and water sports operators, was becoming increasingly bitter and the resource base was declining alarmingly due to a lack of management. An eighteen-month consultative process, which involved representatives of all the main groups with an interest in the area, resulted in the development of an "Agreement on the use and management of marine and coastal resources in the Soufriere region." This agreement was essentially a zoning plan, which formed the basis for the establishment of the Soufriere Marine Management Area

(SMMA). The agreement failed, however, to take into account the diversity of stakeholders that existed even within individual households, where, for example, the needs, expectations and resource use strategies of older fishermen are very different from those of younger water taxi operators. Following an institutional review and restructuring that has addressed such weaknesses in the original institutional design (Brown 1997), the SMMA, now in its sixth year, has recently been named by the International Coral Reef Action Network as a centre of excellence for the demonstration of best practices in marine protected area management. While the representatives of the major resource use sectors, including fishing, yachting and yacht servicing, and diving, have been continuously active in the management of the SMMA, efforts to involve a wider spectrum of the community have been largely unsuccessful because of an inability to demonstrate the benefits of involvement. This has led to the recent establishment of a broad-based Stakeholder Committee within the overall institutional structure.

In Negril, Jamaica, local concern about rapid, unplanned tourism development resulted in the establishment of local environmental organisations and proposals for a Marine Park. It soon became clear, however, that Negril's marine resources were doomed unless the land-based impacts upon them could be controlled. This led to local advocacy for a protected area comprising the entire Negril watershed and coastal zone, resulting in the legal establishment of the Negril Environmental Protection Area in 1997. Management of the Area consists of a patchwork of regulatory instruments implemented by a range of government agencies. But coordination, as well as tasks such as research, monitoring, and environmental education, is the responsibility of the Negril Area Environmental Protection Trust (NEPT), a consortium of local and national government agencies and local community associations and NGOs. The structure of NEPT, with its broad membership, provides an avenue for representation of most members of the Negril community as well as national agencies and stakeholders. In the absence of a strong regulatory framework, however, NEPT's ability to coordinate the management of Negril's resources is impeded by Jamaica's centralised and highly politicised processes of decision-making on development issues.

Experiences in co-management

The concept of co-management, although not always well understood, has become increasingly popular in the Caribbean, where it is seen as a mechanism for improving management by supplementing the limited resources available to most of the region's governments with those of the community, private sector and NGOs. It also formalises the rights and responsibilities of management partners. In the development of co-management arrangements, naïve assumptions regarding the nature of local communities can sometimes be observed.

The Policy for Jamaica's National System of Protected Areas (NRCA 1997) seeks local community involvement through partnerships between government and "qualified local groups" in the management of protected areas. The policy has been operationalised through the formal or informal delegation of management responsibility for four protected areas. A recent evaluation (CANARI 2001) concluded that Jamaica's initial experience in co-management has not been successful. Only one of the four delegated management agencies was a pre-existing local organisation. Two others were established largely for the purpose of managing the protected area, and one was a national NGO. In most cases, the partners represented only a narrow spectrum of local interests. All the organisations, both governmental and non-governmental, have been hampered by severe human, technical and financial constraints, as well as by the absence of a comprehensive legal and regulatory framework. In some cases, participation of the community has been limited to a few influential stakeholder groups and there have been no common guidelines or policies to assure and encourage widespread local participation. For the most part, the level of management has been low, with problems such as high staff turnover and continuing financial crises. However, these issues have been recognised by all parties involved

and recently a participatory system planning process has been proposed in order to develop a more adequate framework for effective management (CANARI 2001).

Protected areas and local social and economic benefits

As experience from some of the region's protected areas (such as the Jaragua National Park in the Dominican Republic, Negril and Montego Bay Marine Parks in Jamaica, and the Soufriere Marine Management Area) has shown, programmes aimed at providing benefits to, or mitigating the negative impacts of management on disadvantaged stakeholders, tend to increase their interest and involvement in the area's management (Geoghegan *et al.* 2001).

There is much evidence that Caribbean protected areas, especially those with high levels of management, produce significant economic benefits (e.g. Dixon *et al.* 1993). However, there is also evidence that benefits are not equitably shared, with most economic benefits going to the tourism industry (often owned and managed by expatriates and foreign investors) and social benefits, such as education, given little importance (van't Hof 1998). Restrictions on traditional activities, including fishing in marine reserves and timber cutting in forest reserves, have actually resulted in negative economic impacts for local resource users, at least in the short term. Research in the SMMA over the past several years, however, demonstrates that fish stocks in areas adjacent to marine reserves can increase substantially in just a few years, resulting in increased yields for local fishers (Roberts *et al.* 2001). This research has enhanced the commitment of Soufriere's fishing community to the success of the protected area.

One significant local benefit identified through a recent survey of Caribbean marine protected areas has been the mitigation of conflict between users as a result of effective zoning and ongoing consultation (Geoghegan *et al.* 2001).

Lessons from experience

On the basis of this experience, we can extract four key lessons of direct relevance to the relationship between protected areas and local communities.

Lesson 1

Effective management requires the integration of the full diversity of stakeholders and takes into account the differing ways they are impacted by and impact upon protected areas

Approaches to community participation have often made assumptions regarding the homogeneity of local communities that fail to take into account the extreme diversity of stakeholder interests, and, at times, result in the marginalisation of important stakeholders. This exclusion has been detrimental to people and it has also hindered the achievement of environmental and natural resource management objectives.

In addressing this issue, protected area planners and managers should consider the following points:

- While communities may have a coherence and unity that must be taken into account and can be built upon, the interests of the stakeholders within communities can be very diverse. Sex, age, social class and cultural capital are among the factors that determine the stakes of individuals and groups.
- Some stakeholders are prominent and easily identifiable, while others can be forgotten or ignored in protected area planning and management processes. This can have negative impacts, transforming power relations in favour of some stakeholders and at the expense of others, usually those who already have the least power. The reasons for the "low visibility" and the resulting lack of involvement of some stakeholders include:

a) local power structures, that allow some sectors, groups and individuals to dominate institutions and processes;
b) conditions of the planning and management processes, which often favour those who are able to follow formal rules, use official languages, and feel comfortable within formal and official settings;
c) the seasonality of some resource use activities;
d) the geography of stakeholders, which may cause those that live at a distance from the protected area to be left out; and
e) the social conditioning and biases of the planners and managers, which can cause them to overlook or discount certain groups and individuals.

- Resource use patterns, institutions and power relations are in constant evolution. This presents an additional challenge to planners and managers, as it is not sufficient for them to identify and understand stakeholders and their relationships at a given point in time. They also need to observe and integrate these perpetual changes and assess their implications for management.
- Protected area managers and planners are not neutral parties but stakeholders themselves, and neutral facilitation is often needed to assure that planning processes are not skewed towards their interests.

Specific approaches and methods are needed to understand and embrace this diversity. For the planners and managers of protected areas, the most useful among these are the tools of stakeholder analysis, which allow for the identification and understanding of the interests of the individuals, groups and institutions that can affect or be affected by the outcome of a management intervention, the assessment of the dynamics among and between these groups, and the application of this information to project design, implementation and monitoring (Renard *et al.* 2001).

Lesson 2

The long-term success of participatory management depends on the suitability of the institutional arrangements

The experiences described above suggest some principles to guide the design of institutional arrangements, namely:

- They need to be democratic and to contribute to the empowerment of disadvantaged groups.
- They must include structures and mechanisms that allow stakeholders to influence management decisions.
- They must be efficient and effective in their pursuit of management objectives.
- They must be flexible and capable of responding and adapting to change, and also of dealing with unforeseen circumstances and exceptional events such as natural disasters.
- All key stakeholders must own them (legally or at least symbolically), and they must be suited to local conditions and compatible with the local socio-cultural and political landscape.
- They require structures and mechanisms that promote and sustain linkages between sectors, and the involvement of non-traditional actors in management arrangements.

The Caribbean experience further shows that decentralisation and partnerships do not necessarily result in participatory management. Institutional arrangements that appear on the surface to be democratic and decentralised may in fact be controlled, through legal regulation or political or economic influence, by central authorities or a small group of powerful stakeholders. Co-management agreements between state agencies and non-governmental organisations can easily exclude and further marginalise poor and powerless stakeholders, while giving the illusion of participation. The promotion of local community organisations and the vesting of

management authority within them can modify local power relations, again at the expense of the poor and the powerless.

There is a fundamental difference between representation and representativeness: in the design of protected area management institutions, it is almost always impossible to ensure that all stakeholders are represented, but it is possible to ensure that people involved in decision-making are truly representative of the various interests. Lastly, participation is not only found in the structure of an institution or an organisation. It must also be part of its culture and of its operations. In order to achieve active participation in protected area management, it is often more important to have ongoing public consultation programmes than to have a few selected representatives of stakeholders sitting around the table at meetings of boards of directors.

Sustainable uses can bring benefits to local communities, especially when users are involved in formulating and implementing management decisions, as is the case in this small mangrove in Saint Lucia, West Indies. Photo: Allan H. Smith.

In this participatory framework, the role of protected area management agencies and professionals changes significantly, in order for them to become:

- animators and facilitators of stakeholder participation in management decisions;
- builders of capacity among state and civil society partners; and
- mediators, capable of managing conflicts among stakeholders on the uses of the area's resources.

In the process of institutional design and capacity-building, planners and managers need to be realistic about the roles and capacities of community organisations. Community development work in the past three decades in several parts of the world has emphasised the need for strong community organisations. In the field of protected areas, proponents of community participation have followed that trend, often insisting on the need for strong and organised community partners as a condition for participatory management and delegated authority. This approach certainly offers benefits, but it also presents several dangers. Formal structures are useful, but they can undermine existing, informal community institutions and they inevitably introduce new rules that can transform power relations and introduce hierarchical relationships. At the same time, community organisations, simply because they exist and represent sectors of the community, cannot be expected to have the interest or capacity to become automatically effective partners in the management of protected areas. Technical skills, access to financial resources and commitment are more important requirements for day-to-day management than representativeness. There is therefore a need for ways to involve stakeholders without imposing forms of organisation which may not be timely or suited to local needs and conditions.

Lesson 3

Given the limited resources available for protected area management, transparent processes of negotiation are required to determine how much participation is possible and what objectives are given priority

Most of the region's protected areas are seriously lacking in management and financial resources, and diverse conservation and social objectives must be approached incrementally. When decisions regarding priorities and trade-offs are made in an *ad hoc* manner, they can be misinterpreted, alienate key stakeholders and compromise management. Mechanisms that are transparent and provide the opportunity for stakeholder negotiation on priorities and approaches provide a way to move towards the achievement of difficult objectives in the absence of resources adequate to reach ideal levels of management over the short term.

Lesson 4

Participatory management of protected areas must yield appreciable benefits for local communities

If it does not yield real benefits for local people, community involvement in protected area management cannot be meaningful, especially in the developing world. While there is still very little evidence that participatory approaches are capable of bringing such benefits on a sustained basis, some observations may be useful in assisting managers to address the issue of stakeholder benefits:

- As negotiated processes that recognise the legitimate needs of all parties involved, stakeholder participation in protected area planning tends to result in the identification of objectives and programmes aimed at the provision of local benefits. Participatory processes can lead to a sharing of agendas, where conservation agencies embrace development objectives while economic sectors integrate conservation requirements.

- Inequitable participation is likely to be reflected in the objectives that are defined. For example, the heavy influence of the tourism industry on the development of marine protected areas in the Caribbean region may explain why the objectives of so many of these areas are weighted towards the maintenance and enhancement of the tourism product, at the expense of fisheries and other traditional, less powerful sectors.
- Not all the potential benefits from protected areas are economic. Local populations expect that protected areas will provide them with recreational, cultural, and educational opportunities equal to or greater than those provided to other visitors and they are aware and resentful when this is not the case.

Conclusion

In the past few decades, the Caribbean region, like the rest of the developing world, has made significant advances in its search for more effective and equitable approaches to protected area planning and management. This work has revealed the values and benefits of community involvement and participation, but it has also begun to question initial assumptions. It has confirmed the need to go beyond some of the clichés that are part of the dominant discourse on participation, and to explore in greater depth the impacts and benefits that participation brings to protected area management.

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Note: This paper is a product of a regional programme on "*Building capacity for community participation in natural resource management in the Caribbean*" implemented by CANARI with support from the United Kingdom Department for International Development (DFID).

Innovative governance of fisheries and ecotourism in community-based protected areas

JANET M. CHERNELA, ALI AHMAD, FAZLUN KHALID, VIV SINNAMON AND HANNA JAIRETH

This paper describes three cases where communities have developed innovative approaches in order to conserve imperilled aquatic systems and promote ecotourism. Each demonstrates a strategic use of fisheries legislation supplemented by customary laws and practices to manage local protected areas with protection status equivalent to IUCN/WCPA Category V or VI, with small strict (Category I) preservation areas. Diverse stakeholders are involved, including governments, industry, non-governmental organisations and community interests. The declaration of each protected area was catalysed by the actual or threatened impacts of extractive industries and local perceptions of declining resources. External funding has benefited each project, but they are expected to be self-sustaining over time. The effective enforcement of applicable fisheries legislation is a high priority for Silves and Kowanyama communities, as are culturally sensitive community education, and monitoring the effectiveness of current management approaches for each protected area.

THREE INNOVATIVE APPROACHES developed by communities to conserve imperilled aquatic systems are described in this paper. The first is Silves, in the Brazilian state of Amazonas, where diverse stakeholders are cooperating to protect a unique lake system and seasonal floodplains. The second is from the island of Misali, in Zanzibar in the United Republic of Tanzania, where Islamic environmental stewardship principles are being promoted as a means for sustainably managing declining fishstocks in the Misali Island Marine Conservation Area. The third is from Kowanyama, in the Mitchell River Delta in northeastern Australia, where indigenous Australians are sustainably managing their land and sea-country, in cooperation with other stakeholders. The primary concern of each protected area is fisheries management and the promotion of sustainable ecotourism.

Each case study demonstrates how customary laws and social practices that promote sustainable local development can be asserted effectively to complement the inadequate enforcement of legislation. Strong local community involvement and support feature in each of the case studies. The impacts of unsustainable fishing on local communities, and those communities' insistence that fisheries legislation be enforced, have catalysed reforms. In Kowanyama's case, the prospect of extensive mining in the region also inspired the local community to take action. External funding has benefited each project, but they expect to be self-sustaining over time. Not-for-profit international NGOs have been key stakeholders promoting this type of innovative protected area management for Silves and Misali, but less so in remote Indigenous Australia. The Kowanyama case study demonstrates that industry associations and governments can be key allies for social movements promoting local sustainable use of protected areas. Industry sectors may also align themselves with conservationists and concur with sustainability objectives.

Silves

Silves is an equatorial island municipality of about 4,000 persons located at the junction of the Urubu River and the Lake Canaçari, in Amazonas. It is about 250 km from the urban centre of Manaus. Like other Amazonian River communities, its economy is based on fishing, cultivation and extractive industries, but ecotourism is also a growth industry. An estimated 50–75% of all animal protein consumed by the population is derived from fish (Salati *et al.* 1983) caught by local fishermen in local waters with rudimentary equipment. The local community has a unique

Amazonian ethnicity, known as *caboclo*, or *ribeirinho,* which is a synthesis of Amerindian, Afrobrazilian and European cultural traditions.

The rivers of Silves are poor in nutrients, highly acidic and have low resident fish populations. However, annual flooding by the nearby Amazon River carries rich, sediment-laden waters into the lake system at Silves. As the floodwaters recede, fish and other biota flushed into the lakes are trapped, creating ideal conditions for capture. In seasons of lowering waters, a few deepened channels, known locally as *furos*, permit large fishing vessels to enter the lakes from the main river.

'Development' impacts

In the 1960s the Brazilian government instituted a number of development projects to integrate the Amazon into the modern Brazilian economy. Among the government's schemes was the 10,000 km^2 Manaus Free Trade Zone (*Zona Franca de Manaus*) in the heart of the Amazon basin. In 1990 Manaus ranked as Brazil's largest manufacturing center after Sâo Paulo. The population of Manaus rose from 173,000 in 1960 to 1,500,000 in 1990 (Chernela 2000), placing increasing pressure on local fisheries. Between 1970 and 1980 the number of registered fishing vessels rose from 135 to 728 (Salati 1983) and many began regularly to fish the waters of Silves with its highly productive lakes within a day's motorised river travel from Manaus. Brazilian state and federal environmental agencies did not effectively enforce fisheries regulations, despite community pleas (Aranha 1991). By the late 1970s and early 1980s, with hundreds of commercial fishing vessels regularly entering the lakes at Silves, local families began to note declines in fishing yields. The first indicator was the scarcity of preferred fish species.

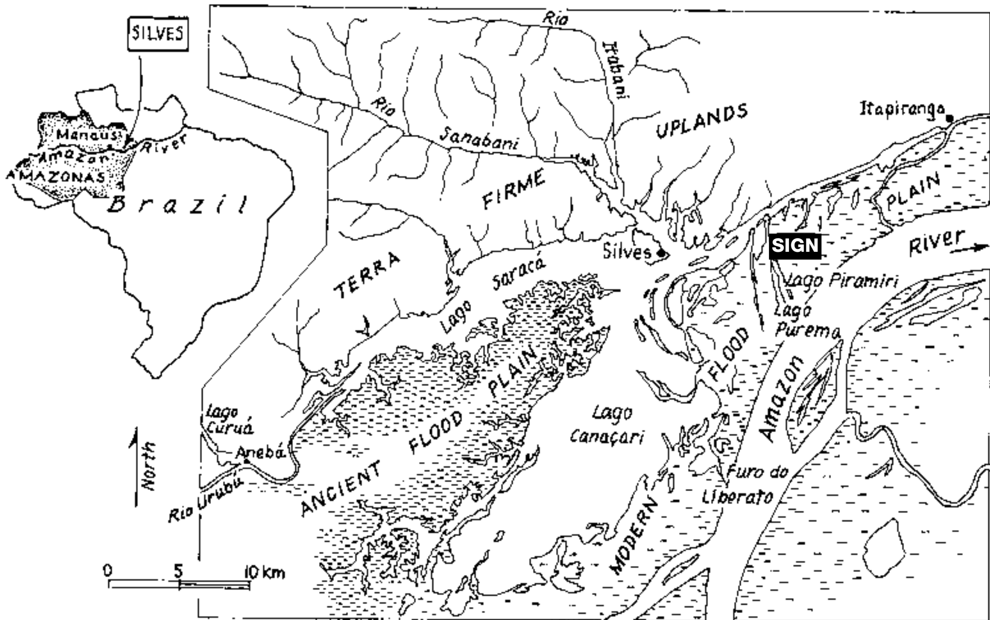
The movement in defence of the lakes of Silves

In the 1960s and 1970s a revitalisation movement within the Latin American Church established community-based organisational structures, known as *Communidades Eclesiales de Base*, or CEBs. In the Amazon, formerly isolated settlements were unified into community clusters that met regularly for worship and discussion of local concerns and needs. In addition, larger assemblies were held that would bring together a number of communities.

In 1981 one of these, the Assembly of the People of God (*Assembleia do Povo de Deus*) gathered in Silves and drafted a petition to state and federal environmental agencies reporting breaches of environmental laws and the illegal invasions of local lakes. The petitioners requested measures to enforce regulations (Aranha 1991) but little changed. The lack of government

Flooded forests at Silves. Photo: Janet Chernela.

Figure 1. This map shows the vicinity of Silves in the State of Amazonas, Brazil. Every year the Amazon deposits a layer of sediment on the modern floodplain. The location of the warning sign (see photograph below) which prohibits entry to Lago Purema by commercial fishermen, is marked on the map. Map: Robert Meade.



Sign indicating absolute prohibitions on fishing and hunting in two lakes by virtue of their status as Municipal Reserves. Photo: Janet Chernela.

response and continued illegal fishing activities led to confrontations between the fishers and local communities. Women were often responsible for mobilising local communities (Aranha 1991). Initial hostile encounters and a growing sense of urgency served to catalyse Silves' efforts to preserve fisheries. A series of local community meetings were held in January and February of 1982 in which new strategies were considered. One of those meetings, held in the village of Sâo Joao in February 1982, is now regarded as the start of the community movement in defence of the fish, rivers and lakes of Silves (*movimento comunitario em defesa do peixe, dos rios e lagos de Silves*). A groundswell of villagers declared themselves dedicated supporters of the movement. They called for immediate action.

In the absence of assistance from federal or state environmental agencies, people took matters into their own hands. Information on environmental legislation was distributed in the communities for study. Participants coordinated communications and action networks. Through a system of volunteer guards and strategies of non-violent negotiation, they would attempt to remove predatory fishermen. In addition, a long-term strategic plan for the protection of local fisheries was instituted. Two types of aquatic preserves with differing regulations were established. The first, the *Lago Sanctuario*, is a category of absolute preservation in which no fishing is permitted. These lakes would be protected as reproductive grounds for fish. This conservation status is equivalent to a Category I Protected Area (Strict Nature Reserve/Wilderness Area) according to the IUCN *Guidelines for Protected Area Management Categories* (IUCN 1994). The second, the *Lago de Conservaçao*, prohibits commercial fishing but permits local subsistence use, and its conservation status is equivalent to that of a Category V (Protected landscape/seascape) or Category VI (Managed Resource) protected area. Nine lakes were selected for absolute preservation; the rest only permitted subsistence fishing. Signs alerting transgressors of the new prohibitions were posted at entry points. The first locally-generated system of aquatic preservation in the Brazilian Amazon had been established.

These protections were based on federal legislation that had been largely neglected. By bringing to bear their own sets of meanings, closely related to perceived needs, the *caboclo* fishermen of Silves created a system of sustainable resource use in which residents had a strong creative role, high stakes, and strong commitment. By applying unenforced federal regulations locally, and by designating special areas as *sanctuarios* and others as *conservações*, the residents of Silves had operationalised the principles underlying Brazil's own neglected federal environmental legislation. The strategy was successful. Within six months the Governor of the State of Amazonas, Gilberto Mestrinho, signed a decree outlawing commercial fishing, but only in two of the lakes at Silves – Aneba and Caru. By the following high-water season, results of the coordinated efforts to protect local stocks were visible: 1982 brought an abundance of fish.

Commercial fishermen, however, were not to be stopped easily. Enforcement was rudimentary and easy to elude. Moreover, co-optation by powerful entrepreneurs was difficult to combat. *Armadores*, the owners of commercial ships, contracted crew members from Silves. They also made 'gifts' to individual fishermen and communities, such as footballs and sports outfits, establishing a dependent relationship, in which the fisherman-employee was obliged to sell fish to the *armador*. These ties were traditional and difficult to break. Some *armadores* purchased local land in order to fish as legal residents. Soon, fish scarcities were once again apparent.

In July 1983 meetings were held with the governor's representatives. Two hundred and ten villagers sent a document to Governor Mestrinho demanding a court order to prohibit commercial fishing in the municipality of Silves. In spite of numerous meetings with members of his staff as well as government representatives, no response was heard from any political official at either state or federal levels. Things were to improve when Brazil became a democracy and international NGOs became welcome.

A commercial market in Manaus, showing tambaqui *fish on sale.* Photo: Janet Chernela.

WWF and ecodevelopment

The Brazilian transition to democracy in 1985 coincided with a worldwide proliferation of NGOs and new donor support (Scurrah 1996). Various environmental NGOs were particularly interested in working for the preservation of biodiversity in Amazonas. International funding to Brazilian projects was further stimulated by UNCED in Rio de Janeiro in 1992. Since that time billions of dollars have been directed to Brazil from NGOs and multilateral lending agencies for projects of resource preservation and sound management.

Silves, with its unusual record of grassroots conservation action, was an attractive partner for one of the largest international conservation organisations, the World Wide Fund for Nature (WWF). With help from WWF Brazil, in 1993 eight communities of Silves united to form a local not-for-profit NGO, the Cultural and Environmental Protection Association of Silves (*Associação de Silves pela Preservação Ambiental e Cultural* – ASPAC). The principal objective of ASPAC is to preserve the environmental and cultural patrimony of the Silves community, whilst also supporting ecodevelopment. It also aims to generate local awareness of the importance of the lake reserves, and to establish, monitor and enforce fisheries regulations. For example, ASPAC has provided 24-hour surveillance to protect local fisheries when needed. WWF provided financial support between 1993 and 2000, some of which was used for training and employing local fisheries inspectors.

The success of this project led to new initiatives. For example, an ecotourism project was instituted in 1994 with the assistance of WWF Brazil and the Austrian and Swedish Governments. The community, under the auspices of ASPAC, built an eco-lodge, *Aldeia dos Lagos*. The conditions of economic development resulting from employment and training associated with the lodge are expected to contribute to community empowerment in the long-term (Bento Ribeiro dos Santos, President of ASPAC and Coordinator of Environmental Conservation: pers. com. 1999), and provide alternative sources of employment for local fishermen. With the help of WWF, members of ASPAC have undertaken training in ecotourism and guide interpretation. About 20% of the revenue generated by the lodge is dedicated to the protection of the important and rich biodiversity of the lakes system. Local markets are also stimulated by tourist

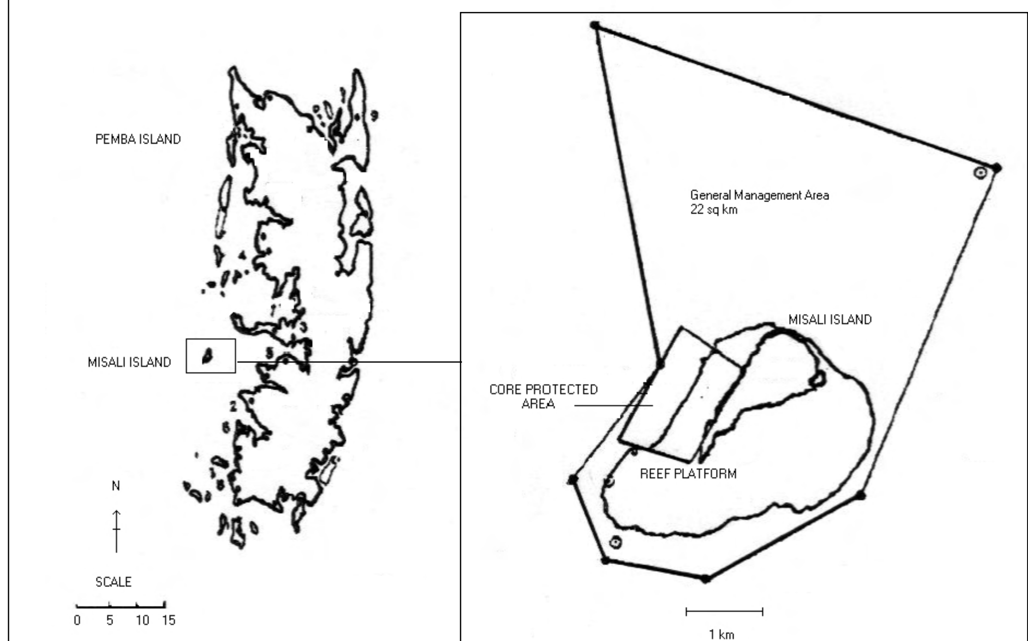
demand for food products and handicrafts etc., and public revenue is increased by the taxation of lodge income. It is expected that the salaries accruing through work in community projects will also result in improved social, health, and economic conditions for the people of Silves, with minimum impacts on the fragile, but monitored, ecosystem. ASPAC has also begun receiving funding from other organisations, including the Swiss AVINA Foundation.

Misali

Misali Island is one of the two main islands that make up Zanzibar, in the United Republic of Tanzania. It is a forested, uninhabited island located about 10 km off the west coast of Pemba. The Misali Island Marine Conservation Area was established by a Ministerial Order on 22 May 1998. It is run by a management committee, the majority of whom are fishermen, in accordance with powers granted by the Minister for Agriculture and Fisheries. The total area of the Misali Island Marine Conservation Area (MIMCA) is 22 km^2. Misali Island, which is about 2 km^2, is the core of the marine protection zone (Cooke and Hamad 1998), and its conservation status is comparable to a Category V or Category VI Protected Area, according to the IUCN guidelines.

Misali Island is surrounded by some of the finest coral reefs in the Indian Ocean. On the west side facing the deep water of the Pemba channel, the reef descends steeply with hard corals to 64 metres, where there are more than 300 species of fish and 42 genera of corals (Cooke and Hamad 1998). The island is renowned in diving circles for its rich coral slopes and gardens and exceptionally clear water. Förstle *et al.* (1997) describe the quality of its marine and intertidal habitats. Misali is one of the most important turtle nesting sites in Pemba (Cooke and Hamad 1998). Green and hawksbill sea turtles make a minimum of 20 nests annually. Previous estimates ranged up to 120 nests annually. Misali also supports a variety of sea birds and humpback whales which pass by on their migrations around the Indian Ocean. Terrestrial vegetation ranges from low bush to a high forest of mixed species. The island supports several roosts of the endangered pemba flying fox (*Pteropus voeltskowii*) totalling an estimated 50 animals. The endangered coconut crab (*Birgus latro*) is common, and there are at least 18 bird species and four species of reptiles (Ely *et al.* 1997).

Figure 2. *Map of Misali Island; detail: the Misali Island Marine Conservation Area.*



The Misali Island Conservation Area is used as a fishing ground and it provides direct livelihood to an estimated 1,640 fishermen, supporting over 11,000 people. The fishermen come from 35 coastal *shehias* or villages located in neighbouring Pemba. The fishers effectively form a community because they spend a large part of their time together, share resources such as camping sites, fuel, food and water and help one another during emergencies. Dive boats and cruise ships bring tourists. At another level, Misali has a sanctified image, and it is considered holy by some. The overwhelmingly Muslim population of Zanzibar believes that the Muslim prophet Hadhara prayed there once, using the bare earth of the island as "a substitute prayer mat" (Cooke and Hamad 1998). The name Misali is said to be an adaptation of the Arabic term *masalla* (prayer mat).

In common with other traditional communities, the fishermen are experiencing population growth, rising expectations, resource depletion, and threats from tourism. International trawlers equipped with high-technology fishing techniques have yet to make their presence felt but the situation is critical even before their arrival. As long hours in the open seas continue to yield shrinking catches, some fishermen have resorted to dynamiting the reefs to extract more fish. This inevitably causes permanent damage to the marine habitat in addition to depriving the fish of their nesting grounds. The threat of a hotel being built on Misali Island has now receded with the creation of the Conservation Area.

Customary law supplementing government legislation

Following years of experimenting with conventional and purely technical conservation methods with limited success, the Zanzibar Commission for Natural Resources (CNR), (now absorbed into the Department of Commercial Crops, Fruits and Forestry DCCFF), agreed to test the application of customary Islamic principles for the management of MIMCA. The Misali initiative has been operational since 1996 as part of the Zanzibar Protected Areas Project. It was implemented by the UK- based Environment and Development Group with initial funding from the Commission for European Communities and overseen by the DCCFF.

The Misali protected area is based on the promotion and realisation of the customary *Shariah* (Islamic law) as a means for sustainable development. Islam engenders consciousness about nature and teaches that humankind was created as God's trustees on earth, to maintain the balance inherent in His creation. It encourages respect for the beauty and order that permeate the natural domain. Creation or nature is seen by Muslims as the *ayat* (signs) of Allah which is also the name given to the verses of the Qur'an (Khalid 2001).

In 1999 CARE International, USA, invited the UK-based Islamic Foundation for Ecology and Environmental Sciences (IFEES) to support the CNR initiative. IFEES conducted a pilot workshop in November 1999 involving the fishing community, religious leaders and government officials. The resource used was a set of photographic slides with an accompanying instruction manual, *Qur'an, Creation and Conservation,* based on verses from the Qur'an. The second stage of the project commenced in January 2001 when workshops involving a deeper study of the Qur'an were conducted. Aspects of the *Shariah* related to conservation were also examined and it was proposed that the conservation area under scrutiny could be designated a *hima* (conservation or strictly protected zone) in accordance with the conservation and sustainability principles embodied in the *Shariah*. The conservation status of the proposed *hima* would be equivalent to that of an IUCN Category I protected area.

The impact of these workshops was extremely positive. The first immediate outcome was the decision taken by the NGOs concerned, supported by CNR and the office of the Mufti of Zanzibar, to base the future of MIMCA on Islamic ethical principles. It was recognised that the use of the Qur'an as a teaching resource could sensitise stakeholders to conservation issues in a matter of days compared with the poor results achieved over previous years using standard conservation techniques (Khalid 2000). Resource material for the *ulema* (scholars loosely referred

Handline fishing is permitted in the extractive-use zone of the Misali Island Marine Conservation Area.
Photo: Rainer Vierkötter.

to as prayer leaders) and teachers in *madrasas* (Qur'an schools) are now being produced to enable Islamic environmental messages to be disseminated to a wider cross section of the community. The second outcome was the acceptance by WWF International of the Misali project as a Gift of Islam, as part of its global Sacred Gifts of Nature Programme, at an international gathering in Khatmandu, Nepal, in November 2000. This was the only site on the African continent to be awarded this distinction.

In the third and final stage of the project, further aspects of the *Shariah* related to conservation will be examined and the proposal to designate MIMCA as a *hima* in accordance with Islamic conservation and sustainability principles will be developed and further assessed. The secular law of Zanzibar now recognises the conservation zone and procedures are being considered to introduce an implementation process that will incorporate Islamic best practice within existing administrative structures. This process is being monitored and will be evaluated at regular intervals with a final report expected to emerge in 2003. This project has achieved another first with the appointment of an Islamic Conservation Officer (technically known as *muhtasib* under *Shariah*) who is responsible for implementing the *hima*.

Although the Misali project has received overt government support, it is not expected that any aspect of the *Shariah* will be incorporated in legislation, because Zanzibar is part of the secular state of Tanzania. Rather, the object of the project has been to sensitise stakeholders to the principles underlying the Islamic conservation ethic and to leave them to work through this within existing administrative structures, incorporating Islamic modes of accountability wherever possible. The project relies on the individual to work within the *Shariah* as defined in this area, the motivating factor being Islam's notion of personal accountability to the Creator to whom all things belong. Ahmad (2001) has noted the possibility of greater voluntary compliance with international conservation requirements when they are expressed in terms of institutions and mechanisms that matter to local communities. Furthermore, the introduction of aspects of the *Shariah* in dealing with environmental issues is showing increasing promise as a means of engaging Muslim communities in managing protected areas (Ahmad and Bruch 2002). Associated with this are moves to expand the teaching of the Islamic approach to conservation in schools and mosques to create further awareness.

It is expected that once the project has been evaluated, the lessons learnt will be applied to other areas in Zanzibar, the East coast of Africa and other parts of the world. Currently, similar projects in various states of development are underway in Madagascar and Indonesia, the former supported by the World Wide Fund for Nature and the latter by the World Bank. Declaring a *hima* in Zanzibar will hopefully remind Muslims of the responsibilities delineated in the *Shariah* to preserve and nurture the Earth as God's creation.

Kowanyama

Kowanyama is an indigenous community of about 1,200 people located in the Mitchell River delta in northeastern Australia, 40 km from the Gulf of Carpentaria coast in Queensland. The community is nine hours by road from Cairns, the nearest major business centre. The current population is made up of descendants of the Kokoberra, Yir Yoront, Kunjen, and Olkolo language groups whose traditional homelands are located within the lower Mitchell and Alice River areas. There are also descendants of the Kokoberrin, a group with association to areas around the Nassau River to the south. Kowanyama land includes Gulf sea country of about 50 km.

The Mitchell River delta is one of the Gulf's most biologically diverse and productive areas (Wagner 1989). It is a landscape of extensive delta mangroves, wetlands and marine plains. Open eucalypt woodlands extend to the forest country of the Central Peninsula where open melaleuca woodlands are interspersed with ironwood, and messmate ridges and lancewood predominate. The Mitchell River bisects extensive coastal sand-ridge and tidal flat complexes of the southern coast of Cape York Peninsula. It represents one of the largest river systems of Northern Australia, which is sourced in the higher rainfall areas of the eastern Great Dividing Range. The area also has a rich indigenous cultural landscape where people continue a very close association with ancestral lands and waters. The country retains important local economic and cultural subsistence values.

In 1987 the locally elected Kowanyama Aboriginal Council was granted governance authority over the former Mitchell River Mission land (declared in 1903). Kowanyama Aboriginal landholdings now total about 5,490 km^2 consisting of the former Aboriginal reserve lands, restored as Deeds of Grant in Trust in 1987, and the Oriners and Sefton pastoral leases purchased by Kowanyama Aboriginal Council in the 1990s. Kowanyama lands have a conservation status equivalent to an IUCN Category VI protected area.

Between 1987 and 1997 Kowanyama was a pioneer in the rapid development of Aboriginal community natural resource management agencies in Northern Australia. In 1990 Kowanyama Aboriginal Council established the Kowanyama Aboriginal Land and Natural Resources Management Office (the Office), including an Aboriginal Ranger Service. The Office's brief was to maximise Aboriginal control over the development and management of Aboriginal lands. It was to help develop and implement policies under the joint direction of the Kowanyama people and its Aboriginal Council.

The Office developed a working relationship with state fisheries management agencies. Kowanyama's Aboriginal Fisheries Officer was granted enforcement powers under both local government and Queensland legislation and developed an interstate training programme with the New South Wales Fisheries Service. A limited helicopter surveillance programme continued to be funded with camping fees levied from recreational fishing groups. It provided data that was useful during negotiations and for the management of activities in remote areas of the delta. It also illustrated Kowanyama's commitment to the professional implementation of management strategies.

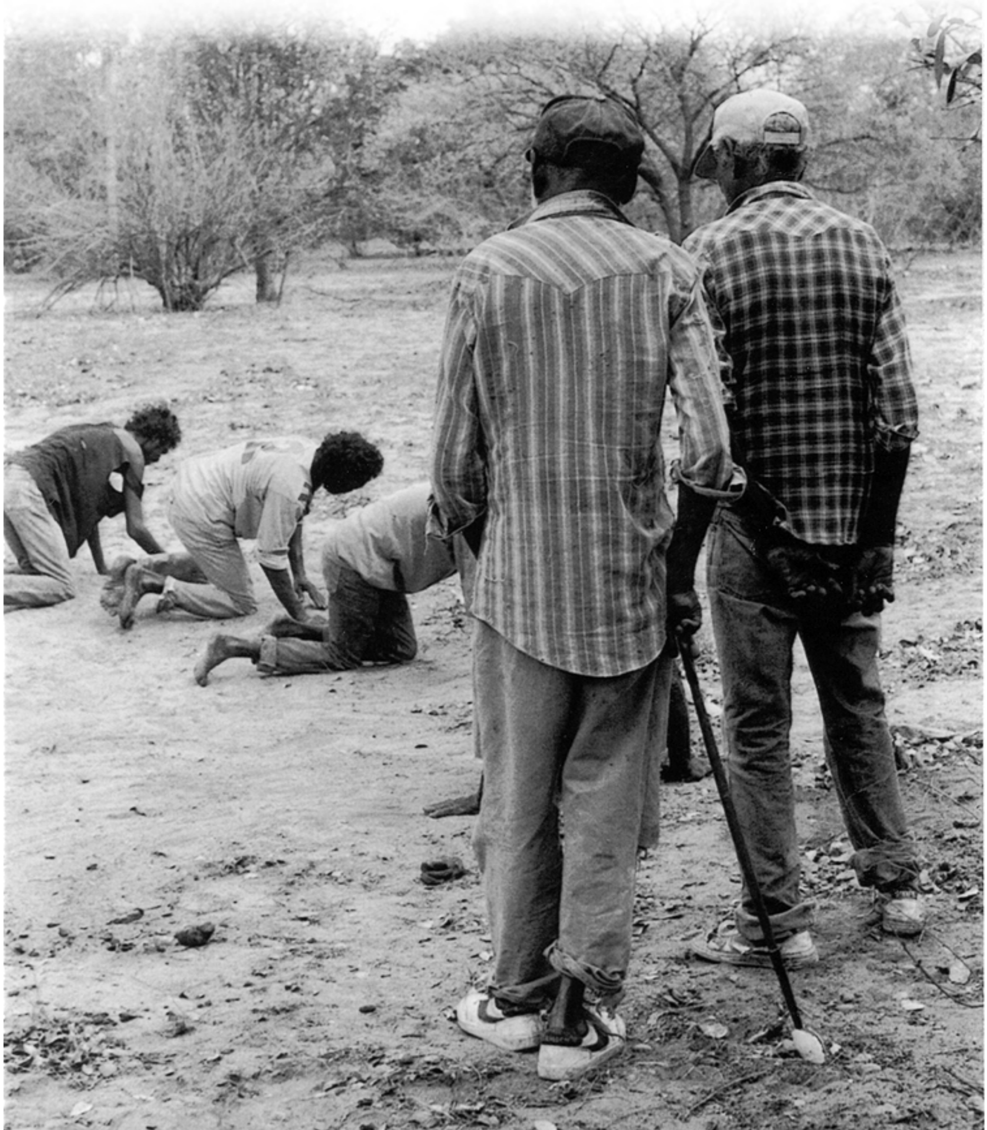
Kowanyama's management also protects customary law and reduces adverse impacts on local lifestyles and traditional activities and resources. For example, the barramundi fish increase ceremony was held at Kunworiy on three occasions during the 1990s to induct younger

men into ceremonial responsibilities. Traditional groups also assert their right to close camping areas for cultural reasons such as a death within the traditional landowner group. Sites of significance are protected through the locally developed and supported management plans (discussed below).

During its first ten years of operation, the Office became part of a strong network of other indigenous management agencies in Australia and in the coastal areas of the Pacific Northwest US. This involved speaking and training tours, and work exchanges between Kowanyama and Native American organisations. The media was used effectively to promote recognition of indigenous management and management plans.

The catalyst for Kowanyama's interest in establishing firm management controls originated just prior to the 1987 restoration of Aboriginal land title. Mining companies' applications for authorities to prospect for minerals on Kowanyama land led to an intensive campaign by the

Yir Yoront Elders look on as young men take part in the barramundi increase ceremony at Kunworriy on the banks of the Mitchell River in 1990. Photo: Viv Sinnamon.



community and its agencies to protect the cultural and environmental integrity of the Mitchell River delta. Applications were made to explore for gold within riparian areas, including a small section of an adjoining national park. Two mineral sand exploration proposals were lodged, as was an application to search for heavy minerals across almost the entire width of the delta lowlands. Another application related to offshore gold exploration. All were perceived as potential threats should exploration prove successful.

Kowanyama Aboriginal Council moved early as a land management agency to tighten controls on non-Aboriginal recreational fishing groups camping on Kowanyama Aboriginal lands. In spite of opposition from some non-Aboriginal residents, Council levied a camping fee for the use of a limited number of places within the area. It later established a limited fishing season, clearly defined campsites, and limits on the number of vehicles permitted per campsite. Local newspapers and fishing magazines were used to inform the public of the new regulations as a management plan began to develop. Camping fees were used to defray the cost of a helicopter surveillance programme that would provide information on alleged illegal activities on Aboriginal lands and adjacent coast and waterways. The objective was also to send a clear message that the area was no longer isolated and to assert Aboriginal management. An Aboriginal Ranger was appointed to implement the new permitting system. An active support network within the Gulf of Carpentaria fishing industry and conservation organisations assisted Kowanyama's campaign. Active strategic alliances were developed by key players sharing common interests in the management of natural resources albeit for different purposes. Kowanyama became known as the environmental eyes and ears for the fishing industry. Some described this as an "unholy alliance" between indigenous and commercial fishing interests.

The community's activism in land management issues lead to the hosting of a major Fisheries Conference in 1988 which brought together Queensland fisheries authorities, Aboriginal representatives from three states, and all major Aboriginal communities in North Queensland. Concerns about the state of the fishery and indigenous aspirations were discussed frankly and the meeting was widely regarded as constructive. In 1989 Kowanyama secured the closure of significant areas of the delta to commercial and recreational fishing activities using Queensland legislation. It also became committed to assisting the Queensland Government's active fisheries management programme. Between 1981 and 2000 the number of fisheries licenses in the region had been reduced from 212 to 95 (QSIA 2001). More than 100 gillnet licenses had been removed from the Gulf of Carpentaria barramundi fishery. Kowanyama Aboriginal Council assisted this programme by funding the purchase of another two barramundi gillnet licenses at a cost of $Aus64,000 from its own enterprise funds, effectively removing the fishing effort of two gillnet entitlements from the limited entry Gulf commercial fishery. This contributed to the protection of a major fishery stock for future generations.

Television and telephone, media access and increased air travel increased awareness of broader management issues for Kowanyama. People became better informed about intense gold mining activities in the upper reaches of the Mitchell River watershed. In 1990 Kowanyama hosted the Mitchell River Conference (Carr 1993) to find ways for local communities to become more involved in the management of up-river development affecting downstream interests. The conference attracted senior Queensland government land managers and resulted in the formation of the first community-initiated watershed management group in Queensland. The Mitchell River Group represents the interests of indigenous, fisheries, conservation, mining, pastoral and farming communities. Kowanyama produced a video documentary, *Running the River*, to document the conference and community concern for the health of their country (Barramundi Productions 1991). The Group was nominated for the international Theiss River Prize in 2000.

In 1993 Kowanyama established a community-based planning process, including management principles, and set the early direction for the operation of the management agency. The

community plan was reviewed and updated in 1999. Kowanyama Aboriginal Council has also moved to develop its own strategic directions and planning process. Community-based planning has been valuable in dealing with the recent development of broader regional processes of both government and regional authorities in northern Australia. Kowanyama is now investigating the potential development of an indigenous coastal management plan for the Mitchell River delta coast as part of wider management plans for the southern Gulf region. With the assistance of WWF Australia, the community is also working on the development of a GIS wetland atlas and continues to develop its management in the light of native title processes.

Kowanyama's success during the first ten years of its establishment was the result of credible representation and the community's resolve to remain unified in the face of what they perceived to be external threats to the management of its lands. The desire to remain in control of local governance and land management plans remains strong at Kowanyama.

Kowanyama's experiences with fisheries management demonstrates that positive relationships and mutual benefits are possible where there is a willingness to be creative in the nature of collaboration and the development of trusting and supportive relationships. Key individuals within commercial fisheries organisations supported Kowanyama because they regarded Kowanyama's management of the fishery to be both effective and sincere.

Kowanyama considers its provision of camping facilities to be a privilege rather than a right, as well as demonstrating indigenous governance responsibility for traditional lands and waterways. Effective regulation in the face of increasing tourist numbers bears testimony to Kowanyama's sound management. Within the first six months of each year sites are now fully booked for the June to October recreational fishing season. Those who visit Kowanyama regularly as recreational fishers support the community's management approaches because they protect the area's valuable recreational amenity. This is demonstrated by cooperative relationships. For example, recreational fishers are often the source of information on illegal or inappropriate recreational and commercial fishing activities. Commercial fishing interests also support Kowanyama's management of recreational fishing impacts because it is beneficial to them.

Barramundi fish carcasses discarded on the river bank at Topsy Creek illustrated the level of resource use and community concern in the mid-1980s. Photo: Rainer Vierkötter.

Conclusions

These cases demonstrate the important role of community involvement in conservation policy and practice. They provide a basis for drawing generalisations and comparisons that may serve as lessons in community conservation and local governance in general.

The cases are derived from three unrelated and distant contexts, but demonstrate that innovative governance can evolve from strong community support for better natural and cultural resource management at the local level, in the face of perceived threats from unsustainable or potentially high-impact extractive industries. When participation is broad, extending to decision-making, the likelihood of success is enhanced. Local knowledge of declining resources can catalyse sustainability initiatives, and lead to the better implementation of legislation or customary law, whether state-sanctioned or otherwise. When conservation and resource management is related to well-being, the long-term success and viability of area protection is enhanced. These studies lend support to the position that traditional groups with high stakes in resource sustainability will invest creativity and effort in preserving important resources. The benefits of such management are far-reaching insofar as they promote sustainable resource use and, at the same time, encourage local self-determination.

These case-studies also exemplify the global trend of community-based organisations, in partnership with other stakeholders, exercising governance responsibilities for local natural and cultural resource management. In the case of Silves and Kowanyama, potentially conflicting resource-access claims amongst stakeholders have been resolved for the time being, in favour of restricted access. This is likely in future in Misali if a *hima* is declared in the Misali Island Marine Conservation Area.

The Silves and Misali case studies also show that local institutions such as NGOs and religious organisations may encourage the assertion of locally supported customary laws and norms, including religious norms, in a way that strengthens the aims of secular legislation. In each case local peoples adopted methods and mechanisms for on-site management aimed at the long-term sustainability of critical resources. These studies demonstrate that, with high levels of stakeholder involvement and communities' support, the application of customary laws and practices can effectively supplement state legislation, or operate in a substitute fashion where state legislation is not effectively implemented, for the better management of local ecosystems. Extant legislation and customary law and norms, and diverse stakeholder networks, can be used strategically to establish and manage local protected areas.

However, promoting compliance with state legislation and norms as a priority concern requires substantial resources, whether for culturally sensitive or appropriate educational activities, or investigations and prosecutions. International donor funds can complement domestic government programme funds and local fundraising efforts, as demonstrated by the ecotourism levies applied, and income-generating activities undertaken, in Silves and Kowanyama. Each case study has also demonstrated that success breeds success, with more financial and logistical support being made available to each community as they have demonstrated their commitment to ecologically sustainable natural and cultural resource management.

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parks

The Mesoamerican Biological Corridor and local participation

VIVIENNE SOLÍS RIVERA, PATRICIA MADRIGAL CORDERO, IVANNIA AYALES CRUZ, AND MARVIN FONSECA BORRÁS

This article[1] reflects on the progress made and challenges faced by the Mesoamerican Biological Corridor (MBC) in the area of local perception and participation. Based on the experience of the MBC project in Central America and the authors' perceptions and regional experience, the article presents some lessons learned that may be of use to other regions of the world contemplating the establishment of biological corridors. Amongst the most important of these are the following: valuing local communities and traditional knowledge and ensuring the corridor provides not only for food security but for sustainable socio-economic development as well. The co-operation of local populations in the establishment of a biological corridor is dependent upon their full participation in the decision-making processes that determine their future development.

BIOLOGICAL CORRIDORS have traditionally been developed according to strictly biological criteria, giving lower priority to the socio-economic, cultural and spiritual needs of the rural and indigenous groups involved.

In concept it would appear that the Mesoamerican Biological Corridor considers social factors. However, in practice, local communities may perceive its development as a threat, associating it with the Regional Protected Area (National Park) System formed over past decades and the related restrictions on use and exploitation of natural resources.

1. This article was written as a collective effort of different associates of Cooperativa Autogestionaria de Servicios Profesionales para la Solidaridad Social, CoopeSolidar, R.L.

Figure 1. *Map of Central America.*

The Mesoamerican Biological Corridor is one of the largest, most unique conservation efforts presently underway in the world. Photo: WWF Central America.

The authors argue here that if the MBC is to be strengthened, both in conceptual and practical terms, it must take into consideration the human development aspects of conservation. The challenge for the region is to build a holistic vision and to reinforce the natural and social capital, which together provide the basis for economic growth and human well-being. In indigenous territories, people's rights and their particular territorial concept should also be respected as integral to their way of life and culture.

When we first considered the possibility of writing some reflections on the participation of the communities in the Mesoamerican Biological Corridor initiative, we never anticipated the difficulties we were to encounter. We thought it would be possible to show interesting cases related to the subject and visions from the region's eight countries. The task has not been easy, however, as we found limited human resources in the countries and little recognition of local experiences within the processes of conservation and development. Therefore, this article provides background on the MBC project, reviews cases where community participation has been attempted and highlights some issues central to community involvement in the MBC, whilst indicating a need for further research on the subject.

The Mesoamerican Biological Corridor

The Mesoamerican Biological Corridor (MBC) covers an area of 769,990 km^2 and extends from Darien in eastern Panama to Selva Maya in Mexico's South-East. It includes part of four states in the southern region of Mexico (Yucatán, Quintana Roo, Campeche and Chiapas) and the seven Central American countries (Guatemala, Belize, El Salvador, Honduras, Nicaragua, Costa Rica and Panama). The natural abundance of the region is attributed to its geographic characteristics: a land bridge between the two continental masses of North and South America, the existence of two oceans and the presence of diverse topographic features and landscapes. This area harbours 7% of all scientifically known life forms, three biomes, 20 life zones, 22 eco-regions, more than 60 vegetation forms and up to 350 different landscapes, ranging from cloud forests and lowlands to tropical dry forest (Zúñiga and Cardenal 2001).

Mesoamerica is a diverse cultural region with a population of 34 million and an annual growth rate of 2%. The majority of this population lives in rural areas with high poverty levels. The

cultural diversity of the region is evident in the more than 29 ethnic groups found in the Corridor and the identification of more than 144 areas of cultural heritage (Zúñiga y Cardenal 2001).

Technically, biological corridors are geographic extensions, continental or maritime, whose function is to connect areas in order to sustain the distribution of flora and fauna and provide natural conditions that guarantee their conservation and that of essential habitats. These habitats, according to Rojas (2000), are those ecosystems which are (1) used by the biota in at least one critical stage of its ontogeny (larvae, juvenile or adult); (2) composed of a significant combination of abiotic characteristics (e.g. hydrology, meteorology, oceanography, geology and geomorphology) and biotic characteristics (e.g. high biodiversity, productivity); (3) of great structural complexity (e.g. high number of niches subject to colonisation); and (4) areas that are used for reproduction, mating, nourishment and protection.

From a social point of view, the socio-cultural, spiritual and economic dynamics of these geographic areas must also be considered. Without a clear and conscious reference to the social, political, cultural and economic context in which the biological wealth is found, the implementation of a biological corridor would not be feasible. The only thing that can guarantee biodiversity conservation in the long-term is the just and equitable distribution of the benefits derived from the use of natural resources among those communities having direct or indirect contact with the corridor. Achieving this depends, in turn, on a clear commitment to finding ways in which decision-making can take into consideration the participation of diverse stakeholders and sectors.

The Mesoamerican Biological Corridor is based, conceptually, on the idea that human beings have the right to use biodiversity resources to achieve an adequate quality of life. This concept promises, amongst other things, to be a process that is built on principles of equity and justice, is gender focused, and is respectful of cultural diversity and environmental sustainability. Moreover, it seems that in Central America, the establishment of corridors is being promoted as a potential means of building alliances among conservation and development sectors and interests.

According to the MBC regional management team, the MBC has been conceived as a regional strategy for sustainable development, based on the conservation and sustainable use of biodiversity and natural resources. They note that:

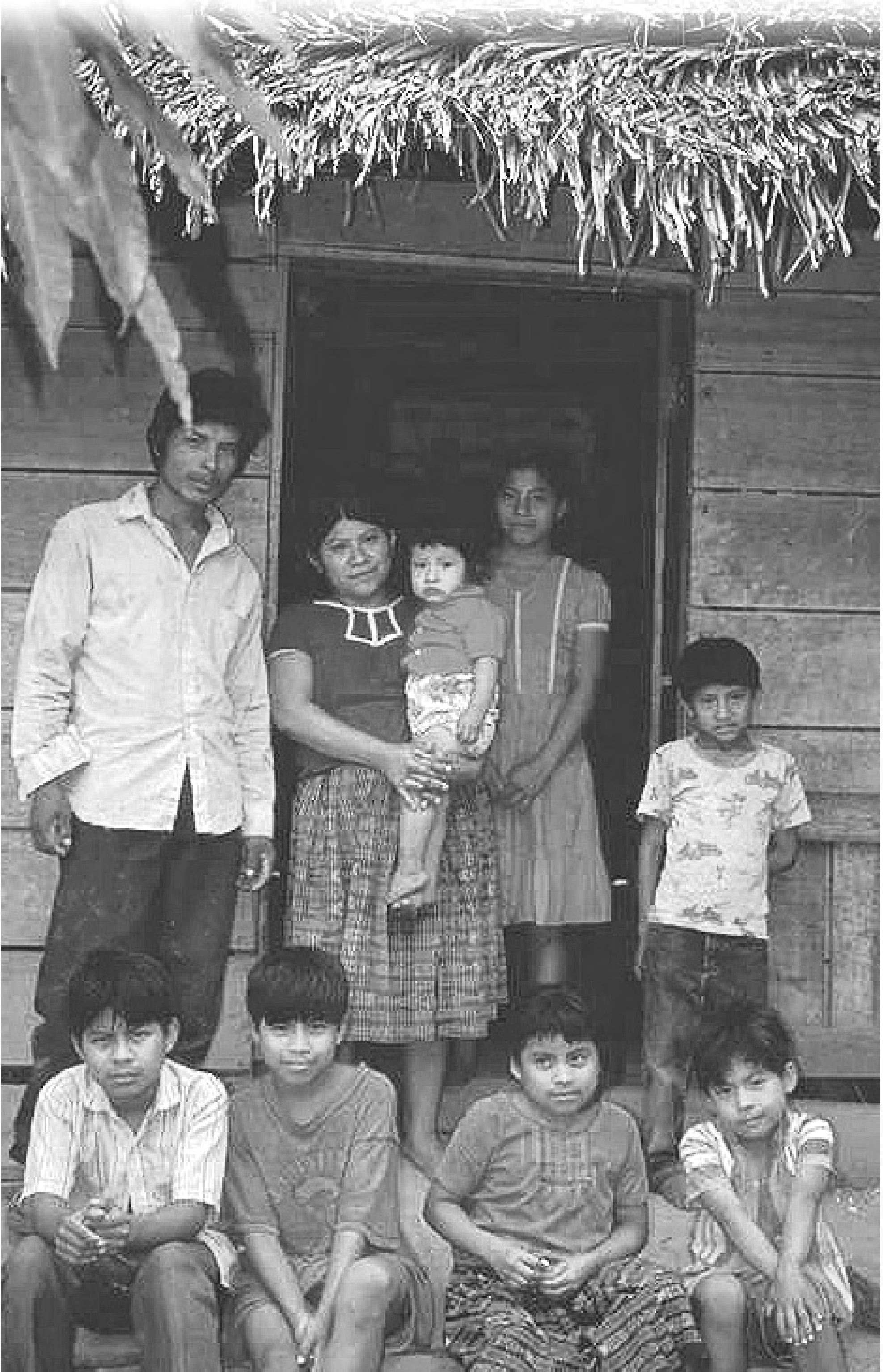
> *One of the main goals of this project is to provide technical assistance that allows the government and communities in the Mesoamerican countries jointly to establish the MBC as a system that integrates, preserves and uses the biodiversity in the framework of the priorities of the sustained economic and social development of the region. This becomes an initiative with no precedents in the area.*
>
> *The Corridor is offered as a comprehensive development model, where nature conservation is an important tool in the fight against poverty and to reduce vulnerability to natural disasters. Therefore, the Corridor initiative constitutes a model of progress in regional sustainable development for the Earth Summit in Rio+10.*
>
> Zúñiga y Cardenal 2001.

Clear and timely information

"I am concerned ... Does the government have rights over our land? I think everybody must know what to do on his or her property, how to claim rights, or when to give them away. I have had a farm for the last 15 years and now they make a biological corridor, not marked yet, and they have to go through my farm, then what? What do I do, how do I defend my rights?"

Local leader, Biological Corridor Piedras Blancas-Corcovado

Without clear reference to the social and cultural context within which biological wealth is found, the implementation of a biological corridor would not be feasible. Photo: WWF-Central America.



Box 1. The Mesoamerican Biological Corridor Action Axis

1. **Poverty relief**
   Almost 15 million Central Americans (37%) live in poverty. With the promotion of socio-economic activities that benefit the environment and offer new employment opportunities, the Corridor aims to provide a better quality of life.
2. **Disaster mitigation**
   The integrated management of natural resources in the conjunction [connection] zones is achieved by maintaining healthy ecosystems helping disaster mitigation, for example through the protection of mangroves, conservation of coastal forests, prevention of forest fires and maintenance of marine ecosystems.
3. **Environmental services**
   Efforts will be increased to value strategic environmental goods and services in the region such as water and soil erosion prevention, and to promote eco-friendly and profitable practices and experiences such as organic agriculture, certified forest management, and ecotourism.
4. **Cultural patrimony and traditional knowledge protection**
   The MBC helps to preserve the sacred practices of indigenous groups and, where possible, utilise their knowledge and insights for the better management of the area's environmental resources. With this approach, the indigenous communities living in or near the protected areas are encouraged to preserve the traditional agricultural and hunting practices inherent to their lifestyle and cultural heritage.
5. **Strengthening institutional capacities**
   The MBC aims to provide technical support for regional governmental and non-governmental institutions in order to guide decision-making and policy definition for the natural resource management, using tools such as geographic information systems (GIS) or biodiversity tracking techniques.
6. **Strengthening the Central American integration process**
   By sharing efforts and jointly planning the use of natural resources, the countries that constitute the MBC will strengthen the Central American integration process, opening better opportunities for socio-economic development.
7. **Priority areas**
   In the bi- or tri-national trans-border regions, the exchange of experiences and coordination promotes the joint management of natural resources. The work accomplished in the protected areas will thus strengthen the social fabric and contribute to peace and regional stability in the long term.

Cross-cutting themes within the action axis include:

- Gender equality and fairness;
- Fundamental human rights protection;
- Social justice;
- Environmental education.

All are essential requirements for sustainable development in Central America.

Zúñiga and Cardenal 2001

The MBC project represents a regional conservation plan that has entered the political agenda in Central America. The concept has evolved over the two decades since the MBC's inception, and currently the key actors at regional, national and local levels hold different views of the project's objectives. For example, according to the Presidents' Declaration of 1997 (which began the project), the MBC is a "territorial organising system." For the majority of the environmental organisations and the people working in the conservation of the area, the MBC is a biodiversity conservation tool. Government officials, who consider it a way to strengthen the national systems of protected areas, hold a similar view. For certain communities, it is seen as one more way to limit their access to land and natural resources.

As stated by Miller, Chang and Johnson (2001), one of the main challenges of the project is to reconcile the interests of the various groups involved.

Community involvement in the MBC initiative

It is essential to develop a rigorous work-plan with the fundamental groups: rural and indigenous people who live within the MBC. For the majority of these people, talk about "the corridor" has provoked negative reactions similar to the response to the past establishment of national parks or government protected reserves.

The MBC aims to promote awareness of sustainable development among the Mesoamerican inhabitants, so that no command-control instruments are needed to force landowners in the biological corridor area to use sustainable production models.

From the perspective of some rural and indigenous communities that live in areas within or around biological corridors, the way their land and natural resource uses will be affected is a cause of great concern and uncertainty.

"*Why is there this reaction from the communities...*" some technicians may say, "*...if the concept is clear?*" "*Biological corridors must be created...*" the scientists say, "*...if we want to protect the region's biodiversity.*"

The main problem with the MBC relates to its focus. We need to consider whether we are merely repeating past mistakes. From a technical perspective, it is easy to assume that the scientifically constructed concepts are universal and clear to everyone, and that it makes perfect sense for the inhabitants of the areas in question to link the "corridor" with enthusiasm. In reality this is evidently not the case, and in the region there are as many visions as communities and groups involved.

A first and fundamental step towards the implementation of a biological corridor should be to ask the local communities: *what do you want to preserve and how?*

Until now, conservation efforts have concentrated on the location of primary sites based on their biological importance and, in some cases, the follow-up and monitoring of certain biological indicators. According to Luis Ramos, Technical National Focal Point for the El Salvador Biological Corridor Project, in the last three years personnel from the former National Park and Wildlife Service (now the Environmental and Natural Resources Ministry) of El Salvador have monitored at least ten protected natural areas. This follow-up methodology (developed by the PROARCA CAPAS project) involves the participation of the communities linked to these areas in the evaluation process. For 2002 there are plans to monitor eight more areas. The areas where this participatory methodology will be used are: Santa Rita, Barra de Santiago, Los Andes, Complejo San Marcelino, Colima, Monte Cristo, Pañanalapa, El Imposible, San Diego-La Barra and Conchagua.

If the technicians liaised with the inhabitants concerned in order to find out which valuable resources local communities wished to conserve, they would almost certainly find an overlap between those areas which must be preserved from a biological perspective and those which are important to the socio-economic and cultural development of the communities.

In fact, the idea of the biological corridors in general has been well received by the local people, who clearly perceive the environmental importance of joining ecosystems, which, for various reasons, have been fragmented. However, in the end, the practice has been otherwise: the technician continues to underestimate the capacity of the local communities to know what resources they need for their survival and socio-cultural development.

This is not an easy task to perform, but it is the only way to ensure the active and productive participation of the users and other interest groups concerned with natural resources. For example, one area of common ground between these different interests is the need to conserve certain areas with great biological diversity for the environmental services they provide to the people.

With the support of the World Wide Fund for Nature (WWF), the MBC project has tried to implement a communication strategy (WWF 2001). The effort started with a participatory approach, using interviews in which the different sectors of society expressed their main needs

in terms of information. There were many different opinions, but *water* appeared to be a common issue of concern. With this in mind, different audiovisuals, TV commercials, radio programmes, workshops and meetings were organised in all the countries. While this effort was a good start, the challenge remains to engage the many Mesoamericans who are difficult to reach – those who are illiterate or speak distinct dialects (as is the case in Guatemala). Communication that enables people of all sectors to make good decisions and develop informed opinions concerning the MBC continues to be a priority for the initiative.

Nevertheless, at the moment it is still hard to understand fully the areas of overlap and disagreement, as a series of dichotomies may be observed: between the regional and the national, and between local environmental management by the communities themselves or by an external agency (e.g. non-governmental organisations or the State). For example, in most cases where collaborative management has been promoted within the corridor, management by non-governmental organisations has been favoured over efforts to strengthen community management structures.

The MBC has been conceived as a corridor enveloping many corridors, or as a project encompassing many projects. Until now, the local impact has been weak from a social and economic point of view, and hence the principal future challenge of the initiative will be to decide how national sustainable development strategies can be linked to the regional scope.

Some solutions have been found for these problems. The operational planning exercises performed in 2001 resulted in the decision that the implementation of the project will be defined at a national level. Thus, the mechanisms to reach the planned objectives and implement the conservation strategies will be defined by each country according to its socio-economic, cultural and political characteristics.

Cases for analysis

Overcoming the geographical boundaries myth

For many scientists, the fact that there are no communities in a defined area of a corridor leads them to believe that they can avoid socio-environmental conflicts. This is a mistake, as the relationship between the local users and the natural resources transcends the geographical boundaries of their farms or parcels. In this matter we incorrectly assume that living in the surrounding areas of a proposed corridor is not living in the corridor itself.

In keeping with this view, some technicians are intent on establishing new protected areas for the conservation of biodiversity, without considering the needs of the local communities. This appears to be the case, for example, in northern Costa Rica, where the Lapa Verde National Commission has been working for the past seven years to preserve the lapa verde, or green macaw, and its habitat, and serves as an officially recognised advisor to the Ministry of Environment and Energy.

The Commission is a multi-sector institution comprised of various groups interested in the conservation and development of Costa Rica's Northern area. These groups include governmental and non-governmental organisations from both the forest and preservation sectors, as well as local organisations.

The area where the Commission has been working coincides with the newly named "San Juan-La Selva Biological Corridor." This Corridor is managed by an Executive Committee formed by the Tropical Scientific Center (CCT), the Wildlife Conservation Society (WCS), the Tropical Studies Organisation (OET), COSEFORMA-GTZ[1] and MBC.

The project proposed by the San Juan-La Selva Biological Corridor recognises the initiative to form a new protected area for the conservation of the green macaw, originally initiated by the Lapa Verde National Commission. By forming the Executive Committee for the development of

1. COSEFORMA stands for: Cooperación en los Sectores Forestal y Maderero, and GTZ stands for Cooperación Técnica Alemana.

Guaymie indian women sewing and discussing their views concerning environmental services incentives impact for their reserves and lives. Photo: CoopeSolidar, R.L.

this project, the Lapa Verde National Commission had the limited role of a consulting entity and the local communities were relegated to a tertiary level in the project's execution structure. With this approach, it is obvious that the conservation of biodiversity will take priority over consideration of the socio-economic dynamics of the area. Under this new decision-making structure, local communities will have difficulty in participating in the efforts to establish a new protected area with an integrated approach.

The San Juan-La Selva Biological Corridor offers an insight into the issues that can surface in similar conservation projects. The Lapa Verde National Commission has been recognised as a highly participatory model, but currently the Commission's role in the conservation project is not clear. The challenge of this project will be to provide this institution with a relevant role in the decision-making processes and to make their conservation efforts into a system that also benefits the local communities living and working in the area prior to the corridor's establishment.

The land: peoples' rights

Land tenure is a serious problem that has not been resolved in Central America, where there are still cases of land invasions and non-recognition of indigenous peoples' territories. Given the impact of land tenure problems on people's lives and economic development, the issue is one of great importance to consider when discussing biological corridors. As noted earlier, many local communities are concerned that their rights to land and resources in areas linked to the MBC may be threatened. Their fears are founded on past experience in which the establishment of protected areas led to the loss of their land and/or resource uses. We would expect the MBC project to contribute to helping solve the land tenure problems facing local, especially indigenous, communities in the corridor.

Several precedents in Central America and worldwide support the idea that land (especially indigenous territories) should be managed by native communities (for example the Kuna indigenous people in Panama). At the local level, these people have fought hard for their territories, and their rights have been recognised at national and, in some cases, international levels. A good example is the recent case of the Pueblo Mayagna Awas Tigni, in Nicaragua's Atlantic coast.

On 17 September 2001, the Inter-American Human Rights Court (CIDH) ruled against the Nicaraguan government for violation of the human rights of the people of Mayagna Awas Tingni, and ordered the government to recognise and protect the legal rights of the community to their traditional land, natural resources and environment.

This is the first case of this kind to have been resolved by the CIDH. The conflict started because of the lack of boundaries in the indigenous territories, the uncertainty in the ownership of the land, and the appointment of foreign wood concessions. The Awas Tingni community fought for several years in the Nicaraguan courts to protect their land and natural resources, but did not receive timely attention by the Nicaraguan justice system. Therefore, in 1995 the Center of Juridical Resources for the Indigenous Communities filed a claim in the name of the Awas Tingni community against the Nicaraguan government at the Inter-American Human Rights Commission.

The Nicaraguan government was denounced for having granted wood concessions to foreign companies on the traditional lands of the indigenous community without consulting them. The Inter-American Human Rights Commission favourably accepted the claim but the government did not consider the recommendations on compensation measures. In June 1998, the Commission sent the case to the Inter-American Court. In its verdict, the Court established that Nicaragua had violated the international human rights law by not recognising the community's right to their property, providing suitable judicial protection or equality before the law for their protection. The Court stated that the legal protection given by the Nicaraguan government to the indigenous territories was "precarious and inefficient". In addition to ordering the Nicaraguan government to pay legal fees and a contribution for investment in the community's development (totaling US$80,000), the court ordered the government to fix the boundaries for the traditional land of the Awas Tingni community and establish new juridical mechanisms to fix boundaries in the traditional lands of all indigenous communities in Nicaragua.

This case brings up several different issues. One is that many of the remaining pristine forested areas in Mesoamerica are located in areas occupied by indigenous communities, and the MBC crosses most of them. The question now is how the MBC will recognise that the conservation of different cultures is closely linked to territorial rights. One of the main challenges facing the MBC is to respect cultural specifics and especially indigenous territories.

Reinforcing effective local participation

The Talamanca Caribe Biological Corridor (CBTC) is a regional network founded in 1992 by various local organisations from Talamanca in the southern part of Costa Rica, bordering Panama. The CBTC Association includes indigenous territory associations, community development associations and small agricultural and forest producers' associations. The Association has been a catalysing element for those community-based efforts, establishing a forum for debate that allows member organisations to voice their concerns, exchange experience, and work together to find alternatives and solutions to their natural resource challenges.

Through its work over the past decade, the Association has strengthened participatory processes in the Talamanca region, linked to the acquisition of scientific technical knowledge, the development of conservation strategies and support for the region's sustainable productive activities. These activities have, in turn, helped to consolidate the Biological Corridor in this region. For example, activities of the Talamanca Association's Biodiversity Conservation Programme include supporting local communities' efforts to secure payment for environmental services, promoting innovative approaches to environmental education in schools and supporting biodiversity protection activities. The corridor's institutional structure has helped facilitate local participation and open talks on a concrete problem: plans for oil drilling off the Caribbean coast of Costa Rica. The technicians and project directors placed no limits on people's opinions. Their position has been sincere and clear, open to participation and civil decision-making.

Another important example is Belize, where the primary biological corridors in the project have been defined as the result of a local participation process, giving us an interesting model to replicate. Over 44% of Belize is subject to some category of protected status. The responsible agencies are three Ministries (Natural Resources and the Environment; Tourism; Agriculture, Fisheries and Cooperatives). Fourteen of these protected areas are under co-management regimes between NGOs and community-based organisations (CBOs) and these Ministries. In 1996 a feasibility study of biological corridors showed the need for four strategic linkages between these protected areas within Belize and two linkages (Priority Areas) with the protected areas of three neighbouring countries, namely Mexico in the north, Guatemala on the west and south and Honduras in the east. These priority areas of trans-boundary importance are Selva Maya between Mexico, Belize and Guatemala, and Gulf of Honduras between Belize, Guatemala and Honduras.

The consultation process with stakeholders of the proposed strategic corridors was initiated in 1996 when the feasibility study for the national biological corridor system was done. This process has been continued at the individual corridor level, including the design of micro-corridors such as riverine corridors in northern Belize. Examples are described briefly in Box 2.

The challenge

In Mesoamerica, the indicators of biological, social and economic fragmentation are clear, and illustrate the high vulnerability of the area. The priority for the region, more than the consolidation of a biological corridor, is to develop structures that in a suitable and integral way link biological, social, cultural and economic matters. The development of a corridor (or the development of many corridors) should be considered one option, particularly if social and natural capital can be linked by this initiative.

In Table 1 we compare some examples of how biological fragmentation, the most common index, corresponds with social and economic fragmentation indices.

The challenge for the region revolves around fortifying the natural capital[2] and the social capital[3], which together provide the basis for economic growth and human well-being. At the same time, it is urgent to link efforts at all levels – regional, national and local – in the development of integrated indices of social, economic and environmental progress.

2. The natural capital is comprised of plants, animals, microorganisms, genes and ecosystems, and provides services such as water and climate regime regulation, soil formation and treatment, nutrient cycling, biologic control and waste management, among others (Pretty 1998).

3. The social and economic capital refers to all the needed human potentialities for the socio-productive development, an improvement of the quality of life, and the social capacities that allow a lowering of the costs by easing the cooperative relations, credibility, trust and collectivity (Pretty 1998).

Table 1. *How biological fragmentation compares with economic and social fragmentation indices.*

Biological fragmentation	Social fragmentation	Economic fragmentation
Species and ecosystem extinction	Food insecurity	Vulnerability of local economies
Micro-climate alterations	Loss of life forms and practices	Decreased production alternatives
Alteration of vital cycles (land, water, air)	Loss of identity	Homogenisation of local economy
Species break-in	Trust in local capacity lost	Relationship with other economies lost
Landscape-rupture and vulnerability	Geographic and cultural uprooting	Resources valued from a strictly economic point of view

If we are to move from the sustainable development "talk" to actual practice, we must design and implement conservation mechanisms that are fair and accurate, democratic and participatory, and legitimate and representative. It is urgent to integrate community and conservation objectives.

Looking at the experience of the Mesoamerican Biological Corridor, it is clear that the human development factor must be included in the Corridor's conservation practices. It is essential to consider that path toward Central American integration that will create opportunities to fight poverty and injustice jointly. At the same time biological and social elements must be equitably considered in developing all activities. This holistic vision is the only alternative to reinforce the region's development together with environmental conservation.

The development model backed by the economic sectors in the countries of Central America is currently oriented towards foreign investment and privatisation of services. For the indigenous

Box 2. Some examples of community participation in biological corridors in Belize:

1. **Northern Belize Biological Corridor**
   Comprised of 13 communities, this corridor is being managed by Programme for Belize, an NGO. All of these communities have developed projects that are eco-friendly and that will contribute to corridor consolidation, these activities include agroforestry, cultural centres, reforestation, and ecotourism. Women and youth are also participating. In order to continue this work for the long term, this group of 13 villages is organising themselves into a proposed Association of Northern Conservation Organisation (ASONCO).
2. **Rio Hondo Biological Corridor**
   Comprised of seven villages along the Belizean side of the border. This corridor is highly important for transboundary connectivity into the Selva Maya portion in Mexico. This initiative was only begun in late 2001 and there have been only two formative meetings.
3. **Northwestern Biological Corridor**
   Though this is a natural corridor linking Belize and Mexico, there has not been any initiative by anyone to support its consolidation.
4. **New River Biological Corridor**
   Comprised of 10 villages along the New River, this corridor is highly important for watershed protection in the northern portion of Belize. This initiative was only begun in late 2001 and there have been only two formative meetings.
5. **Central Biological Corridor**
   Promoted by the Sibun Watershed Association (SWA), a community-based organisation, this corridor impacts 11 villages along the Sibun River in central Belize. This corridor is important for the connectivity between the Northern Belize Biological Corridor with the rest of the country. Community activities include water fairs, environmental education, mapping exercises, ecotourism and handcrafts.
6. **Golden Stream Corridor Preserve**
   This corridor is being promoted by the Yax-Che Conservation Trust, an NGO, and is comprised of two villages. The villagers are mostly involved in protection and work as wardens. The corridor has a high importance for watershed protection along the Golden Stream River.
7. **Southern Biological Corridor**
   This corridor is being promoted by various CBOs in the southern portion of Belize. It links the Temash-Sarstoon National Park with the Guatemalan Sarstoon protected area and thus has trans-boundary connectivity importance. Approximately 19 indigenous villages are participating in various activities such as ecotourism, handicrafts, agroforestry, organic cacao, reforestation and watershed management.

communities, projects with this development model are a threat to their traditional culture and way of life. This development model is based on concessions to transnational companies for the exploitation of mineral resources, hydrocarbons, forests, and, most recently, genetic and biochemical resources, which are a threat to the rights and territorial status of indigenous communities. Obviously, it is hard to find a compromise when local, national and transnational interests stand in constant conflict. This is a critical issue that has not been considered in depth until now by the Mesoamerican Biological Corridor.

In a positive way, the MBC project is making an important effort to develop some indicators which can measure the degree of progress of these plans from biological, social and economic perspectives. These indicators are still in the early stages of development but they are part of the regional debate on how to include other criteria that will enhance the proposal and the working process of the conservation effort with different participants. Based on this experience, some ideas are identified which might contribute to the debate and be of value in measuring the conservation and development outcomes of the initiative in the long term.

Conclusion

The Mesoamerican Biological Corridor has the unavoidable task of urgently developing actions oriented towards sustainable socio-economic development, food security, and valuing local and traditional knowledge. The MBC must create more opportunities for people's participation in decision-making processes that affect their own development. It must reduce social fragmentation through the establishment of agreements among the interested groups and sectors, and identify innovative ways in which the State and society can resolve the innumerable conflicts related to natural resource use.

Based on our analysis of community participation in the Mesoamerican Biological Corridor project , we offer the following reflections that may also be of value to the discussion of biological corridors in the global context.

1. In the case of Mesoamerica, it is clear from the biological perspective that the areas to be included in the biological corridor are already too isolated from the ecological point of view – there is not even a biological link between some areas. In this situation, the issue of community involvement becomes a top priority. Before placing the corridor in the map, it is very important accurately to forecast potential social and economic impacts and to ensure that these projections are clearly expressed in the operative strategies.
2. It is also necessary to reconsider the connections between the international focus, the regional integration efforts and the national proposals, and ensure the net result is a clear and practical answer to the local needs.
3. Every country has different participatory decisions, making it very difficult to create a standardised model. These national dynamics must be respected without losing the regional objectives that guarantee both the conservation of natural resources and the fair and just distribution of the benefits from their use, which necessarily will include the promotion of bottom-up decision-making mechanisms.
4. The role of the State and citizens in conservation must be extended, and the accompanying rights and responsibilities clearly defined.
5. There is a need to join the conceptual and practical aspects of biological corridors from a holistic point of view and to include human development in the framework of an interdisciplinary vision.
6. It is essential to recognise the limited human and economic resources of such projects and the need for constant adjustments in goals and planning, without losing sight of long-term processes and objectives.
7. It is important to study unique initiatives where a positive link between communities and management of protected areas has occurred, analysing the lessons learned through these

processes and systematising them at the different national, regional and international levels to make them stronger.

We believe that a willingness to reflect has long existed and that now it is essential to put the ideas into practice. There is a clear need for the MBC to take action along three strategic lines:

- Conservation of biodiversity, promoting actions towards diminishing species and erosion of genetic diversity in the region.
- Recognition of the ethnic and cultural diversity of Mesoamerica, and inclusion of a gender perspective, so that the conservation of biological and cultural diversity can be linked, conceptually and in practice.
- Development of a participatory and de-centralised model of environmental management which allows the political impact and specifies the positions and capacities of the different participants involved with the environmental management.

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parks

Local community leadership: building partnerships for conservation in North America

NORA MITCHELL, BARBARA SLAIBY AND MARK BENEDICT

In recent decades, conservation in the United States and Canada has shifted from an approach emphasising government-managed park systems to a broader, more inclusive, community-based paradigm. Local communities (including indigenous communities), private non-profit organisations, and state and national governments have recognised that although national parks and other officially designated protected areas are important contributors, they alone cannot achieve effective natural and cultural heritage conservation. In response, the conservation approach in both countries in the last 30 years has undergone substantial shifts in both the conceptual framework and practice. A diverse collection of case studies illustrates many innovations in conservation practice and a promising new direction in this area. Although this collection of stories is diverse, the overall unifying theme is the role of communities in conserving protected areas and the ways that leadership and vision can be effectively shared across boundaries and sectors. This emerging community-based management model relies on local leadership and holds great promise as a foundation for sustainable land management. A convergence of this approach with models of conservation in many other countries creates tremendous opportunity for learning through international exchange.

RECENT SHIFTS in the conceptual framework and conservation practice in the United States and Canada are explored in this article. In both countries, national park systems – including natural areas, historical sites and culturally significant places – began to be created in the late nineteenth century, and for many years this government-based approach dominated the conservation agenda. These park systems began with a strategy of federal ownership and management of nationally important places in remote western areas. However, recent innovations have extended this federal ownership model to create diverse protected areas systems in both countries. Conservation strategies for protected areas have also become more inclusive, encompassing and addressing the interests of local communities and Aboriginal peoples.

Presentation of several case studies indicates the emergence of a more inclusive, community-based paradigm. Although this collection of stories is diverse, the overall unifying theme is the role of communities in the conservation of protected areas and the ways that leadership and vision can be effectively shared across boundaries and across sectors. This experience over the last 30 years has demonstrated the vital role of local communities in successful conservation strategies in both countries.

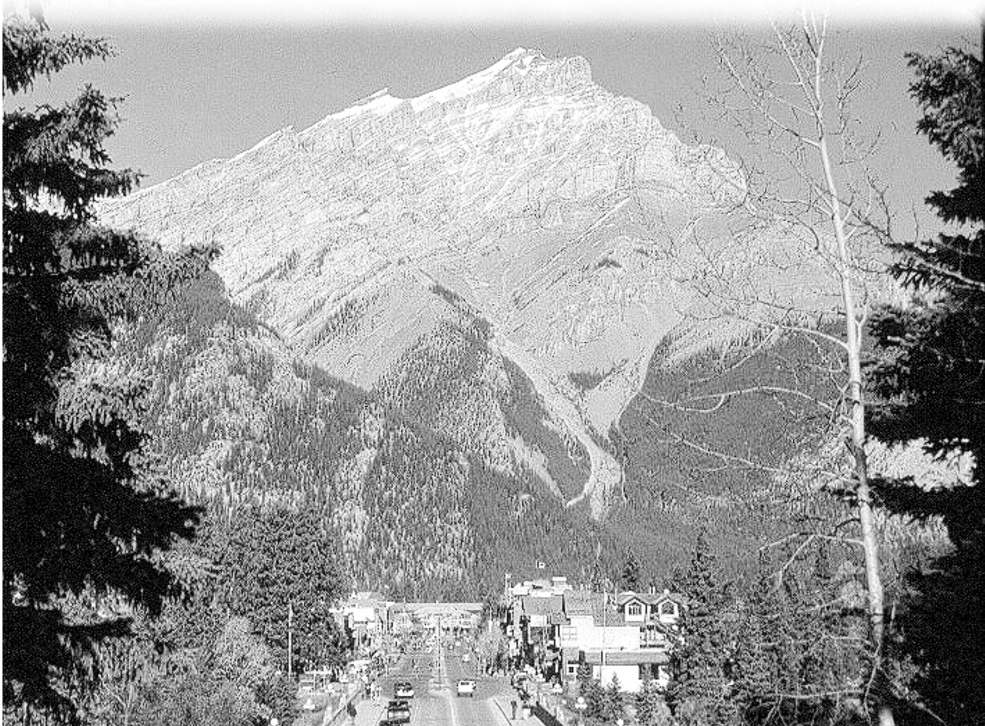
Brief historical background on two national park systems

The history of government-led conservation of officially protected areas in both the United States and Canada began with designation and management of federal parks, so today the two countries share a legacy of national park systems with nineteenth-century origins. With the creation of Yellowstone National Park in 1872, the US Congress introduced what would become an internationally recognised model for land and resource protection (Runte 1979; Rettie 1995). The first Canadian national park was created by the Rocky Mountain Park Act of 1887 that enlarged a hot springs reserve to create Rocky Mountains Park, and later (in 1930) Banff National Park, borrowing some of the language from the Yellowstone legislation (McNamee 1994; MacEachern 2001). At the time, the national park model was an innovation that relied upon the role of the federal government as land manager and served an important conservation purpose in the era of western expansion. Implicit in this model were the nineteenth-century

ideas of "pleasuring grounds," scenery, and tourism (Runte 1979; Sellars 1997; MacEachern 2001). Establishment of parks in both countries was actively supported by the railroads. The model was used successfully in both countries to protect large, scenic, western landscapes of grandeur that soon became icons for each nation. Subsequently, areas in the east and historically and culturally important sites in each country were added to the park systems as well as designations of state, provincial, and local parks (Runte 1979; MacEachern 2001). Today, the national park legacy provides critical areas for natural and cultural heritage conservation – but federal ownership and management no longer defines either nation's conservation approach.

With the closing of the twentieth century and the beginning of the twenty-first, there is widespread recognition that although national parks (and other publicly owned reserves) are important contributors, on their own they are not sufficient for heritage conservation. Beginning in the 1960s and 1970s, additional conceptual, legal, and philosophical frameworks for protected areas emerged based on innovations in conservation that extended and built upon the traditional national park model (Sonoran Institute 1997; Beresford and Phillips 2000; *The Landscape of Conservation Stewardship* 2000; Machlis and Field 2000; Tuxill and Mitchell 2001). In particular, the important role of communities in protected area management began to emerge. Both countries now have a more complex system of protected areas, some publicly owned by different levels of government, many owned or managed in partnership with others, and others owned and managed by non-governmental organisations and some by local communities. The role of local communities, including Aboriginal tribal communities, in many protected areas is important both to successful conservation, but also to the sustainable future of the communities.

Banff Avenue, Banff National Park. Townsites such as this are an integral part of western Canada's largest national parks. The move from Parks Canada control to community-based management of the Banff townsite illustrates the devolution of federal powers in protected areas. Photo: Susan Buggey.



Shifts in the conceptual framework for conservation practice

Reflecting on conservation practice over the last two decades, significant shifts in the conceptual framework become apparent. The following list summarises several of the emerging principles but it is not meant to be comprehensive.

1. **A community-based approach.** With the emergence of community-based conservation, the trend is moving away from top-down management strategies towards decentralised, localised, place-based approaches. There is more capacity at the local and regional levels and significant devolution of federal government roles. In the US, there has been a tremendous growth in land trusts, now numbering more than 1,200, and the activity of the non-government sector in conservation is substantial.
2. **Partnerships and collaboration**. In the United States and Canada, there is an increasing realisation that, in order to manage existing protected areas effectively and to create new ones, there needs to be an emphasis on working collaboratively with local communities through partnerships. These partnerships can include federal government agencies; state, provincial, or local government agencies; non-profit organisations; local governments and community organisations; and, in some cases, businesses. Effective conservation often works across sectors, on sustainable communities and sustainable economies, and is connected with democracy and civic life (Tuxill and Mitchell 2001).
3. **Bioregional strategies**. Conservation strategies are becoming increasingly bioregional. The field of conservation biology has demonstrated the pressing need to work on an ecosystem scale across large landscapes to conserve biological diversity. There is a growing recognition that protected areas can no longer be treated as islands but must be seen in the context of overall land use (Mitchell and Brown 1998). Conservation work consequently encompasses larger scales and whole systems, such as watersheds. There is a growing emphasis on cross-boundary collaboration and interdisciplinary perspectives.
4. **Inclusive values and broadened sense of relationship between humans and the environment**. More inclusive values and ethical frameworks are being incorporated into conservation. There is increased recognition of a plurality of cultural relationships between human communities and the natural world, respecting the value of cultural and natural heritage and traditional local land use practices. There is recognition of the link between nature and culture, and an understanding that landscapes are shaped by human culture as well as the forces of nature, and that rich biological diversity often coincides with cultural diversity (Brown and Mitchell 2000). Concurrently, the definition of cultural heritage—with a traditional focus on monumental architecture—has broadened to include landscapes, places of cultural value that may be large – hundreds or even thousands of hectares.
5. **Concept of stewardship**. The concept of stewardship, with its focus on community-based management and local leadership in heritage management, holds great promise as a foundation for sustainable land management (Mitchell and Brown 1998, Mitchell and Diamant 2001). "Stewardship means, simply, people taking care of places. In its broadest sense, it refers to the essential role of individuals and communities in the careful management of their natural and cultural wealth for now and for future generations" (Brown and Mitchell 2000).

These emerging trends in conservation and protected areas management are creating new opportunities to engage local people in the stewardship of the natural and cultural heritage of landscapes, as illustrated in the following case studies.

Examples of innovation

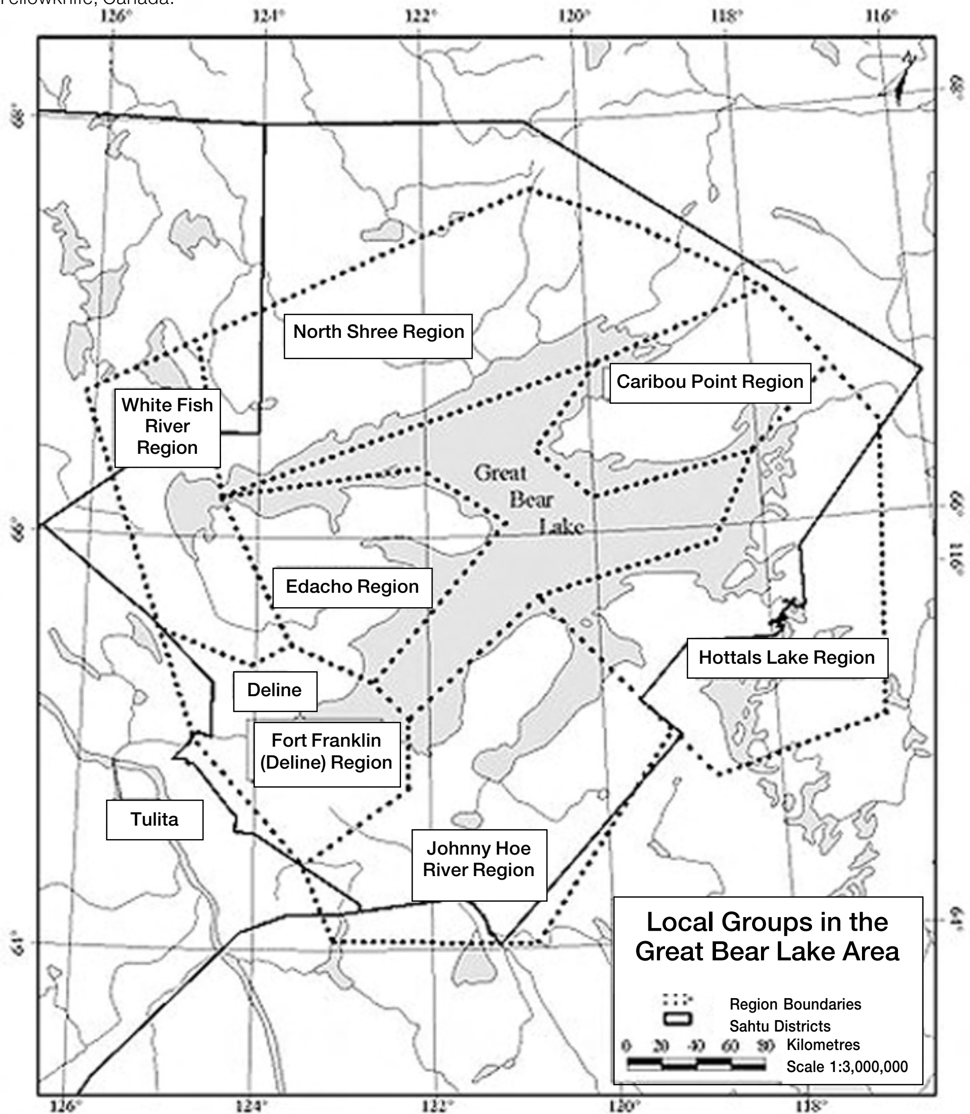
This diverse collection of case studies illustrates many dimensions of conservation practice such as: the evolving relationship between indigenous communities and national parks and between

communities and adjacent federal lands, the changing roles of park agencies, community-led conservation, and grassroots efforts to achieve national designation for heritage areas. In some cases, the initiative for collaboration comes from the communities, in others from the land management agency. Collectively, these examples represent a promising new direction in conservation. Although this collection of stories is diverse, the overall unifying theme is the role of communities in conservation of protected areas and the ways that leadership and vision can be effectively shared across boundaries and across sectors.

Collaborative management with indigenous peoples

Over the past two decades Parks Canada and aboriginal peoples have gradually built a constructive relationship for the establishment and management of some nationally significant protected areas. These partnerships have been developed using a variety of instruments

Figure 1. *Local groups in the Great Bear Lakes Area, Canada.* Map: Prince of Wales Northern Heritage Center, Yellowknife, Canada.



including constitutionally protected comprehensive land claim agreements, national park establishment agreements and national cost-sharing arrangements for national historic sites. In addition, eleven national parks currently have cooperative management boards to advise the Minister of Canadian Heritage on the operation and management of these protected areas (Parks Canada web sites, February 2002)

In September 1997, the Sahtu Dene people entered into an agreement with the Government of Canada to work collaboratively in determining the most appropriate means of expressing the significance of **Grizzly Bear Mountain and Scented Grass Hills National Historic Site,** known to the Sahtu Dene people as **Sahyoue/Edacho**. This cultural landscape in the Northwest Territories is intimately associated with the origin, spiritual values, lifestyles and land uses of the Sahtu Dene. The two peninsulas, rising gradually from the western shores of Great Bear Lake and covered with open boreal forest, include woodland caribou winter habitat, a fish migration route and furbearers. Traditional lifestyle activities and land use of the mountains have continued, sustaining biodiversity and high integrity of the landscape. Age-old narratives and names associated with specific places, passed by elders to youth from generation to generation, provide verbal maps by which people know the land. The narratives play important roles in sustaining Sahtu Dene culture by transmitting language, prescribing behaviour, and identifying sacred sites through the association of place and story. "The land is alive with stories which blend the natural and supernatural worlds, defining [the Sahtu Dene] in relationship to the earth" (quoted in Buggey 1999).

Under the Sahtu Dene and Metis Comprehensive Land Claim Agreement (1993), the Deline Land Corporation for the Sahtu Dene owns approximately 20% of the land and the federal government owns approximately 80 percent as crown land. Many of the sacred places cannot be visited or may only be visited with a guide who knows the area well. The 1996 designation as a National Historic Site of Canada carries no legal protection. In February 2001, the site was granted an interim land withdrawal, which applies to surface and subsurface rights, for five years under a Federal Order in Council. The purpose of the withdrawal was to provide protection from development while stakeholders carry out the necessary assessments of values and identify options for and put in place long-term protection for the cultural and ecological integrity of the site. This land withdrawal was sought by the Deline Dene Band Council and the community of Deline, and was supported by such organisations as the Canadian Parks and Wilderness Society (CPAWS), the World Wildlife Federation (WWF), and the Canadian Nature Federation. These lands are the first set aside under the Northwest Territories Protected Areas Strategy (1999) (http://cpaws.org/news/sahyoue-edacho-2001-0323.html). Parks Canada is working with the community to develop a Commemorative Integrity Statement (commemorative intent and values, with objectives to protect them) and to complete a Conservation and Presentation Plan. One proposed option is co-management of the lands "according to natural law, Dene law, the laws of Canada, and the Sahtu Land Claims Agreement."

The US National Park Service also recognises associative cultural landscapes (sometimes called ethnographic landscapes) that are "traditionally associated with a contemporary ethnic group, typically used for such activities as subsistence hunting and gathering, religious or sacred ceremonies, and traditional meetings" (US Department of the Interior, National Park Service 1998 and 1994). These landscapes are important for maintaining the cultural identity of the community. A recent innovative example of collaborative management resulted in the US federal government transferring land and neighbouring areas to the **'Timbisha Shoshone Tribe** to provide access to their aboriginal homeland.

Since time immemorial, ancestors of the 'Timbisha Shoshone have lived on lands in California and Nevada. Today, the Tribe's ancestral homeland includes an area that is now within Death Valley National Park, managed by the US National Park Service (NPS) and other lands in California and Nevada that are administered by the Bureau of Land Management

(BLM). Since 1936, the Tribe has lived and governed the affairs of the Tribe on approximately 40 acres of land near Furnace Creek within the park. At the time when the Tribe achieved federal recognition in 1983, they did not have access to land within the Tribe's ancestral homeland to accommodate the growing membership of the Tribe and the needs for housing, government and administrative facilities, cultural facilities, and sustainable economic development. In 2000, realising that the interests of both the Tribe and the federal government would be enhanced by formally recognising their coexistence on the same land and clarifying the rights of the Tribe, the US Congress passed the 'Timbisha Shoshone Homeland Act. This legislation transferred 314 acres of land in Death Valley National Park, plus other areas outside the park, to the 'Timbisha Shoshone Tribe. The legislation also established special use areas on federal land where the tribe could engage in "low impact, ecologically sustainable, traditional practices pursuant to a management plan agreed to by the Tribe, the NPS and the BLM." The legislation also provided a partnership between the Tribe and NPS for interpretation of the Tribe's history and culture for visitors to the park ('Timbisha Shoshone Tribe information on NPS website)

Cooperation between local communities and public land managers

In the past decade, the approach to conservation management by Parks Canada has become defined by using values as a decision-making tool for preservation and planning. In the exploration of values, attention has been drawn to the importance of the associative values of place to those living in the landscapes – from indigenous peoples to urbanites. The focus is on the living qualities of cultural landscapes, their connection with living communities, and the meanings of places to the people who live there rather than the perceptions of external experts and professionals (Buggey 2001). As a result, Parks Canada is establishing collaborative management agreements with local entities for some national historic sites. The **Rideau Canal National Historic Site** is an example of collaborative management in which Parks Canada is learning to work with 26 communities along the course of the canal.

While the Rideau canal itself is owned and operated by Parks Canada, the majority of the upland and shoreline is privately owned. Stakeholder groups are very active in the canal corridor, especially in the protection of lake environments and communities. Photo: Susan Buggey.

The Rideau Canal National Historic Site, a designated heritage river, is 202 km in length, connecting Canada's capital, Ottawa, to Kingston on Lake Ontario. The waterway joins the Rideau and Cataraqui waterways through 47 locks, numerous dams and 18 km of artificial channels. Built between 1826 and 1832 as part of the British strategy for the defence of Canada, the canal is the most intact in North America, with many of the original military buildings and structures preserved. Parks Canada is primarily responsible for the preservation and use of the waterway and the associated technology for boat use. However, it was clear to the park managers and local community leaders that the cultural landscape surrounding the canal system was integral to its significance and its integrity, and that it was vulnerable to growing development pressures (Stevens 2001).

In the mid-1990s, a project was initiated by Parks Canada in concert with local communities to better understand and document the importance of the cultural landscape to the canal's significance. The project team met with local communities residing along the length of the canal to begin the collaborative process for identifying and protecting important resources of the landscape (Stovel *et al.* 1998). Subsequently, an Advisory Committee for the Rideau Canal was formed with representatives from communities along the canal. This committee works with Parks Canada on a variety of current issues, including revising the Management Plan for the canal (Oliver 2000). This plan focuses on the management of the canal but also emphasises the importance of interface and interaction with the communities and organisations along the canal corridor.

Managers and local communities

In the United States, a good deal of work has focused on issues facing "**gateway communities**" – the towns and cities that border public lands such as national parks, national forests, fish and wildlife refuges, Bureau of Land Management properties, or other public lands. Increasingly, these communities face development pressures from tourism and population shifts to rural areas with a high quality of life. This "wave of migration" to gateway communities has implications for public and private lands, their natural systems, and historically significant cultural resources. These local communities are struggling to "retain a high quality of life in the face of mounting pressures for growth, homogeneity, and change." They are trying to shape "well designed and publicly supported strategies to preserve their character and surroundings" so that they can retain "the very assets responsible for their economic vitality and future potential" (Howe *et al*. 1997). Even though the futures of local communities and public lands are inextricably linked, "[h]istorically, the residents of gateway communities and managers of neighboring national parks, wildlife refuges, or other public lands have tended to view each other as adversaries rather than allies" (Howe *et al*. 1997).

Beginning in spring 1999, two private, non-profit organisations – The Conservation Fund and the Sonoran Institute – have worked collaboratively with the National Park Service and its Conservation Study Institute along with the US Fish and Wildlife Service to create opportunities to build relationships between communities and public lands. Participants attend a national three and a half days-long programme in teams composed of representatives from local municipalities, federal land management agencies, local non-profit organisations, and interested individuals. Teams work together to craft strategies that can be implemented in their region, learning from both expert instructors and teams from other parts of the country facing similar problems. The sponsoring partners are now developing regional workshops that are tailored to the specific issues of an area and provide for more participation from key stakeholders. Often requests for regional workshops originate with the team that attended the national programme.

In a growing number of places, gateway communities and public land managers are working in partnership to create mutually beneficial solutions to formerly intractable problems (Howe

et al. 1997; Sonoran Institute 1997; Machlis and Field 2000). Many gateway communities have identified traffic congestion as a significant problem, and one that has been successfully addressed by communities adjacent to national parks at opposite ends of the US – **Acadia National Park in Maine** and **Zion National Park in Utah** (Turnbull 2000). In Maine, the local communities, local businesses, regional organisations, the Maine Department of Transportation and the National Park Service have adopted a coordinated approach for an area-wide transportation system that includes a new bus system. Since the summer of 1999, eight propane-fuelled buses became part of the Island Explorer transit system, operating on six routes that linked hotels and other businesses with destinations within the park. In 2000, the popularity of the system allowed for the addition of nine more buses and a seventh route. The Island Explorer operates during the height of the season from late June to early September. Similarly, at Zion Canyon in the southeast corner of Zion National Park, a free shuttle bus service now provides the only mode of transportation for most peak season canyon visitors, alleviating the traffic congestion that had been a serious problem for residents and for businesses in the local community. Prior to this partnership and the resulting transportation system, the traffic congestion was a serious problem for local residents and for businesses in the local community.

Locally-led conservation supported by the US National Park Service

In the late 1980s, in response to a number of community initiatives, the US National Park Service developed a new model for working collaboratively with local partners on conservation projects. Responding to requests from community groups and local and state governments, the Rivers, Trails, and Conservation Assistance Program (RTCA) provides expertise to a variety of locally led conservation projects. Communities, with assistance from RTCA, conserve rivers, preserve open space, and develop trails and greenways to link parks, schoolyards, open spaces and recreational areas. Communities have successfully raised funds, created local coalitions to develop strategic plans, brought stakeholders together, and engaged the public's imagination.

Conservation efforts address a broad diversity of community goals: cleaning up local waterways, restoring significant cultural and historic assets, turning abandoned railways into trails that link neighbourhoods and communities, and preserving open space. For example, the Washington Water Trails Association in Seattle asked RTCA for assistance in building a broad-based constituency for the Lakes-To-Locks Water Trail that includes over 100 miles of shoreline and 100 launch and landing sites. In New York the Friends of the Canalway Trail worked with RTCA to support access on 524 miles of towpath trails on the Erie Canal system and launched an Inn-to-Inn Canalway bicycling system.

Currently, the non-profit **Northern Forest Canoe Trail** is working with the RTCA in the northeast to create a 740-mile water trail that will link the watersheds of northern New England, Maine, New Hampshire and Vermont and the Adirondacks of New York. The objective is a trail managed and maintained by local stewardship organisations that will retrace the historic travel routes used by Native Americans and early settlers. The trail will serve neighbouring communities and travellers by improving river access, encouraging canoe and kayak travel and recreation, and enabling travellers to experience the full range of landscapes in the region, from working cities and towns to farms and forests. It will also serve to educate visitors about the history of the northeast as it developed through river travel, creating new educational opportunities, and stimulating economic development through low impact tourism. A series of maps is being created that will tell the local stories along the rivers from Native American travel routes, to the days of logging, to the present-day culture of "North Woods" communities. The maps will also contain resource information, and will promote low-impact use and respect for private property.

Local initiatives to create national heritage areas

Over the last decade, there has been growing momentum from communities and regions across the country seeking national designation of heritage areas or corridors. These areas include entire communities or regions in which residents, businesses, and local governments work together to conserve special landscapes and their own heritage. In the enabling legislation, the US Congress creates a collaborative management entity that includes government representatives at federal, state, and local levels; representatives from non-profit organisations; and other stakeholders in the local area. This group works together to further the conservation of natural, cultural, and scenic resources; promote tourism and improve the local economy; develop an interpretative message and interpretive programmes for the area; create recreational opportunities; and generally improve the quality of life for residents. Within heritage areas, the role of the National Park Service is to provide technical and financial assistance for a limited period of time indicated in the heritage area's enabling legislation.

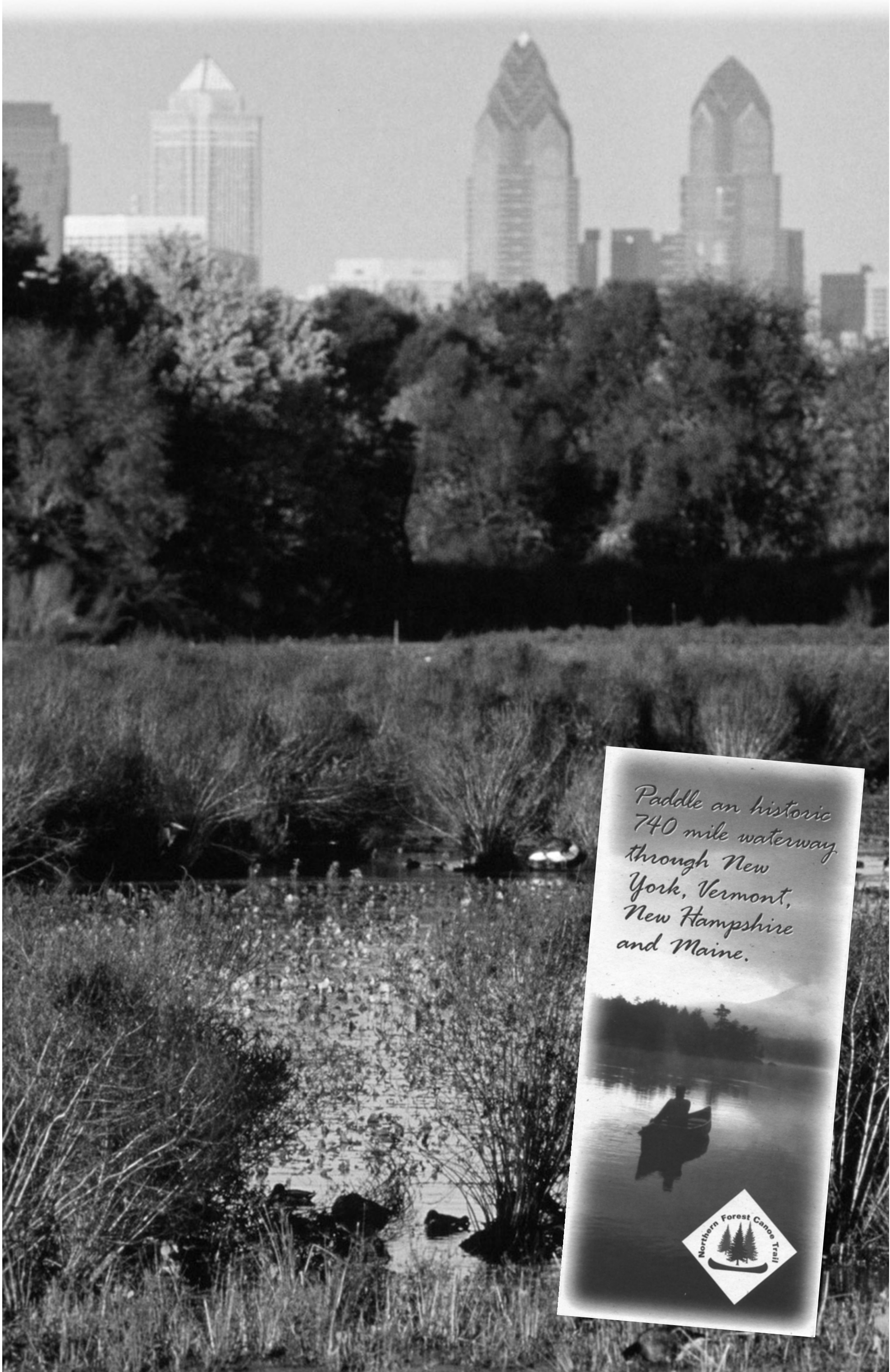
The Blackstone River Valley National Heritage Corridor is a region of nearly 400,000 acres located within Worcester Country in central Massachusetts and Providence County in northern Rhode Island, along 46 miles of the Blackstone River. The national corridor was designated by an act of the United States Congress in 1986, "to preserve and interpret for present and future generations the unique and significant value of the Blackstone Valley." The corridor area includes 24 cities, towns and villages, and almost one million people. The corridor is an affiliated area of the National Park System but, unlike traditional national parks, the federal government does not own or manage any of the land or resources in the corridor. Instead, dozens of local municipalities, businesses, non-profit historical and environmental organisations, educational institutions, many private citizens, two state governments, and the National Park Service work together through a Corridor Commission to protect the valley's special identity and prepare for its future (Blackstone NHC website). The Commission, operating within a working landscape of strongly independent New England communities, leverages limited human and financial resources to support a combination of public education, public-private partnerships, and "targeted" investments. The Commission successfully integrates issues related to the environment, community development and preservation, land-use planning, and economic development.

Networks of protected areas

There is a growing realisation in the United States and Canada that creating networks of protected areas can serve both humans and wildlife. In the United States, "**green infrastructure**" is a term that is used to describe the idea of land conservation networks, as a counterpart to the "gray infrastructure" of utilities and roads familiar to community planners. The green infrastructure approach creates "interconnected networks of natural areas, conservation lands, and working landscapes [landscapes in which people live and work] that support native species, maintain natural ecological processes, sustain air and water resources, and contribute to the health and quality of life for America's communities and people" (Benedict 2000).

While the green infrastructure concept emphasises the ecological connections that benefit biodiversity and counter the effect of habitat fragmentation, it also recognises that interconnected green spaces can provide long-distance recreational opportunities and other social and economic benefit to local communities. The green infrastructure approach encourages planning and design of green infrastructure before development occurs, and broad public engagement in developing plans in order to stimulate action by a wide range of participants. Green infrastructure can provide a framework for growth, and works best when both ecologically significant lands and suitable areas for development are identified early on before planning begins. The approach can function across multiple jurisdictions and at different scales, and is designed to involve diverse stakeholders. The concept of green infrastructure repositions

Green infrastructure provides benefits to both people and nature – John Heinz National Wildlife Refuge, Philadelphia, Pennsylvania. Photo: Karen Hollingsworthy/USFWS. *Inset: the Northern Forest Trail brochure.*



open space protection from a community amenity to a community necessity (Benedict and McMahon 2002).

In 1997, the State of Maryland launched its **Smart Growth and Neighborhood Conservation Initiative**, which is designed to rejuvenate existing communities while preserving farms, forests and other open spaces. Two related ideas are central to the success of this initiative. First, the state would no longer provide financial support for haphazard development, but would instead redirect all of its financial resources to existing communities and areas approved for growth. Second, Maryland would take a much more aggressive and strategic approach to preserving open space (Benedict and McMahon 2002).

The new strategic approach to land conservation manifested itself in two separate programmes. Maryland's "Rural Legacy Program" seeks to protect large, contiguous blocks of farmland and other rural open spaces by working with local governments and non-profit organisations to define preservation boundaries and then concentrating preservation efforts and funding in these areas. The state's new GreenPrint Program aims to identify and protect the state's most ecologically sensitive lands. Although the State of Maryland has worked diligently to conserve its finest natural areas for decades, until the creation of GreenPrint the efforts were not part of an overall long-term strategy. GreenPrint identifies the state's green infrastructure – a statewide network of large ecologically significant hubs bound together by greenway corridors or links – and the state has committed significant resources over the next five years to ensure their protection.

Concluding comments

Today, local communities in both the US and Canada are actively involved in conservation of protected areas as part of their strategy for building a sustainable future. The traditional government-based conservation approach in both countries has undergone substantial shifts in both the conceptual framework and conservation practice in the last 30 years. The case studies presented in this article represent only a few examples of a widespread change, and serve to illustrate the successful development of collaborations across boundaries and across sectors with substantial leadership by local communities in the conservation of protected areas.

These case studies illustrate the emergence of a more inclusive, community-based paradigm that is similar to approaches in many other parts of the world. This approach challenges the established traditions and ways of working, both for communities and for public land managers and other organisations involved in management. There are implications for methodologies that require the extension of professional skills for those working in this collaborative conservation. This convergence of approaches in many countries creates tremendous opportunity for learning through international exchange.

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Acknowledgements

This paper contains contributions by Susan Buggey and Jessica Brown. The authors also acknowledge Michael Creasey, Superintendent at the Blackstone River Valley National Heritage Corridor; Linda Greene at Death Valley National Park; Meryl Oliver who was on the Rideau Canal project team; Patricia L. Parker with the US National Park Service American Indian Liaison Office in Washington, D.C.; and Lelia Mellen and Jennifer Waite with the US National Park Service Rivers, Trails and Conservation Assistance Program based in Woodstock, Vermont, for their generous assistance with the case studies.

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Do rural people really benefit from protected areas – rhetoric or reality?

EDMUND BARROW AND CHRISTO FABRICIUS

The creation of reserves in Africa downgraded local people's rights to land and resources, with little compensation for losses incurred. These centralised protected area systems may have conserved biodiversity, but not without high social costs. Traditional forms of conservation were not recognised and, as people became increasingly alienated, their support for nature protection waned and conflicts escalated. With the post-1990 emphasis on decentralisation, equity and participation, community conservation began to develop, involving rural people in partnerships to preserve biodiversity and ensure livelihood security. This approach was also embraced to reduce the administrative and management costs of protected areas.

Unfortunately, policy rhetoric has generally not been matched in practice. As a result, sceptical policy-makers and practitioners now question the viability of the concept itself – something which could lead to its abandonment. Given the pressures to decentralise government functions, there is little alternative except to continue experimenting with, adapting and institutionalising community conservation. Although community conservation is no panacea, the ground rules have changed for good: no park is an island – people and conservation can no longer be separated. Responsible authority needs to be devolved to ensure that benefits from conservation outweigh costs to communities, and that community conservation becomes firmly entrenched in national land-use and conservation strategies.

COMMUNITY CONSERVATION stems from the recognition that protected areas and biodiversity in many countries will survive only if they address human concerns (Anderson and Grove 1987; Hulme and Murphree 2001). Without the support of local people, the future of such areas is insecure, as Africa's poor may find the temptation to exploit protected resources irresistible (Martin 1986). With the increasing focus on decentralisation of natural resource management, community conservation activities are evolving rapidly. In the broadest sense, community

Figure 1. *Map of eastern and southern Africa.*

conservation is conservation by, for, and with the local community (Murphree 1996). Advocacy of community conservation is driven by several perceptions: the impotence of most state agencies to manage protected areas; the potential for cost-effective local management, using informal social sanctions; the value of local knowledge about ecological dynamics; and enhanced motivation to conserve natural resources when conservation brings direct economic benefits.

New government policies encourage decentralisation, including the devolution of power to local authorities, thereby further promoting community conservation. Despite this, wildlife, key natural resources and tourism remain centrally managed and owned, with little functional integration at a local level. There appears to be much policy rhetoric but little real action in acknowledgement of the inadequacies of 'fortress conservation' (Hulme and Murphree 2001).

We demonstrate that conservation area managers have engaged in protected area outreach and collaborative management, but their efforts are generally inadequate to meet contemporary conservation challenges in eastern and southern Africa. We focus on protected area outreach and collaborative management on the continuum of community conservation (Barrow and Murphree 2001), and emphasise that, even though community conservation remains the most effective and viable option, it continues to be illusive, and there are many lessons that could be incorporated into policies and practice.

Undervaluing local knowledge – the establishment of protected areas

The early settlers had an enormous impact on wildlife numbers and ecosystem health, and by the early nineteenth century the impacts of unsustainable hunting and deforestation were felt all over eastern and southern Africa. Toward the middle of the same century colonial governments became concerned about the deterioration of natural resources and decline in animal numbers. This gave rise to a policy shift in favour of protecting selected wildlife areas (Box 1), and coincided with growing scientific and aesthetic interests to preserve wildlife. The type of wildlife legislation and administration patterns that emerged made it impossible for rural people in many areas to lead a normal existence without breaking some conservation law.

Elaborate conservation systems prevailed among indigenous African people before colonisation, for example the royal hunting preserves of the amaZulu and amaSwazi people

Box 1. Setting aside East Africa

Kenya, Tanzania and Uganda adopted the American model of strict protected areas. The traditional authority vested in customary leaders was taken over by a centralised state system. Large areas of East Africa were reserved, as early conservation authorities subscribed to the notion that wildlife and humans were incompatible (Kangwana 1993). Most protected areas were set aside with little regard for, or understanding of integrated social and ecological systems.

The first wildlife legislation in Uganda was the 1899 Game Regulations which provided for a 'native's license', authorising the indigenous population to hunt (Kamugisha 1993). Between 1890 and the 1950s a series of legal ordinances further separated the conservation of wildlife from local people. In 1959, residence in Game Reserves was prohibited, though the rights of prior residents in Game Reserves were recognised. Legislation aimed at the establishment of 'local game committees' did, however, allow local leaders to become involved in the management of wildlife and protected areas (Kamugisha 1993).

The Game Department in Tanzania was created in 1921 to protect people and crops from marauding game animals, enforce hunting regulations, and preserve wildlife values. They divided Tanzania's wildlife estate into national parks where no hunting or settlement was allowed, and game reserves where hunting was allowed at the discretion of the governor. This process laid the basis for Tanzania's conservation estate today.

Source: Barrow *et al.* 2000

(Fabricius *et al.* 2001), the kgotla[1] system of land management practised by the Botswana people (Boggs 2000), pastoralist natural resource management in many parts of Eastern Africa (Barrow 1996), and the "kaya[2]" forests along the coast of East Africa (Luke 1996; Robertson 1987). People in Africa generally revered nature, incorporated it into their world view, and most of their political systems included mechanisms to regulate the use and management of natural resources. Examples of rivers, mountains, forests, trees and groves as sacred places for worship and burial exist all over Africa (Daneel 1998; Lewis and Carter 1993).

The failure of colonial authorities to understand customary rules and cultural values set the stage for the introduction of new sets of regulations. Local people were believed to be destroying their resources through mismanagement, and this formed the basis to gazette forests, national parks and reserves, centralising their management and, inevitably, their benefits. This assumption that rural communities could not control access to and use of natural resources formed the basis for the "tragedy of the commons" argument (Hardin 1968). Despite a growing body of empirical evidence which refutes it (Barrow 1996; Swift 1977), this argument still prevails amongst many conservationists and government officials.

The establishment of protected areas during the colonial period frequently meant excluding local people, resulting in alienation and hostility towards the conservation authorities responsible (Box 2). Furthermore, the sharp contrast between affluence inside protected areas and poverty outside must have been all too evident to local people. Their hostility was fuelled as protected areas flourished whilst land-use pressures increased. Wildlife protection became charged with political conflict which now endangers the future of protected areas and is one of the major reasons for the popularity of community conservation approaches (Fabricius *et al.* 2001).

The advent of community conservation

In the mid-1980s, conservationists began realising that governments lacked the resources to conserve biodiversity effectively. Wildlife numbers were declining, land was being converted, and there was a high risk of wildlife being restricted to 'islands' of protected areas, where authorities and local people fought for control over access. Although a number of visionary conventions were formulated by African states (e.g. the African Convention on the Conservation of Nature and Natural Resources of 1968), the transformation in natural resource management only started during the late 1980s and early 1990s.

Box 2. Origins of Skukuza in Kruger National Park, South Africa

Skukuza, the name given to the first and most famous rest camp in South Africa's Kruger National Park, enshrines the link between conservation and coercive community removal. Skukuza ("He who sweeps clean") was the title given to the Park's first ranger, Major James Stevenson-Hamilton, by Tsonga tribesmen evicted from their homesteads during the creation of the reserve. Many people in South Africa still refer to the entire park by this name. Another example is a Herero elder living in the northern parts of Namibia who exclaimed: "When my cattle were starving nature conservation chased them out of the Skeleton Coast Park – the last place where there was still food. They said the area was for wild animals and they would shoot cattle that came in. I had to put my cattle in a kraal and watch them die, knowing that just down the river, inside this park, there was fodder. Why doesn't nature conservation keep its elephants away from our food?"

Source: Fabricius *et al.* 2001

1. *Kgotla* is the traditional tribal forum for consultation and decision-making by the Batswana in South Africa and Botswana.
2. *Kaya* is the term given by the Mjikenda people of the coast of Kenya to their sacred forests.

Conservationists adopted the concept of "community-friendly" conservation at the 1982 World Parks Congress, which called for increased support for communities through education programmes, revenue-sharing schemes, participation in the management of reserves, and the creation of appropriate development schemes around protected areas. In 1985 the World Wildlife Fund launched its Wildlife and Human Needs Programme, in an attempt to combine conservation and development. The Convention on Biological Diversity (CBD) was the first international conservation convention to demonstrate this move towards people-centred conservation. Two out of three of its principles (the fair and equitable sharing of benefits and sustainable use) imply that people are central to conservation.

This set the scene for community conservation to develop in a climate of increasing environmental democracy, supported by donors willing to invest in what appears to be a "win:win" situation. The increasing participation of civil society in natural resource management has been supported by a shift to devolving responsibility to lower levels. Many donor supported trial programmes were not fully institutionalised within the conservation structures, though Tanzania National Parks (TANAPA) has made the greatest commitment by establishing institutional programmes for community conservation (Barrow *et al.* 2000).

Factors influencing the shift in emphasis from exclusion to community conservation

A variety of factors influenced the policies of governments, NGOs and parastatals in the region towards community conservation (cf. Fabricius *et al.* 2001):

The pressure to promote development through conservation took a variety of forms but it is generally agreed that Zimbabwe's CAMPFIRE programmes (Murphree 1995), eastern Africa's protected area outreach in Tanzania (Barrow *et al.* 1995b; Bergin 2001), and collaborative management in Uganda (Barrow *et al.* 2000) played pioneering roles. Similar programmes were started in Zambia in the Luangwa Valley (Lewis and Carter 1993), conservancies on communal lands in Namibia (Jones and Mosimane 1999), and more recently in Kenya and with wildlife management areas in Tanzania (Barrow *et al.* 2000; Hartley 1997). In South Africa, the principles of integrating development with conservation were implemented in some of the then independent homelands: the Mtethomusha Game Reserve in KaNgwane and the Pilanesberg and Madikwe Game Reserves in Bophuthatswana, where state resources were used to create new protected areas, unlike the programmes in other countries where wildlife based development programmes were based on communal land (Fabricius *et al.* 2001).

A desire and need to diversify the economy meant including tourism and natural resource use. In Botswana, the government realised that livestock development programmes promoted by government were taking place at the expense of traditional resource use by remote rural communities (Boggs 2000). These programmes stress the need for rural residents to participate in conservation-based industries. There are greater pressures for protected area authorities to show benefits, and contribute to livelihood security; for example, collaborative management in Uganda (Uganda Forest Department *et al.* 1996), the benefit sharing programme of TANAPA (Barrow *et al.* 1995a). In this manner conservation authorities were able to demonstrate their contribution to rural livelihood security.

A lack of resources for law enforcement inside protected areas and the desire to conserve wildlife populations outside protected areas is evident throughout the sub-region. This was the original impetus for the CAMPFIRE movement, the early Namibian conservancies, the move away from centralised government control and the allocation of concessions to communities in Botswana. More recently, the development of collaborative management institutions at Dwesa in South Africa, and arrangements with protected areas in Uganda, as well as a collaborative forest management of many State and District forests in Tanzania were initiated.

Livestock being tended in Dwesa National Reserve, Eastern Cape, South Africa. Photo: C. Fabricius.

Community pressure and subversive behaviour such as land invasions, vandalism of natural resources and threats to conservation staff and tourists are often the only tactics available to rural people. This was evident in the Eastern Cape region of South Africa when residents of settlements around the Dwesa, Cwebe and Mkambati reserves staged spectacular invasions and began plundering shellfish in the marine reserves and decimating wildlife inland as a symbolic act of defiance (Grundy *et al.* in prep.). Encroachment of protected areas, for example Mt Elgon and Kibale National Parks in Uganda are a further expression of this "frustration" of exclusion (Barrow *et al.* 2000; Hinchley and Turyomurugyendo 2000).

Pressure for land reform. During the early and mid-1990s a number of communities began organising to reclaim their land in protected areas. The Makuleke Region of the Kruger National Park, the Riemvasmaak land claim against the Augrabies National Park (Steenkamp 1999), the San Bushman land claim in the Kalahari Gemsbok Park and, the Mdluli land settlement in the southern parts of the Kruger Park were examples of this (Fabricius *et al.* 2001). Such land restitution has been a particular feature in South Africa, and less marked elsewhere, where there is extensive ongoing land reform, but not the restoral of previous rights *per se*.

A desire by conservation organisations to acquire new land, where conservation agencies were able to expand the size of protected wildlife estates by negotiating with local residents and agreeing on "contract parks", which entailed incorporating communal land into game reserves for conservation and development purposes. The Richtersveld and West Coast National Park in South Africa and the more recent agreement with the Makuleke people around the northern parts of Kruger National Park are examples of this (Steenkamp 1999).

Political expediency and recognition by governments that rural voters are important led to politicians claiming responsibility for the successes of community conservation. The Madikwe Game Reserve in the Northern Province of South Africa was initially established to fast-track development in the former 'homeland' of Bophuthatswana. More recently the Makuleke land claim, by which a portion of land inside the Kruger National Park was transferred to a community, demonstrated that land reform played an important role in expediting the claim (Steenkamp 1999). In Namibia communal conservancies were established, following the example of successful conservancies on white-owned freehold land. In part, this was an attempt by the post-apartheid Namibian government to redress past imbalances (Jones and Mosimane 1999). The Support for Community Initiated Projects (SCIP) Fund of TANAPA resulted in TANAPA

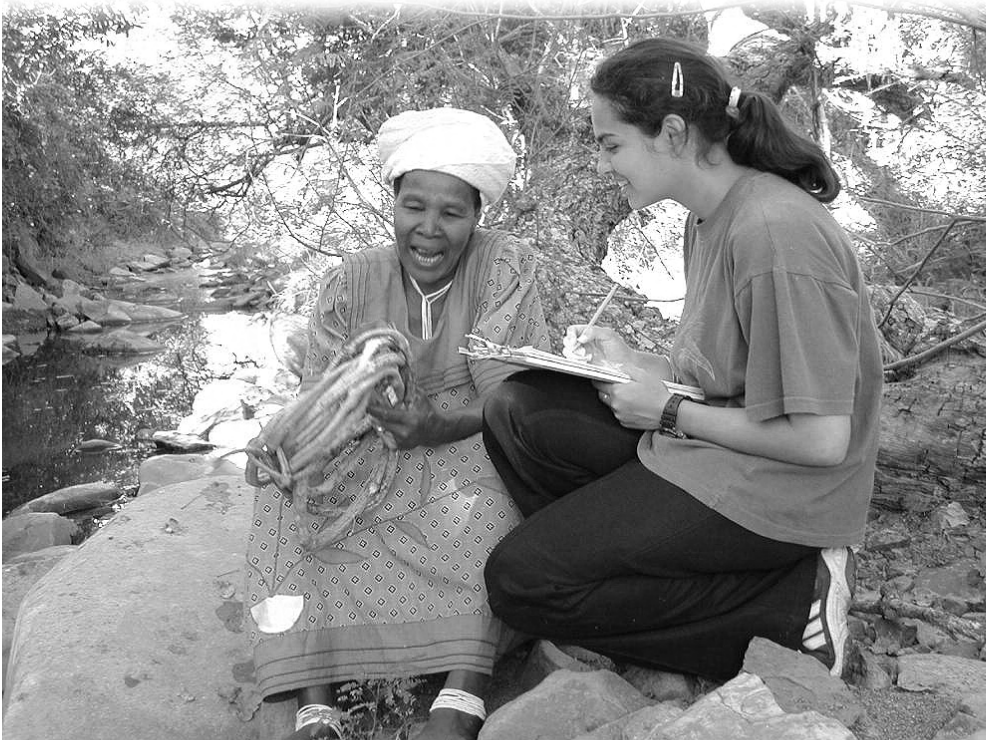
assuming a much higher political profile in recognition of the significant amounts of resources shared (Bergin 2001; Bergin and Dembe 1995).

Characteristics of the community conservation model

Community conservation is relatively "new" in eastern and southern Africa, in the sense that it is only now being adopted by conservation authorities, NGOs and others, as a mechanism for providing local people with more rights to/responsibility for their natural resources. Partnerships between conservation authorities and NGOs seemed to provide the right mix of conservation, flexibility and community experience (Barrow *et al.* 2000). Early community conservation work in East Africa was characterised by efforts to reverse the negative impacts of protected areas. Initially, it tended to take the form of "outreach" programmes, for example around Amboseli National Park in Kenya, early trials around Serengeti, Tarangire and Arusha National Parks in Tanzania, and the Lake Mburo in Uganda (Barrow *et al.* 2000; Barrow *et al.* 1995c; Kangwana 1993). In Uganda early activities which embraced resource substitution and improved livelihood began in the late 1980s. As more projects were established in support of individual protected areas, the need for community conservation policies and central co-ordination has become evident.

In southern Africa, government officials and NGOs realise that biodiversity resources play an important role in livelihood security (Matzke and Nabane 1996). Conservationists were inspired by a number of innovative projects in which rural groups were able to improve their livelihoods through the use of wildlife, most notably the CAMPFIRE programme in Zimbabwe. In the mid-1980s, examples of good private-sector wildlife management and forestry practices outside of protected areas were documented. Meanwhile, governments and parastatals in

Participatory monitoring of medicinal plants at Machibi village, South Africa: Kelly Scheepers, an Environmental Science student is interviewing Madzana, a traditional healer, in the field. Photo: C. Fabricius.



Zambia, Botswana, Namibia, South Africa and Mozambique switched to more community-oriented approaches (Southern Africa Sustainable Use Specialist Group 1997). South African National Parks (SANParks) became involved in community conservation in 1989, when it started talking to local people in the Richtersveld to acquire new land for conservation.

The community conservation model emerging in eastern and southern Africa embraced some of the following attributes:

- Allowing communities access to natural resources from which they previously had been barred;
- Sharing revenue from the use of natural resources with communities;
- Making conservation pay for the costs of management as well as community development;
- Involving communities in decision-making;
- Recognising communities' historical rights of tenure to resources and land; and
- Trying to ensure that the benefits outweigh the costs and support livelihood objectives.

Unrealistic expectations, disillusionment and realism

Support for community conservation is by no means universal (Barrett and Arcese 1995; Murphree 1996). It has been suggested that conservation linked with development is unsustainable (Barrett and Arcese 1995). Others argue that wildlife's existence values are reason enough to conserve it (Spinage 1998; World Conservation Monitoring Centre 1992). The community conservation approaches have not been in place for long, and results are mixed. The reasons for this include issues like practice not keeping pace with policy rhetoric, simplistic understanding of complex intra- and inter-community interactions, inequitable distribution of the rights and responsibilities for natural resource management, and losses of power (Barrow *et al.* 2002). Policy makers, academics and practitioners have started questioning this neo-liberal approach. Numerous studies are beginning to discover flaws in various community wildlife management programmes and projects: flaws in sustainability of use, equitability of distribution and the actual size of benefits generated for local people (Fabricius *et al.* 2001; Hulme and Murphree 2001; Inamdar *et al.* 1999).

Empirically, there is little doubt that many of the projects implemented with this paradigm shift – including some of those touted as major success stories – are experiencing problems. These range from lack of delivery of sufficient tangible benefits impacting significantly on people's livelihoods, to a lack of community cohesion and stable local governance. It is also unclear whether there has been much real devolution of ownership and responsibility for natural resources management. Many conservation authorities and their technocrats seem unconvinced of the desirability of building true partnerships with communities and still view rural communities as technically unable and politically unprepared to play a serious role in conservation.

Traditional and modern community institutions have been weakened by high levels of political, social, and economic uncertainty, and by high levels of population movement. Many communities are now extremely diverse and divided, and often unable to co-operate internally. Community conservation programmes have worked hard to support the development of stable institutions, but success is variable. Some projects have identified stable, functioning, and effective traditional community institutions, and incorporated them into programmes. Others have worked to help establish new ones.

There seems to be a direct correlation between the commitment of park managers and the success of community conservation. The role of local politicians is growing and they are forcing issues, particularly in relation to the balance between conservation and rural livelihood objectives. Local governments and members of the public are also helping to set national agendas, for example through the various pastoralist groupings in Kenya and Tanzania, Park Management Committees and Common Property Associations in South Africa, Village Trust Committees in

Botswana, Farmers Associations and Conservancy Committees in Namibia, and co-management arrangements for forest conservation in Uganda and Tanzania.

Issues of governance have a strong influence on the conservation of natural resources. As a result the very institutions designed to manage financial benefits and distribute them are becoming the focus of conflict. Whereas conflicts in the pre-community conservation era took place mainly between communities and conservationists, there is now a new source of tension, within communities. Corruption, nepotism and jealousies raise their heads as soon as community conservation produces meaningful benefits. Add to this the lack of technical and administrative management capacity, and the scene is set for disillusionment amongst project managers and donors.

The production potential of the land is another factor that has a profound effect on the success of community conservation (Norton-Griffiths and Southby 1995). In arid areas, conservation is often the best form of land use and the benefits from biodiversity can easily compete with the benefits from agricultural production, e.g. in the community conservancies of Namibia, concession areas in Botswana and pastoralist lands in East Africa. In higher rainfall areas, e.g. Uganda, community conservation is much more difficult because of the pressure to convert land for agricultural use (Emerton 1998a). Under these conditions, international biodiversity subsidies and heavy investments in law enforcement may be the only viable strategies to maintain any remaining "wilderness" areas (M. Norton-Griffiths, unpublished data).

There is an emerging debate about looking at community conservation as a component of livelihood security, as opposed to simply another form of biodiversity conservation. While community conservation can contribute to rural livelihoods and lifestyles, it is much more difficult to show how it supports conservation objectives (Taylor 2001). Many activities were set up with little attention to the need to monitor impact on conservation resources whereas activities like monitoring community knowledge, attitudes and practices was commonplace. Without carefully designed programmes to monitor biodiversity, it will remain difficult to measure the impact of community conservation empirically, making it necessary to rely on more subjective measures of success, including anecdotal indicators (Kangwana 1998). This needs to be made an integral part of project design and implementation. If not, the complexity of establishing causal links and confounding variables may limit conservationists' ability to collect the right data and interpret it correctly (Kangwana 1998; Taylor 2001).

Towards the new millennium: what have we learnt from two decades of experimentation?

Community conservation is about finding a balance between biodiversity management and the improvement of local people's livelihood security. Today, growing human populations with high expectations are becoming increasingly dependent on a small and shrinking natural resource base. In this context, it is inevitable that short term and immediate conflicts between the imperatives of conservation and livelihood security will emerge. Conservationists are fortunate in being able to learn from the successes and failures of almost two decades of experimentation with community conservation. But it seems as though project managers and donors continue to make many of the same mistakes, as if little had been learnt. We therefore summarise some of the major lessons, to enable us to move forward (for a more detailed account, see Barrow *et al.* 2000 and Fabricius *et al.* 2001).

The devolution of meaningful authority for wildlife management to the lowest level where there is capacity, is a first prerequisite for responsible community wildlife management. Local people should be able and willing to share responsibility for biodiversity conservation, and the benefits (tangible and intangible) of participating should exceed the costs to all parties. National conservation policy and legislative frameworks must support and direct the empowerment of

rural communities as ecosystem managers and the development of all actors' capacity to engage in community conservation (Gillingham 1998).

Devolution of meaningful authority

Protected areas will continue to be important for biodiversity conservation. But they must cease to be isolated islands and become integrated into wider landscape planning. Links between people and protected areas should therefore be based on equity, rights and shared responsibilities. Rural people have to become active participants, not passive recipients. It is clear that conservation authorities must focus not just on protected areas, but on the livelihood needs of rural people existing on the periphery of such areas.

Policies need to address proprietorship over wildlife at the community level, clarify how responsibility and authority will be shared between stakeholders, and provide guidelines for the design of transparent, accountable institutional linkages so that stakeholders can negotiate access to and gain control over resources. At the policy level there is often support for such devolved processes, but many remain at the level of rhetoric.

Government will continue to be an important player, but its role may vary, as many governments do not have adequate resources to manage their conservation estates due to structural adjustment, retrenchment and reduced budgets. This means that policies should promote the forging of linkages between communities and others, such as the private sector, as well as more responsible linkages with state authorities. Investing in such partnerships is a slow and time-consuming process, yet to fast track it is to invite disaster.

If rural people and communities are to have clear rights and responsibilities, then clarity over tenure is fundamental. This forms a stronger basis than any policy rhetoric, and could lead to communities creating their own protected areas or taking the lead in collaborative management arrangements, as in the case of the Makuleke collaborative management agreement in South Africa.

Community responsibility for biodiversity conservation

Communities define and re-define themselves, and consist of sub-units that have different needs and aspirations. As a result, communities can no longer be treated as simplistic homogenous entities. Communities need to increase their bargaining power by laying claim to assets that they can put on the 'power table'. It is clear that policy changes notwithstanding, conservationists need to adopt a more progressive approach to integrate conservation into regional land use.

Equally, communities need to be equipped to take on their responsibilities for conservation, and not merely lay claim to the benefits. While law enforcement is one of the cornerstones of sustainable common property resource management and cannot be neglected, it is essential that local people should at least be party to rule-setting, should help enforce them and define the penalties for transgression (cf. Oström 1990). For this to happen communities need to be able to define themselves, geographically or otherwise, as well as the institutions which will be responsible. A general problem for many community based institutions is the lack of management and business skills. The large areas some community institutions cover and the lack of real understanding of/interest in these institutions by their membership is also a problem.

The capacity of communities to accept the role that community conservation programmes and donor projects would like them to play can constrain the development of real partnerships. Some community institutions are strong enough to take responsibility, while in many other areas they are not. An essential activity is strengthening community institutions, for stronger communities are the key to true partnerships. They can undertake responsibility for natural resources and can exert sufficient pressure on the authorities to be granted responsibility in the first place.

The responsible involvement of rural people and communities cannot be a "quick-fix" approach. Time and trust between the different parties are key elements, so that capacity can be

built. Donor funding is most useful in the early stages of initiatives, as seed funds. However, sudden injections of large funds can lead to misappropriation or conflict. Lastly, donor funding cannot be a substitute for national investment. Community conservation must evolve to become functionally institutionalised within conservation authorities and move beyond the level of trial or demonstration.

Benefits should exceed costs

Benefit-based approaches (such as revenue sharing and the implementation of social infrastructure projects) have formed the guiding principle for much community conservation. Most of these activities aim to distribute natural resource based revenues to local communities. Although the economic rationale to benefit-based approaches to community wildlife conservation is sound, it is incomplete (Emerton 1998b). Generating broad development benefits is not the same as providing economic incentives for conservation, nor does it address the issue of wildlife costs.

Consideration of wildlife costs forms a central part of the economics of community conservation, strengthening arguments for building community-benefit sharing arrangements into wildlife conservation. Benefit-sharing can have only marginal impact on either community welfare or wildlife conservation unless it directly offsets the costs associated with wildlife management. It is not enough merely to allocate a fixed proportion of wildlife revenues to community development activities – the level and type of benefits provided must be closely tied to the magnitude of wildlife costs accruing to communities. Not only must benefits be provided to a sufficient level to balance the value of wildlife costs, they must also be generated in a form which directly compensates for the economic activities precluded or diminished by the presence of wildlife. For local communities to be willing and able to conserve wildlife, they require not just that conservation generates broad benefits, but that wildlife benefits exceed wildlife costs. Such benefits may, however, include intangibles, which are often underestimated (Ashley 1998).

Community conservation as part of national conservation strategies

Communities' rights are entrenched in a number of conventions, e.g. the Convention on Biological Diversity and the International Convention on Human Rights, both of which need to be used to greater effect for communities to negotiate for their rights and responsibilities to natural resources, whether on their own lands, or on state lands. At one level this is an information problem, where communities are less than aware of their national rights and responsibilities, never mind their rights under international conventions. But many countries, while they may be signatories, have yet to articulate them fully in policy and practice.

A number of countries have developed national conservation or related strategies, policies and laws to try and better manage their natural and environmental resources. In these, the rights and responsibilities of communities and state authorities need to be clear and non-conflicting, and take into account the lessons learnt from community conservation practice to date. But there also needs to be strong links with the production sectors, in particular tourism, agriculture and forestry. This implies that conservation must be part of national land use planning, and that community conservation is the "glue" to help make conservation an integral part of land use planning.

Conclusion

The notion of community based sustainable management of natural resources, both within and outside protected areas, presupposes true commitment of community institutions. It also hinges on the genuine commitment of the management authorities to share responsibility for the control and management of resources. While both conditions are integral to long term success, it is not clear to what extent these conditions have been met. Until these are achieved, community

Box 3. Further reading on participatory conservation in Eastern and Southern Africa

Eastern Africa

- Barrow, E.G.C., Gichohi, H. and Infield, M. 2000. *Rhetoric or Reality? A Review of Community Conservation Policy and Practice in East Africa*. IIED and IUCN, London.184.
- **Lake Mburo National Park, Uganda**: Hulme, D. and Infield, M. 2001. Community Conservation, Reciprocity and Park-People Relationships – Lake Mburo National Park, Uganda. In: Hulme, D. and Murphree, M. (eds.). *African Widlife and Livelihoods – The Promise and Performance of Community Conservation*. James Currey, Oxford. Pp106–130.
- **Ngorongoro Conservation Area, Tanzania**: Kijazi, A.J. 1995. Approaches to community based conservation in the Ngorongoro Conservation area. In: Leader-Williams, N., Kayera, J.A. and Overton, G.L. (eds.). Community Based Conservation in Tanzania. Department of Wildlife, with AWF and WWF, Dar-es-Salaam, Tanzania. Pp57–63.
- **Tarangire National Park, Tanzania**: Kangwana, K. and Mako, S.O. 1998. Conservation, Livelihoods and the Intrinsic Value of Wildlife – Tarangire National Park, Tanzania. In: Hulme, D. and Murphree, M. (eds.). *African Wildlife and Livelihoods – The Promise and Performance of Community Conservation*. James Currey, Oxford. Pp148–159.
- **Maasai, Kenya**: Berger, J. 1993. *Wildlife Extension, Participatory Conservation by the Maasai of Kenya*. ACTs Press, Nairobi. 139.

Southern Africa

- **Okavango Delta, Botswana**: Boggs (2002), in: Fabricius, C. and E. Koch with H. Magome and S. Turner, in prep. Community Based Natural Resource Management in southern Africa: myths and realities. (Manuscript in preparation, Rhodes University, Grahamstown, South Africa).
- **Tchuma Tchato in Tete Province of Mozambique**: Johnson (2002), in: Fabricius, C. and E. Koch with H. Magome and S. Turner, in prep. Community Based Natural Resource Management in southern Africa: myths and realities. (Manuscript in preparation, Rhodes University, Grahamstown, South Africa).
- **Zimbabwe's Communal Areas Management Programme for Indigenous Resources (CAMPFIRE)**: Hasler, R. (1999). An Overview of the Social, Ecological and Economic Achievements and Challenges of Zimbabwe's CAMPFIRE Project. Evaluating Eden Discussion Paper no. 3, London, IIED.

conservation will remain an uneasy, if productive, compromise between the demands of communities, the reservations of management authorities, and the interventions of external agents.

Community conservation is not a panacea for conservation, and there remains a role for officially designated protected areas. But the ground rules have changed: no protected area is an island, and people and conservation cannot be separated. International and national policies and laws need to be urgently revised to allow protected area categories to be more embracing of community conservation. Some protected areas may become invalid or unnecessary, others may be re-gazetted to enable the management authorities to enter into partnerships with local communities. Ultimately, conservation and protected areas in contemporary Africa must either contribute to national and local livelihoods, or fail in their biodiversity goals.

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The challenge of community-based protected area management

SEJAL WORAH

Community-based resource management is today at a 'crossroads'. On the one hand, it is increasingly challenged by academics, conservation organisations and governments. On the other, whilst some donors/NGOs continue to promote it, they use old, less-than-successful paradigms. This has meant that a decade after it became popular, community-based conservation is still not widely accepted or practiced. This paper examines some of the 'weaknesses' in current community-based conservation practices and argues for a change in the approach.

There is a need to shift the focus from solely economic and livelihood incentives. Where possible, community-based conservation programmes need to promote enabling policy and legislation. Documentation and literature on the subject must become more rigorous and scientifically credible. Representation of community interests through external agencies needs careful reflection on both the precise role of the external agency and on the future phase-out strategy. Finally, such initiatives need to better recognise, understand and work with the complexities of local environments. This means strengthening local decision-making mechanisms within a framework of appropriate policy, incentives, checks and balances, and then letting these institutions evolve to decide future resource management options.

COMMUNITY-BASED CONSERVATION is an approach to the conservation of natural resources where local communities have a key or significant role in the decision-making processes (Kothari *et al*. 2000). Community-based protected area management can be thought of as a 'subset' of community-based conservation, but with more specific (and varying) policy and legal constraints. The issues discussed in this paper are related largely to 'externally' initiated programmes that aim to promote community-based conservation[1].

Whilst community-based conservation is still advocated by one school of conservation thought, the idea has been increasingly challenged in recent years by various conservation professionals (Brandon *et al.* 1998; Kramer *et al.* 1997; Oates 1995 and 1999). Several international conservation organisations as well as some donors also question the efficacy of such approaches. To a certain extent, skepticism is justified as, in recent years, there appears to have been far more rhetoric and enthusiasm about community-based conservation than practical and credibly documented examples on the ground. Despite the fact that problems with community-based conservation are acknowledged by most practitioners, they have still not been adequately addressed and hence new community-based conservation initiatives continue to be based on old paradigms.

The necessary changes in attitudes, policies and practices to support community-based conservation need to be fast-tracked. Practitioners and promoters of community-based conservation have to find ways to 'mainstream' it into broader conservation strategies. However, unless clear evidence can be provided to different audiences that the approach 'works', there is a danger that it will be discredited and discarded altogether. Some of the key challenges that need to be addressed to promote community-based conservation are discussed below.

Re-thinking incentives

Much criticism of community-based conservation stems from 'traditional' integrated conservation and development projects (using economic incentives to generate local support for biodiversity conservation/the local protected area)[2]. Critics point out that this approach has been ineffective

1. These could be initiated by international donor agencies or NGOs, national NGOs or governments.
2. The more recent thinking on ICD is much broader than this and is based on reconciling the interests of multiple stakeholders using a range of negotiated strategies (Franks *et al.* 2000).

at conserving biodiversity. At the same time, it has created various social problems and resulted in a waste of financial and human resources that would have been better utilised in 'direct' support for conservation and protected area management activities (Bruner *et al.* 2001; Kramer *et al.* 1997; Oates 1995 and 1999).

To some extent the criticism is valid. The fundamental hypothesis that an increased income for local communities automatically leads to reduced impacts on biodiversity remains debatable. Most initiatives aiming to replace existing biodiversity dependent livelihoods with 'alternatives' are based on a poor understanding of livelihood strategies and a weak analysis of the linkages between conservation and development. Examples from various continents and countries have shown that flawed assumptions and planning have led to the 'failure' of many projects in achieving their conservation objectives through livelihood development (Blomley 2000; EDG 1999; Gilmour 1994; Kremen *et al.* 1994; McShane 1999; Wells 1994, 1999).

In fact, the underlying assumption of such initiatives – that most biodiversity loss is caused through overuse of natural resources by local communities – is flawed. A detailed study of a number of integrated conservation and development projects in Indonesia found that even if villagers do cut timber, hunt wildlife and plant crops within protected areas (PAs), they are rarely the principal threat facing the protected areas. The study demonstrates that the most serious threats to PAs are usually organised invasive practices such as logging, mining and road building. These activities need to be addressed through stricter law enforcement and by influencing regional planning and policy processes, not community development (Wells 1999). Yet it is true that in some areas/situations communities may have a negative impact on biodiversity and here, providing alternative income generation *could* reduce such impacts. However, as noted by an evaluation of ecodevelopment projects around Indian PAs , developing viable alternative livelihoods is often easier said than done. The study revealed little evidence of improvement in the socio-economic status of communities as a result of the ecodevelopment schemes (CEE 1997).

Villagers in the buffer zone of the Royal Chitwan National Park, Nepal, thatch a hut with grass collected from the Park. In Nepal's Buffer Zone Policy, a proportion of tourism revenues generated by the park is shared with communities in the buffer zone (who bear a major cost of conservation). Photo: Sejal Worah.

Interestingly, even when the alternative livelihoods are economically viable, this does not necessarily lead to improved conservation. A recent analysis by the Biodiversity Conservation Network of 39 projects across Asia, that were specifically designed to test the conservation impact of resource-based conservation enterprises, found that the linkages between financial benefits and conservation effectiveness were complex and site specific. In fact, the results of this analysis showed that there was a weak relationship between enterprise success and conservation success. They found that effective conservation was not linked to financial benefits alone but to a range of other incentives as well (Salafsky *et al.* 2001).

This is borne out through discussions on conservation issues, initiatives, behaviours and incentives with forest-adjacent communities throughout India. Although improved income generation is obviously welcomed, an issue raised far more urgently by communities is that of protection from crop-raiding and other damage by wildlife. Addressing the latter would probably be a far greater incentive for community involvement in and support for conservation than 'experimenting' with alternative livelihoods.

Unlike the norm in much of Asia, where economic incentives are still largely based on developing 'alternatives' outside protected areas, policy changes in some eastern and southern African countries have enabled the benefit sharing of PA revenues with communities. In Kenya, Uganda and Tanzania, the park management authorities return a proportion of the revenue earned through the parks to local communities, usually through district councils. In Uganda, revenue sharing is enshrined in the Wildlife Statute (1996), where 12% of the gross revenue generated by parks goes back to park-adjacent communities (Sikoyo 2001).

However, even in such situations where there is a clear and direct 'linkage' between conservation and economic benefits, it has been found that this is often an insufficient incentive for communities to conserve biodiversity. The reasons for this are varied but include an incomplete understanding of the nature of economic benefits and costs of conservation to communities, insufficient generation of economic benefits, inappropriate use of these benefits and the complex and poorly understood nature of communities themselves (Emerton 1998).

There is a need to broaden the understanding and scope of incentives that will encourage community participation in resource management. Incentives should be thought of as a set of factors that create an enabling environment, motivating stakeholders to participate actively in conservation, rather than as 'bribes' to induce people to change behaviour, usually temporarily. At the community level, this means focusing on social, policy and economic incentives that will promote the idea of conservation and sustainable resource management as an investment in their future. The right combination of incentives can often achieve far greater and wider community involvement in conservation than only economic incentives, which often tend to target specific sections of a community (either deliberately or inadvertently).

This is not to say that economic incentives are unimportant. They are and will continue to be an important factor driving decision-making, especially as local communities get increasingly exposed to market forces and cash economies. However, fiscal incentives need to move beyond the relatively narrow confines of alternate income generation and limited benefit sharing of protected area revenues to more innovative and attractive options such as trust funds, taxes and subsidies, market measures and pricing for goods and services (Emerton 2000). Some of these ideas are being tried out in various countries and it is important to analyse and assess the effectiveness of the different measures to see what works and how that can be replicated. The Mgahinga and Bwindi Trust Fund focused around the two gorilla reserves in Uganda has now been running for a number of years with mixed success. Lessons from this important experiment could inform the setting up of other protected area trust funds.

Finally, if rural communities are, as is usually acknowledged, expected to bear a higher cost for biodiversity conservation, then it would be better to see them as 'stewards' of these resources. In which case, it calls for the need to explore compensating and directly paying rural communities

for their stewardship of natural resources by charging urban, national and international users who benefit directly and indirectly from their efforts (Franks and Blomley 2001; Reed 2001). To some extent, this is being implemented through the buffer zone policy in Nepal, which returns 30–50% of revenues generated through tourism into protected areas (which have an officially declared buffer zone) to park-adjacent communities for development programmes.

Focusing on policy and scaling up

Policy and legal constraints are probably the single biggest obstacle to community-based conservation, particularly when it comes to protected areas. In most developing countries, a large proportion of the legally protected areas fall within IUCN categories I through IV[3], which do not have provisions for any substantial representation of community interests in management. This means that community-based protected area management is largely defined by the restricted interpretation of existing protected area policies. Even when protected area policies 'allow' community involvement, this is often not accepted or encouraged by park managers. It is usually under pressure from external donors or international conservation organisations that park managers have started considering community roles in protected area management.

However, many external initiatives that are trying to promote community-based protected area management tend to get bogged down in activities related to the management and implementation of alternative livelihoods, biological and socio-economic surveys, various kinds of training and micro-level planning, amongst other things. All of these activities are complex, time-consuming and can be expensive. The options for action are also usually limited by existing policy and legislation regarding land and resource use within and around protected areas so that much of the community-based planning is actually redundant.

It is well documented that wherever community involvement in protected area management has worked well, it has been facilitated by enabling policy and legislation, usually at the national level. This has been demonstrated in countries like Nepal, where the addition of Conservation Areas into the more 'traditional' protected area categories has enabled communities to legally live within these areas and to play an active role in their management. The often-cited example of the Annapurna Conservation Area is, in many ways, seen as a 'pioneering model' of community-based protected area management and much of its success is based on supportive legislation and policy that empowers community groups, enables revenue sharing and reduces the role of the government in the management of the Conservation Area.

Similarly, legal and policy changes in the Philippines have enabled substantial community representation on the multi-stakeholder Protected Area Management Boards or PAMBs. This is a body composed of representatives from government (national and provincial), communities, NGOs and indigenous cultural communities. This is the main policy-making body for protected areas in the Philippines and it enables the participation of all key stakeholders in decision-making regarding the management of these areas. While the structure might be cumbersome and unwieldy at times, and decision-making often difficult, the PAMB system has laid the foundations for 'true' stakeholder participation in protected area management. The process is still evolving and many important lessons are being learned along the way. As expected, it was found that in the initial stages, although community and indigenous peoples' representatives were on the board, their voices and views were often marginalised. However, in terms of numbers, community representatives often make up the bulk of the PAMBs (since one member from each village around the protected area is represented). With increased capacity building for community and indigenous peoples representatives, many PAMBs are evolving into models of democratic participation in protected area management (Senga 2001).

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3. Although the IUCN categories are not *explicitly* used in many countries, the policies governing PAs are often similar to those described in the IUCN categories.

However, these models of participatory and community-based protected area management have not spread widely in other countries. Most donors, international NGOs and even some national NGOs involved in community-based conservation continue to work within existing (and limiting) policy frameworks rather than working towards influencing policy and promoting some of these more innovative approaches to protected area management.

This is often because in many countries, protected area policies are considered 'sacrosanct' and questioning them or suggesting changes to allow greater community participation often becomes a political, volatile and emotionally charged issue. Projects or NGOs working in isolation are rarely in a position to take on such a challenge on their own. In addition, many externally funded programmes have donors who do not wish to antagonise governments in the countries where they are working and therefore are circumspect about tackling legal and policy issues. Further, working on policy advocacy and lobbying leads to less 'tangible' results compared to conducting surveys or setting up tree nurseries. While donors may on the one hand expound the rhetoric of 'participation' and 'process-driven programmes', in reality they are often still focused on visible outputs. Target-driven programmes that are compelled to produce outputs within given timeframes therefore often prefer to focus on 'output-oriented' activities rather than work towards longer-term policy objectives.

However, unless programmes promoting community-based conservation start seriously to address policy constraints to community participation in protected area management, it is unlikely that the necessary scaling up will be seen in the near future. Project-based approaches have inherent limitations and are often restricted in terms of their scope and scale. An enabling policy and legislative environment would not only help external community-based conservation initiatives have impacts well beyond the 'project' scale, but could also encourage more community-led initiatives to start up. Policy analysis, advocacy, lobbying and dialogue with policy-makers therefore needs to have at least as much (if not more) of a priority, as designing alternative livelihood strategies for communities with community-based conservation programmes.

While it might be unrealistic to expect community-based conservation projects or programmes to influence protected area policy within their relatively limited timeframes, there are a number of 'steps' that such initiatives can take to promote the process of policy reform. Firstly, it is important to understand the linkages between field programmes and policy. Investing time in analysing the impacts of both specific resource-related policies (protected area, forestry, fisheries, etc.) as well as wider policies (agriculture, irrigation, trade, mining, etc.) on community-based conservation at the site and national levels helps to get a clearer understanding of the 'big' issues, the key players and what needs to be done. Understanding land and resource tenure systems (both legal and customary) is a critical aspect of policy analysis as this often lies at the heart of effective community-based conservation.

A poor understanding of the policy and legal environment can often lead to problems and can exacerbate conflicts between local resource users and government agencies. External initiatives driven by NGOs tend to promise more than they can deliver, partly because of poor analysis of policy issues and partly to 'buy' local support. In the long run, such initiatives can end up frustrating communities and hence erode support for conservation when expectations are not met. An example of this is quoted from Dalma Wildlife Sanctuary in Bihar, where NGOs promised villagers a share in the profits from harvesting of trees protected by them. This, however, was in violation of the existing legal framework and led to conflicts between the village organisations and the Forest Department (Kothari *et al.* 2000). Such situations are not unusual and point to the need for policy analysis as part of any community-based conservation initiative.

Rather than focusing directly on national or international policy issues, community-based conservation initiatives might be more effective in tackling policy issues at the site or provincial level. District and provincial level government officials are often more attuned to issues that affect communities rather than national governments. While most protected area policies come

under national law, there are often opportunities to influence other policies that affect community interests in protected areas at the district level. For example, the small-scale fishermen's network, with support from NGOs and academics in southern Thailand, was able to force the provincial government to impose a ban on destructive fishing gear used within the Phang Nga Bay Marine National Park by larger push-net and trawler operators (Singh *et al.* 2000).

The role of research and monitoring

To create a convincing argument about the effectiveness of community-based conservation there is a need for documentation that can stand up to scrutiny by resource managers, academics and policy makers. This is not particularly straightforward, primarily because of the timeframes required for effective monitoring of biodiversity impacts and the complexities of analysing changes in attitudes, behaviour, capacity and practice at a community level. However, unless stronger attempts to address these issues and share methodologies are made, leading to better documentation of successes, achieving enabling policy environments to promote and support community-based conservation will continue to remain elusive.

Much current literature on community-based conservation lacks scientific rigour and is over-generalised, repeating the same issues and the same few examples with little hard data to support positive conservation impacts of community-based projects. The focus of recent papers has tended to be on evolution, historical aspects, and the 'how to' of community-based conservation. Well-researched and analysed success stories are few and far between, and are anecdotal rather than backed up with scientifically valid evidence (Fisher 2000). Promoters of community-based conservation, therefore, often find themselves on the defensive when challenged to provide tangible, scientific and current evidence to show that this is an effective conservation approach.

Research and monitoring plays a key role in convincing policy-makers about the effectiveness of any approach. In particular, information on the results of small-scale community-based pilot projects is needed if the approach is to be expanded. However, 'definitive' results are often difficult, if not impossible, to obtain when working in dynamic socio-economic and ecological conditions. An example of this is the multiple-use programme initiated in Bwindi National Park in Uganda – one of the pioneering resource sharing agreements between local communities and park authorities. Over the years, this programme, which enabled some members of surrounding communities to harvest certain useful products from the park, has helped to establish dialogue between park authorities and local people, developed a sense of ownership of the park within communities, strengthened community institutions and provided tangible benefits to sections of the local community. Now, after almost ten years of implementation, many of the original parameters have changed and the programme is at a stage where a new direction needs to be taken. Adaptation demands adequate data to show the impacts of the current phase. This requirement had been anticipated by the designers of the programme so that baseline and other research was an integral part of the implementation. However, it has still proven difficult to determine how the programme can be modified and expanded to meet the needs of communities (Worah *et al.* 2000). This experience implies that, in many situations, designing and adapting collaborative management arrangements requires taking small, calculated risks based on mutually agreed trade-offs with careful monitoring of subsequent impacts, rather than awaiting the generation of 'unambiguous' data to support different positions.

Scientific credibility of community-based conservation documentation might improve by taking more of a 'participatory action research approach' to such initiatives from the start. This would mean that community-based conservation is undertaken as a 'learning system', with clear hypotheses that are continuously tested through rigorous (not necessarily complex) monitoring and the results are regularly documented and disseminated. It is important that key stakeholders,

especially communities, understand the need for such an approach and are a part of the hypotheses development, monitoring and documentation.

Whose interests are represented – and how?

The issue of who genuinely represents community interests and for how long is a complex one that many external institutions promoting community-based conservation are grappling with. Biodiversity conservation often involves multiple interests ranging from international, national to the very local. These interests can be quite different, sometimes even opposing. For example, international and national interests might be intent on preserving biodiversity, while local interests look to using it as a resource. In externally driven projects, the overall agenda is often that of the main agency responsible for initiating (and funding) the community-based conservation programme.

Therefore, if the initiative is promoted by a development agency, community and livelihood interests are likely to be at the forefront (sometimes at the expense of conservation priorities). This is basically an acknowledgement of the fact that when it comes to use and management of biodiversity in a multi-stakeholder environment, community interests are often marginalised. Therefore, it is argued, by representing community interests over and above those of others in negotiations over resource use and management, these external institutions are merely creating a 'level playing field'. This can cause a number of problems, such as pitting external NGOs as well as communities against protected area management, whilst creating a high level of community 'dependency' on the external agency representing them. This often leads to additional problems in time-bound projects, leaving a sudden vacuum on their completion. Many processes and negotiations come to an end when project staff pull out and, in fact, new conflicts can emerge because of the shift in power equations created during the initiative.

If, on the other hand, the agency promoting community-based conservation has a primarily conservation mandate, community interests are likely to be 'accommodated' only so long as they are consistent with overall biodiversity conservation goals. In fact, community-based conservation in a protected area context rarely follows the principles of genuine partnerships (equity, transparency, responding to local needs), since biodiversity conservation is considered the 'bottom line' for both protected area managers and the external agency. Except in rare cases, this is usually not the main priority for local communities. Therefore, community-based protected area management seldom allows 'full' community participation at the level of decision-making.

Most examples of community-based protected area management, at least in the Asian context, bear this out (Kothari *et al.* 1997 and 2000). This in turn means that incentives for communities to participate in protected area management may not be adequate to sustain long-term interest. There are numerous examples of communities showing an initial willingness to participate in conservation programmes with the expectation that some of their other concerns might also be addressed. Once it becomes clear that the conservation agenda is a priority and community interests are secondary, local participation drops off dramatically. This is an ongoing challenge for conservation NGOs in trying to balance conservation priorities with meeting community needs.

However, there are 'degrees' of participation within community-based protected area management, and external agencies can and have played an important role in ensuring community interests are better represented. The role communities can play depends on a number of variables including the policy/legal environment, community capacity and organisation, attitude and openness of protected area managers, degree and source of threats to the protected area, and the type of external agencies involved. Even in the absence of fully supportive policies, the right combination of these variables can create the necessary incentives and enabling environment for substantial and effective community-based protected area management. This has been noted even from countries like India, where protected area legislation severely limits community participation.

Kalakkad-Mundunthurai Tiger Reserve (KMTR) in southern India demonstrates how community participation can be mobilised, even in the face of policies that restrict community roles in protected area management. Here, park authorities have recognised the need to make the bureaucracy more responsive to the needs of local people. A separate complement of park field staff, the Ecodevelopment Wing, was set up to work with communities. The staff in this wing have striven to alter the rigid nature of bureaucratic functioning by insisting on hierarchically flexible and demand-responsive behaviour. Communities appreciate this distinction from the more rigid attitudes of the Territorial and Policing wings of the department and have reciprocated by holding open the dialogue on project implementation. A code of conduct ensures that park staff hold informal regular meetings with all sections of the community and abandon the trappings of power, such that the Ecodevelopment staff are virtually members of rural households. Building on this atmosphere of trust, issues related to substitution of forest resource use by communities could be openly discussed and mutually agreed. Incentives have come in the form of access to reliable credit mechanisms through micro-finance arrangements, managed largely by the community, and a focus on the watershed values of the reserve, which are of great importance to the agricultural communities. Thus a combination of some supportive policies, an innovative and responsive park management, adequate incentives, effective extension and outreach, community mobilisation and organisation, and relatively manageable external 'threats' to the reserve have come together to enable park managers and communities to work together for conservation and development.[4]

There is now increasing recognition among many NGOs working on community-based conservation that they should act more as facilitators rather than implementers of the community-based conservation process (Larson *et al.* 1998). This, however, requires not only multiple skills (including facilitation, negotiation, conflict management, and organisational capacity building) but also the ability for the NGO to put aside its own biases and play the role of 'honest broker' in negotiations between different stakeholders. As both conservation and development organisations have found, this is not always easy on account of their own inherent interests and mandates.

4. Information provided by Sugato Dutt, ecodevelopment officer at KMTR, presently a Ph.D candidate at the Center for Populations, Institutions and Environment Change, Indiana University. He is the author of a case study titled 'Project Tiger and Local Participation: A unique experiment' in a compendium of case studies on successful Community Based Natural Resource Management to be published by IUCN–INTACH–Kalpavriksh.

Forest officials and the WWF-I team in discussion with Village Forest Committee members at Kalakkad-Mundanthurai Tiger Reserve, India. Photo: Preston Ahimaz and R. Bhanumathi (WWF-India).

Agencies promoting community-based conservation therefore need to think very carefully about their roles in the process. Focusing on building capacity within communities to represent their own interests should be an integral part of any conservation strategy. Even if the external agency initially needs to play a leading role in representing community interests and capacity building (strengthening existing or new community-based organisations), there should be a clear 'phase-out' plan. It is important that these organisations have some level of legal recognition and should be accepted and integrated into local administrative frameworks. Leaving behind strong local institutions with a recognised mandate for resource management will help to ensure that community-based conservation continues well beyond the life of a 'project'.

External agencies, especially NGOs, have other crucial roles in promoting and strengthening community-based conservation. These include policy, advocacy and lobbying as well as research and documentation, as discussed previously. When the small-scale fishermen's network in southern Thailand was asked why they needed NGOs and what their role in supporting the work of the network was, they responded saying that NGOs are the "eyes and ears" of the community (Worah *et al.* 2000). In other words, facilitating the flow of information to communities is another key role that external agencies can play. Here, NGOs have also enabled communities to see that they *can* and *should* negotiate their demands with government officials. The change in relations between Thai villagers and local district officials illustrates this. Until the arrival of the NGOs, villagers reported that people had little contact with officials beyond the sub-district level and people were simply too frightened to visit the district office. Within a couple of years, however, meetings between district officials and villagers had become a regular event (Johnson 2001).

Finally, it is also important to understand who speaks for the community from *within* the community. It is for convenience that in this paper, the terms 'community' and 'local community' have been used so far. However, in reality, these are loaded and complex terms, which need to be used with care and clarity. In recent years, much has been written about the 'myth of community', and the fact that most communities are not homogenous entities with similar interests in resource use and management is widely recognised (Agrawal 1997, Adams and Hulme 1998, Barrow and Murphree 1998, Borrini-Feyerabend 2000, Neumann 1997). It is apparent to people working on community-based conservation that many communities are often deeply divided along ethnic, class, communal and caste lines and that internal conflicts within communities may sometimes be far more difficult to resolve than conflicts with external stakeholders. It is also clear that communities are linked in many complex ways to external forces such as markets and political processes, and are constantly changing and evolving.

Depending on their experiences and viewpoint, different authors also argue about the glorification of communities as wise-users of resources versus the concept that communities have undergone rapid changes, are fractured and driven by individual self-interest. These discussions inevitably raise the question of who the local community actually is. However, at the end of the day, it is often the ideology and mandate of the implementing agency that will define the focus of the 'community' and the target group. Some development organisations tend to see the 'poorest of the poor' within communities as their target group; some will support 'traditional' or indigenous groups over migrants or progressive farmers; some support settled agrarian villages' rights over those of nomadic transients.

Rather than getting bogged down in academic discussions about the nature of communities, it might be better to focus on the basic principles of community-based conservation which are to decentralise resource management to the local level, to put the appropriate system of incentives and the policy environment in place to enable this and to build capacity for local stewardship of natural resources. This would imply that the focus of community-based conservation initiatives needs to be on facilitating equitable negotiations between interest groups based on incentives and disincentives, checks and balances and a supportive policy environment. To some

extent, this, along with strengthening local-level institutions to implement and manage such agreements, is all that external interventions can aim for. As local systems, users and institutions evolve, their interests and needs will also develop and, to some extent, it is almost impossible to predict what shape or form community-based conservation initiatives might take in the future. However, if the conditions for community-based conservation are in place, it should be left to local institutions to interact with other stakeholders to determine future directions.

Conclusions

This paper argues that achieving effective community-based conservation requires agencies and programmes supporting the concept to address key issues such as incentives, policy and advocacy, in a consistent manner and strengthening local communities and institutions to be able to represent their own interests in conservation. None of these concepts are new or radical and these issues have been deliberated by different authors in the past. However, despite this, it appears that not enough progress has been made on these fronts as simplistic models of economic incentives continue to prevail, policy analysis and advocacy continue to be a low priority and external projects continue to implement activities on behalf of (ill-defined) communities in the field.

For community-based conservation to be mainstreamed in conservation, developed and to become self-sustaining, it is important to shift the focus of support to understanding and designing combinations of incentives that will motivate local stewardship of resources. There is a greater need to create a policy and legal environment that will allow such incentives to operate. External agencies need to re-think their roles in community-based conservation and seriously to see themselves as facilitators and change-agents who can also help build the capacity of local institutions to engage in community-based conservation effectively. In the end, it is important to put into place the 'conditions' that will enable local resource management to be initiated and to have the resiliency to adapt and evolve, based on changing external conditions.

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Community-conserved areas in South Asia

Neema Pathak

Many Asian communities protect and manage specific territories containing wild and domesticated biodiversity. These could be:

- areas of cultural and religious significance such as sacred sites;
- village forests, watersheds and pastures conserved to meet livelihood requirements;
- wetlands conserved for drinking and irrigation facilities, or to protect heronries;
- traditional agricultural systems with diverse agricultural and natural niches;
- coastal and marine areas protected for traditional fisheries.

Clearly, the management objectives vary from situation to situation. The initiative may be through local institutions rooted in tradition, or through modified traditional systems, or entirely new organisations and rules developed in response to a given situation. The motivation ranges from unflinching devotion to tradition, to a response to resource-scarcity crises.

Such efforts may be entirely self-initiated by the community; or they could be initiated with/by external government and non government agencies and individuals. In other cases, the interest of local communities and outside society openly diverge and community-based conservation schemes are born as part of a struggle, with the communities fighting against commercial forces interested in exploiting the habitat and resources.

These efforts can collectively be called Community Conservation Areas (CCAs). CCAs are broadly defined as natural ecosystems (including those with minimum to substantial human influence) containing substantial wild and domesticated biodiversity value, being conserved or protected by local communities.

Some examples of CCAs

- Protection of 1,800 ha of forest, for more than two decades, by Gond tribal community in Mendha (Lekha) village, Maharashtra state, India. Forest protection is an offshoot of the struggle towards tribal self-rule;
- Forest protection, ecotourism, and anti-poaching measures over several thousand km^2 of the Annapurna Conservation Area, Nepal, by local communities and a national NGO.
- Regeneration and protection of 600–700 ha of forest, management of grasslands for sustainable and equitable use, struggle against limestone mining, and in-situ conservation of hundreds of varieties of indigenous crop varieties by the villagers of Jardhargaon village in Uttaranchal state of India;
- Protection of sea turtle eggs, hatchlings, and nesting sites by fisherfolk community in Kolavipalam, Kerala, India;
- Initiative by fisherfolk in Rekawa lagoon, Sri Lanka with help from Colombo University, to enhance the fish stock, protect it from destructive commercial fishing, stop coral extraction and influence local governments to stop destructive development plans;
- Traditional conservation of Painted stork and globally threatened Spotbilled pelican nesting sites by villagers in Kokkare Bellur village, Karnataka, India; and of Blackbuck and other wildlife by Bishnoi community in Rajasthan and Punjab, India;
- Religious protection to the endangered Blacknecked crane by Buddhist communities in Sangti Valley, Arunachal Pradesh, India;
- Conservation of Gursikaran and Sheikha wetlands by surrounding villagers in Uttar Pradesh, India;
- Sustainable trophy hunting in Hushey Valley and elsewhere in Pakistan, run by local communities with NGO and government facilitation, resulting in increased populations of mountain wildlife;
- Community forestry initiatives in several thousand villages of Orissa in India, initiated as early as 1936; many are now part of larger level federations for management, policy issues and conflict resolution;
- Sacred groves, though fast depleting and losing their religious significance, still being zealously preserved by the local communities, in many states of India;
- Ecotourism by Baghmara village in the vicinity of Chitwan National Park in Nepal, by regenerating the degraded surrounding forests, and protecting wild rhinos;

... continued overleaf

These are only few of thousands of such initiatives in Asia and other parts of the world. Unfortunately, these remain grossly understudied and their potential for upscaling has not been fulfilled.

Some major lessons

Governance in community conservation

Most community conservation initiatives are decentralised and site-specific in their objectives and approaches. They are based on local norms, rules and regulations thus enjoying higher social acceptance. They usually have a transparent, equitable and well-informed decision-making process. Emphasis is given to equal representation of all sections of society and often each adult within the community, though this may not always be the case. In order to take informed decisions, many communities have a system of information exchange with outsiders through group meetings and discussions. Through such interactions, villagers become aware of internal and external dynamics, build administrative and other capacities, resolve serious conflict issues such as encroachments and forest fires, and so on. Unfortunately, such a model is not yet officially accepted or propagated.

In all the above mentioned cases, while the local community has been the most important actor, a critical role has been played by one or more external interventionists either at the stage of inception or subsequently to help the initiative carry on. This points to the need for synergistic linkages of the community to the national and international groups. Local government officials and NGOs can be critical as facilitators of these processes.

Economics of community conservation

For communities, the most common benefit of conservation is livelihood security, including through gaining control over the resources they depend on. Other benefits include developmental inputs, strengthening of cultural associations with biodiversity, ecosystem service benefits, and so on. In many areas in India ecosystem conservation is in fact a spin-off of a larger move towards local self-rule.

Considering that such multiple benefits are critical, the relevance of expensive entry point programmes in externally initiated programmes is questionable. True devolution of power to the communities appears to be a greater incentive for conservation than mere money.

Community members in Jardhar with regenerating forests of Jardhar village in the background. Scientists have graded these forests as among the most bioloically diverse forests in the region.

Examples, especially from India indicate that large parts of the funds required for community conservation can be generated locally. In most situations the communities prefer this, as it gives them a greater sense of ownership and ensures long-term financial sustainability. However, all other countries in the region have a substantial dependence on external funding agencies. Pumping in large funds for participatory conservation often breaks down existing systems of management and may prove to be a serious impediment for any future, self-run processes.

Ecological sustainability

CCAs show that communities can be strongly conservation-oriented. In all the above examples and others, people have strongly opposed commercial monocultures by the forest department as they believe that they are neither beneficial for nature nor local livelihoods.

It is important to note that in most community initiatives cited above, ecological improvement is "perceived" by the local communities as well as outside researchers and intervenors. However, there is usually no long-term monitoring and evaluation (M and E) of these efforts. Exceptions include Hushey valley in Pakistan, Rekawa in Sri Lanka, and Biligiri Rangaswamy Temple Sanctuary in southern India, where the local people have been at the centre of M and E.

Equity concerns

Many local communities are ridden with internal inequities, of caste, class, gender, and so on. These can be significant deterrents to natural resource management. National recognition of local initiatives should not mean that distant centres of power are simply replaced by local ones. There are many examples where local communities have tackled this problem on their own (for instance, the egalitarian principles on which Jardhar's irrigation and grass-cutting practices are based, or the relative equity in decision-making that Mendha has been able to achieve). But there are many more cases where this has not happened on its own, and requires external intervention.

Inequities also necessitate the identification of the primary stakeholders, that is those who are primarily dependent on the biodiversity, and who have substantial contributions to make. These are the ones who should have the greatest stake in making decisions and receiving benefits. Women, in particular, need special attention, as do nomadic communities.

Laws and policies

In many of the above-mentioned initiatives, communities have relied on customary laws and social sanctions. But in the absence of statutory legal authority, they face problems. For example, they often feel helpless when outsiders cut their forests in absence of any legal powers to punish them. There is a strong need for legal or statutory authority to be given to village-level institutions, and for long-term tenurial security over the natural resources which they are managing.

A truly decentralised governance system would have to be sensitive to diverse customary or community-made rules relevant to natural resource management, facilitating rather than displacing them.

Limitations in community conservation initiatives

CCA initiatives are not foolproof. They are situated within a highly dynamic social, political and economic context. Changes in any of these could change the nature of the community initiative. Years of alienation has rendered most communities incapable of handling sudden power, which at times leads to failure of well intended devolutionary steps such as the *gram swaraj* (Village self-rule) Act in Central India. Younger generations are increasingly moving away from traditional lifestyles and knowledge systems. Increased wild animal populations due to habitat protection in many areas are causing human- wild animal conflict, and so on.

Yet the examples mentioned above suggest that if studied deeply, the lessons from the successes and failures of these initiatives could help resolve some extremely critical issues facing biodiveristy conservation today.

Neema Pathak *is a member of Kalpavriksh – Environmental Action Group, based in Delhi and Pune, India. She has co-coordinated a study on "Community Involvement in Wildlife Management in South Asia" and is currently involved in the documentation of Community-conserved Biodiverse Areas in India. For a more detailed assessment of the issues involved, see Kothari* et al. *(2000).*

The Dana Declaration

A group of concerned professionals including social and natural scientists from all regions of the world met in Wadi Dana Nature Reserve, Jordan, 3–7 April 2002, to consider a comprehensive approach to mobile peoples[1] and conservation. At the end of this meeting, they agreed the following declaration:

THE WORLD FACES unprecedented threats to the conservation and sustainable use of its biodiversity. At the same time its cultural and linguistic diversity, which includes an immeasurable and irreplaceable range of knowledge and skills, is being lost at an alarming rate.

The linked pressures of human population dynamics, unsustainable consumption patterns, climate change and global and national economic forces threaten both the conservation of biological resources and the livelihoods of many indigenous and traditional peoples. In particular, mobile peoples now find themselves constrained by forces beyond their control, which put them at a special disadvantage.

Mobile peoples are discriminated against. Their rights, including rights of access to natural resources, are often denied and conventional conservation practices insufficiently address their concerns. These factors together with the pace of global change undermine their lifestyles; reduce their ability to live in balance with nature, and threaten their very existence as distinct peoples.

Nonetheless, through their traditional resource use practices and culture-based respect for nature, many mobile peoples are still making a significant contribution to the maintenance of the earth's ecosystems, species and genetic diversity – even though this often goes unrecognised. Thus, the interests of mobile peoples and conservation converge, especially as they face a number of common challenges. There is therefore an urgent need to create a mutually reinforcing partnership between mobile peoples and those involved with conservation.

In the light of this understanding, we commit ourselves to promoting conservation practices based on the following principles:

Principle 1. Rights and empowerment

Conservation approaches with potential impact on mobile peoples and their natural resources must recognise mobile peoples' rights, management responsibilities and capacities, and should lead to effective empowerment. These rights include:

1.1 Human rights: civil, political, social, economic and cultural;
1.2 Land and resource rights, including those under customary law;
1.3 Cultural and intellectual property rights;
1.4 The right to full participation in decision-making and relevant negotiation processes at different levels;
1.5 The right to derive equitable benefits from any consumptive or non-consumptive use of local natural resources.

To this end, appropriate legislative reforms should be promoted as needed, at national and international levels. In addition, because mobile peoples often move through different territories, transboundary co-operation between national authorities may be required.

Recognition of mobile peoples' rights should lead to effective empowerment, and include consideration of gender and age.

Principle 2. Trust and respect

Beneficial partnerships between conservation interests and mobile peoples should be based upon mutual trust and respect and address the issue of discrimination against mobile peoples. To this end partnerships should:

2.1 Be equitable;

1. By *mobile peoples*, we mean a subset of indigenous and traditional peoples whose livelihoods depend on extensive common property use of natural resources over an area, who use mobility as a management strategy for dealing with sustainable use and conservation, and who possess a distinctive cultural identity and natural resource management system.

2.2 Fully respect and acknowledge mobile peoples' institutions;
2.3 Balance the exercise of rights by all parties with the fulfilment of responsibilities;
2.4 Recognise and incorporate relevant customary law;
5.5 Promote the accountability of all parties in relation to the fulfilment of conservation objectives and the needs of mobile peoples.

Principle 3. Different knowledge systems

In planning and implementing conservation of biodiversity with mobile peoples, there is a need to respect and incorporate their traditional knowledge and management practices. Given that no knowledge system is infallible, the complementary use of traditional and mainstream sciences is a valuable means of meeting the changing needs of mobile peoples and answering conservation dilemmas. In particular:
3.1 Traditional and mainstream sciences and management practices should enter into dialogue on a basis of equal footing and involve two-way learning;
3.2 Traditional and mainstream sciences should be appropriately valued and their dynamic nature acknowledged.

Principle 4. Adaptive management

Conservation of biodiversity and natural resources within areas inhabited or used by mobile peoples requires the application of adaptive management approaches. Such approaches should build on traditional/existing cultural models and incorporate mobile peoples' worldviews, aspirations and customary law. They should work towards the physical and cultural survival of mobile peoples and the long-term conservation of biodiversity.

More particularly, such adaptive management approaches should:

4.1 Build on areas of common interest between the chosen lifestyles of mobile peoples and the conservation objective of sustainable resource management;
4.2 Allow for diversification of livelihoods, and ensure provision of a variety of benefits at all levels, including mobile services;
4.3 Recognise the diversity of systems of tenure and access to resources, including the customary sharing of resources;
4.4 Recognise and support the contributions made by mobile peoples to conserving and enhancing the genetic diversity of domesticated animals and plants;
4.5 Learn from the flexible management practices of mobile peoples to enrich conservation;
4.6 Develop conservation planning at a larger landscape scale, using the notion of mobility as a central concept, and incorporating both ecological and cultural perspectives.

Principle 5: Collaborative management

Adequate institutional structures for adaptive management should be based on the concept of equitable sharing of decision-making and management responsibilities between mobile peoples and conservation agencies. This is only possible if the existing decision-making mechanisms for biodiversity conservation become more democratic and transparent, so as to allow for the full and open participation of civil society and mobile peoples in particular, and for the establishment of co-management and self-management systems. This requires that the relevant parties:
5.1 Develop processes and means that foster cross-cultural dialogue directed towards consensual decision-making;
5.2 Incorporate culturally appropriate conflict-management mechanisms and institutions;
5.3 Recognise the time-scale appropriate to cultural processes and the time required to build intercultural partnerships for adaptive management;
5.4 Foster locally agreed solutions to conservation problems;
5.5 Encourage diverse and pluralistic approaches to conservation planning and implementation;
5.6 Develop their capacities to enter into mutually beneficial partnerships.

This declaration is our contribution to narrowing the disciplinary divide. The ideas in it need to be tested, refined and further developed in dialogue with mobile peoples themselves and others. But these issues need to be considered urgently at national and international levels – and in particular at the forthcoming World Summit on Sustainable Development and the World Parks Congress.

Résumés

Communautés indigènes et locales et aires protégées: repensons leur relation

GRAZIA BORRINI-FEYERABEND INTERROGE TARIQ BANURI, TAGHI FARVAR, KENTON MILLER ET ADRIAN PHILLIPS[1]

La relation entre les communautés et les aires protégées est un mariage du ciel et de l'enfer. Le concept d'aire protégée est associé le plus souvent aux parcs créés par les gouvernements, dont l'existence est relativement récente. On ne pense que rarement aux aires communautaires sacrées qui existent depuis des siècles et qui abritent des ressources de biodiversité unique. Il est encore plus rare de considérer la vaste contribution à la conservation des paysages productifs indigènes ou des ressources naturelles gérées de façon communautaire. Dans l'ensemble, la conservation par les communautés n'est presque jamais reconnue et ces communautés sont trop souvent injustement perçues comme des ennemies de la nature.

Cet entretien – une « conversation à distance » – illustre les opportunités et les obstacles liés à la construction d'une nouvelle alliance entre les communautés et la conservation. Le débat concerne des initiatives pratiques et déclarations de droits inaliénables, des concepts qui commencent à voir le jour et leurs conséquences politiques, la dichotomie légitimité/ légalité et le nombre croissant d'acteurs sociaux impliqués dans la gestion des aires protégées. Une nouvelle dimension taxinomique pour les aires protégées – type de gouvernance – est illustrée en vue du débat au Congrès Mondial sur les Parcs de septembre 2003. Tout le monde semble convaincu de son utilité et aussi du fait que « la diversité culturelle et la diversité biologique sont des alliées naturelles et puissantes » et que « seule leur alliance peut parvenir un jour à les sauver toutes les deux. »

Au delà de la participation des communautés à l'aménagement et à la gestion des aires protégées : leçons des îles caraïbes

TIGHE GEOGHEGAN ET YVES RENARD

Cet article fournit un cadre conceptuel succinct qui définit le contexte de la participation des communautés à l'aménagement et à la gestion des aires protégées, et présente un argumentaire en faveur de celle-ci. Reconnaissant la nécessité de comprendre et de réconcilier les intérêts et les attentes des parties prenantes qui sont très diverses, il remet en cause certaines des idées fausses couramment répandues qui supposent l'homogénéité des communautés locales. L'article résume l'expérience des îles caraïbes en matière d'aménagement et de gestion participatives des aires protégées, en s'appuyant sur des exemples tirés de plusieurs pays de la région.

L'analyse de ces études de cas permet d'identifier quatre points clés : (i) la nécessité de reconnaître la diversité des parties prenantes et de prendre en considération toute la complexité de leurs intérêts et des rapports qu'elles entretiennent avec la ressource et entre elles, (ii) l'importance de l'existence de dispositifs institutionnels adéquats pour la réussite à long terme de la gestion participative, (iii) le nécessité de la mise en place de processus transparents et négociés de détermination des priorités dans des situations où les ressources sont insuffisantes, et (iv) la relation qui existe entre une gestion participative réussie et l'obtention d'avantages appréciables pour les communautés locales.

Administration innovante des pêcheries et écotourisme dans les aires protégées avec la participation des communautés

JANET M. CHERNELA, ALI AHMAD, FAZLUN KHALID, VIV SINNAMON ET HANNA JAIRETH

Cet article décrit trois exemples de cas dans lesquels les communautés ont développé des approches innovantes de protection des systèmes aquatiques en danger et de promotion de l'écotourisme. Chacun des cas fait preuve d'une utilisation stratégique de la législation sur les pêches, que complètent des lois et des usages coutumiers, pour gérer des aires locales protégées ayant un statut de protection équivalent à la Catégorie V ou VI de l'IUCN/CMAP[1], et comprenant de petites aires strictes de conservation (Catégorie I). Les parties prenantes impliquées sont de nature diverse et comprennent des gouvernements, l'industrie, des organisations non gouvernementales et des intérêts communautaires. La déclaration de chacune des aires protégées a été catalysée par l'évaluation des impacts actuels ou potentiels des industries d'extraction et par les perceptions locales de la diminution des ressources. Chaque projet a bénéficié de financements externes, mais il est prévu que les projets puissent s'autofinancer au bout d'un certain temps. Le respect effectif d'une législation sur les pêches qui soit applicable est une priorité de toute première importance pour les communautés de Silves et de Kowanyama, tout comme le sont la recherche d'une éducation communautaire sensible aux différences culturelles et le contrôle de l'efficacité des approches actuelles de gestion de chaque aire protégée.

1. CMAP: Commission Mondiale des Aires Protégées

Le couloir biologique mésoaméricain et la participation locale

VIVIENNE SOLÍS RIVERA, PATRICIA MADRIGAL CORDERO, IVANNIA AYALES CRUZ ET MARVIN FONSECA BORRÁS

Dans cet article, les auteurs réfléchissent au progrès réalisé et aux défis auxquels doit faire face le Couloir biologique mésoaméricain (CBM) dans le domaine de la perception et de la participation locales. En s'appuyant sur l'expérience du projet CBM en Amérique centrale, sur le ressenti des auteurs et sur l'expérience acquise dans la région, l'article présente certaines des leçons tirées qui pourraient servir dans d'autres régions du monde où il est question de mettre en place des couloirs biologiques. La leçon la plus importante consiste à accorder de la valeur aux communautés locales et au savoir traditionnel et à s'assurer que le couloir fournisse non seulement la sécurité alimentaire, mais aussi les moyens d'un développement socioéconomique durable. La coopération des populations locales à l'établissement d'un couloir biologique ne pourra être obtenue que si elles participent entièrement aux processus de prise de décision qui déterminent leur développement futur.

Leadership des communautés locales: developpement de partenariats pour la conservation en Amérique du Nord

NORA MITCHELL, BARBARA SLAIBY ET MARK BENEDICT

Au cours des dernières décennies, la conservation aux Etats-Unis et au Canada s'est déplacée d'une approche favorisant des systèmes gouvernementaux de gestion des parcs, vers un modèle plus large, plus inclusif qui s'appuie sur les communautés. Les communautés locales (y compris les communautés indigènes), les organisations à but non lucratif privées, et les gouvernements des Etats et les gouvernements nationaux reconnaissent que même si les parcs nationaux et les autres aires protégées bénéficiant d'une dénomination officielle contribuent de façon importante à la conservation, ils ne peuvent assurer seuls la conservation efficace du patrimoine naturel et culturel. En réponse à cela, la façon d'aborder la conservation dans les deux pays s'est considérablement modifiée ces 30 dernières années, tant au niveau du cadre théorique que dans la pratique. Dans les études de cas variées rassemblées ici sont présentées de nombreuses innovations dans les pratiques de conservation et une nouvelle direction prometteuse à suivre dans ce domaine. Bien que les histoires présentées soient diverses, il y a thème unificateur général : le rôle joué par les communautés dans la conservation des aires protégées et la façon dont un leadership commun et une vision commune peuvent être partagés avec succès au delà des frontières et des secteurs. Ce modèle de gestion avec la participation des communautés qui commence à voir le jour est fondé sur l'existence de leaderships locaux et semble être à même de jeter les fondations d'une gestion durable des terres. Cette approche converge avec les modèles de conservation dans de nombreux autres pays, créant ainsi d'immenses possibilités d'apprentissage par l'intermédiaire d'échanges internationaux.

Les populations rurales tirent-elles vraiment profit des aires protégées ? Belles paroles ou réalité ?

EDMUND BARROW ET CHRISTO FABRICIUS

La création de réserves en Afrique a porté atteinte aux droits de propriété et d'utilisation des ressources des populations locales, sans réelle compensation pour les pertes subies. Ces systèmes centralisés d'aires protégées ont certes contribué à la conservation de la biodiversité, mais les coûts sociaux engendrés ont été considérables. Les formes traditionnelles de conservation n'étaient pas reconnues, et à mesure que les populations se sont senties de plus en plus exclues, leur soutien à la protection de la nature s'est affaibli et des conflits se sont développés. Avec la focalisation des années post-1990 sur la décentralisation, l'équité et la participation, la conservation par les communautés a commencé à se développer, les populations rurales participant au moyen de partenariats dédiés à la conservation de la biodiversité et au maintien des moyens de subsistance. Cette approche fut également adoptée pour réduire les coûts d'administration et de gestion des aires protégées.

Malheureusement, les politiques prêchées n'ont généralement pas été suivies dans la pratique. En conséquence, certains décideurs politiques et opérateurs devenus sceptiques ont actuellement tendance à remettre en cause la viabilité du concept lui-même, ce qui pourrait aboutir à son abandon. Etant donné les pressions de décentralisation des fonctions qui pèsent sur les gouvernements, il n'y a pas vraiment d'autre solution que de continuer à faire des expériences, à adapter et à institutionnaliser la conservation par les communautés. Même si la conservation par les communautés n'est pas une panacée, les règles de base ont définitivement changé : aucun parc ne peut être considéré comme une île, et on ne peut plus traiter séparément les populations et la conservation. Il faut déléguer des pouvoirs responsables qui s'assurent que les bénéfices tirés de la conservation l'emportent sur les coûts subis par les communautés, et que la conservation par les communautés soit fermement ancrée dans les stratégies nationales d'utilisation des terres et de conservation.

Le défi de la gestion des aires protégées avec la participation des communautés

SEJAL WORAH

La gestion des ressources avec la participation des communautés est actuellement à la croisée des chemins. D'une part, elle est de plus en plus remise en cause par les universitaires, les organisations de protection de la nature et les gouvernements. D'autre part, même si certains donneurs et certaines ONG continuent à promouvoir ce concept, ils utilisent des modèles vieillis dont on ne peut pas dire qu'ils aient fait leurs preuves. C'est la raison pour laquelle, dix ans après que le concept se soit répandu, la conservation avec la participation des communautés n'est toujours pas tellement acceptée ni adoptée dans la pratique. Cet article étudie certains des « points faibles » qui existent dans les pratiques actuelles de conservation avec la participation des communautés et argumente en faveur d'un changement d'approche.

Il faut amener le débat sur un terrain qui ne soit plus uniquement régi par des incitations économiques et de subsistance. Lorsque cela est possible, il faut que les programmes de conservation avec la participation des communautés encouragent des politiques d'habilitation et des décrets d'application. La documentation et les textes publiés à ce sujet doivent être rendus plus rigoureux et plus crédibles d'un point de vue scientifique. En ce qui concerne la représentation des intérêts des communautés par des agences externes, il faut réfléchir soigneusement au rôle précis joué par l'agence externe et à la stratégie future de son retrait progressif. Finalement, il faut que les complexités des environnements locaux soient mieux reconnues, comprises et prises en compte dans de telles initiatives. Cela veut dire qu'il faut renforcer les mécanismes décisionnels locaux par un cadre constitué par des politiques, des incitations, et un système de contrôle mutuel appropriés, et ensuite laisser ces institutions évoluer et décider des options futures de gestion des ressources à adopter.

Resumenes

Las comunidades indígenas y locales y las áreas protegidas: repensando la relación

GRAZIA BORRINI-FEYERABEND ENTREVISTA A TARIQ BANURI, TAGHI FARVAR, KENTON MILLER Y ADRIAN PHILLIPS[1]

La relación entre las comunidades y las áreas protegidas es un enlace entre paraíso e infierno. El concepto de "área protegida" está a menudo asociado con los parques establecidos por el gobierno y que se han materializado en una época relativamente reciente. Raramente piensa uno sobre áreas sagradas de comunidades que se remontan a varios siglos y siguen abrigando recursos únicos de biodiversidad. Es menos común todavía considerar la larga contribución de los paisajes productivos indígenas o de los recursos naturales manejados en forma comunitaria. En resumen, las contribuciones a la conservación de las áreas protegidas por parte de las comunidades difícilmente son reconocidas y muchas veces estas comunidades son erróneamente percibidas como enemigos de la naturaleza.

Esta entrevista – una "conversación a distancia" – ilustra las oportunidades y los obstáculos que se presentan cuando se quiere forjar una alianza nueva entre las comunidades y la conservación. El debate cubre iniciativas, prácticas y declaraciones de derechos inalienables, así como conceptos que surgen y sus consecuencias políticas, la dicotomía entre legitimidad y legalidad y el creciente número de actores sociales involucrados en el manejo de las áreas protegidas. Una nueva dimensión taxonómica – tipo de gobernanza – con vista al debate que tendrá lugar en el Congreso Mundial de Parques en Septiembre del 2003. Todos parecen convencidos que el tiempo es oportuno para esto, y todo el mundo parece estar de acuerdo en que "las diversidades culturales y biológicas son aliados naturales y poderosos" y que "solo esta alianza podría por fin operar para la salvación de ambas."

Más allá del envolvimiento de la comunidad en el planeamiento y manejo de las áreas protegidas: lecciones del Caribe insular

TIGHE GEOGHEGAN Y YVES RENARD

Este artículo provee un marco conceptual que establece el telón de fondo y propone una racional para el envolvimiento de la comunidad en la planificación y manejo de las áreas protegidas. Desafía los conceptos communes erróneos acerca de la homogeneidad de las comunidades locales, en la luz de la necesidad de comprender y reconciliar los intereses y las expectaciones de una gran variedad de partes interesadas. Hace un sumario de la experiencia del Caribe insular, de su participación en el planeamiento y manejo de las áreas protegidas, usando ejemplos de varios países de la región.

Un análisis de estos casos estudiados identifica cuatro puntos claves: (i) la necesidad de reconocer la diversidad de las partes interesadas y de tomar en cuenta la complejidad total de sus intereses y relaciones con el recurso y de unos con otros, (ii) la importancia de una disposición institucional adecuada para un éxito del manejo a largo plazo por parte de los participantes, (iii) la necesidad de procesos de negociación transparentes para la determinación de prioridades frente a recursos inadecuados y (iv) la relación entre un manejo de participación exitoso y la provisión de beneficios apreciables para las comunidades locales.

Un gobierno innovativo de las pesquerías y el ecoturismo en áreas protegidas basadas en la comunidad

JANET M. CHERNELA, ALI AHMAD, FAZLUN KHALID, VIV SINNAMON Y HANNA JAIRETH

Este informe describe tres casos donde las comunidades han desarrollado un enfoque innovativo con el propósito de conservar sistemas acuáticos en peligro y promover el ecoturismo. Cada uno demuestra el uso estratégico de la legislación pesquera, suplementado con leyes y prácticas tradicionales para el manejo local de áreas protegidas con una condición de protección equivalente a las categories V o VI del IUCN/CMAP, con pequeñas áreas de preservación estrictas (Categoría I). Abarcan diversas partes interesadas, incluyendo gobiernos, industrias, organizaciones no gubernamentales e intereses comunales. La declaración de cada área protegida fue catalizada por los impactos actuales o amenazantes de las industrias de extracción y las percepciones locales de la declinación de los recursos. Cada proyecto se ha beneficiado con fondos externos, pero con el tiempo se espera que sean autosuficientes. El cumplimiento efectivo de la legislación pesquera que corresponda es de alta prioridad para las comunidades de Silves y Kowanyama, así como la educación culturalmente sensitiva de la comunidad y el monitoreo de la eficacia de la forma en que se encara la administración de cada área protegida.

1. CMAP: Comisión Mundial de Áreas Protegidas

El corredor biológico Mesoamericano y la participación local

VIVIENNE SOLÍS RIVERA, PATRICIA MADRIGAL CORDERO, IVANNIA AYALES CRUZ Y MARVIN FONSECA BORRÁS

Este artículo reflexiona sobre el progreso hecho y los desafíos que enfrenta el Corredor Biológico Mesoamericano (CBM) en las áreas de la participación y de la percepción local. Basado en la experiencia del proyecto del CBM en América Central y en las percepciones y experiencias regionales de los autores, este artículo presenta algunas lecciones aprendidas que pueden ser usadas por otras regiones del mundo que están contemplando el establecimiento de corredores biológicos. Las más importantes de éstas incluyen la valoración de las comunidades locales y de su conocimiento tradicional y el asegurarse de que el corredor provea no solamente una alimentación segura sino también un desarrollo socio-económico sostenible. La cooperación de la población local en el establecimiento de un corredor biológico depende de su participación total en los procesos de toma de decisiones que determinan su futuro desarrollo.

El liderasgo de las comunidades locales: desarrollando asociaciones para la conservación en Norte América

NORA MITCHELL, BARBARA SLAIBY Y MARK BENEDICT

En décadas recientes, la conservación en los Estados Unidos y Canadá se ha desplazado de un enfoque que enfatiza los sistemas de parques manejados por el gobierno a uno más amplio y más influyente, un paradigma basado en la comunidad. Las comunidades locales (incluyendo las comunidades indígenas), las organizaciones privadas sin propósito de lucro y los gobiernos de estados y nacionales, han reconocido que aún cuando los parques nacionales y otras áreas protegidas designadas oficialmente son contribuciones importantes, solamente ellos son insuficientes para lograr la conservación effectiva del patrimonio natural y cultural. Como respuesta,el enfoque de la conservación en ambos países en los últimos 30 años ha experimentado cambios substanciales, tanto en el marco conceptual como en la práctica. La variada colección de casos estudiados ilustra muchas innovaciones en la práctica de la conservación y una nueva dirección prometedora en este terreno. A pesar de que esta colección de historias es variada, el tema unificante en la totalidad es el papel de las comunidades en la conservación de las áreas protegidas y en el modo en que el liderazgo y la visión pueden ser compartidos a través de los límites y los sectores. Este modelo de manejo basado en la comunidad confía en el liderazgo local y es muy promisorio como base para un manejo sostenible de las tierras. La convergencia de este enfoque con modelos de conservación en muchos otros países crea una oportunidad tremenda para aprender a través de un intercambio internacional.

La población rural: ¿se beneficia realmente con las áreas protegidas- realidad o retórica?

EDMUND BARROW Y CHRISTO FABRICIUS

La creación de reservas en Africa disminuyó los derechos de la población local a la tierra y sus recursos, con muy poca compensación por las pérdidas incurridas. Estos sistemas de áreas protegidas centralizadas han conservado, quizás, la biodiversidad, pero con un alto costo social. Las formas tradicionales de la conservación no fueron reconocidas y a medida que la gente se alienaba más y más, su apoyo a la protección de la naturaleza se debilitó y escalaron los conflictos. Con el énfasis en la descentralización, equiparación y participación después de 1990, la conservación comunitaria comenzó a desarrollarse, incluyendo la participación de la población rural como asociados a fin de preservar la biodiversidad y asegurar la seguridad del modo de vida. Este enfoque fue abrazado también para reducir los costos administrativos

Desgraciadamente, la retórica de la política no ha sido generalmente equiparada con la práctica. Como resultado, los creadores de los reglamentos y sus practicantes, se han convertido en escépticos y tienden a cuestionar la validez del concepto mismo, algo que podría terminar con su abandono. Dadas las presiones para la descentralización de las funciones gubernamentales, hay pocas alternativas aparte de las de continuar experimentando, adaptando e institucionalizando la conservación comunitaria. Si bien esta última no es la panacea, las reglas del juego han cambiado definitivamente: ningún parque es una isla – la gente y la conservación no pueden separarse más. La autoridad responsable necesita evolucionar para asegurarse que los beneficios de la conservación sobrepasan el costo a las comunidades y que la conservación comunitaria se encuentra firmemente entrelazada con las estrategias de conservación y del uso nacional de tierras.

El desafío del manejo de las áreas protegidas basado en la comunidad

SEJAL WORAH

El manejo de los recursos basados en la comunidad está, hoy en día, en una encrucijada. Por un lado, está siendo desafiado más y más por los académicos, las organizaciones conservacionistas y los gobiernos. Por el otro, mientras que algunos donantes/NGOs continúan promoviéndolo, usan viejos y no muy exitosos paradigmas. Esto ha significado que una década después de haberse popularizado, la conservación basada en la comunidad todavía no ha sido aceptada o practicada ampliamente. Este informe examina algunos de los “puntos débiles” en las practicas corrientes de la conservación basada en la comunidad y argumenta un cambio de enfoque.

Hay una necesidad de cambiar el foco fuera de lo puramente económico y de los incentivos para la supervivencia. Donde es posible, los programas de conservación basados en la comunidad necesitan promover una política y una legislación que lo permita. La documentación y la literatura en este tema debe volverse más rigurosa y científicamente credible. La representación de los intereses de la comunidad a través de las agencias externas necesita una reflexión cuidadosa, tanto en el papel preciso de la agencia externa como en la estrategia para retirarla de circulación paulatinamente. Finalmente, dichas iniciativas necesitan reconocer, entender y trabajar mejor con las complejidades de los entornos locales. Esto significa un refuerzo de los mecanismos para la toma de decisiones locales dentro del marco de una política, incentivos, evaluaciones y ajustes apropiados y luego permitir que estas instituciones se desarrollen a fin de que decidan las opciones futuras para el manejo de los recursos.

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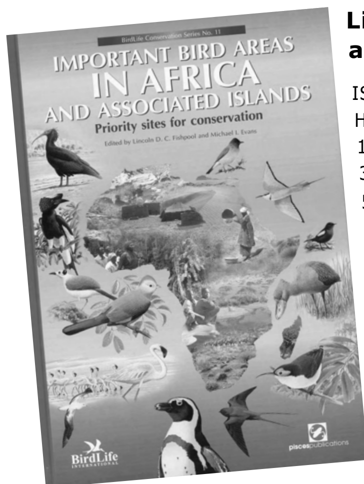

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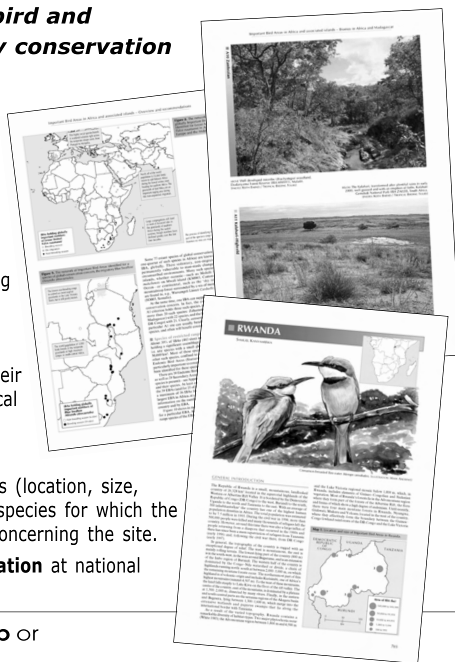

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ISSN: 0960-233X

Editors: Jessica Brown, Ashish Kothari and Manju Menon

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