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PARKS is published to strengthen international collaboration among protected area professionals and to enhance their role, status and activities by:

- maintaining and improving an effective network of protected area managers throughout the world, building on the established network of CNPPA
- 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

Cover: Cayapas family in Rio Barbudo, Ecuador. Photo: WWF/R. von der Giessen.

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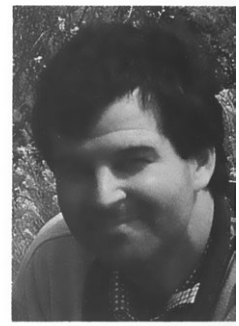
Editorial

PAUL GORIUP



IT IS JUST OVER A YEAR since the publication of the last issue of PARKS (Volume 3 No 3). The interlude was caused by the confluence of several changes: changes caused by a CNPPA review of the role and format of PARKS (carried out at the Fourth World Congress on Parks and Protected Areas in Caracas); changes in the staff of the IUCN Protected Areas Programme as David Sheppard succeeded Jeff McNeely; and changes in the production arrangements for the journal.

As Editor of PARKS, and on behalf of the new Advisory Board (see inside front cover), I am delighted to launch PARKS under its revised, sharper mission: to strengthen international collaboration among protected area professionals and to enhance their role, status and activities. In practice, this means a more substantial publication in which more space is given to developing the theory and practice of protected area management at the professional level.

We have improved the design of the journal and, even better, achieved a much lower subscription price. Moreover, PARKS will now accept appropriate advertisements (e.g. for meetings, equipment and services) the revenue from which will help in due course to finance editions of PARKS in French and Spanish. One of the main characteristics of recent practice is, however, being maintained: each issue will revolve around a theme in order to provide a coherent treatment of issues pertinent to protected area management. The theme of this issue is "building community support for protected areas", and it draws on material presented at workshops held at the Caracas Congress.

It is a particularly apt theme for me as I have just returned from the Danube Delta Biosphere Reserve, Romania, where IUCN is contributing its expertise to a major programme of investment by the European Bank for Reconstruction and Development and the Global Environment Facility. The focus of the programme is to promote ecologically sustainable development for the delta's inhabitants. As a significant example of how protected areas can benefit local people, and thus engender their support, the Danube Delta Biosphere Reserve Administration and the Council of Tulcea District have recently agreed on a scale of fees for utilising the reserve's natural resources. The income will be deposited in a special fund that will provide interest-free loans to commercial companies so that they can purchase advance stocks of vital foodstuffs (such as sugar, salt and oil) and distribute them to stores within the delta before all the waterways become frozen in winter. Not only will the delta inhabitants be assured of supplies, they will be able to purchase them at normal prices.

Future themes will be *Financing Protected Areas* and *Protected Areas and Sustainable Development: Making It Work*. Articles for these themes will be commissioned. However, there will also be space for two or three short communications on other matters, and potential authors should contact the editorial office for advice on suitability, deadlines and manuscript preparation. PARKS will also print letters, so if you want to take issue with something appearing in the journal, expand on a point, or contribute a new insight, please do write in.

Working with indigenous peoples in South America

TED MACDONALD

Developed countries now support and encourage Latin American Indians to use their interests and skills to become participants in programmes of conservation and sustainable land use. This should enable them to improve their incomes in an economically sustainable way.

Developing workable strategies for managing fragile lands with indigenous Indian populations is not easy. Indians and their organizations have reason to be cautious, indeed suspicious, of individuals and organizations which claim to work on their behalf. They have suffered deprivation, displacement, and marginalization to this day. Recently, Indians have established their own organisations to defend their rights to land and resources.

The paper outlines some of the historical and institutional background which has led to the Indian's current situation. It then reviews ways in which government and NGO agencies have worked with Indian peoples and describes the goals of Indian organizations. Case studies are presented to illustrate a positive and a negative response to programmes of conservation and resource management. The paper concludes with some guidelines and suggestions for working with these new social sectors.

WHO SPEAKS for Indian peoples and their needs? Considering the tragic situation of most Indians, it would appear that any concerned person could, indeed should, voice support for them. However, as the world's stage currently fills with those who report on human rights, the environment, national development and nationalism, as well as peace and security, voices range with such variety of direction that they must somehow be ordered, blended, and, occasionally, eliminated or rejected. Increasingly, Indians have taken on this responsibility and speak for themselves. That process is not yet complete, so understanding the current situation requires selective listening.

This paper aims to assist current listening to the sounds from lowland South and Central American Indians. It does not pretend to unite the voices of these people, but simply reviews critical aspects of the current situation and provides some suggestions for working with indigenous residents of fragile lands and protected areas as their self-determination evolves.

This paper first outlines some of the historical and institutional background which has led to the current situation of indigenous peoples. It then reviews ways in which government and NGO agencies have worked with Indian peoples, describes the goals of Indian organizations, and illustrates some of the current problems faced by governments and NGOs working with indigenous peoples.

The second section of the paper focuses on two questions which developed from a November 1991 workshop hosted by Harvard University's Centre for Cultural Survival (CCS), *The role of NGOs working with indigenous federations in Central and South America*. Each question suggests methods to enable greater and more effective local participation in programmes of conservation and sustainable management of fragile lands. The first question is: **Why should**

planners concerned with fragile lands pay any special attention to indigenous peoples? The second is: **If working with indigenous peoples is deemed important, how should it be done?**

In the third section, case studies attached to this paper illustrate a positive and a negative indigenous response to programmes of conservation and resource management. The paper concludes with some guidelines and suggestions for working with these new social sectors.

Data for this paper have been drawn from field programmes supported by Cultural Survival since the late 1970s and from the CCS-sponsored workshop on the role of NGOs in work with indigenous peoples.

Fragile lands and Indians

Latin America's fragile lands and protected areas, as understood here, fall into two broad categories. The first includes those lands which are at present relatively unmodified; this category includes areas such as tropical rain forests and many coastal areas. The second comprises those lands which have been rendered fragile by long term overuse; this category would include the arable slopes and valleys of Central America and the Andean region of South America. In each area, planning for use and conservation requires different approaches.

Just as demographic history helps to define fragility, it also helps to distinguish Indians' response to their environment. For all Indians, land and land rights are the critical concern. But those living in the overworked, more densely populated landscapes are generally more concerned with recuperating lost land than they are with preserving or restoring its resources. Those who live in relatively unmodified landscapes have been less affected by pressures from the dominant society, so they link themselves and their future more closely to natural resource management and restoration of degraded lands. Both sectors have responded recently to pressures from the dominant society by political mobilization. However, the lowland groups have linked their concerns more closely to those of the broad environmental community. Though their interests are similar, there is as yet no broad convergence of interests and relatively little coordinated work with conservationists. This paper suggests that the potential for fruitful collaboration is enormous. As such, lowland groups are the focus. Many of the comments and suggestions, however, apply to permanent residents in many rural settings.

The changing face of Indian peoples

The popular image of exploitation of and disdain for Indians by non-Indians, despite their few outspoken but frustrated champions, has been generally accurate and hardly interrupted from the late sixteenth until the late twentieth century. The Indians' historical response has been hundreds of unsuccessful revolts and nearly continuous but more subtle forms of protest. Aside from the few isolated individuals who have voiced concern for the plight of Indian peoples, and a series of unsuccessful revolts, the Indian's position improved little during the last 500 years. This has begun to shift, slightly but nonetheless significantly, in the Indians' favour in the twentieth century.

This evolving social landscape offers both challenges and opportunities for those concerned with either fragile lands or protected areas. In such environments many, if not most, of the residents are indigenous people. Many of them now

refuse to be considered either as one more exotic species to be protected or as an obstacle to someone else's plans for environmental conservation or national development. They demand to be significant actors.

Two basic changes began to move this process in the mid-twentieth century. One was the emergence of ideas related to *indigenismo*. The second, far more important, was the world-wide push for national development which followed World War II. Those currently concerned with conservation, sustainable development and biological diversity must face this history as well as a new Indian political reality.

Indigenismo in Latin America

In the 1930s, the writings of Peruvian nationalist José Carlos Mariátegui championed the nation's Indians in a highly idealistic and often romantic manner, as a reaction to the Eurocentric focus of the nation's elite. The ideas and sentiments of the *indigenismo* resonated well within Mexico and, to a somewhat lesser extent, in most Latin American countries. Indians, the argument went, provided many of the lasting historical roots and strengths of Latin America, but abuse and neglect had left contemporary Indians mere remnants of their proud and creative ancestors. Thus, *indigenismo* revered and highlighted Indians in historical accounts, but argued strongly that any support should be directed toward incorporating Indians into the national political and economic systems which were established and dominated by non-Indians. In brief, Indian 'history' died with the conquest, so any assistance should support their acculturation within the new social order.

Such thinking led to some of the first secular educational and economic support for the Indians of Latin America, illustrated largely by the programmes established through the Instituto Indigenista Interamericano (III), founded in Mexico and subsequently expanded throughout many Latin American nations in the form of national institutes. The institutes always functioned with minimal to nonexistent budgets and overwhelming paternalism. Institute programmes were either academic, as illustrated through the III publication *América Indígena* and institute seminars, or occupational, as illustrated by institute-sponsored training courses in manual arts and crafts. Though the institutes still function in many Latin American countries, they remain poorly funded, largely academic, and isolated from the mainstream of Indian life. With the exception of the few individuals who participate in limited programmes, Indians hold little regard for the III. The institutes, nonetheless, illustrate many of the attitudes towards Indians that accompanied the world-wide concern with nationalism and development that followed World War II, and that persist in many current development and conservation programmes.

Indians and national development

Post-World War II international development funds enabled numerous programmes that, directly or indirectly, were designed to assist native peoples and other poor sectors of Latin American society. Spurred by a booming US economy and humanitarian spirit which was sparked by the Marshall Plan in Europe, the idea of international development arose and subsequently established itself as the closest approximation to a world religion. With US government funding, national development programmes appeared throughout the world. Combined with

efforts towards agrarian reform, development funding proliferated in Latin America after the Cuban revolution.

These programmes were characterized by highly centralized funding and strong national government control over the design and implementation of projects. Funds were always channelled to government agencies and ministries through the central banks. Project related decisions were the responsibility of the governmental agencies. In most cases even the project's on-site technical teams had little input into the process. The communities, or 'beneficiaries', had even less. The most they could hope for was to petition project directors or government agencies, and hope to be heard.

From the standpoint of most major bilateral and multilateral donor agencies, this pattern has changed very little in Latin America. Donor agencies and others are generally aware of these problems. Though there have been few exceptions to the basic government-to-government assistance programmes, many donors have considered means to make the work more effective, less corrupt and more responsive to local interests. One of the few noticeable changes has been an effort to decentralize the support and focus on regional programmes. Such efforts, however, always run the risk of simply replicating problems at a local level.

NGOs: From alternatives to establishments

In many ways non-governmental organizations (NGOs), beginning in the late 1960s and expanding rapidly in the 1970s, reflected an idealistic concern for social justice, popular participation and economic equity as well as growing cynicism with regard to government-managed development programmes. Government agencies provided no response to demands for popular participation, yet central governments continued to control most of development funds and, with them, any development project design and implementation.

In the 1970s private funding sources proliferated in the industrialized world. Many of these foundations and donors perceived themselves as kindred spirits with the young, largely urban and highly idealistic members of the NGOs. Each maintained a similar focus on ideas such as grassroots development, popular participation and human rights. And they shared a common perception that most major development agencies, knowingly or unknowingly, had not responded to such needs and concerns. Small-scale, privately funded development programmes appeared across the Latin American landscape. In turn, NGOs from the industrialized world looked mainly toward their Latin American counterparts for alliances, joint programmes, and training. This sharp distinction between government and NGO programmes has now changed in many areas. Smith (1990) writes:

> In the early days, the NGOs often found themselves in political opposition to the governments in power, and in conflict with the governments to occupy a space in the development and advocacy business. By the late 1980s with the blessing of bilateral and multilateral funders representing neo-liberal policies, the world of the NGOs was legitimized; their numbers mushroomed as did their budgets and their political power. Currently, in many cases, the NGOs provide needed services to the urban and rural poor which government ministries, impoverished by inflation and debt, are no longer able to deliver.

In most countries NGOs, founded as relatively small powerless groups with little government control, continue to function quite freely and informally. They often design programmes in the name of the groups such as indigenous peoples, receive economic support to undertake these projects from a increasing number of agencies, and implement them with a high degree of independence. Though the NGOs and their programmes vary widely in terms of the degree of local participation in planning and directing projects, young urban professionals generally make up the NGO ranks. Many are sensitive to the demands for local control, and the programmes actively support true collaboration. Others still carry many of the values of the dominant society. Here even many of the most enlightened are not fully divorced from the sentiments and ideas which spawned *indigenismo* decades earlier. In brief, the extent to which some NGOs vary significantly from government agencies in terms of power and control can be questioned, and has been.

Indigenous ethnic federations

The potential for institutionalization and paternalism by NGOs, like that of government agencies, has not gone unnoticed by indigenous peoples. During the 1970s and 1980s two movements began. Indian communities of lowland South and Central America began to organize themselves into ethnic federations. Now, having organized quite successfully, they are demanding recognition of their rights and direct participation in programmes previously dominated by government agencies. Similarly, they are questioning and challenging NGOs for political space, project funding, and legitimacy as advocates for Indians.

During the past two decades, in every Latin American country, Indians have begun to organize their communities into regional and national organizations, or ethnic federations. By contrast to many other sectors of a national society, Indian federations are greatly concerned with their ethnic identity and uniqueness. Concerns over land rights, threatened by colonists and extractive industries, and ethnic identity, under threat by almost all those who worked with them, sparked the formation of the organizations. They represented the first truly indigenous-inspired efforts to improve their situation without submitting themselves to demands for acculturation into an alien society.

Currently ethnic federations are expanding the national political arena by including themselves within it. Some of the most notable examples – the Kuna of Panama, the Shuar of Ecuador, and Paez of the Regional Indian Council of Cauca in Colombia – have become internationally recognized social and political forces, and have thus created niches for themselves within plural national societies. Faced with broad regional problems, some federations have begun to organize internationally. And their work has been recognized. In 1987, Evaristo Nugkuag, the Aguaruna Indian founder and president of the Amazonian regional ethnic federation AIDESEP (Asociación Interetnica para el Desarrollo de la Selva Peruana), accepted the prestigious Right Livelihood Foundation's annual award, for AIDESEP's work in development in Peru as well as the role played in the formation of the Coordinating Group for Indian Organizations of the Amazon Basin. In regions or countries where ethnic federations have become developed and stable social sectors, they have also become the vehicles which provide communities with a means toward broad, long-range social and economic change.

Most developed and stable federations maintain two primary concerns:

- to defend their member communities' rights to land and resources
- to expand and strengthen their organizations.

Both concerns are critical to empowerment, and they can and often do influence any decision regarding indigenous participation in development or conservation.

Many of the leaders of ethnic federations feel that their broad political concerns are rarely approached by national or international development agencies, or by environmental and human rights organizations. At the same time, they openly question the use of funds, particularly those of the NGOs, which are solicited and obtained to defend Indian peoples or their land and resources.

Such concerns were expressed by Indian representatives from organizations in Belize, Costa Rica, Panama, Colombia, Ecuador, Peru, and Bolivia who attended the CCS workshop *The role of NGOs working with indigenous federations in Central and South America*. Also attending were three NGOs from Latin America as well as several from the United States and Canada.

Discussions were wide-ranging but, through a series of working groups which met over four days, some general concerns and questions emerged. These are reviewed briefly here. They are in no way complete or conclusive. All Indian representatives stated that the issue of who speaks for and works with Indians, as well as how they do it, should be a subject for on-going discussion. To open the discussion, representatives and others stressed that it was essential to distinguish between national and international NGOs. Until recently, most links were between NGOs rather than between international NGOs and Indian organizations. Indian representatives did not suggest eliminating such links but rather evaluating them. Earlier, as a means to circumvent centralized planning and get right to the grass roots, the NGO was seen as essential. However, with the rise of Indian organizations, the need for an intermediate NGO was challenged, not necessarily denied, but subject to question and to a redefinition of responsibilities.

The major expressed concerns, and problems resulting from a failure to meet them, centred on local participation in projects, legitimacy of those involved in these activities, and communication between groups. Participation was understood to be the extent to which local people were actually involved in all phases of programmes and projects. This included initial project identification, preliminary planning, assessing support, training needs and effectiveness, management of funds, and evaluation of project progress and results. The opinion was that, to the greatest extent possible, Indians should be involved and eventually take control of this process. At the same time, both groups recognized the serious past and current problems with planning, reporting, and financial issues on the part of both types of agencies.

Remedies for management problems among Indian organizations led to the question of legitimacy. To a certain extent legitimacy with regard to Indian organizations is an easier matter to determine than legitimacy of NGOs. Legitimate Indian organizations are understood to be representative bodies led by officials who have been delegated authority through election or another culturally acceptable manner. If a group claims to be an Indian organization yet does not conform to some representative structure, the leaders have no right to call themselves an Indian organization. This does not prevent the formation, nor

does it deny the legitimacy, of Indian NGOs. The groups are simply different, speaking with varied degrees of authority, and working towards different ends. Indian NGOs, and for that matter all other NGOs, are understood to be *ad hoc* groups formed for specific purposes or to undertake specific programmes.

Though there was no clear definition of legitimacy for NGOs, it was suggested that a group can claim to be legitimate only if it meets its objectives in an honest manner. Determining, or even questioning the legitimacy of such a group was accepted as a valid process. NGOs should be able, perhaps required, to present and defend their programmes openly. The details were seen as essential information for those who provide the funds as well as those who are seen as the beneficiaries of the support. Representatives suggested open dialogue and understanding as to the goals of the group working with Indian organizations. Indians and others at the workshop agreed that NGOs varied widely with regard to legitimacy and representativity. There was an expressed commitment to continue the evaluation of such groups.

All of the concerns pointed to a greater need for communication among both NGOs and Indian groups. Here there was agreement that the time needed to decide on any issue varied for each group. Most noticeably, Indian organizations, as representative organizations, required considerably more time to review, inform, and decide upon projects and relationships with those who might work with them on projects. This would require considerable rethinking and, to be successful, an acceptance of the time needed for Indian leaders to properly inform and obtain the consent of those they represent.

In summary, Indians indicated that they are willing to work with both government and non-government agencies. However, the conditions under which they will consider programmes and actually collaborate with both entities have changed significantly. This paper now considers the value of working with Indian organizations and ways in which those who do so should undertake that work.

Working with indigenous peoples

Why work with indigenous peoples?

All Indians in Latin America are among the poorest of the poor. That alone could justify specially focused programmes. However, much work which seeks to mobilize rather than simply support the poorest of the poor is often frustrated by the absence of local organizations and structures capable of administering development programmes. Most Latin American Indians, however, have now created unique ethnic federations and, through them, have begun to create systems which will allow Indians to manage their resource base in a sustainable manner and to improve their deplorable economic situation.

Geography also points to work with Indians. In many parts of the developing world, particularly in Latin America, the most fragile or potentially threatened environments are also the homelands of indigenous peoples. Cultural Survival's mapping project and the resultant National Geographic Society map *The coexistence of indigenous people and the natural environment in Central America* (1992) illustrated a direct relationship between the region's last standing forests and Indian communities. Indians have helped to maintain the physical integrity

of their territory. Yet, as colonists and extractive industries expand, the future of the Indians' sustainable adaptation has become as precarious as that of the forests. A similar relationship occurs in much of lowland South America. As such, geographic proximity alone would support the development of programmes which link Indians to resource management.

At least as important are the socio-political concerns which link Indians and fragile natural resources. To appreciate and incorporate these interests, Indians must be accepted and understood as significant social actors, not just one more species to be protected or studied in the name of biodiversity.

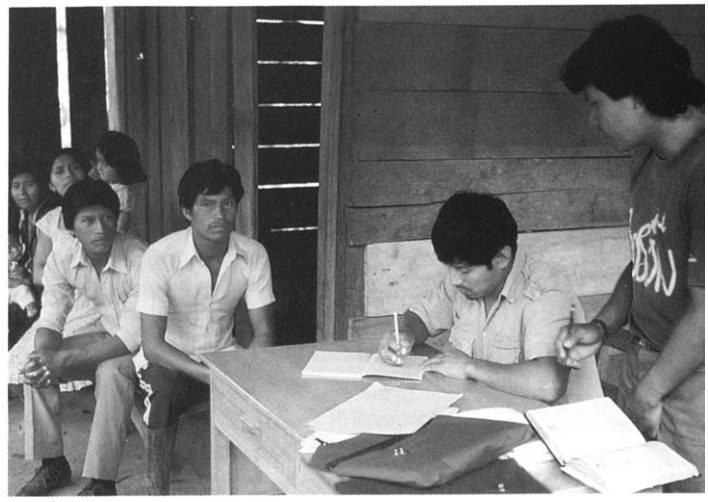
Such a perspective is critical, yet often missed. For example, the current environmental focus on the future of tropical rainforests has sparked strong interest in indigenous technology and knowledge systems. Researchers and casual observers alike agree that Indians have managed natural resources in a sophisticated and sustainable manner. Considerable funds have been provided to research and document indigenous technologies and beliefs.

However valuable such knowledge, research and other programmes with indigenous peoples cannot be limited solely to so-called 'traditional' land use practices. To do so would suggest that Indians can, or want to, oversee their land and resources in some timeless romantic manner. In fact, relatively few live in the sort of isolation suggested by such research.

Most, if not all, Indians face an expanding colonist frontier. Directly or indirectly all participate in the market economy. At the same tine all draw from a shrinking natural resource base. These changes have reduced or eliminated Indians' ability to function solely through household-based, subsistence economic systems. Most Indians, however, have not yet moved comfortably or successfully into non-sustainable income generating production systems. The majority remain linked to their lands.

Indians are fully aware of their current precarious political and economic situation. They also understand that lands and resources which are *not* worked in some visible or otherwise acceptable manner will be perceived or labelled as 'idle lands', and thus become coveted targets for alternative claimants. This is the sort of knowledge which has pushed Indians in general towards development programmes or similar activities.

In many cases national development priorities led Indians towards activities such as cattle raising, resource extraction, and other systems of limited ecological sustainability and, for them, minimal economic gain. Most Indians moved in such directions simply because the economic activities were politically acceptable land use systems. They provided a means toward secure tenure but rarely improved the domestic economy. Recently, Indians have moved more towards participation in programmes of sustainable management for their natural resources.



Indigenous people as resource managers: Amazonian Indian resource management specialists gathering information, suggestions and opinions on land tenure and land use from local community members from the Napo River, Ecuadorian Amazon. Photo: Ted Macdonald.

Working within and managing an existing landscape is not something new for Indians; sustainable land use has now become more politically acceptable in the face of resource degradation and other widely expressed environmental concerns. A summary review of these factors follows.

1. Indians have maintained a long-term, vested interest in their resource base. This is a rational and pragmatic response to a specific situation, as well as a distinct normative and cultural attitude. Most Indians regard their land and its resources as their principal present and future capital base. Despite their poverty, many Indians are attracted to long-term use and sustainable management of these resources, not the short-term maximization strategies generally sought by colonists and other entrepreneurs.

2. In response to the threats posed by an expanding frontier of colonists and extractive industries, Indians have begun to organize into pan-community ethnic federations. In nearly every country in Latin America, and other parts of the world, indigenous peoples have joined to create local, regional and now international organizations. All of those who attended the CCS workshop were representatives of such groups, as were the scores of Indians in Bolivia who attended the December 1991 workshop of Indian resource managers.

This level of organization is unparalleled by most other sectors of rural society (e.g. peasants and colonists) with whom Indians share equal, if not greater, economic needs. The organizations provide excellent dispersal mechanisms for ideas, and they enable a powerful multiplier effect for methods for resource management and land use.

3. Indians, though they have opened a greater political space for themselves, still remain marginal to most major political and economic sectors of the countries in which they live. To meet Indians' economic needs, programmes must be directed specifically towards them.

4. Indians' sense of self is not simply ascribed or caused by others. Native Latin Americans regard themselves and their cultures as unique and valuable. Programmes which aim to help Indians meet their economic needs and conserve their resources must work within a framework which includes ethnicity and culture.

5. Many Indian organizations have now initiated their own programmes of natural resource management. When the organizations first appeared in the 1960s many focused solely on organization itself as an essential first step toward a larger goal of empowerment. Recently, the communities which make up the organizations have begun to challenge their leaders, stating that the communities are now organized but are still impoverished. They ask 'what comes next?'. Organization-sponsored projects, such as pursuing land rights through land management, providing technical assistance to programmes which increase income, and obtaining funds for long-term land use programmes, have become well-received responses to the communities' concerns.

6. Resource management programmes run by Indian organizations recognize the need for technical assistance, and the value of this assistance. Indians have seen that many of the most promising programmes run by Indian organizations – for example the Kuna Indians' Project Pemasky in Panama, the Amuesha Indians' Yanesha Forestry Cooperative of Peru, and the Quichua Indians' Project Pumaren in the Ecuadorian Amazon – have benefited from various forms of outside technical assistance.

7. Indian technical teams linked to their organizations have begun to exchange ideas, consider common problems, and work jointly on programmes. Cultural Survival has assisted this process by supporting technical assistance exchanges among Indians from Panama, Colombia, Ecuador, Bolivia, and Peru. Possibilities for future technical interchange were expanded at the December 1991 International Indian Workshop in Bolivia which brought together over 100 indigenous resource management specialists.

8. Indian technicians, unlike individuals from other similarly poor sectors of Latin America, are less vulnerable to 'brain drain'. Even with specialized training or advanced education, most Indians remain stigmatized by their ethnic status when they enter non-Indian sectors of the society. They obtain their highest social standing by remaining within their own societies, working with their own people.

9. Finally, it is an opportune time to work directly with Indian organizations. 1992 and 1993 (the UN Year of Indigenous Peoples) were years when organizations worked to establish new sorts of relationships with donor agencies and others who work with indigenous peoples. This now provides a unique opportunity to work directly with indigenous peoples and their organizations, and presents a challenge to do so sensitively.

How can those concerned with the use and management of fragile lands begin to work more effectively with indigenous peoples and their organizations?

Developing workable strategies for managing fragile lands with Indians is logical and perhaps essential, but it is not easy. Indians have generally suffered deprivation, displacement, and marginalization by government agencies and non-government organizations alike. Indian representatives at the CCS workshop detailed examples of such histories and generally expressed a concern to rely on neither government nor international support. The overall sentiment is critical of all those who claim to be working *for* Indians. History supports their cynicism through examples. Yet, despite a strong rhetorical shield, most Indian organizations embrace and accept support while they may continue to question and probe its legitimacy. Such concerns not only enable them to minimize paternalism but lead to the sort of constructive evaluations of projects which can make them more effective. Indigenous concerns and priorities regarding their rights must be accepted, and their cautions regarding threats to those rights must be respected. Concerns, priorities, and cautions vary from case to case, but many of those reviewed below are shared.

Indian organizations were established primarily to defend their member communities' rights to land and resources and to expand and strengthen their organizations. An understanding of such priorities, as they apply to each group, is essential for programme planning. Otherwise projects which, in the opinion of the organization's leadership, threaten either priority may be challenged or rejected. Similarly, for outsiders, ignorance of the Indians' local history of land tenure struggles and threats to their organization building can lead to activities which are easily interpreted as suspect.

Unlike some other sectors of society (e.g. cooperatives, unions and labour organizations), indigenous ethnic federations seek to maintain their members' unique ethnic identity. Group solidarity is therefore critical and its expressions

must be understood. Any activities which challenge that unity are perceived as threats.

Indians and their organizations have good historical and present reasons to be cautious, indeed suspicious, of individuals and organizations which claim to work on their behalf. They regularly challenge government agencies, churches, national and international development organizations. Now they openly question those institutions and seek to make sure that development programmes do not mask efforts to weaken their organizations. Recently, the organizations have begun to question the sorts of non-governmental agencies (e.g. human rights groups, grass-roots development organizations and environmental groups) which were formed to circumvent the bureaucracies and political constraints and concerns of larger organizations.

The basis for most major indigenous concerns can be grouped into several broad themes. Some of these are land, strong and autonomous organizations, direct participation, and control over resources. A brief review follows.

Land

Historically, the Indians' capital base – land and its resources – has stood greater risk of loss than has their understanding of resource management. So land tenure is awarded more public attention than its management. It is a priority for any work which concerns indigenous peoples and resources.

Many of the programmes which have succeeded in linking Indians to resource management – e.g. The Central Selva Project (Peru), the Yanesha Forestry Cooperative (Peru), the Awá Ethnic/Forest Reserve (Ecuador/Colombia), Project Pumaren (Ecuador) – included, as a first step, efforts to secure land tenure. Others have a strong land titling component through which land tenure can eventually be secured. At the very least, a process to define land rights, and problems which may be associated with tenure disputes, must be put in motion before any outside efforts at actual resource management programmes are undertaken. Otherwise any work can be seen as the sort of improvement which makes the land and resources more appealing to others, and thus threatened.

Strong and autonomous organizations

Over the past two decades in every Latin American country Indians have begun to organize their communities into regional and national organizations, or ethnic federations. Land rights and ethnic identity are the main focus. In each case an indigenous group responded by organizing when its collective land base was threatened by government policies, colonization, or an expanding market economy.

Many ethnic federations have expanded the national political arena by including themselves within it. The Kuna of Panama, the Shuar of Ecuador, and Indians of the Regional Indian Council of Cauca in Colombia have become internationally recognized social and political forces, and have thus created niches for themselves within plural national societies. Faced with broad regional problems, some federations have begun to organize internationally.

In regions or countries where ethnic federations have become well developed and stable social sectors, they have also become the vehicles which provide communities with a means toward broad, long-range social and economic change. The other, newer organizations are working toward that status.

As mentioned earlier most developed and stable federations maintain two primary concerns, both of which are critical to empowerment. Any work, however benign or well meaning, which appears to threaten the power of these newly formed organizations will be challenged. Similarly any work with individual communities which are members of Indian federations must be channelled through the organizations. The concerns are well founded. In many cases government and church agencies have attempted to weaken the federations by granting special favours to some communities. These efforts are interpreted as 'divide and conquer' tactics, and the organizations work hard to prevent them.

Direct participation

Indians are aware that, at least since the sixteenth century, few of them have been included in the political and economic decisions which most affect their lives. This has been particularly true of decisions made by large land owners, churches, government agencies and other powerful groups. As with many third world groups they are aware that international donor agencies have worked to promote geopolitical interests in the past. Vietnam and Nicaragua still carry a heavy symbolic load. This is far from being an insurmountable obstacle and can often be overcome by openly discussing the project's goal and allow for open questions.

The current concerns over conservation and resource protection provide few exceptions to this pattern. Conservationists and development workers continue to initiate plans for Indians' land and resources. Consequently, in many areas Indians understand conservation and sustainable development programmes as little more than a new wave of colonialism which neglects and denies them their rights to land and resources. Even in cases where plans are well-meaning, aware of Indian needs, and environmentally sound, motives are often regarded with suspicion.

Indians, particularly their organizations, now demand direct participation in all phases of any programme. Ideally, any development programme should emerge from the organization itself, or from the communities through the organization. Participation which is seen as recruitment into an externally designed project is difficult at best.

In addition, decisions over projects – either development or conservation – are not the sole purview of the organizations' leadership. The organizations are understood to be representative and democratic. Decisions must be transmitted back down through the membership.

This has direct implications for any sort of work with the ethnic federations. A process of debate and decision making, neither quick nor executive, must be understood and respected. Decisions of any sort will take time to develop. A single meeting with the directorate should not be expected to produce any agreement. If some sort of agreement *is* obtained from a brief meeting, it will not necessarily be regarded as binding or permanent.

Control over resources

Specific programmes and projects themselves are not the only concern. For many Indian organizations, the mere existence of non-Indian organizations which promote projects are also a major concern. Indian organizations have become

increasingly sensitive of any efforts to use them or the communities for direct or indirect political ends or economic gain.

Such concerns have always existed with regard to any government programme, national or international. Increasingly, the organization rejects local party political alliances. The legacy of Vietnam, Nicaragua, and US drug control still weigh more heavily than the popular resentment which has spurred the collapse of the Soviet Union and eastern European nations. Indians are also concerned with geopolitical agendas, particularly those perceived to originate from US government policy, since the US is the largest presence in the region. Those working with any programme funded or associated with USAID, perhaps more than any other government donor, can expect questioning and suspicion on the part of organizations. Programmes funded through host country organizations can become equally suspect. They are concerns which should be expected, but their existence and expression does not preclude successful projects. They simply suggest a need to understand how politics influences even the local interpretations of development goals and objectives. They point to the need for openness on the part of the development organization and a willingness to discuss plans and permit a high degree of control on the part of the Indian organization.

Analogous concerns now apply to conservation programmes. Indians are fully aware that conservation is currently fashionable, and that NGOs are seen as primary vehicles for such work. However, there is considerable concern over the role and the goal of intermediary organizations. Indian organizations recognize that there are various types of intermediaries. Their goals and methods of working with local organizations vary enormously.

However, the increasing number of such groups makes it difficult to identify and evaluate new agencies. The variety and intention of these groups was a subject of considerable discussion at a recent Cultural Survival workshop. In the future, Indian organizations will look even more carefully at such groups and then begin to work more closely on programmes.

The Indians' concern with such groups or institutions lies in the fact that they seem to buffer them from agents of support or power. They, like marketing middlemen, are seen as groups which siphon off resources which could be returned to the communities. Recently, with the growth of development and environmental NGOs, Indian organizations have begun to question the motives of these groups. Additional questions and concerns are inevitable in the future. Direct local control of programmes and resources is the goal, and efforts which enable organizations to manage such work should be supported.

The above general concerns provide a basis for any work with Indian organizations. In addition, given both the political and cultural concerns of the Indian organizations, a series of general procedures are advisable prior to beginning any programme.

1. Simply get to know the group as early as possible, prior to any project development. Familiarity with past threats to their organizations and problems with land tenure will help to avoid inappropriate planning and resultant misunderstandings.

2. Ideally, project plans should develop from ideas and needs already established by the organizations. Any planning in their absence should be carried out slowly and in coordination with the organization.

3. Time should be allowed for ideas to be discussed openly with the organization. This may be frustrating and time consuming, but efforts which move forward too quickly from the standpoint of the organizations are bound to produce problems which could destroy a programme. Assuming that a delay is preferable to a failure, time is well spent by moving at the pace of the organizations.

4. Concern and respect for local process and priorities will enable a far greater long term, project success. Such procedural matters must be accepted by project staff on the ground and those who oversee and evaluate their work.

Case studies: Resource management and indigenous peoples - two tropical forest projects

1. Napo Agroforestry Project

Almost 50% of Ecuador's Amazonian lands are in the province of Napo (52,371 km^2), divided into two major geographic regions – the Andean foothills and the Amazonian lowlands. Today, the Amazonian lowlands are a region of extreme contrast. The isolated sectors contain some of the richest and least studied areas of species diversity in the world, illustrated by the international attention given to the 254,760 ha Cuyabeno Wildlife Reserve and the 679,730 ha Yasuni National Park, and substantiated by ongoing research in other unmodified forest lands conducted by the Missouri Botanical Gardens. Yet along recently opened roads, and often penetrating several kilometres on either side into the interior, colonization and resource extraction have eliminated much of the forest. Napo province has already experienced the Oriente's most extensive population expansion, resource extraction, and deforestation to permit cash crops and cattle raising. In the absence of an alternative, such trends are almost certain to continue. So, for both economic and environmental reasons, sustainable use patterns are essential. The Napo Agroforestry Project, *Proyecto Agroforestal,* was a response to these needs.

Proyecto Agroforestal, initiated in 1984, was funded largely by USAID and coordinated by the Ministry of Agriculture's National Forestry Directorate (DINAF). The project's overall goal was to encourage sustainable production of both settled and newly cleared lands by offering farmers a variety of agricultural, silvicultural, and pastoral land use techniques.

Although planned and tested as an integrated multi-use system, the project's primary focus was its silviculture component. For purposes of a saleable crop as well as a means of soil conservation, trees were planted in gardens and pastures. Fifteen or more species of high commercial value were recommended, including laurel (*Cordia allidodora*), cedro (*Cedrela odorata*), jacaranda (*Jacaranda copaia*), and fosforo (*Didymopanax morototoni*), as well as several varieties of palm and guava trees. The project also provided technical assistance with cash crops, such as coffee and plantains. In addition to food crops and trees, the project also promoted small animal husbandry, mainly African sheep (which by contrast to cattle are easy to manage, produce numerous offspring, and do not damage soils through compaction). The animals are pastured on a combination of well-tested grasses (*kikuyo amazonico*, rather than the widely-used *elephante*, *dalis* and *gramalote*) and a nitrogen-fixing leguminous ground cover (*trebol*) which also reduces erosion and weed growth. 'Living fences' are grown, which

when pruned provide firewood as well as demarcate house plots. This combination of crops, animals and trees permits low-cost, sustainable, income-generating farms compatible with the soils and climate of the area.

Proyecto Agroforestal offered an environmentally superior and economically competitive alternative to clean-clearing forests for cattle raising. In addition, the technology sharply contrasted with large-scale efforts to regenerate tropical forest soils through heavy inputs of fertilizers and pesticides. *Proyecto Agroforestal* was technically and economically well suited to the environmental limitations of the region.

As a means of extension, the ethnic federations which united most of the region's population could have spread the technology to thousands of families at a rate impossible to replicate without some analogous form of social organization. Moreover, with its focus on tree crops, the project also seemed to fit the Indians' political needs. They were fully aware that land had to be put into some form of production in order to obtain and retain land tenure. Many of the Indians who were converting their lands to pasture were fully aware of the limitations and problems of this system of land use. The 1982 forestry legislation would have made agro-forestry equivalent to cattle raising in terms of securing land tenure; trees were put on a par with cattle. Agroforestry, in principle, was a land use pattern already practised by most tropical forest Indians of the area; and several of the ethnic federations had expressed interest in the general idea as a means to increase income by improving on their traditional swidden systems, either through selective cutting of new plots or reforestation of cleared lands.

Yet, when the opportunity to participate in *Proyecto Agroforestal* was presented to them, the local Indian federations (FOIN and FCUNAE) as well as the regional organization, CONFENIAE, not only refused to participate, but publicly opposed the project. They decided that it threatened their broader concerns in several ways, all of which, outweighed any immediate economic benefits. As with most ethnic federations, their major concerns fell into two categories:

- Land, which was largely untitled in the area, and natural resources; rights over which were hotly contested at the time.
- Strengthening the status of their organizations; this related to their ties with constituent communities and with respect to relations with regional and national government.

Unwittingly, *Proyecto Agroforestal* either appeared to or actually did threaten these interests.

The project's principal implementing agency was the National Forestry Directorate (DINAF), a sector of the Ministry of Agriculture. Prior to the agroforestry project, DINAF had done no work of any sort in support of small farmers; instead, most of the agency's activities concerned logging, mainly with large wood and wood product firms. Local forestry programme workers were regarded, quite correctly, as corrupt and working only to benefit the large lumber firms or other loggers who were not only exceeding the legally established quotas but were doing so on lands claimed by Indian communities. Prices paid for logs and boards were extremely low. Although obligatory, reafforestation was minimal and largely cosmetic.

The Indian communities, their respective federations and the national-level confederation had been consistently challenging the logging companies to

prevent this sort of pillage. DINAF was perceived as an accomplice in the process. Indian communities had also been pressuring and criticizing the agrarian reform agency (IERAC) for years over the agency's failure to provide land titles to Indian communities in the Napo. In brief, Indians perceived the Ministry of Agriculture, particularly two of its sub-agencies, to be high among the stumbling blocks to local economic empowerment.

Indian leaders indicated that the small ministry-promoted agroforestry sub-project might produce a modest economic improvement for some individuals. However, formal or otherwise, broad inter-institutional collaboration was perceived as co-optation, which would siphon their energies away from criticism of the Ministry's broader and, in the Indians' eyes, more destructive activities. The Indian organizations, consequently, rejected several offers to collaborate with the agroforestry project. They indicated that their role was best realized by defending the long-term interests of their constituency through criticism of DINAF rather than by promoting short-term gains by working with the agency.

These were general opinions voiced during the project's planning stages. However, as the project evolved, the Indians' perceptions of DINAF were confirmed. Although the 1981 forestry laws were designed initially to promote conservation, their application under the 1983 government was quite different. DINAF declared large sectors of tropical forest as 'national patrimony', which many equated with some form of forest preserve. Indians were told that their rights of usufruct on these lands would be guaranteed, and that they need not worry about land titles if they resided in such areas because the lands were inviolable. These 'reserves', however, were far from preserves in either the legal or the practical sense. As national property, the government had the right to declare that the national patrimony could be tapped whenever national needs or priorities were invoked. National needs and priorities, in turn, could be invoked when someone in high office simply defined them. This was the case in Napo.

Agribusiness firms had been expanding African Palm plantations throughout the region. Although most were financed by foreign companies, several of the shareholders in some companies were top government officials. To expand the size of the plantations, the companies were moving onto land claimed by Indian communities. In some cases plantation employees became 'colonists' who moved onto and laid claim to Indian lands. Such territorial violation resulted in numerous violent encounters and several deaths.

The *de facto* seizure of Indian lands was subsequently legalized when a Ministry of Agriculture decree (No. 0431) declared that 11,000 ha of *'patrimonio forestal'* were to be turned over to IERAC for colonization programmes, and the lands were to be used for silviculture, agriculture, and ranching, and 'especially palm production'. Moreover, these 'reserves' were not isolated, unpopulated areas; many contained lands which were already claimed and some were even titled to Indian and campesino communities. By altering forestry legislation the Ministry of Agriculture was effectively converting Indian lands to agribusiness plantations. The Indian communities were among the first to observe the implications of this legislation and, drawing on national and international support, the Indian federations entered into public conflict with DINAF. Amidst such conflict the image of the agroforestry project was one of a Ministry of Agriculture subterfuge, promoted to draw attention away from the ministry's

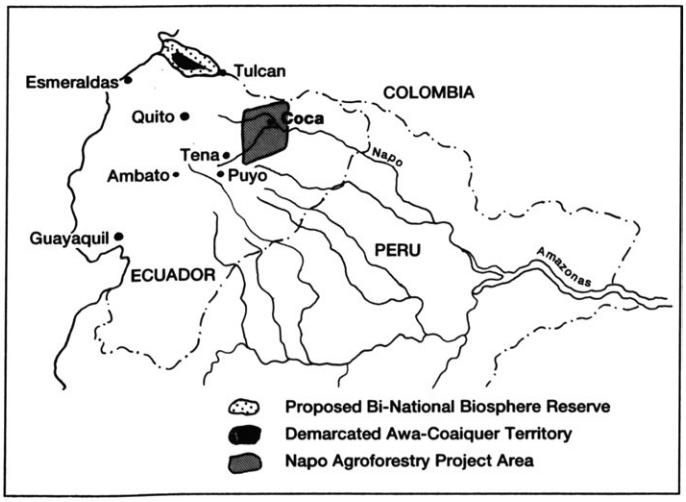
participation in and support of larger programmes which threatened the Indians' major concerns.

A second form of opposition focused on one of the project's North American coordinators. He was a highly experienced technician who had spent over 10 years in Napo province creating and refining aspects of the agroforestry project. For almost a decade beginning in the mid-1970s he had designed and tested a sustained-yield agricultural and animal husbandry project that could be managed within the parameters of the 50 ha plot. Both he and his work, however, threatened the larger social process underway in the area. First he had undertaken much of his previous work at the Summer Institute of Linguistic's (SIL) jungle base camp, Limoncocha, during a period in which the regional federations were evolving; he had become identified with efforts by Evangelical Protestants to create alternative organizations within some communities and denigrate the federation's activities in others. Consequently, when the technician returned to advise the agroforestry project, he was not only a *persona non grata* with most Indian leaders, but was regarded by some as the advance guard for the reappearance of the SIL whose expulsion has achieved great symbolic importance.

In addition, this project coordinator's previous work on refining a 50 ha family plot was undertaken in recognition that such a holding was the standard IERAC allocation to colonists and other independent landowners. No matter how efficient or productive that plot, it was not what the communities had been asking the government to recognize. They claimed rights to and demanded recognition of communal land holdings with sufficient reserve land to support future generations, not, they argued, homestead plots for presently existing families.

In summary, the agroforestry project originated from within a national agency perceived to be working against the interests of the Indian communities. As the project worked to recruit participation, the ministry, living up to its reputation through its actions, indirectly distanced the project further from the Indian communities. The Indian federations, meanwhile, were working to promote the groups' broad interests and programmes. As such the Indians became adversaries of the ministry promoting the project. The foreign technicians too were seen as real or symbolic opponents of Indian interests. As a result, in March 1988, the agroforestry project office stated that they were working with only 196 families, largely scattered settlers who have accepted the project based on observation or recruitment. As the project drew to a close in 1991, extentionists were able to establish several experimental plots at several community schools, but no local organization ever agreed to receive any form of direct, open assistance.

Ecuador/Colombia border region showing Napo Agroforestry Project and Awá Territory and Reserve area.



These problems were not institutional or technical; they were political concerns. The project's design was not flawed; it

simply could not be implemented to its fullest extent because it resonated off of the Indians' broader political process. The case with the Awá was quite different.

2. The Awá Ethnic/Forest Reserve

Numbering approximately 1,800, the Awá of Ecuador live on the western slopes of the Andes. Here seasonal changes in temperature are minimal while altitudinal changes are marked, giving rise to the different ecological zones in the region. Ranging in altitude from 50 to 1700 m above sea level, the newly established Awá Ethnic/Forest Reserve encompasses about 120,000 ha of montane, pre-montane and humid tropical forest. The area represents the largest single tract of Pacific tropical forest remaining in Ecuador. By contrast to the Amazonian region, this forest area remains relatively isolated; the social and environmental impact of colonization and resource extraction have been minimal. While several ethnographic studies had been conducted in the area, the Awá were little known to outsiders, including the national Indian organization, until this decade. Nevertheless, beginning in 1983, both the Indians and their lands have drawn the attention of environmentalists and public administrators alike.

Although rumours of a planned World Bank road sparked efforts to establish secure land tenure for the Awá in 1980, national attention was focused on the region in 1982 with the announcement of construction in the area for the Chical–Alto Tambo and the Chical–Tobar Donoso roads. At the time, due to the presence of Colombian gold miners in the area, there was concern by the Ministry of Foreign Relations' Office of Frontier Affairs to establish a visible Ecuadorian occupation to prevent any border dispute with Colombia. The roads, however, were expected to lead to an influx of non-Indian colonists and land speculators. To manage these developments, an informal, inter-institutional commission was formed. Members of the commission visited the area in November 1982.

In July 1983, the regional offices of the government transformed the informal group into the Inter-Institutional Tobar Donoso Commission, made up of six government ministries (Foreign Relations, Agriculture, Education, Health, Public Works and the Agrarian Reform Institute) and three provincial offices. The overall purpose of the Commission was to coordinate the region's development. Based on the observations of their survey, they established a set of broad development goals for the region – incorporation of the area's population into the national economic life, expansion of the agricultural frontier, creation of mechanisms to "preserve the 'Awá' or 'Coaiquer' native culture, presently in danger of extinction".

With regard to the Awá, the first part of the work was to demarcate and title the 'traditional' lands. To support the demarcation the Commission sought funding from Cultural Survival. It was suggested that this funding be channelled through a non-governmental agency. The responsibility was given to a non-governmental, national Indian organization (then an unofficial grouping referred to as CONACNIAE, now a legally recognized corporate entity titled CONAIE [Confederation of Indigenous Nationalities of Ecuador]). This minor change proved to be critical for future work. CONAIE became a formal member of the Commission before demarcation was undertaken or any specific programmes or projects were planned or implemented. As such, for one of the first times, an ethnic federation was ensured representation in government planning which would affect Indian communities. Moreover, as treasurer and dispersal agent for

part of the work, the national Indian organization established a significant role reversal with regard to government agencies.

In terms of empowerment, CONAIE's participation in the Awá project fitted into the federation's overall process in two ways: the Indian leaders strengthened the organization by adding yet another ethnic group to the federation, and they participated as equals in planning which affected Indian communities. Although normal disputes and disagreements punctuated the process, Indians and government officials, particularly those from the Ministry of Foreign Relations, maintained the sort of regular communications which permitted expression and resolution of conflicts. Consequently, one of the principal liaisons between the various groups writes that to date, 'relations between government officials involved with the project, CONAIE members, and Awá leaders are very good, and have insured the participation of the Awá on all levels of project planning.'

To strengthen direct Awá participation in this process and give the isolated population experience in dealing with outside agencies, CONAIE worked with the Awá to establish a broad political structure in the communities. Following an organizational pattern which reflected both the Ecuadorian Shuar Federation and those of the Colombian Regional Indian Council of Cauca (CRIC), the dispersed Awá households were grouped into 15 regional *centros,* governed by locally elected councils, or *cabildos*. As of early 1988, six of these centres had obtained corporate legal status and applications were being processed for three others.

Each centre, named for geographic location, now holds regular meetings attended by anyone inhabiting that area. Representatives elected from the centres to attend pan-cabildo and national assemblies or meetings are rotated frequently so that a maximum number of persons participate and become acquainted with the operations of the new organization. Although, as of early 1988, the paperwork necessary to create a pan-ethnic Awá Federation was incomplete, CONAIE assisted them in this lengthy bureaucratic process. To further strengthen Awá participation in the national Indian organization, an Awá was elected to the directorate of CONAIE at the organizations' 1984 congress. In brief, beginning in 1983 dispersed Awá households were linked to form local political units which subsequently will be united into a regional federation with representation in the national Indian organization. As such the Awá became part of the process of national as well as their own empowerment.

Such organization and collaboration was essential to obtain land rights, the issue which brought the Awá to the fore in the first place. Several other steps have been taken since then. Outside funds enabled the Awá to remove outside settlers from the territory by compensating them for the few investments made in Awá territory. Such investments usually referred to as *mejoras,* or improvements, were small gardens which served as demonstrations of an intent to occupy rather than a true occupation. Despite protests by the 'colonists', the Awá and CONAIE, with support from the Ministry of Foreign Relations, were able to pressure IERAC to remove them without the violence which occurred in the Oriente. Several other actions in support of the Awá rights of residence were undertaken by the Tobar Donoso Commission. The building of community meeting houses, bilingual schools, a medical facility, tree nurseries and certificates for Awá teachers further strengthened the Indians' confidence regarding the Commission's intentions. Several local experiments in sustainable yields also were undertaken and a 'green

belt', 12–15 m in width, intended to ring the entire reserve, was planted. The belt has both economic and social functions. In addition to providing income to Awá communities, through cash-producing crops such as cacao, coffee, coconuts, citrus and other fruits, the belt provides a visible ring of cultivated land, delimiting Awá territories and thus discouraging encroachment by colonists.

Before land title could be provided, a critical issue had to be resolved – Awá national identity. The population had straddled the Ecuador-Colombia border for generations, and many Awá were unable to define their birthplace. Moreover, none of them possessed the certificate of citizenship necessary to undertake most legal or other civil activities. Consequently, in an extraordinary gesture, teams from the Office of Civil Registry travelled to the isolated area to process documents for all Awá living in Ecuador. This enabled the Awá to legalize their status as Ecuadorian citizens, and eventually to obtain corporate legal status for their organization. It will ultimately enable them to ensure land rights to their reserve, once the topographic work is completed.

Since 1983, IERAC topographical teams have travelled regularly to the isolated area to undertake the demarcation of Awá traditional territory. Determining the boundaries of Awá territory was complicated not only by the settlers who had moved down from the eastern highlands but also by lumbering companies moving up from the western lowlands and encroaching on land claimed by Awá communities. Settlement of border disputes often involved long and acrimonious debates and confrontations. However, the ability to do so was a credit to both the national Indian organization and the Inter-Institutional Commission. The lengthy land titling process strengthened ties between the Awá and the national Indian organization and, equally important, created a strong working relationship between the Indians and the government agencies which made up the Inter-Institutional Commission.

Obtaining title to communal Indian land, however difficult, is secondary to securing its tenure. To demonstrate that the communal lands would not be frozen from development some acceptable form of land use had to be established. Here, too, the Awá were fortunate. As word of activities in the area spread, national and international biologists began to explore the area. They determined that, at the very least, the area (the southern extension of a bioregion whose core is the Chocó area of southern Pacific Colombia) may contain some of the highest known biological diversity in the world. Moreover, it has been suggested that the area was once a 'refuge zone', that is, one of several 'islands' of rain forest which remained during the driest periods of the late Pleistocene. Not only was much of the land declared to be of unique biological concern, but surveys showed it to be so fragile that it was unsuited for any form of modification, and should remain untouched. Public statements and scientific papers attracted the attention of numerous environmental organizations. Foremost among these was the World Wildlife Fund-US which has contributed funds to set up a long-term programme for planning and implementing land management in the area. Technical assistance for this work is being provided through Colombia's non-profit Foundation for Advanced Education (FES) via its research station at La Planada, adjacent to the Colombian Awá area.

Environmental concerns sparked efforts to have the area declared a 'forest reserve'. In principle the creation of such a reserve would have provided the

Awá with an extensive protected homeland. However, CONAIE, well aware of the problems which had arisen in the Oriente with the designation of land as *patrimonio forestal,* argued that a forest reserve was an unacceptable form of land tenure. Moreover, demarcation produced a land claim of approximately 120,000 ha; to obtain communal title to such a holding for a population of about 1,800 would have been difficult, at best. After months of prolonged negotiations, the communities and the Commission agreed to combine two pieces of legislation, one regarding the forest reserve and another directed toward Indian communities, and create a unique Indian/forest reserve. In addition to the land titling steps already taken by the Tobar Donoso Commission, a master plan for sustainable development and natural resource management has been developed and is now being implemented by the government and Indian organizations.

Equally significantly, the project area has been expanded and may serve as a unique example of international collaboration in both environmental and human rights. In 1986 and 1987 a series of binational meetings were held by representatives of the governments and the national Indian organizations of Ecuador and Colombia to establish mechanisms and coordination for the formation of a binational resource plan for the region. As a result of these meetings, application has been made to the Man and the Biosphere Programme of UNESCO for a biosphere reserve in the Awá region. The purpose of this reserve would be to 'reinforce efforts of both countries to preserve both the biological and cultural diversity of this most unique region of the Pacific Neotropics'. As it is now designed, the projects' area of influence would include approximately 300,000 ha in Ecuador and another 800,000 ha in Colombia. In both countries, the project area is established on the basis of traditional Awá territories. However, plans also take into account the needs of nearby or resident colonists. Colombian Awá number approximately 6,000–8,000 people, whose lands are not yet delimited or legalized into *resguardos*. In a broad programme supported by WWF-US and coordinated by FES, Colombia's office of Indian Affairs and the National Indian Organization, ONIC are working with the Colombian Institute of Land Reform, INCORA, to title Awá territories.

The international social and biological implications of this expanded work are obvious, and if successful will provide an excellent example for application in other areas. For the purposes of this paper, however, it is the process rather than the future results which is significant. While it may be premature to evaluate the resource management component of the Awá project, several factors indicate the likelihood for future success. Proposals originated with the Tobar Donoso Commission, not from international or other equally unfamiliar planners. Assistance and technical support were obtained from international agencies, but the initiatives for the project, and thus support and responsibility for the project, lies with the Commission and its members, including the Indians. The designers of the resource management project are the recipients themselves. It is here that the Awá case offers room for optimism.

As it presently stands the Awá case represents a strongly coherent social process linked to an incipient resource management project. As such it sharply contrasts with the Napo Agroforestry Project, which may be described as a resource management plan with no links to a social process.

Conclusion: Indians and rain forest resource management

The search for alternatives to deforestation in the Amazon, and fragile ecosystems elsewhere, offers an excellent opportunity to work within the new socio-political environment provided by Indian ethnic federations. However, these organizations do not always evaluate the benefits of a particular activity by using the same technical or economic criteria as development or environmental planners; they strongly weigh its relation to their larger goals of empowerment. Rather than participate in someone else's development project, they prefer to generate and control their own programmes. Alternatively, presented with the opportunity to collaborate in a potentially beneficial project they seek to guarantee maximum control over its implementation. If there is respect for and response to such concerns, ethnic federations can become an excellent, perhaps indispensable, resource for conservation and development.

The precarious future of tropical rain forests and their inhabitants is well known and has become a subject of considerable concern and startling statistics. These statistics have been widely publicized and need not be reviewed here. Nor have we detailed the role and responsibility of bilateral and multilateral development agencies and banks in this process. Most donor agencies have acknowledged their role and have produced policy statements indicating their concern and an intent to seek solutions. Similarly, most US and Latin American non-governmental environmental organizations now include the rights and needs of indigenous peoples in their statements. Indigenous peoples have become part of the environmental and development landscape.

Yet, while there is an acknowledged need for socially sensitive, sustainable development of forest resources, and while considerable experimentation is underway regarding sustainable resource management, any positive initiatives are greatly outpaced by environmentally destructive activities. Despite expressions of concern, many national and international development agencies as well as environmental and conservation organizations state informally that they have not yet developed the mechanisms to convert general policy statements into programme planning and evaluation, or project operations.

Clearly, from the standpoint of both social justice and environmental conservation, work with indigenous organizations is both recommended and essential. However, the conditions under which such work will take place has changed significantly. The following is a summary of recommendations and suggestions.

- Historically, the Indians' capital base – land and its resources – has stood greater risk of loss than has their understanding of resource management. So land tenure is awarded more public attention than its management. It is a priority for any work which concerns indigenous peoples and resources.

At the very least, a process to define land rights and problems which may be associated with tenure disputes must be put in motion before any outside efforts at actual resource management programmes are undertaken. Otherwise any work can be seen as the sort of improvement which makes the land and resources more appealing to others, and thus threatened.

- Most developed and stable federations maintain two primary concerns: to defend their member communities' rights to land and resources and to expand and strengthen their organizations. Both concerns are critical to empowerment.

Any work, however benign or well-meaning, which appears to threaten the power of these newly formed organizations will be challenged. Similarly any work with individual communities which are members of Indian federations must be channelled through the organizations. The concerns are well founded. In many cases government and church agencies have attempted to weaken the federations by granting special favours to some communities. These efforts are interpreted as 'divide and conquer' tactics, and the organizations work hard to prevent them.

- Conservationists and development workers continue to initiate plans and programmes for Indians' land and resources. Consequently, in many areas Indians understand conservation and sustainable development programmes as little more than a new wave of colonialism which neglects and denies them their rights to land and resources. Even in cases where plans are well meaning, aware of Indian needs and environmentally sound, motives are often regarded with suspicion.

Indians, particularly their organizations, now demand direct participation in all phases of any programme. Ideally, any development programme should emerge from the organization itself, or from the communities through the organization. Participation which is seen as recruitment into an externally designed project is difficult, at best.

- Decisions over projects – either development or conservation – are not the sole purview of the organizations' leadership. The organizations are understood to be representative and democratic. Decisions must be transmitted back down through the membership.

A process of debate and decision making, neither quick nor executive, must be understood and respected. Decisions of any sort will take time to develop. A single meeting with the directorate should not be expected to produce any agreement. If some sort of agreement *is* obtained from a brief meeting, it will not necessarily be regarded as binding or permanent.

- Indians are also concerned with geopolitical agendas, particularly those perceived to originate from US government policy, since the US is the largest presence in the region. Programmes funded through host country organizations can become equally suspect.

Concerns over geopolitical issues should be expected but their existence and expression does not preclude successful projects. They simply suggest and need to understand how politics influences even the local interpretations of development goals and objectives.

- Potential concerns point to the need for openness on the part of the conservation and development organizations and a willingness to discuss plans and to permit a high degree of control by the Indian organization.

Indians are fully aware that conservation is currently fashionable, and that NGOs are seen as primary vehicles for such work. However, there is considerable concern over the role and the goal of these intermediary organizations.

The above general concerns provide a basis for any work with Indian organizations. In addition, given both the political and cultural concerns of the Indian organizations, a series of general procedures are advisable prior to beginning any programme.

- Simply get to know the group as early as possible, prior to any project development. Familiarity with past threats to their organizations and problems

with land tenure will help to avoid inappropriate planning and resultant misunderstandings.

- Ideally, project plans should develop from ideas and needs already established by the organizations. Planning, under any circumstances, should be carried out slowly and in coordination with the organization.
- Time should be allowed for ideas to be discussed openly with the organization. This may be frustrating and time consuming, but efforts which move forward too quickly from the standpoint of the organizations are bound to produce problems which could destroy a programme. Assuming that a delay is preferable to a failure, time is well spent by moving at the pace of the organizations.
- Concern and respect for local process and priorities will enable a far greater long-term project success. Such procedural matters must be accepted by project staff on the ground and those who oversee and evaluate their work.

Update

Over the past few years, indigenous-run resource management and conservation programmes like that of Ecuador's Awá have proliferated throughout the world, particularly in Latin America. Many of these are described in two recent publications: the spring 1993 Cultural Survival Quarterly *Resources and Sanctuary: Indigenous Peoples, Ancestral Rights and the Forests of the Americas* and *Indigenous Agendas for Conservation: A Directory of Indigenous Peoples' Projects in Environmental and Resource Management in the Americas* (a joint research project and publication by Cultural Survival-US and Canada's Dene Indian Cultural Institute). Both are available through Cultural Survival, 215 First St, Cambridge, MA 02142, USA.

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Local fishing communities and marine national parks and protected areas in Kenya

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The growth of the fishing industry and increase in tourism along Kenya's coast has led to increased pressures on the marine environment. Surveys at two sites confirmed that damage was being done to coral reefs from collecting and other forms of exploitation, and in 1967 an Act of Parliament led to the establishment of the first Marine National Parks at Malindi and Watamu. Nine are now established, covering more than 100,000 ha.

Not all the marine resources are harvested for food. The exploitation of living coral, coralline algae and some molluscs for construction material could damage biological communities. The increasing importance and use of pharmaceutical products from marine organisms has resulted in small-scale harvesting of rare or uncommon species. This is already happening on the east coast and action is required to monitor these activities.

The background and difficulties in establishing marine parks are discussed. A key element is the involvement of local communities in their establishment and protection. In the past this has not always been successful in Kenya, but now it is encouraging to see that communities are participating in management policies, and as a result, receiving many benefits.

KENYA'S COAST runs for about 500 km along the Indian Ocean. This distance is from a small fishing town in the north, on the border of Kenya and Somalia, called Kiunga to another small town called Vanga on the southern border of Kenya and Tanzania. There are other larger towns on the same coast, principally Mombasa, which is the gateway to Kenya by sea. Malindi is the second largest attraction to tourists and hotel industry developers, and there is also Lamu (which featured very much in the history of the country as a trade centre during the fifteenth century), Mambrui, Kilifi, Kipini. Takaungu, Watamu and Shimoni. These towns have fewer inhabitants, but all depend on or get their livelihood from the sea.

Fishing (ocean exploitation) by local communities

During the colonial period the fishing communities along the coast relied on fish that they caught from the ocean and sold at small markets. The communities on this coast also built their houses closer to the shore for ease of landing their fish. While they were fishing they also engaged in bait-fishing, and coral and shell collection for ornamental purposes. Since the population was very low, the sea was also used for dumping waste of whatever kind. This dumping of waste was on a small scale, and did not do much damage to the ocean.

During this period, the fisheries department was responsible for formulating regulations and rules for both inland and ocean fisheries. As the population

increased, and the demand on fish, corals and shells increased, it became necessary for the law-enforcing department to be closer to where the laws and regulations were supposed to be enforced. The department built offices at Mombasa, Malindi, Shimoni, Lamu, Vanga and Kilifi. These offices were for law enforcement and for fisheries development. Officers were deployed in these areas to advise the fishing community on how to benefit from the ocean resources. Jetties were built for landing vessels, and the department also introduced a loan system whereby fishermen who formed cooperatives could borrow money to purchase fishing gear, including the purchase of large fishing vessels.

No damage to the fishing areas was envisaged so long as the fishermen used traditional methods. But, as the country opened up after independence, more people were encouraged to eat fish. In fact there was a campaign all over the country for the citizens to eat more fish. This campaign was very successful and interest in the fishing industry grew. Large vessels were purchased, cold storage houses were built on the coast, with cold storage vehicles used for transporting marine fish to other parts of the country.

Sport fishing also caught on in areas such as Malindi, Mombasa, Kilifi and Shimoni. As more people were encouraged to eat more fish, methods of fishing also improved to keep up with the increased demand, but to the detriment of the fishing areas.

People from the interior also became interested in activities at the coast, as tourists also began to visit the coast to enjoy the beaches and the ocean. The hotel development industry caught up with the increase in visitors, and hoteliers had to organise activities for their clients. Sport fishing and snorkelling were special attractions for visitors. As these activities got more publicity, the visitors' demand became higher. Some hoteliers discovered their own good areas for snorkelling and scuba diving. Of course the local communities were now catching more fish to feed the hotel visitors. The fisheries department also became concerned by how much fish was being caught, and what equipment was needed for fishing. The environment for good fishing had to be protected, and the laws which had been formulated had to be strictly enforced.

Some hoteliers made glass-bottomed boats for taking tourists to special places to view reef fishes and good corals. There were no laws or regulations with regard to the collection of corals and shells, and hence those who visited these areas could walk on bear coral during low tide, and collect dead or live shells or corals. At first the damage being done was not noticeable. The sea was so large that nobody really though the collection of small animals would have any effect on either the species concerned or on the environment itself. The hoteliers became concerned when it was discovered that tourists were breaking off live coral, bringing it to the hotel and then leaving it to rot.

Establishment of Marine National Parks and Reserves

The realization that the sea was being exploited without any regulation was a great disturbance to hoteliers and tour operators who saw the future of tourism in the country as an industry. With aid from non-governmental organisations, the central government, through the then Board of Trustees of Kenya National Parks

(now Kenya Wildlife Service), organised surveys at Malindi and Watamu to find out how much environmental damage was being done to the area. This survey revealed that the reef needed some protection from unregulated exploitation.

In 1967 an act of parliament was passed to establish Marine National Parks at Malindi and Watamu (see map). In 1968 the first Marine National Parks were gazetted and established. At Malindi, the Park covered a total of 2,575 ha lying between latitude 3° and 4° south, between the tourist towns of Malindi and Watamu. The government was also concerned about the wildlife on the shore, including birds, monitor lizards, monkeys, mongooses and dik-dik.

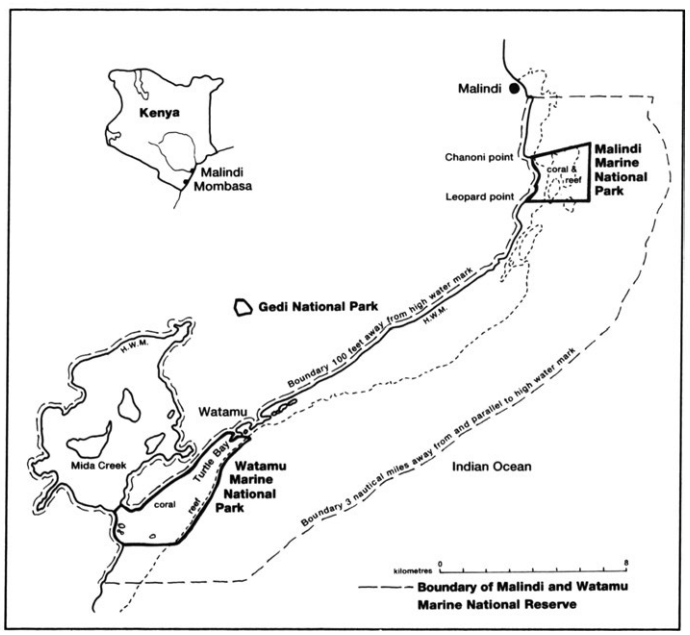
Since these were the first Marine National Parks in the country, it was a little difficult for the coastal communities to accept that an area in the sea could be reserved for certain activities only, apart from fishing.

Difficulties experienced in establishing Marine National Parks

The deployment of staff to make the establishment of Marine National Parks a reality was done from headquarters in the capital, Nairobi. This was seen by the local community as a hindrance to and interference in their traditional fishing activities. There was strong resistance from local politicians and leaders. Those opposed to the establishment of protected areas reasoned that it was unthinkable for an area in the sea to be protected, because it would be difficult to establish and mark the boundaries. The local communities had been fishing in the areas proposed for protection since their great-grandfathers' time, and they did not anticipate anybody, least of all their own independent government, asking them to stop fishing there.

Advised to purchase larger vessels to fish further out to sea, the communities claimed not to have funds for such developments. The livelihood of the whole community was at stake; their children could not go to school, due to lack of school fees, if the parents were not allowed to fish in their traditional grounds to earn money. Since some of the fishing communities had already begun trading in shells and corals, they did not appreciate being asked to collect these from somewhere else, or being required to have licences to collect and trade.

Malindi and Watamu Marine National Reserve and Parks.



The government could not leave the communities grumbling without finding a solution. Community leaders were invited to meetings so that they could be guided on what benefits would accrue from the protected areas, and the fisheries department invited the fishing communities to attend meetings where they could be advised on what the government intentions were. This was quite a difficult task.

Management rules

In order to manage the Marine National Park effectively it was necessary to formulate rules which could be followed by those who were interested in visiting the area. Simple rules were proposed:

- There was going to be a charge for those who visited the protected areas.
- For every entry into the protected areas a receipt to show that the prescribed fee had been paid was required.
- No fishing or collecting of shells, corals or other marine organisms was allowed in the protected area.
- Those who had glass bottomed boats were allowed to anchor on particular buoys designated and anchored by the authority.

Although these rules sounded simple, it was difficult for the fishermen to obey them as they hindered normal work and activities.

Since the protected sea areas actually started at the shore, the fishing communities questioned how they could go fishing without passing through the protected areas. They also wanted to be advised on how they could identify the protected area boundaries. The fishing communities believed that they were losing what they considered to be their rights, and wanted to know what benefits they would gain by giving up these rights.

Benefits

To allay the fears of the fishing communities, it was up to the authority to educate the communities about what benefits they would get from the protected areas. These benefits were put forward as follows.

- The protected areas would provide jobs for the local community. This aspect was a little difficult to implement in a way acceptable to the community because it involved law enforcement. The local community could not envisage a situation where a locally-based protected area manager could arrest his own relative who may have committed an offence. The authority (in Kenya) had to devise another solution. Some employees from terrestrial National Parks were deployed at the Marine National Parks, and those newly-employed from the coastal areas were deployed to parks further away from their homes. For some time the local people were not willing to be deployed away from home, but they eventually saw the sense in it. Later those who were employed to work at the Marine Parks were transferred to their home areas.
- Local fishing communities would be allowed to fish in the Marine National Park using local fishing gear, and also during the North-Eastern Monsoon.
- The shell and coral collectors would be allowed to collect dead corals and shells in areas that were not protected, but would have to purchase permits for these activities from the Fisheries Department.
- Allowance was to be granted for fishermen to pass through the Marine National Parks while going out to sea, as long as they did not fish or tow lines through the Parks.
- Fishermen were advised to build glass-bottomed boats that could be used to ferry tourists to Marine National Parks. This trade was left entirely to the local community and even boat charges were left at their discretion. This trade has developed and has become big business, to an extent that some of the fishermen have turned into tour operators.

One benefit that has not been put into effect in Kenya is the sharing of revenue from protected areas with the local communities; this is established, for example, in the Seychelles, where the tourist revenue is shared between the government and the local community (Chongcheng 1979). There is already a suggested percentage figure for allocation of gate collection money to local county councils.

Perhaps more research is needed to establish what proportion of the money should be used to maintain the protected areas and how much could be used to the benefit of the community. In Tanzania and the Seychelles the authorities provide facilities to the local community, including health centres and schools. In Kenya, the local development committees of central government allocate money for community development projects, but there is no implication that this money is raised from protected areas.

Environment

It cannot be assumed that once the local fishing communities have recognised the potential benefits from coastal protected areas they will maintain appropriate practices. The protected areas could be easily be over-exploited, and the local communities need to be educated on how to manage the environment in such a way that benefits can be maintained. Exploitation of the areas can devastate them, even to the extent of eroding them completely. Much environmental action can best be taken at the level of local communities or by individuals. This has been tried in Kenya to some extent, and communities are careful about what they do. However, there is still room for an education campaign to encourage self-reliance, appropriate technology and voluntary simplicity, so that life-styles which do not threaten nature are adopted. Now that telecommunication technology can be used more easily, information on the state of environment should be disseminated to all concerned, enabling them to take appropriate action to rectify mistakes or avert threats.

Human attempts to manage natural populations can have other effects. For example, conservation measures to protect seal stocks, by preventing hunting and culling, may increase their numbers, resulting in overcrowding and disease at haul-out sites, and increased competitive pressure on fishery resources. In addition, seals are hosts to parasites, part of whose life-cycle is completed in the flesh of commercial fish. In several parts of the world fishermen complain that increased seal populations result in fish having such high parasite levels that the catch becomes unmarketable (GESAMP 1990).

Not all the marine resources are harvested for food; the exploitation of living coral, coralline algae and some molluscs for construction material may also severely damage biological communities. The increasing importance and use of pharmaceutical products from marine organisms has resulted in small-scale harvesting of the less common and rare species, and some thought should be given to monitoring these activities.

Another problem is pollution; although there are techniques for preventing pollution these have not always been adequate to protect the environment. Kenya has most of its largest coast population and industrial activity centred at Mombasa. An estimated 20% of domestic sewage in Mombasa receives primary treatment before discharge into Kilindini Creek (Bryceson *et al.* 1990). At Malindi and Lamu there are no sewage treatment systems.

Industries in Mombasa include timber, cotton seed oil, copra, vegetable oils, cashew nuts, soap, skins, shoes, rubber, sugar, paper, cement, adhesives, plastics, matches, glass, steel, aluminium, salt, paints, oil and farm machinery (Bryceson *et al.* 1990). The damage to the environment caused by these industries concerns the government and non-governmental organisations, because it could expand into protected areas such as the Mombasa Marine National Park and Mombasa Marine National Reserve, which are not very far from the port. Polluted water could also be blown southwards along the coast, threatening protected areas and other productive marine resources.

There are other effects on the marine environment that are difficult to reverse. Kenyan coastal reefs suffer damage from dynamite-fishing and from the use of beach-seines; the latter method is also suspected of catching large quantities of juvenile fish, causing a reduction in recruitment (Muthigo and McClahanan 1986). Damage to the reef can also result in an increase in sea urchins.

While the protected areas are managed properly, as far as possible, other areas that border the protected areas should also be monitored and an inventory made for future comparisons. It should not be assumed that the protected areas will remain undamaged forever, since as the human population rises the need for new sites for settlement, industry, relaxation etc. also rises. This should be the responsibility of all concerned agencies; to quote Prince Saddrudin Aga Khan, the United Nations Secretary General's representative for humanitarian affairs, speaking in relation to the Gulf War, "Our senses are assaulted almost daily by media-reported horrors of burned forests, threatened species, pollution, acidification, desertification, climatic disasters and not least the ravages of war" (Aga Khan 1991). All around us are prophecies by respected scientists of what Rachel Carson called a "silent spring", followed by a torrid greenhouse summer, and the spectre of Carl Sagan's "nuclear winter".

Current ecological research into the coastal and marine environment in Kenya could reveal unique ecosystems that would warrant protection. Until this investigation is undertaken, it may be difficult to make new proposals, as available information may not be sufficient.

Since Kinyanjui's (1984) report, three more Marine National Parks have been established (see Table 1). Now it is the responsibility of the Kenya Wildlife Service to ensure that protected areas are managed for the benefit of the community, the nation and the world environment.

Table 1. *Marine National Parks and other protected areas in Kenya.*

name	*area (ha)*	*date gazetted*
1. Malindi Marine National Park	600	1968
2. Watamu Marine National Park	1,000	1968
3. Malindi/Watamu Marine National Park	24,500	1968
4. Kisite/Mpunguti Marine National Park	2,800	1978
5. Kiunga Marine National Reserve	25,000	1979
6. Mombasa Marine National Park	6,000	1986
7. Mombasa Marine National Reserve	20,000	1986
8. Res Teneri Marine National Reserve	35,000	1991
9. Watamu Marine National Reserve	3,200	1968

Local community participation

I have tried to show how local communities can be involved in the establishment and management of protected areas. This has not been fully achieved in the case of the Kenyan Marine National Parks. Maybe Kenya, under the umbrella of the Kenya Wildlife Service, can learn from the Seychelles with regard to the establishment of commissions or committees for particular areas (Chongcheng 1979). Such committees would enable the views of nominated local leaders, such as the Mayor or chairman of a local authority, to be incorporated into management regulations. Local leaders would know what development projects are needed by the local community, and they could be included in the budget for the protected areas. Already such development projects are included in the budgets for terrestrial National Parks.

In the Philippines, it has been noted that after 10 years of effective management and maintenance of the coral reef at Sumilon there were evident benefits for the coral reef ecosystem and for the fishermen dependent on the reef. Assessments of fish caught, which began in 1976, showed that until 1984 the fishermen extracted an increasing tonnage of reef fish (Dobia 1989). In Kenya, the establishment of the Marine National Park at Malindi does not appear to have had an effect on the fish caught (see Tables 2 and 3), and in any case other factors, such as the use of larger fishing vessels and fishing in deeper water, could also affect the catch size. It would be useful if the department responsible for fisheries kept records of all the fish caught on or near protected areas, but this information is not currently available.

Table 2. Quantity, in metric tonnes, of marine fish landed in coastal towns near protected areas from 1973 to 1975

town/station	*1973*	*1974*	*1975*
Lamu	1125	858	874
Malindi	372	391	371
Kilifi	113	142	240
Mombasa	1083	936	1054
Shimoni	211	191	176
Vanga	321	307	319
total:	*3225*	*2825*	*3034*

Table 3. Quantity, in metric tonnes, of crustaceans landed in coastal towns near protected areas from 1973 to 1975

town/station	*1973*	*1974*	*1975*
Lamu	69	60	48
Malindi	4	12	16
Kilifi	4	5	10
Mombasa	89	14	24
Shimoni	5	3	2
Vanga	14	12	12
total:	*185*	*106*	*112*

As the Marine National Parks got to be known, the number of visitors increased. Table 4 shows the number of visitors to Malindi and Watamu Marine National Parks (figures for other protected areas were not available for this report). The figures for revenue in Table 4 include all visitors, including residents and non-residents of Kenya, and those with seasonal passes. Kenyan residents are charged at lower rates than non-residents. This is to encourage the local people to visit protected areas and to maintain good public relations. If local people visit in groups, they are chargedstill lower rates and can be taken on a conducted tour by the management; this is another way of encouraging direct communication between the management and the local community. Although tourism is not without dangers to the environment, the benefits perhaps outweigh any potential damage. Certainly, if damage is not controlled then the end results could be very destructive.

Table 4. Number of visitors to Malindi and Watamu Marine National Parks, and revenue received, 1969–1976.

year	*number of visitors*	*revenue (Kenyan shillings)*
1969	18,480	101,180.00
1970	21,441	121,200.50
1971	26,677	151,720.50
1972	33,369	187,600.00
1973	30,160	170,959.00
1974	35,750	327,519.50
1975	34,665	199,710.00
1976	37,754	317,860.00

It is encouraging to see that local communities in Kenya are now participating in the protected areas, and their ideas are being incorporated into management policies which will eventually be of benefit to them. Nearly all the objections to the participation of local people have been overcome.

Unless communities are sufficiently stable to enable them to plan ahead, they run the risk of being left out of development plans for beach-related tourism. Studies done by Dobia (1989) in Thailand show five broad development stages:

Stage 1. As tourism catches on local communities establish small bungalows for local tourism. This has happened on the Kenyan Coast, where residential houses have been renovated and converted into small hotels and boarding lodges, earning higher revenue for local people.

Stage 2. As the value of tourism increases a few outsiders begin buying land and establishing their own operations on a larger scale than the locals. Roads and other infrastructure developments begin. Local people still benefit economically, although the main income goes to a small number of people.

Stage 3. Development for tourism, particularly hotel construction, continues at a faster rate. At this stage planning regulations are not directly adhered to, and haphazard building takes place. An increasing number of local people benefit by being employed in the larger beach establishments (hotels and lodges, or even transport). As these developments continue the degradation of the environment becomes a noticeable problem.

Stage 4. Already a large proportion of hotel, bungalow and restaurant owners are outsiders, and money begins to flow outside. No regulations are followed as large developments are implemented. This has already been noticed on the Kenyan Coast. Large hotels and organisations arrange tourism from overseas, and the money their clients pay for accommodation stays in their country of origin, with tourists bringing only small amounts of money into Kenya for souvenirs. Water supplies and the environment become endangered and the large-scale developers fear for their future.

Stage 5. The fear of a decrease in the volume of tourism, due to the degradation of the environment, prompts calls for action to mitigate environmental damage. Remedial action is slow to take effect, and the degradation continues.

The five stages shown above should not be inevitable if planning is done with proper environmental considerations. The local community has benefited all along, but control has been taken over by outside developers, who may subsequently abandon the area and move somewhere else. Medose (1981) wrote

"it is how well we have met their (local community) basic needs that determines whether we have developed or not, how well they eat, how they are clothed, what homes they live in, how is their health, what education is available to them and their children, how easily they can travel, what recreational resources are available to them, how they provide for their old age and perhaps most important how fully they participate in the economic, social and political life of the society."

I end this report by quoting Lao Tse, a Chinese ancient philosopher: "Give a man a fish and he will eat for a day, teach a man to fish and he will eat for a lifetime." But fishermen at Visayas Regional Project I in the Philippines modernized this report (White and Savina 1987): "Give a man fish and he will eat for a day, teach a man to fish and he will eat until the resource is depleted. Teach a community to manage its fishery resources and it will prosper for generations to come." We should not underrate local communities as far as marine and other environmental protection policies are concerned; they may have a wealth of knowledge of and commitment to their environment which can be harnessed for the good of protected areas.

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Participatory Rural Appraisal: a challenge for people and protected areas

CAREL DRIJVER

The relationship between protected areas and local communities is a key factor in the long term conservation of natural resources. This is especially the case in remote areas of developing countries where effective control is difficult to maintain without the support of local communities. In many cases however, the relationship is more one of conflict then one of support. Local communities typically perceive the protected area as a burden on their land use and self-reliance, while on the other hand growing numbers and aspirations of local people form a major threat to the sustainability of the protected area, according to conservationists. As an example of how the challenges can be addressed the author describes 'Participatory Environmental Mapping' exercises conducted in north Cameroon.

THE RELATIONSHIP between protected areas and local communities is a key factor in the long term conservation of nature and resources in and around these areas. This is especially the case in remote areas of developing countries, where effective control is difficult to maintain without the support of local communities. However, in many cases this relationship is more one of conflict than of support. Conflict typically arises when local communities perceive the protected area as a burden on their land use and self-reliance, while on the other hand conservationists perceive the growing numbers and aspirations of local people as a major threat to the sustainability of the protected area. A number of conservation and development projects around the world have taken up the challenge to transform such conflicts into cooperation, aiming at the participation of local communities in the protection and management of conservation areas as well as in the potential sustainable benefits from conservation (Anderson and Grove 1987, McNeely 1988). However, building up good long term cooperation with local communities in the framework of conservation and development projects (Drijver 1991) has proven to be a difficult undertaking.

Why is it so difficult to achieve such cooperation? A major problem is posed by the large number of different groups and levels that are supposed to participate in conservation and development projects: the local (often tribal) communities, the government officials at provincial and national level (often different tribes), the foreign consultants and donors. Each of these participants have their own cultural background and they generally have different interests, varying from securing rights to hunt or raise crops, to writing a good report or stealing the show in board meetings of donor agencies. Also, different interests occur *within* these groups; within local communities there may be significant differences between, for instance, cattle owners and agriculturists, or between different ethnic factions. The success of a project is very much dependent on the extent to which it provides all these acting categories with the right incentives and disincentives (McNeely 1988).

Problems in project design

In the classical project approach, data collection and project design are dominated by national and foreign specialists while the local communities are really only invited to participate in project implementation, and to be responsible for long-term conservation. Experiences in various parts of the world (Drijver 1991, Anderson and Grove 1987) have shown that this approach does not work. Either the specialists have not really understood and addressed the hidden, deeper priorities of the different potential partners, or the participants do not perceive the incentives designed by the project as such.

A logical consequence of global and long-term perspectives of nature conservation, and especially biodiversity maintenance, is that the goals are largely set from above, then reset into habitat requirements which are based on ecological principles, and thus not very negotiable. Nevertheless, in the conception of conservation projects, and even more so in the conception of conservation and development projects, it is not always necessary for choices to be set from above. It is here that the active involvement of local communities and local government agencies is required, *from the very beginning of project conception*. This kind of involvement and cooperation cannot be realized overnight. It needs time, and its development requires sensitivity in a process during which conflicts will arise and compromises will be necessary.

The role of Participatory Rural Appraisal

The way in which research for conservation and development projects is set up can be a significant influence in ensuring local community involvement. Most current project research is set up by specialists (both nationals and expatriates), and executed by them with the help of project personnel and selected community members, the latter mainly as passive informants. Consequently, the research does not make adequate use of local people's knowledge, is not necessarily addressing their priority problems or questions, and does not contribute to *mutual* understanding and cooperation. The same omissions can be found in agricultural projects. In reaction to this a number of rural development experts have developed so-called Participatory Rural Appraisals (PRAs). The term Participatory Rural Appraisal is used for new approaches and methods in which rural people themselves do much more investigation, presentation, analysis, planning and decision-making than has been normal in the past. During the last five years, non-governmental organisations (NGOs) and government organisations (GOs) have gained experience with local field-based Participatory Rural Appraisals. Participants at a workshop held in February 1991 in Bangalore had been involved in or conducted 145 different field exercises (Mascarenhas 1991). These and other experiences show us the rich variety of methods that have been developed.

Various combinations and sequences of methods are used in PRA, including participatory mapping and modelling, transects, wealth and wellbeing ranking, matrix ranking and scoring, visual and analytical diagramming, and quantification of several sorts. These methods not only present a rich body of knowledge, they also facilitate better communications. When they are well applied, both outsiders and local people get absorbed by the activity, and share their views and knowledge more openly. Applying PRA methods will require changes in the behaviour and attitudes of the project personnel, government officers and

consultants involved. They need to be more aware of the limitations of their own knowledge, to respect rural people and be willing to learn with and from them.

All this may seem very promising in the rural development sector, but can PRA be of use for conservation, in and around protected areas? In order to answer this question we need to demonstrate how PRA works. Together with staff and students of the Centre for Environment and Development of Cameroon, I have conducted PRA field trials in north Cameroon. For this article I will focus on the method of Participatory Environmental Mapping. This is a method whereby local people themselves draw a map of their environment, indicating its condition, the uses to which it is put and any problems they have experienced. They also record their attempts to manage these problems, and any ideas for future management. Researchers or extension officers act as a catalysts only. The objectives of our Participatory Environmental Mapping exercises were:

- to make a start with the development of an open communication with local communities
- to get a first impression of the physical environment, its users, their land use, their current access and their perception on environmental problems, as well as their views on existing and optional solutions
- to create a common basis of understanding on the above issues in order to facilitate further investigation and discussion on selected topics.

These objectives were quite ambitious. Nevertheless most of our experiments with the method lived up to expectations. After the usual thorough introduction we were amazed to see how actively local people participated in drawing in the sand while explaining to us the different qualities of pasture they distinguish; different soil types, forest patches and watering points; how they appreciate certain areas that we considered as highly degraded; which areas they had access to, which not and why; how differently men and women draw their environment; and how far reaching the environmental knowledge of certain locals is, both in terms of surface area, details and changes over time. A Cameroon project officer expressed his amazement to us, saying "I have been working as an ecologist in this area for almost ten years, I had a car and I have crossed the area many times doing my fieldwork, so I know the area, but I never knew that they (the villagers) know it as well as I do." Another colleague said: "I never experienced that people stayed so many hours talking to us; normally most of them leave after some while to take up their work." The anthropologist of our team 'complained': "Why haven't I learned this method before?"

Four pillars of success

The reason for this success in encouraging participation can be explained by the four pillars on which the method is based. The first is **visual sharing**. It means that all information is visualized in the form of a big map (perhaps 4 × 6 m) on the ground, in such a way that it is constantly shared with the entire group of people present. During a normal interview, without using any visual aids, often the interviewer and one or two participants will dominate the discussion, while all the others remain passive. The matters raised are recorded in the notebook of the interviewer, and only this person has an overview and knows what was said an hour before. In contrast, with Participatory Mapping all information recorded is constantly visible to all participants.

This collectiveness of information is very important for the participation of group members. It stimulates **interaction between participants** (the second pillar of the method). If in the course of an interview someone gives an answer that is not right, other people present will not always correct the mistake, because it is often 'not the done thing' to correct someone while he or she is talking to a visitor. In a normal interview the words pass by and after a while the incorrect answer is replaced by new words and issues, whereas the advantage of visualizing the answers on a big map is that they don't fade away. All the time participants can see, for instance, the large surface area of 'excellent pastures' and the smaller unit of 'degraded pastures'. They know that in reality these two categorisations should be reversed, and sooner or later one of them will move his or her hands through the sand to change the borderline between these units. The person who first drew the areas will react by asking why it has been changed, and a lively discussion between participants develops. The result may be that three qualities of pastures are finally agreed upon.

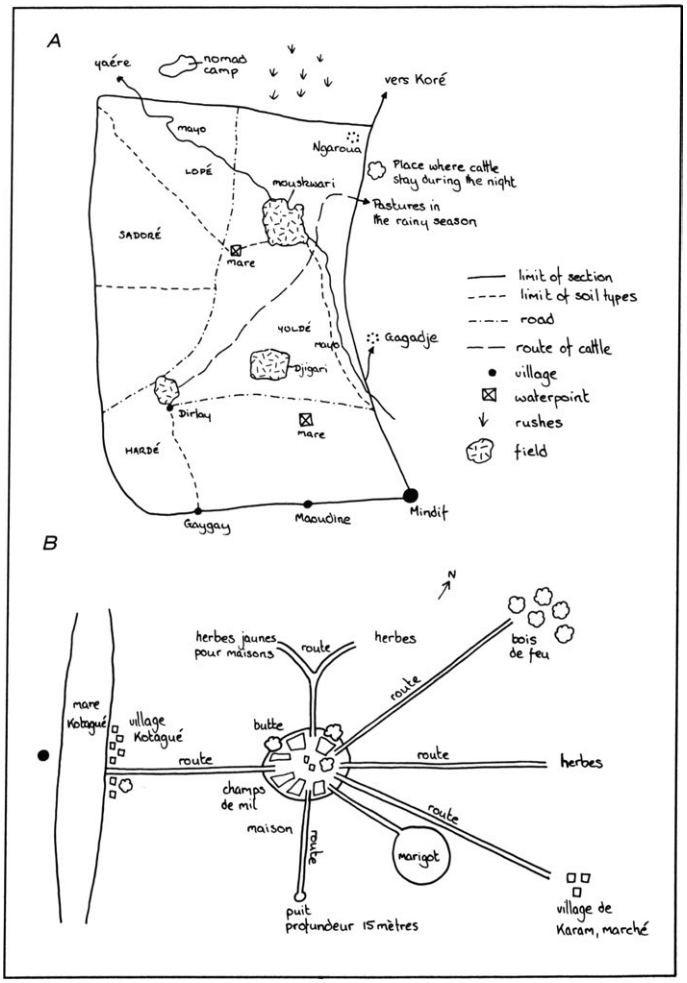
When those kinds of interactions are very lively and frequent, the role for researchers or extension-officers will be to look, listen and **hand over the stick** (the third pillar). Handing over the stick refers not only to the stick with which one draws on the ground but also to the fact that the initiative is given to and taken over by the people. It is desirable for as many people as possible to get their classifications and views on the map. When questions have to be asked to stimulate the interaction these questions are preferably as open as possible. For instance, "Are there any other issues that need to be added to the map?" is an *open* question. It stimulates people to think of something they think is important without directing them. The question "Are the lions taking sheep here?" is a *closed* question, it directs people to something that is important according to the interviewer. In interviews it is not easy to avoid strategic answers. Participants often try to sense what it is that project officers might be able to deliver to them, and their answers are in accordance with their perception of the officers' capabilities. For instance, if project officers arrive in a forest department car they might be told by the locals that tree seedlings are needed in the area. The method of Participatory Environmental Mapping tries to avoid this by taking the time (usually at least an hour) to discuss and map a variety of environmental issues. The map is big and two or more participants are drawing at the same time on different sides of it. It is lively, people discuss and draw, they don't feel that they are being questioned all the time. Funny things happen: people may accidentally destroy 'their village' with one misplaced footstep, or invent a funny symbol to mark where they had a conflict with the neighbouring village. As a result there is a lot of laughter and relaxation.

Relaxation is the fourth pillar of the method. It stimulates more open communication even when it comes to relatively sensitive areas such as decision-making and the distribution of access to resources. Relaxation is of course only possible when the project officers behave like that too. They should adopt a low profile, physically, by sitting low around the map amongst the participants, and mentally, by not imposing their status or knowledge on them. Instead they should be willing to share and learn.

In order to illustrate the method two maps are shown below. After having asked permission from the people concerned, the maps were copied in our

notebook. As one can see, the maps themselves are not very complex or detailed. Nevertheless striking facts can arise. For instance, from the first map (grazing land at Dirlay) we learned that the community had a clear plan of grazing blocks (sections on the map) that were introduced by a project to establish rotational grazing. From the second mapping (of a fishermen's camp at Kotagué) it became apparent that the camp was quite far from the centre of the women's environment. As far as the women were concerned, they would prefer to move the camp.

Although the maps themselves are important, they are not the sole aim of Participatory Environmental Mapping. Their value is that they serve as a common basis for further discussion and investigation. By asking how the area looked like before, for instance, the big droughts of 1972/1973, the changes over time become apparent, as does any environmental degradation, problems and possible actions. Although a lot of information is gained with Participatory Environmental Mapping, the method is little more than a starter. Information gained is often not very precise, and is sometimes wrong. Participatory Environmental Mapping should therefore always be complemented with further investigation, using, for instance, other PRA methods such as transect walks, comparison with scientific maps or photos, participation in daily activities, farmer to farmer visits and in-depth research.



Participatory Environmental Maps: A, Dirlay near Mindif; B, Kotagué near Hinalé.

Dos and don'ts of Participatory Environmental Mapping

DO:

- Take time to introduce yourself
- Explain that you come not just to deliver but to learn
- Ask if people want to know more about you or about what you've said
- Ask for a place outside, in the shade, where the group can sit down, leaving open a circle of about 3 m diameter
- Sit amongst the participants and mix with them during drawing
- Start the map yourself with simple, obvious things like the main road or river, the tree you are under, or the next village, and then ask the participants to complete the map. Discuss the boundaries, where do participants stop drawing and why?
- Once there is agreement on the above pattern, then proceed with an open question about the physical environment: "Is the whole area the same or are there differences?"

- A logical sequence may help, but be flexible:
  1. basic orientation
  2. landscape units identified by their vegetation (crops, forest, grassland)
  3. soil and water (after you've asked "why are crops here?")
  4. land use activities
  5. different qualities of forests, grasslands etc.
  6. availability of access
  7. historical situation and trends
  8. environmental problems
  9. coping strategies
  10. options for action
- Repeat what they have drawn, so that participants can check whether you have understood it well
- Ask *open* questions, such as "what else is important to show on the map?" or "have we forgotten something?", so that the participants provide their own answers
- Try to postpone talking about problems and interventions; first complete the full picture of the present situation and the historical situation. Only then can participants react on the basis of a common overview
- Each time participants explain something, ask them to indicate it on the map
- Stimulate creativity in visualisation, gather local materials
- Use colours, such as coloured sand or powder
- Arrange for one project leader to make notes while the other acts as the catalyst
- Keep the situation relaxed with a small joke now and then; people like to have fun
- Before you leave, explain why you want to copy the map and discuss the follow-up.

DON'T:

- Hurry
- Teach or correct
- Steer too much
- Interview.

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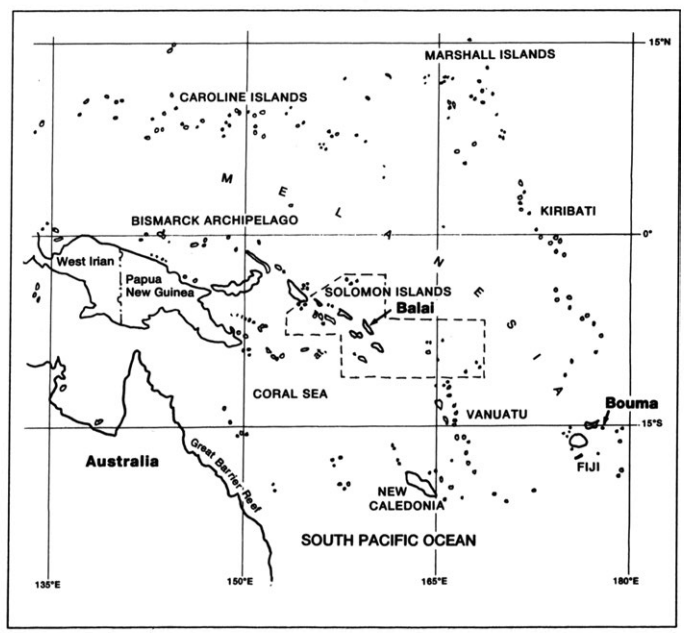
Lessons from the Pacific: linking traditional ownership development needs and protected areas

ANNETTE LEES

In Melanesia, land and resources are custom-owned by family groups of indigenous people. Most people live subsistently in villages, cultivating gardens, fishing and hunting. However, complex traditional rules of use and ownership of forest resources are being challenged by a drive for development led by a desire for change by the village residents themselves. Forest conservation success in these countries is dependent on supporting initiatives of village landowners.

Establishing protected areas depends more on addressing their economic needs and development aspirations than drawing on conservation sentiments. Landowners must in some way be compensated with income earning potential if they are to have the long-term option of protecting their forests. Two examples of successful protected area establishment led by community groups are discussed.

THE region of Melanesia (see map) encompasses New Guinea, the Solomon Islands, Vanuatu, Fiji and New Caledonia in the west of the tropical South Pacific. A large percentage of the land area of Melanesia, typically between 85% and 90% (with the exception of New Caledonia), is still held under legal customary tenure by indigenous people. The tropical forest cover of the region remains extensive: 42 million hectares in total. In the Solomon Islands and Papua New Guinea 70% to 80% of the land still supports its indigenous forest cover. In Fiji natural forests occupy 44% of the land area.



Melanesia, showing approximate locations of protected areas at Balai and Bouma.

Subsistence agriculture and fishing are very important to Melanesian national economies. In the Solomon Islands, for example, only about 30% of the population over the age of 14 is working for wages and even for these people access to home gardens and marine produce remains important.

Traditional Melanesian livelihoods have had an impact on the environment of these Pacific islands, with varying degrees of forest loss and species extinctions (particularly of flightless birds). Over time, the indigenous cultures have evolved sophisticated management regimes to ensure

continued access to key resources (see for example Hviding 1988), including making use of temporary reserved lands to allow particular resource species to recover. These management techniques, combined with low human populations and traditional harvesting technologies, meant that human impact on the environment was fairly moderate until relatively recently.

Today, the natural environments of Melanesia are being increasingly degraded to the detriment of the communities still dependent on them. Population increase, among the most rapid in the world, is placing strains on traditional methods of agriculture, pushing gardens onto steep lands and poor soils where they would not have been placed before. Guns, explosives, and night lights are all making hunting much easier and have had an enormous impact on animal numbers, causing local extinctions of target species in places. Most important however has been the drive for development fuelled by the desire for cash to fund crucial advances in village health care, education and transport and to purchase desired consumer goods.

In Melanesia, one of the principal means by which nations and communities can gain access to cash is through the sale of logging concessions for their tropical rainforest. Logging is therefore proceeding apace. Of Fiji's remaining accessible forest, 60% is already committed to logging concessions. In just over a decade it is estimated that all of the lowland forests of the Solomon Islands will have been logged if the present rate of cut continues. Throughout Melanesia logging is unsustainable and has caused in many places significant environmental degradation and social disruption.

From both within and outside Melanesia there have been suggestions that areas of forest should be set aside in permanent reserves to balance the impacts of environmental change that are occurring in these countries. Until recently very little land (on average about 1% across the region) has been protected in formal reserves. The difficulty has been in trying to devise protected area systems that complement the culture of Melanesia and that have a place in its traditions while at the same time containing in their design a recognition and accommodation of the desire of the majority of Melanesians for development.

Protected areas that failed

Two examples of failed protected areas in the Solomon Islands provide an understanding of where past attempts to establish formal reserves have gone wrong. The Queen Elizabeth II National Park was established in 1954 by government decree to protect an area of the lowland forest behind Honiara. Most of the Park has since been taken over by squatters for gardens and the remainder is being stripped for firewood and other timber needs by the original owners. Unconsulted by the government, the landowners were not accounted for in the original planning and establishment of the Park. The landowners are not supportive of the National Park, they receive no immediate benefits from its protected status, and they have no understanding of its aims nor respect for its boundaries.

In the second example, land tenure was a key issue in the failure to establish a protected area. During the 1970s individuals involved with creating the Arnavon Island turtle sanctuary believed they had obtained all necessary support for the project from the indigenous landowners. However, the ownership of the Arnavon

Wildlife Sanctuary was under dispute by landowning clans. Ensuing disputes eventually led to the sanctuary headquarters being burned down, and the project was abandoned. Recently, the Nature Conservancy has begun working with all clans who claim ownership of Arnavon in an attempt to re-establish protection of this important natural area.

The key lessons learned from these experiences can be summarised as follows. No lasting protected area status is possible without community initiative, without landowner consultation and support, and without some practical community gain to be had from nature protection.

Indigenous community responses to protected areas

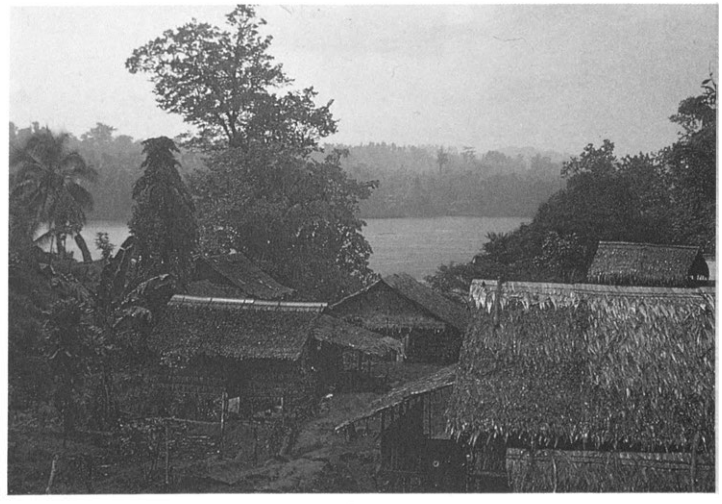
A vision of what kind of protected area design and management might be successful in the Melanesian context can be gained by examining two protected areas that indigenous communities have established themselves (see map).

Balai, Solomon Islands

In the 1980s the landowners of Balai allowed a logging company access to their forests to earn cash income from the land. After several years of logging the landowners refused the company access to further forest because of their concern about the environmental impacts of the operation. Instead, the landowners drew up a collective management plan for the tribal land. The management plan has three components:

- **Reafforestation.** The logged-over forest is being replanted with tree species useful to the community for the provision of house and canoe building timbers, fuel wood, and fruit.
- **Garden lands.** A special attempt is being made to try new gardening techniques on land specially designated for this purpose. (Traditional gardening techniques relying on a bush fallow system are now burdened with having to deal with unprecedented population growth and have exhausted soil on nearby lands.)
- **Protected forest.** The community would like to protect the remaining forest which was not logged (an area of around 15,000 ha). They have chosen to do this to protect the catchment above both their gardens and their reforestation project, to protect habitat for pigs and other useful animals and plants, and because they are interested in establishing a nature tourism enterprise, involving guiding tourists through the tropical rainforest.

The people of the Solomon Islands are still largely dependent for their survival on subsistence gardening and fishing. Photo: Annette Lees/ Maruia Society.



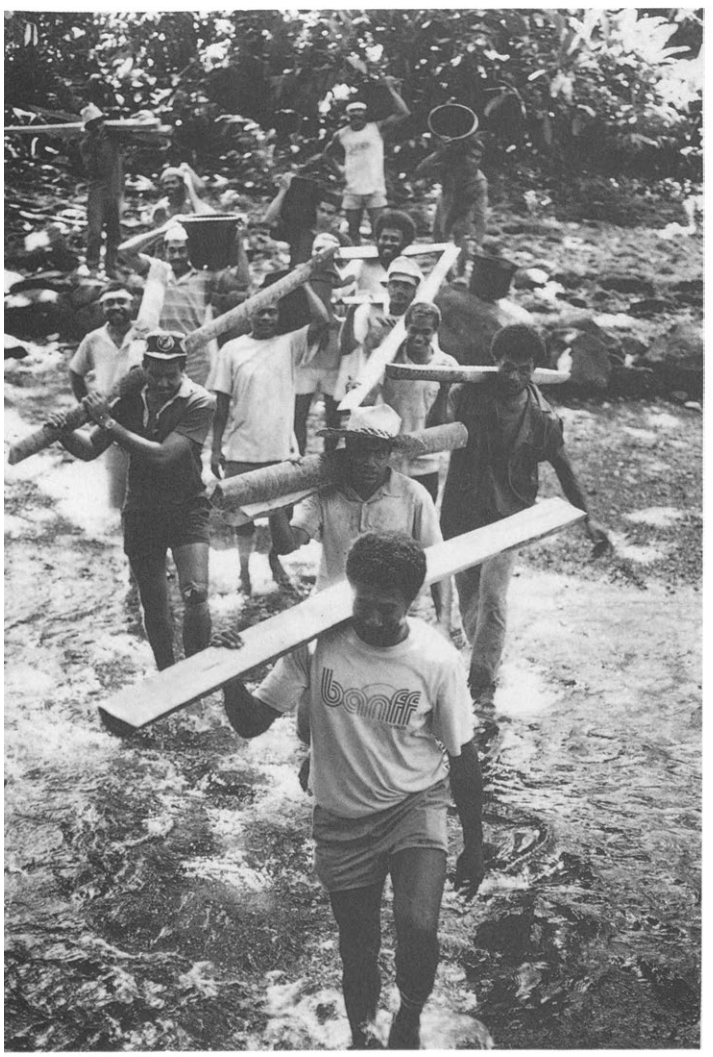
Bouma, Fiji

The indigenous landowning group, Mataqali Naituku, own 1,434 ha of land on the island of Taveuni in Fiji. Most of the land is rugged and steep, supporting dense tropical rainforest. Gently contoured land around the village has been cleared for gardens and copra plantations.

For over 20 years Mataqali Naituku have been showing tourists to a waterfall on their land, about 1 km from the main coastal road on the island. The Mataqali charge a small amount of money to the tourists, and the resulting income, regarded locally as being substantial, is used for village housing projects, education and other social projects.

In the late 1980s, the Mataqali Naituku's land was considered for logging. The Mataqali objected and withdrew their land from an island-wide logging proposal because they were concerned about the effect of logging on their environment and also because they felt it would jeopardise the potential of their land to earn money through nature tourism.

To safeguard their forest from further destructive proposals, Mataqali Naituku drew up a management plan for their forests with assistance from the Native Lands Trust Board (which administers indigenous land in Fiji). Two years later, they extended their tourism operation into forest surrounding the waterfall with international development assistance from the New Zealand Government. Their commitment to forest protection was formalised with a 'vaka vanua' – a binding traditional verbal agreement which was given additional strength in the form of a Memorandum of Agreement signed by the Mataqali, the Fiji Ministry of Forestry and the Native Lands Trust Board. The protected area consists of 200 ha and there is hope that it will eventually be extended further to include more of their forests to protect 'tapu' (sacred) lands where, story has it, a large snake showed tribal ancestors the path to an inland lake. With the vaka vanua, Mataqali Naituku declare they will not do "any act or thing on the area which would be harmful to the environment", and to "only allow ... activities that are conducive to nature preservation and the enhancement of communal nature and forest based tourism".



Landowners at Bouma (Taveuni, Fiji) building the nature tourism walkway in 1990. Photo: Maruia Society.

Common factors in success

The two above examples of successful protected areas have several factors in common, as follows.

Development issues addressed

For both the Balai and Bouma communities, the protection of their

larger environment has been a significant contributing factor to the decision to reserve their forests. Both communities understand the importance of forests for soil and water catchment protection, and both use their forests for hunting and some plant gathering. Certainly both communities have special spiritual attachment to their forested land. In the case of Balai, it did not prevent them from allowing much of their original forest estate to be logged. And at Bouma, their most sacred forest area has yet to be given formal protected status by the landowners.

Both the Balai and Bouma projects were born through communities working together principally to solve development dilemmas. For both, the protection of their forests was a secondary consideration to the management of their land for income generation and meeting basic development needs. Both communities have excluded important gardening land from reservation. Both communities wish to earn a living from their protected forest – from nature tourism. Development issues have thus been the key factors underpinning community commitment to structured land management, and forest protection has been a component of this, rather than the central motivating force.

Unified communities

The landowners at Balai and Bouma live within closely knit communities of related people, administering communally owned land. They are united by a common interest in the development of their resources. At Bouma, land has formally registered tenure but at Balai, it does not. It may be important for landowners at Balai to eventually formally register tenure to avoid disputes and misunderstandings in the future.

Access to technical expertise and funding assistance

Both Balai and Bouma have benefited from assistance from outside their communities. Balai has a close association with a strong indigenous NGO in the Solomon Islands, the Solomon Islands Development Trust (SIDT). SIDT excels in non-formal village education and through workshops has helped Balai landowners understand the value of resource management. SIDT has also facilitated an exchange of skills between Balai and a neighbouring landowning group who are being trained by a New Zealand Government development programme to reforest their land. Balai landowners have visited this group and returned with skills to initiate a similar programme on their own land. Further funding assistance has come from the Australian Government to allow planting to begin. The New Zealand-based NGO, the Maruia Society, and Conservation International are supporting SIDT in strengthening their Conservation in Development programme which assists communities like Balai.

At Bouma, the Maruia Society has helped with the original documentation of the biodiversity values of the forest, and consistent support from the Native Lands Trust Board and the Ministry of Forests has greatly assisted Mataqali Naituku to realise their development aspirations for the forest and their protected area. The New Zealand Government has given financial support for the development of their forest park.

Continued success in these ventures will depend on the willingness of these outside contributory parties to allow the communities to express and implement their own visions for the future of their land, so that these visions are not

ultimately dominated by the views and agendas of those outside organisations assisting them.

Balai and Bouma as models

Experiences from Balai and Bouma are useful to other communities in Melanesia who are searching for environmentally sound paths to development. The Bouma project has already generated enormous interest among other village communities in Fiji. The Native Lands Trust Board has been inundated with inquiries from other Mataqali wishing to establish similar enterprises on their own land. On the island of Taveuni, another large nature tourism enterprise based on the Bouma model has recently been established.

In the Solomon Islands, a coalition of NGOs (SIDT, Maruia Society and Conservation International) is working to assist landowners who would like to develop environmentally sound land management planning similar to that done at Balai.

The focus of all new initiatives must be to work first around the development aspirations of the landowners. If a protected area proposal is built into these larger objectives by the landowners themselves and clear development opportunities are available to complement nature protection, then that proposal has a good chance of realisation and survival.

Other initiatives

That development is an essential component of conservation in the South Pacific is becoming widely recognised in the region. Based on this understanding, two further initiatives have been given trials. Both are based on compensating landowners for development opportunities foregone due to protection of resources.

In the first case, a covenant was established in 1989 between the landowners of Falealupo in Western Samoa and private donors. The landowners pledged to preserve and manage an area of saleable forest in return for funds which were used for the construction of an elementary school. And in Fiji, the Ministry of Forestry and the Native Lands Trust Board have developed a monetary compensation scheme for landowners who have their forests protected for national conservation reasons. Compensation payments to landowners will provide for a one-off payment based on the value of the timber, and ongoing payments based on the value of the land and on development opportunities foregone (such as agriculture or reafforestation).

These progressive attempts to prevent landowners being unfairly burdened with national conservation priorities are to be applauded. However, compensation schemes on their own are unlikely to be applicable to every conservation area in the region.

A significant difficulty with compensation schemes relates to the problematic attitudes to conservation which they can foster. Successful and long-term local commitment to conservation depends as much on landowners believing that conservation is in their personal best interest as it does on carefully targeted outside support. Because conservation agreements will never be sealed by the purchase of land in the Pacific (indigenous owned land cannot or will not be sold), ongoing support for conservation will depend almost entirely on the

commitment to it by local people. Compensation payments are not an ideal foundation on which to build that commitment. Instead, they may build unrealistic and rising expectations about the levels of compensation payable and a deepening dependency on what can amount to aid payments. A more suitable programme of cost-sharing for many places in the Pacific will be a package of social and income benefits – benefits that both ensure resource owners are not unfairly burdened by conservation, and also foster initiative and enterprise to build local involvement in conservation and development.

A second problem with compensation payments is the ongoing nature of their costs. There is a reluctance among Pacific governments and aid agencies to become committed to long-term compensation payments. While it needs to be recognised that establishment of protected areas will involve ongoing management costs, adding compensation payments to this increases the financial burden of conservation area establishment.

Finding the right balance

It is without doubt that the development objectives of the indigenous landowners of the South Pacific need to be central to programmes of protected area establishment in the region. It is also important that the landowners themselves retain control and a powerful sense of ownership over the development of protected areas on their land. To help ensure that both of these objectives are met, conservation initiatives must proceed through leadership from within the communities, and outside assistance needs to be carefully targeted and mindful of the long-term implications of its involvement.

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Legal brief

Convention on the Conservation of Migratory Species of Wild Animals

From 7 to 11 June the fourth meeting of Parties to the Convention on the Conservation of Migratory Species of Wild Animals (CMS) will be held in Nairobi, Kenya. This will be followed by discussions on a major Agreement for the Conservation of African-Eurasian Migratory Waterbirds. So what is the CMS, and what role does it play in protected area management?

Migration is a universal phenomenon, whereby animals move periodically from one area to another, often in a cyclical and predictable manner. A wide variety of animals inhabiting the land, sea and air migrate: antelopes, dolphins, marine turtles, bats and many species of birds, to name just a few. Many animals migrate in response to biological requirements, such as the need to find a suitable location for breeding and raising young, and to be situated in favourable areas in which to feed at other times of the year. In some cases, these specific requirements are fulfilled in locations separated by vast distances.

Migration has both advantages and disadvantages. It allows a species to exploit resources periodically in areas that would not otherwise be suitable for continuous use. However, it also means that animals are biologically dependent on the specific sites they find at the end of their journey and along the way. Increasingly, these sites are threatened by man-made disturbances and habitat degradation. Migratory animals may also fall victim to adverse natural phenomena, such as unfavourable climatic conditions and predation by other species.

The scope of the CMS

The Convention on the Conservation of Migratory Species of Wild Animals aims to conserve terrestrial, marine and avian species over the whole of their migratory range. It is commonly referred to as the Bonn Convention or simply 'CMS'. The Convention arose from a recommendation of the 1972 United Nations Conference on the Human Environment and came into force on 3 November 1983. Its membership now comprises 43 Parties from all regions of the world (Table 1), but its coverage urgently needs more depth to enhance its effectiveness. The CMS provides the necessary framework within which Parties may act to conserve migratory species and their habitat. Such initiatives emphasize the need for close cooperation among CMS Parties, especially developed and developing countries that host the same migratory species at different stages of their life cycles. The Convention complements other global conservation instruments, such as CITES, Ramsar and the Convention on Biological Diversity (CBD). Indeed, CMS may be regarded as a vehicle through which Parties to the CBD may fulfil their obligations under that Convention with respect to migratory species.

There are two appendices to the CMS which list migratory species that would benefit from conservation measures taken by 'Range States' – countries that

exercise jurisdiction over any part of a species' distribution. Appendix I lists species that are in danger of extinction throughout all or a significant proportion of their range. The list currently includes, among others, the Siberian crane *Grus leucogeranus*, hawksbill turtle *Eretmochelys imbricata* and Mediterranean monk seal *Monachus monachus*. Range States are required to give them full protection from such activities as hunting, fishing, capturing, harassing and deliberate killing. Importantly, countries whose flagships are involved in taking migratory species on the high seas, outside national jurisdictional limits, are also covered in the definition of 'Range State'. In addition to these strict obligations, Range States of Appendix I species are to endeavour to conserve their habitat, to counteract factors impeding their migration and to control other factors that might endanger them.

Appendix II lists migratory species whose conservation status requires, or would benefit from, the implementation of international cooperative Agreements. A species does not necessarily need to be threatened with extinction to qualify for listing in Appendix II; if it would potentially benefit from international conservation efforts, it is a candidate for inclusion. Dolphins, seals, the houbara bustard *Chlamydotis undulata* and the monarch butterfly *Danaus plexippus* are among those currently listed.

Agreements lead the way

A novel feature of the CMS, and arguably its most powerful asset, is that it provides for two types of agreements for species listed in Appendix II. First, there are AGREEMENTs (the capitalization is intentional) intended to benefit migratory species – especially those with an unfavourable conservation status – over their entire range. These AGREEMENTs should be open to accession by all Range States of the species concerned, including those that are not Parties to the parent Convention.

The text of the CMS offers guidelines on what AGREEMENTs should include. As a minimum, they should provide for:

- coordinated conservation and management plans
- conservation and restoration of appropriately situated habitat
- control of factors impeding migration
- research initiatives
- periodic assessments of the species' conservation status
- exchange of information among Range States.

The aim of each AGREEMENT is to restore the migratory species concerned to a 'favourable conservation status' or to maintain it in such a state. This is said to be achieved when:

1) population data show that the species is maintaining itself on a long-term basis as a viable component of its ecosystems;
2) the range of the species is neither being reduced, nor is it likely to be reduced in the long term;
3) there is, and will be in the foreseeable future, sufficient habitat to maintain populations of the species;
4) the species' distribution and abundance approach historic coverage and levels (insofar as potentially suitable ecosystems exist and to the extent consistent with wise wildlife management).

Parties are also encouraged to conclude a second type of agreement (spelled in lower case, to differentiate them from AGREEMENTs) for populations of species that periodically cross national jurisdictional boundaries. Agreements of this kind may be prepared for species that are not necessarily 'migratory' as defined by the Convention, or even listed in Appendix II. Unlike the AGREEMENTs mentioned above, the text of the Convention does not specify what these agreements should include. However, the Parties to CMS have agreed that they need not cover the entire range of a migratory species or necessarily be open to accession by all Range States if this would adversely affect their conclusion or implementation.

Table 1. Parties to the Convention on the Conservation of Migratory Species of Wild Animals (as of 1 February 1994).

party	*date of entry into Force*	*party*	*date of entry into Force*	*party*	*date of entry into Force*
Argentina	1.01.92	Hungary	1.11.83	Panama	1.05.89
Australia	1.09.91	India	1.11.83	Philippines	1.02.94
Belgium	1.10.90	Ireland	1.11.83	Portugal	1.11.83
Benin	1.04.86	Israel	1.11.83	Saudi Arabia	1.03.91
Burkina Faso	1.01.90	Italy	1.11.83	Senegal	1.06.88
Cameroon	1.11.83	Luxembourg	1.11.83	Somalia	1.02.86
Chile	1.11.83	Mali	1.10.87	South Africa	1.12.91
Denmark	1.11.83	Monaco	1.06.93	Spain	1.05.85
Egypt	1.11.83	Morocco	1.11.93	Sri Lanka	1.09.90
European Union	1.11.83	Netherlands	1.11.83	Sweden	1.11.83
Finland	1.01.89	Niger	1.11.83	Tunisia	1.06.87
France	1.07.90	Nigeria	1.01.87	United Kingdom	1.10.85
Germany	1.10.84	Norway	1.08.85	Uruguay	1.05.90
Ghana	1.04.88	Pakistan	1.12.87	Zaire	1.09.90
Guinea	1.08.93				

Agreements at work

Several AGREEMENTs have been or are being developed (Table 2). For example, an AGREEMENT on the Conservation of Bats in Europe aims to address threats to bats arising from habitat degradation, disturbance of roosting sites and harmful pesticides. At present it applies to 29 species of bats of the families Rhinolophidae and Vespertilionidae. The AGREEMENT calls upon Parties to prohibit the deliberate capture, keeping or killing of bats except under permit, to identify and protect sites of importance for their conservation, and to promote research programmes and public awareness initiatives. A second example of an existing CMS AGREEMENT is a Memorandum of Understanding (MoU) aimed at conserving the remaining populations of the critically endangered Siberian crane in Central and West Asia. The MoU provides for immediate species and habitat conservation measures to be taken in the Range States concerned.

Two major interrelated initiatives now under way are the development of AGREEMENTS for the conservation of African–Eurasian waterbirds and of Asian–Pacific waterbirds. Each AGREEMENT provides for a comprehensive Management Plan and more specific measures are contained in separate Action Plans targeted towards particular groups of species. Together, these two AGREEMENTs have a potential membership of over 150 Range States; a similar AGREEMENT for the Americas would round out a truly global strategy for waterfowl conservation.

Parties to CMS are encouraged to work towards the conclusion of additional AGREEMENTs or memoranda for one or more migratory species that are not adequately protected by existing legislation. For example, these might include regionalAGREEMENTs for marine turtles, sirenians, small cetaceans, and terrestrial mammals in arid areas.

Table 2. Status of AGREEMENTS under the Convention on the Conservation of Migratory Species of Wild Animals (as of 1 February 1994).

AGREEMENT	*party*	*status*
Conservation of Bats in Europe	To date: Germany, Luxembourg, Norway, Netherlands, Sweden, UK	Entry into force on 16.01.94, with first meeting of Parties in mid-1995
Baltic and North Seas Small Cetaceans (ASCOBANS)	To date: Belgium, Denmark, Germany, Netherlands, Sweden, UK	Entry into force on 29.03.94, with first meeting of Parties in September 1994
Western/Central Asian populations of Siberian Crane	To date: Iran, Pakistan, Russian Federation	Entry into force on 01.07.93
Mediterranean and Black Sea Small Cetaceans	Potentially c. 25	Draft in progress
African-Eurasian Waterbirds	Potentially >100	Draft ready for negotiation, June 1994
Asian-Pacific Waterbirds	Potentially c. 50	Advanced draft in preparation
Houbara Bustard	Potentially c. 15	First draft prepared by Saudi Arabia
Slender-billed Curlew	Potentially c. 30	Draft MoU prepared by Secretariat

The role of protected areas

Clearly, the CMS provides a mechanism for linking protected areas along migration paths, forming a common bond between them and a rationale for the increasingly popular trend of twinning protected areas. The international migration behaviour of animals should be included as part of any national or regional protected areas system plan review to highlight gaps in coverage of routes, especially geographic bottlenecks (e.g. narrow marine straits) and vital resting places. Some of these places may not seem very obvious candidates for protection. However, as the draft Action Plan for Protected Areas in Europe says: "... the aim is not only to protect the most important sites but also to establish corridors that permit dispersal and migration." Ultimately, responsibility for conserving the migratory species covered by the CMS rests with those states that have agreed to be bound by its provisions and which, in so doing, have made a significant commitment to the conservation of the planet's biodiversity.

Compiled by Paul Goriup from material supplied by the UNEP/CMS Secretariat, Mallwitzstrasse 1-3, D-53177 Bonn, Germany. Fax +49 228 954 3500.

Book Reviews

La Diversidad Biológica de Iberoamérica

Gonzalo Halffter, ed. Instituto de Ecología, A.C., Departamento de Publicaciones, Apartada Postal 63, 91000 Xalapa, Veracruz, Mexico. ISBN 968-7213-31-0, ISSN 0065-1737 Acta Zoólogica Mexicana (n.s.).

This book is a contribution to the Subprogramme of Biological Diversity of the Iberoamerican Programme of Science and Technology for Development (CYTED-D), a programme created in 1984 with the aim of promoting scientific and technological cooperation among 14 Latin American countries. It is the first of a series of volumes that will address the state of the art of biological diversity in these countries, its inventory, monitoring, conservation and sustainable use. *La Diversidad Biológica de Iberoamérica* consists of a General Part which includes two chapters, a general one which deals with the definition, types and ways of measuring biodiversity, and another one on extinction models and habitat fragmentation. Then there is a series of country accounts which attempt to describe the biological diversity and prospects for its conservation in Colombia, Cuba, Chile, Guatemala, Mexico and Panama. The production of this book deserves the highest credit, especially because it is entirely written by native authors, thus providing an overview of biodiversity in Latin America from a Latin American perspective, and reflecting the state of scientific knowledge in the region. The main drawbacks are the lack of homogeneity among the country accounts, some of them (e.g. Colombia) being disproportionately long, and the lack of a uniform format for these accounts. The book is very short in tables, maps and graphs, which makes the text somewhat arid for the reader, and the language used is very technical and only accessible to a very specialised audience. In this respect, a short glossary of terms at the end of the volume would have been extremely useful. Several of the papers included are just a new version of work already published elsewhere.

On the other hand, this work provides all the neccessary background for any work to be done on biodiversity in the region, and will undoubtedly become a standard reference book. It is an invaluable contribution to the Convention on Biological Diversity that came into force at the end of 1993, which should be followed by the signature and ratification of the convention by all the countries involved. In addition, it represents the will of the Iberoamerican community to participate in the international efforts which are being developed for the conservation and sustainable use of biodiversity worldwide. The Mexican Insituto de Ecologia deserves special credit for publishing *La Diversidad Biológica de Iberoamérica* as a special volume of its periodical Acta Zoologica Mexicana, and credit is also due to Gonzalo Halffter for the compilation and all the authors for their contributions. Mexico must be encouraged to continue playing a leading role in the completion of this series of books. I look forward to seeing the next issue, which will undoubtedly benefit from the experience acquired in the preparation and publication of this one.

ISABEL SALÍS.

The Law of the Mother - protecting indigenous peoples in protected areas

Elizabeth Kemf, ed. (1993). Sierra Club Books. Hardback, 296 pp, colour photos. ISBN 0-87156-451-3. Published in association with WWF, Commission of the European Communities and IUCN. Available from IUCN Publication Services Unit, 181a Huntingdon Road, Cambridge, CB3 0DJ, UK.

This handsome volume is based largely on presentations made during the Workshop on People and Protected Areas in Caracas, 1992. Its 35 chapters provide a wealth of information from around the world, continually stressing the need for indigenous peoples to be put at the centre of creating and managing protected areas; such areas have sometimes foundered through not taking account of local people.

In many cases, indigenous peoples have been managing 'natural' areas in a sustainable way for many generations, and there is much to be learnt from their traditional methods. There are also undeniable conflicts between people and the conservation of wildlife; one section of the book is devoted to resolving such conflicts. The other subject areas covered are: people living in or near protected areas, land tenure or ownership in protected areas and communities creating protected areas.

This book suggests a positive way forwards for conserving natural areas and the people living in them, and should be of great interest to all involved in protected areas.

Resumos

Labor con grupos indígenas en Sudamérica

TED MACDONALD

Los Países desarrollados están apoyando y entusiasmando a los Indígenas Latinoamericanos para que usen sus intereses y habilidades para hacerlos partícipes en programas de conservación y de uso sostenible de la tierra. Esto les permitirá mejorar sus ingresos en una forma económica sustentable.

Non es fácil desarrollar estrategias prácticas para manejar tierras frágiles con grupos de indígenas nativos. Los indígenas y sus organizaciones tienen razón de ser cautelosos y sospechar de individuous y organizaciones que pretenden trabajar en favor de ellos. Hasta ahora, los indígenas han sufrido de privaciones y marginación. Recientemente, los indígenas han establecido sus propias organizaciones para defender sus derechos a tierra y recursos.

Este documento bosqueja algunos de los antecedentes institucionales e históricos que han resultado en la presente situación de los indígenas. Después se hace una revisión de las maneras en que el gobierno y las agencias no gubernamentales han trabajado con los grupos indígenas y describe las metas de las organizaciones indígenas. Se presentan casos de estudio para ilustrar respuestas positivas y negativas a los programas de conservación y manejo de los recursos. El documento concluye con algunas guías y sugerencias para trabajar con éstos nuevos sectores sociales.

Comunidades pesqueras locales y parques marinos nacionales y áreas protegidas en Kenya

WILFRED W. ASAVA

El crecimiento de la industria pesquera y el aumento del turismo a lo largo de las costas de Kenya han resultado en crecientes demandas sobre el ambiente marino. Inspecciones en dos sitios han confirmado que se han dafiado los arrecifes de coral por colectas y otras formas de explotación y en 1967, un Acto de Parlamento resultó en el establecimiento de los primeros Parques Marinos Nacionales en Malindi y Watamu. Hasta ahora se han establecido nueve parques cubriendo más de 100,000 ha.

No todos los recursos marinos se cosechan para alimento. La explotación de coral vivo, algas y algunos moluscos como material para construcción podría dañar comunidades biológicas. La creciente importancia y el uso de productos farmacéuticos procedentes de organismos marinos ha resultado en colectas a pequeña escala de especies raras o poco comunes. Esto ya está sucediendo en la costa oriental y se requiere de acción para la observación continua de éstas actividades.

Se discuten los antecedentes y dificultades para establecer parques marinos. Un elemento clave es la participación de las comunidades locales en su establecimiento y protección. Anteriormente esto no siempre había tenido éxito en Kenya, pero es muy alentador ver que ahora las comunidades están participando en las políticas de manejo y esto ha resultado en numerosos beneficios.

Valoración rural de participación: un reto para pueblos y áreas protegidas

CAREL DRIJVER

La relación entre las áreas protegidas y las comunidades locales es un factor clave para la conservación de los recursos naturales a largo plazo. Este es el caso especialmente en áreas remotas en países en desarrollo donde es difícil mantener un control efectivo sin el apoyo de las comunidades locales. Sin embargo, en muchos casos la relación es mayormente una de conflicto que de apoyo. Las comunidades locales típicamente perciben a las áreas protegidas como una carga sobre el uso de sus tierras y su autosuficiencia, mientras que por otro lado de acuerdo a los conservacionistas, el creciente número de grupos locales y sus aspiraciones presentan una amenaza mayor a la sustentabilidad del área protegida. El autor describe ejercicios sobre 'Mapas Ambientales de Participación' conducidos en el norte de Camerón como ejemplos de como se pueden tratar estos retos.

Lecciones del Pacífico: el vínculo entre las necesidades de desarrollo tradicional de la propiedad y las áreas protegidas

ANNETTE LEES

En Melanesia, la tierra y los recursos pertenecen a familias de grupos indígenas por tradición o costumbre. La mayoría de estos grupos vive marginalmente en poblados cultivando jardínes, pescando y cazando. Sin embargo, las complicadas reglas tradicionales relativas al uso y propiedad de los recursos forestales están siendo desafiadas por el impulso por desarrollo encabezado por el deseo de cambio expresado por los mismos pobladores residentes. El éxito de la conservación forestal en estos países depende del apoyo que reciban las iniciativas de los propietarios locales.

El Establecimiento de las áreas protegidas depende más del tratamiento de sus necesidades económicas y de sus aspiraciones de desarrollo que de sus sentimientos conservacionistas. Los propietarios deben de ser compensados de alguna manera con la posibilidad de percibir ingresos si van a tener la opción de proteger a sus bosques a largo plazo. Se discute el ejemplo del establecimiento exitoso de dos áreas protegidas dirigidos por grupos comunitarios.

Résumés

Travailler au côté des populations indigènes en Amérique du Sud

TED MACDONALD

Les pays développés supportent maintenant, et encouragent, les Indiens d'Amérique latine à utiliser leurs connaissances techniques et leurs intérêts afin de participer aux programmes de conservation et d'utilisation durable des territoires. Ceci devrait leur permettre d'augmenter leurs revenus d'une façon économiquement durable.

Il n'est pas facile d'élaborer, avec les populations indiennes, des plans de gestion réalisables des espaces fragiles. Les Indiens et leurs organisations ont raison d'être prudents, voire même méfiants, des individus et organisations qui proclament travailler pour eux. Ils ont souffert jusqu'à maintenant de privations et de politiques de déplacement et de ségrégation. Les Indiens on fondé récemment leurs propres organisations afin de défendre leurs droits aux terres et aux ressources.

Cet article présente certaines des bases historiques et institutionnelles qui ont conduit à la situation actuelle des Indiens. Il étudie ensuite la façon dont le gouvernement et les organisations non gouvernementales ont collaboré avec les populations indiennes et décrit les objectifs des organisations indiennes. Des études de cas sont présentées illustrant une réponse positive et négative aux programmes de conservation et de gestion des ressources. L'article présente en conclusion certaines lignes directrices et suggestions afin de travailler avec ces nouveaux secteurs sociaux.

Les communautés locales de pêcheurs et les parcs nationaux marins et aires protégées du Kenya

WILFRED W. ASAVA

L'expansion de l'industrie de la pêche et le développement du tourisme le long des côtes du Kenya ont conduit à des pressions accrues sur le milieu marin. L'examen de deux sites a permis de confirmer que la récolte et les autres formes d'exploitation sont néfastes aux récifs coralliens et, en 1967, une loi a conduit à la création des premiers Parcs Nationaux de Malindi et de Watamu. Neuf parcs sont maintenant établis, couvrant une superficie de plus de 100,000 ha.

Les ressources maritimes ne sont pas seulement récoltées pour leur valeur alimentaire. L'exploitation des coraux vivants, des algues et de certains mollusques comme matériaux de construction pourrait nuire aux communautés biologiques. L'importance grandissante et l'utilisation de produits pharmaceutiques dérivés d'organismes marins ont entrainé la récolte, sur une petite échelle, d'espèces rares ou peu communes. Ceci s'observe déjà sur la côte orientale et il convient de contrôler ces activités.

La discussion porte sur le fond, et les difficultés qui se présentent lors de l'établissement de parcs nationaux marins. La participation des communautés locales à l'établissement et à la protection de ces parcs constitue un élément fondamental. Ceci n'a pas toujours été le cas au Kenya, mais il est maintenant encourageant de voir les communautés locales participer aux plans de gestion et, par conséquent, d'en tirer profit.

Evaluation de la participation rurale: un défi pour les populations et les aires protégées

CAREL DRIJVER

Les rapports entre les aires protégées et les communautés locales constituent une composante esssentielle de la conservation à long terme des ressources naturelles. Ceci s'applique tout particulièrement aux régions reculées des pays en voie de développement où il est difficile de maintenir un contrôle efficace sans l'appui des communautés locales. Dans de nombreux cas cependant, les conflits, plutôt que l'appui actuel des populations, l'emportent. En général, pour les communautés locales, une aire protégée constitue une entrave à leur leur utilisation des terres et à leur indépendance; mais, d'autre part, et selon les protecteurs de la nature, l'accroissement des populations, et leurs aspirations, constituent une menace importante pour la conservation durable des aires protégées.

Comme exemples de moyen d'aborder ces défis, l'auteur cite les exercices de 'Cartographie de la Participation Environnementale' menés au nord du Cameroun.

Leçons du Pacifique: associer les besoins de développement de la propriété traditionnelle et les aires protégées

ANNETTE LEES

En Mélanésie, les terres et les ressources appartiennent, par tradition, à des groupes familiaux indigènes. Les populations, en général, se rencontrent dans les villages et vivent des produits du jardinage, de la pêche et de la chasse. Cependant, les règlements tradionnels compliqués relatifs à l'utilisation et à la propriété des ressources forestières sont menacés par une volonté de développement et de changements souhaités par les villageois eux-mêmes. Le succès de la politique de conservation des forêts dans ces pays dépend du support des initiatives des propriétaires fonciers.

La satisfaction de leurs besoins économiques et de leurs aspirations, plutôt que l'appel aux sentiments de conservation, est plus importante pour l'établissement d'aires protégées. Si l'ont veut que les propriétaires fonciers choisissent la protection à long terme de leurs forêts, ils doivent être compensés par l'attraction de revenus éventuels. Deux exemples réussis de création d'aires protégées, menés par des communautés locales, sont discutés.

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