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Introduction

CONSERVATION AND MOBILE INDIGENOUS PEOPLES

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The close of the twentieth century has witnessed an upsurge in international concern about people's impact on the natural environment. As pressure on natural resources has intensified, the conventional means of protecting habitat and preventing species extinctions, through the establishment of 'protected areas', has increasingly come into question. Conventional conservation approaches have been accused of ignoring the wider forces causing environmental damage and, even, of being part of the same mindset, which imposes land use categories from the 'top-down', classifying lands as protected areas or zones. This, say the critics, has only legitimized and encouraged unsustainable land use outside protected areas, placing further pressure on natural resources and the beleaguered protected areas themselves. Some have, thus, demanded broader changes in national and global economies and focused attention on the underlying causes of environmental destruction – social injustice, the lack of secure land tenure, the enclosure of the commons, consumerism, the rise of corporations, global trade, and government collusion or indifference (WRM 1990; IUCN 1991; Colchester and Lohmann 1993; Ecologist 1993; Verolme and Moussa 1999; Barraclough and Ghimire 2000; Wood et al. 2000).

The classic conservation approach has also been challenged from a different but related quarter. As our appreciation of the value of traditional knowledge and community-based natural resource management has grown (Posey 1999; Roe et al. 2000), there has been a corresponding growth of concern about the social impacts of the imposition of protected areas on indigenous peoples (West and Brechin 1991; Wells and Brandon 1992; Kemf 1993; Colchester 1994; Ghimire and Pimbert 1997).

Indigenous Peoples and Forced Migration

The linking themes, which bring these chapters together, are those of displacement and forced migration, which have emerged as a central area of research at the Refugee Studies Centre at the University of Oxford. The literature on forced resettlement in general and of indigenous peoples in particular is now very extensive and will not be reviewed here (see for example Cernea and Guggenheim 1993; Cernea 1999). Yet the sheer scale of the process is still little appreciated. For example, it is estimated that between 40 and 80 million people worldwide have been displaced by large dams alone (WCD 2000: 104) and our ignorance of the exact numbers of people displaced itself provides shocking evidence of the degree to which local community interests can be ignored by planners. Indigenous peoples have suffered disproportionately from this process (Colchester 1999; WCD 2000). Summarizing the impacts of forced resettlement on rural communities, the World Bank (1994: iii-iv) notes:

When people are forcibly moved, production systems may be dismantled, longestablished residential settlements are disorganized, and kinship groups are scattered. Many jobs and assets are lost. Informal social networks that are part of daily sustenance systems – providing mutual help in childcare, food security, revenue transfers, labour exchange and other basic sources of socio-economic support - collapse because of territorial dispersion. Health care tends to deteriorate. Links between producers and their consumers are often severed, and local labour markets are disrupted. Local organizations and formal and informal associations disappear because of the sudden departure of their members, often in different directions. Traditional authority and management systems can lose leaders. Symbolic markers, such as ancestral shrines and graves, are abandoned, breaking links with the past and with peoples' cultural identity. Not always visible or quantifiable, these processes are nonetheless real. The cumulative effect is that the social fabric and economy are torn apart.

We lack accurate statistics about just how many people, indigenous or otherwise, have been displaced to make way for protected areas. One estimate suggests that as many as 600,000 'tribal' people have been displaced by protected areas in India alone (PRIA 1993). In recent years, with involuntary resettlement becoming increasingly questioned, the trend in India has been to place so many restrictions on indigenous peoples to limit their movements and livelihoods as to make their continued residence almost impossible, obliging them to relocate 'by choice' (JBHSS 2000).

The chapters in this volume show just how widespread this process of forced resettlement continues to be. The case studies also illustrate a very wide range of social situations resulting from the imposition of protected areas on indigenous peoples and other local communities ranging from forced removals, serious impoverishment, through strategies of resistance and conflict management, to 'best practice' examples of co-management, as in Australia.

The papers reveal how hard it is to impose clear categories on the manifold local experiences. Some marginalized peoples like the 'Gypsies' of Tamilnadu described by Meshack and Griffin (this volume) are obliged to be so mobile that isolating a single cause of displacement makes little sense. Yet many other mobile or 'nomadic' peoples in fact have quite well-defined territories (Chatty 1996). Not all protected areas that have led to the displacement of prior residents have directly caused 'involuntary resettlement'. Rather in many cases such as that of the Bedouin of the Negev described by Abu Rabia (this volume), the impositions of protected areas have limited the extent of subsistence or grazing lands, leading inexorably to out-migration from the contested areas. Displacement, intended or not, has been the result. The clarification is important at a time when the World Bank is engaged in revising its policy on 'Involuntary Resettlement' and is seeking to discriminate between those whom its projects oblige to move to make way for development and those whose livelihoods are curtailed due to imposed conservation areas. Controversially, benefits accorded the former - such as being informed about their options and rights, being consulted about alternatives, provided with prompt compensation, ensured the timely sharing of information, infrastructural support, provisions of alternative livelihoods, and (where possible) replacement land for land lost – are denied the latter group (World Bank 2001).

Recent Historical Precursors to Current Conservation **Paradigms**

Government organized parks and protected areas first made their appearance in America and Europe during the nineteenth century. Significant areas of land were set aside as 'wilderness', to be preserved 'untouched by humans', for the good of humankind. In 1872 a tract of hot springs and geysers in northwestern Wyoming was set aside to establish Yellowstone National Park. The inhabitants of the area, mainly Bannock, Crow, Sheepeater and Shoshone native American Indians, were driven out by the army, which took over management of the area (Morrison 1993).

In the United Kingdom, conservationists were mainly foresters whose philosophy stressed that the public good was best served through the protection of forests and water resources, even if this meant the displacement of local communities (McCracken 1987: 190). This expertise and philosophy was transferred abroad to all of Great Britain's colonial holdings. However, whereas in Britain National Parks, in the main, recognize existing rights and established farming systems, in the colonies the customary rights of native peoples were often denied (Harmon 1991; Colchester 1994). Now, more than a century later, most national parks in Latin America, Asia, Africa and the rest of the developing world have been, and to an extent still continue to be, created on the model pioneered at Yellowstone and built upon by the early British colonial conservationists. The fundamental principle of operation remains to protect the park or reserve from the damage which the indigenous or other local communities are supposed to inflict.

In much of the developing world, conservation efforts during the past century have been largely based on the assumption that human actions negatively affect the physical environment. Problems like soil erosion, degradation of rangelands, desertification, and the destruction of wildlife have been viewed as principally due to local, indigenous misuse of resources. Recent studies have clearly shown that models of intervention developed in the West, in its particular historical context, have been transferred to the developing world with no regard for the specific contexts of the actual receiving environments or peoples (e.g. Sanford 1983; Anderson and Grove 1987; Manning 1989; Behnke et al. 1991). For example, the common Western, urban notion of wilderness as untouched or untamed land has pervaded conservation thinking. Many policies are based on the assumption that such areas can only be maintained without people. They do not recognize the importance of local management and land-use practices in sustaining and protecting biodiversity. Nearly every part of the world has been inhabited and modified by people in the past, and apparent wildernesses have often supported high densities of people (Colchester 1994; Pimbert and Pretty 1995). In Kenya, for example, the rich Serengeti grassland ecosystem was, in part, maintained by the presence of the Maasai and their cattle (Adams and McShane 1992). There is good evidence from many parts of the world that local people do value, utilize and efficiently manage their environments (Nabhan et al. 1991; Oldfield and Alcorn 1991; Scoones et al. 1992; Novellino 1998; Abin 1998) as they have done for millennia. These findings suggest, in complete reversal of recent conservation philosophy, that it is when local or indigenous people are excluded that degradation is more likely to occur. 'It suggests that the mythical pristine environment exists only in our imagination' (Pimbert and Pretty 1995: 3).

Rangeland management has had a similar history of Western philosophies and technologies being transposed onto the developing world. The concept of sustainable yield and the goal of improved productivity originated in Germany and North America, respectively, and were rapidly adopted in Australia. All these territories were organized on a system of privately-owned land. For the last fifty years, policy makers have defined the major concern of pastoral regions of the developing world to be overstocking that leads to certain ecological disaster. In this view the problem (too many livestock) has a technical solution (destocking). However, the central assumption being made is that pastoral ecosystems are potentially stable and balanced, and become destabilized by overstocking and overgrazing. This bias has led to the establishment of a multitude of development projects that promoted group ranching, grazing blocks and livestock associations. But these schemes have failed, leading to a fundamental questioning of the basic assumptions underlying this tradition of range management. Behnke et al. (1993) have admirably shown that pastoral systems are not equilibrium systems. Instead they are continuously adapting to changeable conditions, and their very survival depends upon this capacity to adapt. It is, in fact, the 'conventional development practices themselves that are the destabilizing influences on pastoral systems, as they have prevented traditional adaptive systems from being used' (Pimbert and Pretty 1995: 5).

Early Colonial Policy towards Indigenous People in **Protected Areas**

As has been briefly summarized above, in the late nineteenth century and throughout the first half of the twentieth century, conservation meant the preservation of flora and fauna and the exclusion of people. As was the case in the formation of Yellowstone National Park, armies or colonial police forces in Latin America, Africa, Asia and much of the developing world have been employed to expropriate and exclude local communities from areas designated as 'protected', often at great social and ecological costs. Forced removal and compulsory resettlement, often to environments totally inadequate for sustainable livelihood, were common practices.

Accompanying this forced removal was the view that indigenous people who rely on wild resources are 'backward' and so need help to be developed. Occasionally the 'primitive' or 'backward' habits of the indigenous people were regarded as attractive for tourism and, in carefully regulated circumstances, a limited number of groups, such as the San in areas of the Kalahari, were allowed to remain in or near traditional lands. The situation of the Maasai in Kenya and Tanzania is another example (Jacobs 1975; Lindsay 1987). In 1904, in an effort to pacify the Maasai and to clear preferred land for European settlers, the British government created the Northern and Southern Maasai Reserves. Subsequently, over the next ten years, the colonial government abolished the Northern Reserve and forced its resident population to move, effectively denying them access to much productive rangeland. It prohibited all hunting of wild animals on the reserve, although many authorities apparently felt that the Maasai could continue to coexist with the wildlife population. These reserves served the purpose of preserving primitive Africa where 'native and game alike have wandered happily and freely since the Flood' (Cranworth 1912: 310 quoted in Lindsay 1987: 152).

Post-colonial Policy

By the 1940s and 1950s, late colonial policies and early independent government policies began to change. The image of the harmless, pristine native was replaced by that of a dangerous and uncivilized local. Meanwhile indigenous peoples, already highly constrained if not prohibited from pursuing their livelihoods as they had in previous centuries, became more often regarded as backward primitives, and as impediments not only to the state's conservation policy, but also to its general desire to modernize and develop. Subsistence systems were denigrated, and policies were adopted aimed at forcibly settling not only nomadic pastoralists, but also swidden farmers and hunters and gatherers. As Fisher (this volume) demonstrates, resettlement of native peoples in colonial Tanganyika was often justified in the colonial mind as a means of promoting development, easing administration, and providing essential services such as health care. Little thought was given to indigenous

priorities, perspectives or even systems of resource use and the administrators' discourse evolved to legitimize these manipulations. In the Middle East, the newly-independent countries set about settling Bedouin in an effort to 'modernize' them and, as in Israel, a sometimes repressive state took little account of local knowledge or pastoral regimes (Abu Rabia this volume). In Latin America, India and South East Asia similar policies took hold, either settling indigenous communities to better control them, or pushing them off land which the state deemed important for its own economic development (Ewers 1998; Dangwal 1998). These kinds of impositions led to a denial of land rights (Turton this volume; Rae, Arab and Nordblom this volume) and were often shaped by quite explicit prejudices against mobile peoples (Sato this volume; Meshack and Griffin this volume). The same arguments about the need to provide government services to such backward peoples are still deployed in Indonesia (Li 1999b) but the underlying purposes are geopolitical and economic, a means of freeing up access to resources for other interests (Duncan this volume). As in Vietnam, the establishment of protected areas, and concomitant expulsion of local residents, is also motivated by government needs for foreign exchange (McElwee this volume).

In East Africa, post-colonial policy was directed at sedentarizing the Maasai and shifting their livestock economy from a subsistence to a market basis. As Lindsay summarizes (1987: 152-5), the government constructed dams and boreholes, and tapped watering holes. Livestock numbers appeared to increase rapidly over subsequent decades, and by the 1960s conservationists began to perceive that wildlife in the reserves was being threatened by the Maasai herders and their livestock. The reserve boundaries were redrawn and talk began to centre on the possible exclusion of Maasai livestock from the reserves. With growing tourist revenues, the government declared a livestock-free area in the middle of the reserves to protect wildlife. Local Maasai elders began to demand formal ownership of all the land in the region. A confrontation between resident pastoralists and government/conservationists was inevitable. Maasai began killing wildlife such as rhinoceroses and elephants in protest against the threatened loss of more grazing land. More recently there has been some evidence of collaboration with poachers in response to the trade in ivory and horn (Douglas-Hamilton 1979).

Experiences with Protected Areas

Indigenous spokespersons reviewing their experience with protected areas in Latin America have remarked that conservation and development are just two sides of the same coin (Gray et al. 1998). They experience both as topdown impositions which deny their prior rights to land and devalue their indigenous knowledge and systems of land use (Colchester and Erni 1999).

This experience has been a worldwide phenomenon. In East Africa, for example, people have long been forced off their lands in order to create parks and sanctuaries for wildlife (Turton 1987; Howell 1987; McCabe et al.

1992; Kwokwo Barume 2000). Authors in this volume detail these impacts on indigenous peoples in the Middle East (Chatty), South Africa (Fabricius and de Wet) and East Africa (McCabe). Galvin and her colleagues (this volume) provide detailed evidence of the real impoverishment caused by the progressively tightening restrictions imposed on the Maasai in the Ngorongoro conservation area.

The assumption was that local communities overstocked, overgrazed or otherwise overused the natural environment and were thus obstacles to effective natural resource management. 'Scientific' management of these areas was assumed to require the removal of the indigenous peoples for the long-term benefit of these wildlife preserves or the imposition of strict limits on their livelihoods. However, the capacity of State institutions to regulate better these resources is not always clear. Montoya (this volume) describes how a rapidly degrading area of open access in Venezuela was nominally converted into protected State property as the Ticoporo Reserve without taking into account either the current occupants or further pressure from colonists. Using the 'weapons of the weak', the colonists have been able to take over most of the reserve and some have even gained secure title to their holdings. Rent seeking by forest guards has undermined efforts of protection, allowing logging to strip out the best timber. The author recommends reducing the role of the State except to further secure peasant tenure rights and encourage agroforestry as a way of improving forest cover. Likewise Turton (this volume) argues that the main threat to the 'sustainability' of the local ecology in the Omo valley in Southern Ethiopia comes not from the Mursi but from top-down conservation initiatives which will cause forced resettlement or severely curtail traditional rights of use and access. Nearer home, Theodossopoulos (this volume) details local resistance on the island of Zacynthos in Greece where imposed conservation laws will extinguish land titles, without compensation.

These cases also reveal clearly how conservation objectives are undermined when local people's needs and rights are ignored. As Chatty (this volume) demonstrates in her examination of conservation initiatives in Jordan and Syria, although initially the curtailment of local rights may, for a time, allow projects to be portrayed as 'successes', in the longer term conservation goals have been defeated by local resentment and resistance.

Recent Alternatives to the Traditional Conservation **Paradigm**

The near universal model of protected areas and natural parks, which was derived from a Western, positivist approach to science, has lately shown signs of accepting alternative paradigms. Until quite recently scientific investigation was dominated by the Cartesian positivist or rationalist paradigm. This assumes the existence of only one reality, and that the aim of science is to discover, predict, and control that reality. This approach reduces the com-

plex aspects of a problem into discrete parts that can be analysed, so that predictions can be made on these discrete parts. It is then assumed that knowledge can be summarized into universal laws or generalizations. Conservation science is firmly set within this paradigm, and so too are the inherently ethnocentric basic values and assumptions of its professionals. This has produced a body of work and industry based on a top-down transfer of technology model of conservation that has consistently ignored the complexity of ecological and social relationships at the local level (Pimbert and Pretty 1995: 13; Jensen 1998).

For several decades now, however, a minority opinion has grown that argues for a more pluralistic way of thinking about the world and how to change it (e.g. Kuhn 1962; Checkland 1981; Vickers 1981; Pretty et al. 1994). It is becoming increasingly clear that ecological systems of plants and animals exist as a function of their unique pasts. Understanding the particular history of a community or ecosystem is critical for its current management. The old, conventional view of ecosystems as a function of their current operating mechanisms, and the assumption that human interference caused depletion of biological diversity, formerly justified the removal of people from national parks and reserves. But as ecosystems are now more clearly regarded as dynamic and continuously changing, the importance of people in their development and functioning is being acknowledged. Recent studies, for example, indicate that Amerindians played a far greater role in manipulating scrub savannas than had previously been suspected (Anderson and Posey 1989). In southeast Asia, it is now seen that the intermittent clearances of patches of land in the forests of the Pwo Karen never caused forest degradation, but rather encouraged the larger wild herbivores to enter by creating sporadic open spaces in the forest (Ewers 1998). In Africa, a few conservationists now realize that some biodiversity loss in protected areas actually stems from the restrictions placed on the activities of local communities. For example, the Serengeti grassland ecosystem is now understood to have been maintained in the past by the presence of the Maasai and their cattle. With the expulsion of the Maasai, the Serengeti is increasingly being taken over by scrub and woodland, leaving less grazing for antelope (Adams and McShane 1992). A similar lesson was learned in Tsavo National Park (Botkin 1990) where resource management to protect and control the elephants caused severe deterioration of the land within the park, while the inhabited area outside the park remained forested.

In the closing decade of the twentieth century, there was thus a change of heart, and international conservationist circles now reverberate with conceptual discussion of 'conservation with a human face' (Bell 1987), and the need for community participation (Cernea 1991; IIED 1994; Beltran 2000). Even conservation biologists who have given some the impression they are holding out for the old protectionist approach (Brandon et al. 1998), now agree that 'traditional and indigenous people can claim incontrovertible rights to their land' and as 'morally responsible humans we must support their struggle' (Redford and Sanderson 2000: 1362).

The preferred means for achieving a reconciliation of social justice and conservation goals is through 'community-based natural resource management' (CBNRM). These efforts seek to promote 'the collective use and management of natural resources in rural areas by a group of people with a self-defined, distinct identity' (Fabricius 2002: 2). A few promising examples of Latin American, Asian and African conservation efforts are now emerging where indigenous peoples are beginning to be effectively integrated into conservation and development projects. In Bolivia, for example, participatory research by the local indigenous community in the Balfor project has permitted members to harvest caiman and peccaries at sustainable levels, based on their own monitoring (Fabricius 2002). In Africa, the CAMPFIRE scheme in Zimbabwe has been widely promoted as allowing for the sharing of benefits – however small – by the community and at the same time giving indigenous peoples a voice in rural politics (Fabricius 2002). Fabricius and de Wet (this volume) argue that the community-based approach, combined with the provision of land security, is allowing conservation and development goals to be met simultaneously. In India, proposals are now being discussed to allow an indigenous people to become key actors in designing and implementing the management plan for the Rajaji National Park in Uttar Pradesh (Dangwal 1998: Colchester and Erni 1999). Encouragingly, some of the major international conservation organizations have responded to this challenge and are seeking out new forms of collaboration to secure indigenous peoples' rights and long-term conservation goals simultaneously (BSP 2000; Margoluis et al. 2000; Weber et al. 2000).

However, some authors in this volume warn us against facile 'solutions'. Understanding the complex histories of land use systems is important if current conflicts of interest over resources are to be resolved, as Wadley (this volume) demonstrates by examining the Danau Sentarum Wildlife Reserve in West Kalimantan (Indonesian Borneo). There are also dilemmas for conservationists and others promoting participation and the indigenous voice in deciding who speaks for the group, as Armstrong and Bennett (this volume) describe in their examination of the situation of the San of the Kalahari Game Reserve in Botswana. Sullivan (this volume) critically examines the record of community-based natural resource management in Namibia. She finds that the 'new' conservation policy has favoured large (mainly white settler) farmers and even in communal areas has failed to secure ownership rights or substantial benefits. Heavy costs are also borne by the villagers in terms of loss of crops, and even lives, to wildlife. She doubts the conservancies are sustainable without continuing flows of grant aid or a resort to heavy-handed police methods little different from the 'fortress conservation' of the past.

Indeed, a central concern of conservation science today is to find practical ways of putting people back into conservation, or, as Bell argues, to give conservation a human face (Bell 1987). This does not mean substituting the assumption that all indigenous peoples are environmental destroyers with an equally simplistic notion that all indigenous peoples are 'noble ecologists'. Indeed, there are doubts about the extent to which it is appropriate to represent

indigenous knowledge through the discourse of 'biodiversity conservation' (Ellen et al. 2000; Lawrence et al. 2000). Long-term field studies suggest that some, perhaps many, indigenous peoples regulate their impact on the environment not so much through consciously limiting direct pressure on resources but through their own political processes which space out communities over wide territories (Colchester 1981; Harms 1981, 1999; Hames 1991). As pressure on land intensifies and wildlife habitats shrink, and as indigenous peoples are increasingly drawn into the market, overhunting of game is increasingly a problem (Robinson and Bennett 2000). Moreover, some ecologists have warned that the elimination of top-predators may lead to much wider impacts on ecosystems than might be predicted (Terborgh 1999 cited in Schwartzman et al. 2000). Many indigenous peoples recognize that changes in their economies, social organization and values may now pose a threat to the natural environments that they depend on, and they seek the assistance of conservationists in addressing these imbalances (International Alliance 1996). Eghenter (this volume) in her examination of Dayak land use in the Kayan Mentarang National Park in East Kalimantan demonstrates clearly the need for detailed studies of the environmental and social impacts of community resource use. However, the study by Galvin and her colleagues (this volume) warns us not to expect to find 'win-win' scenarios everywhere. Their long-term study of declining Maasai livelihoods and nutrition in Ngorongoro revealed no viable options for restoring Maasai standards of living, based on their current land use systems, which do not imply costs to conservation.

Beyond 'Participation'

'Participation' has now become part of the normal language of development theory. It has become so fashionable that almost everyone claims participation to be part of their work. In the world of conservation, the term has been used to justify the extension of control by the State, or to justify external decisions. In the 1970s 'participation' was often a scheme for achieving the voluntary submission of people to protected area schemes (passive participation, and participation for material incentives). Often it was no more than a public relations exercise in which local people were passive actors (participation in information giving). In the 1980s it was defined as local interest in natural resource protection (participation by consultation). In the 1990s, some agencies saw it as a means of involving people in protected area management (functional participation and interactive participation). All too often 'participation' in protected area management is quite nominal as Turton (this volume) documents for the Mursi in Ethiopia. Imposed management systems, while nominally 'participatory' may take little account of indigenous institutions and processes of decision-making, as the Maasai have found in Ngorongoro (McCabe this volume).

At last, and at least, we now recognize that without local involvement there is little real chance of protecting wildlife. Encouraging though such

initiatives are they remain weak judged against the demands of indigenous peoples themselves and their rights as recognized in international law. Genuine recognition of indigenous rights to their lands and to self-determination, requires that conservationists engage as advisers to indigenous land owners, implying the need for a further transfer of power and resources in favour of marginalized groups and new mechanisms of accountability between 'outsiders' and indigenous people (Colchester 1996).

Conservation and Indigenous Rights in International Law

The rights of indigenous peoples in conservation concerns have long antecedents and have even found their way, albeit ambiguously, into international law. Notably, the global agreements negotiated at the Earth Summit

Table 1.1 A Typology of Participation

| Typology | Components of each type |
|---------------------------------------|--|
| Passive participation | People participate by being told what is going to happen or what has already happened. It is a unilateral announce- ment by project management; people's responses are not taken into account. |
| Participation in information giving | People participate by answering questions posed by extractive researchers. People do not have the opportunity to influence proceedings. |
| Participation by consultation | People participate by being consulted, and external agents listen to views. Professionals are under no obligation to take on board people's views. |
| Participation for material incentives | People participate by providing resources, for example labour, in return for food, cash or other material incentives. It is very common to see this called participation, yet people have no stake in prolonging activities when incentives end. |
| Functional participation | People participate by forming groups to meet predetermined objectives. Such involvement tends to be after major decisions have been made. These institutions tend to be dependent on external initiators and facilitators. |
| Interactive participation | People participate in joint analysis, which leads to action plans. It tends to involve interdisciplinary methodologies that seek multiple perspectives. These groups take control over local decisions, and so people have a stake in maintaining structures or practices. |
| Self-mobilization | People participate by taking initiatives independent of external institutions to change systems. |

in 1992 gave a prominent place to 'indigenous peoples'. For example the 'Rio Declaration' in Article 22 explicitly noted that:

Indigenous peoples and their communities and other local communities have a vital role in environmental management and development because of their knowledge and traditional practices. States should recognize and duly support their identity, culture and interests and enable their effective participation in the achievement of sustainable development (cited in International Alliance 1997).

The Convention on Biological Diversity (CBD), which was also finalized at the Earth Summit and which has now been ratified by some 174 countries, also makes provisions relevant to indigenous peoples. Article 8(j) obliges States that are party to the convention 'as far as possible and as appropriate': 'Subject to its national legislation, to respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological resources ...' Similarly, with reference to in situ conservation practices, article 10(c) obliges States, 'as far as possible and as appropriate' to: 'protect and encourage customary use of biological resources in accordance with traditional cultural practices that are compatible with conservation or sustainable use requirements'.

In 1994, the World Conservation Union adopted a revised set of categories of protected areas which accept that indigenous peoples may own and manage protected areas (IUCN 1994). In 1996, following several years of intensive engagement with indigenous peoples' organizations, the World-Wide Fund for Nature-International adopted a Statement of Principles on Indigenous Peoples and Conservation, which endorsed the UN Draft Declaration on the Rights of Indigenous Peoples, accepts that constructive engagement with indigenous peoples must start with a recognition of their rights, upholds the rights of indigenous peoples to own, manage and control their lands and territories and to benefit from the application of their knowledge (WWF 1996).

The same year the World Conservation Congress, the paramount body of the World Conservation Union, adopted seven different resolutions on Indigenous peoples (IUCN 1996). These resolutions inter alia:

- Recognize the rights of indigenous peoples to their lands and territories, particularly in forests, in marine and coastal ecosystems, and in protected areas
- · Recognize their rights to manage their natural resources in protected areas either on their own or jointly with others
- Endorse the principles enshrined in the International Labour Organization's Convention 169, Agenda 21, the CBD and the Draft Declaration on the Rights of Indigenous Peoples
- Urge member countries to adopt ILO Convention 169
- Recognize the right of indigenous peoples to participate in decision-making related to the implementation of the CBD

 Recognize the need for joint agreements with indigenous peoples for the management of protected areas and their right to effective participation and to be consulted in decisions related to natural resource management.

In 1999, the World Commission on Protected Areas adopted guidelines for putting into practice the principles contained in one of these six resolutions. These guidelines place emphasis on co-management of protected areas, on agreements between indigenous peoples and conservation bodies, on indigenous participation and on a recognition of indigenous peoples' rights to 'sustainable, traditional use' of their lands and territories (WCPA 1999).

The prominence given to them in this debate is the result of a spectacular resurgence of indigenous peoples, who have strategically and quite consciously mobilized to occupy political space at national and global levels to claim recognition of their human rights (Veber et al. 1993; Barnes et al. 1995; Wearne 1996; MRG 1999). A culmination of this sustained advocacy has been a re-interpretation of international human rights instruments in the light of the particular circumstances of indigenous peoples. A body of jurisprudence has resulted which effectively recognizes indigenous peoples' rights to the ownership, use and management of their lands and territories, to represent themselves through their own institutions, to exercise their customary law in conformity with other human rights standards, to their intellectual property, to a measure of self-governance, and to self-determination (Simpson 1997; Pritchard 1998; Roulet 1999; Kambel and MacKay 1999).

These rights have been consolidated in a number of human rights instruments including: the International Labour Organization's revised Convention on Tribal and Indigenous Peoples, No. 169, adopted in 1989; the draft United Nations Declaration on the Rights of Indigenous Peoples, which was adopted by the Sub-Commission on the Prevention of Discrimination and Protection of Minorities in 1993 and is now being reviewed by a working group in the United Nations Human Rights Commission; and the Proposed American Declaration on the Rights of Indigenous Peoples being developed by the Organization of American States, which amounts to a contextualized restatement of rights already recognized in the American Convention on Human Rights. The recent establishment of a United Nations Forum on Indigenous Issues at the level of the Economic and Social Council has further consolidated these gains (Garcia Alix 1999).

The importance of this growing recognition of indigenous peoples' rights has yet to be widely appreciated. It constitutes a significant shift in the evolution of international law, in which growing recognition is given to the *collec*tive rights of human groups to maintain their distinctive identities, customs and relations with their natural environments (Crawford 1988). Historians may look back on this era of growing recognition of indigenous peoples' rights as a sea-change as significant as the anti-slavery movements of one hundred and fifty years earlier.

Disputes remain, of course. A complex question that has yet to be addressed, in a way that satisfies all, is the definition of 'indigenous peoples' - something which is conceptually impossible until the very notion of 'peoples', a basic element of international law, is itself defined (Kingsbury 1998). 'Objective' criteria that help identify who indigenous peoples are include the following, offered by the Chairperson of the UN's Working Group on Indigenous Populations and the World Bank:

- Priority in time with respect to the occupation and use of a specific territory
- Voluntary perpetuation of cultural distinctiveness
- Self-identification, as well as recognition by other groups, or by State authorities as a distinct collectivity
- An experience of subjugation, exclusion or discrimination (Daes 1996)
- Vulnerability to being disadvantaged in the development process
- Close attachment to ancestral territories and to natural resources in these areas
- Presence of customary social and political institutions
- Primarily subsistence oriented production (World Bank 1991)

What these 'check lists' of 'indigenousness' duly recognize is the principle of self-identification, a principle that is also incorporated into the ILO's Convention No. 169 (Article 1c) and the UN's Draft Declaration on the Rights of Indigenous Peoples. The editors of this volume accept both approaches, interpreting the term 'indigenous peoples' as both a polythetic and a self-ascribed class of human societies. Human groups collectively choose to identify themselves as 'indigenous peoples' in order to secure control of their lands and natural resources, to renegotiate their political relations with nation-states and to overcome discrimination and marginalization. As anthropologist Tania Murray Li (1999a: 151) notes: 'My argument is that a group's self-identification as tribal or indigenous people is not natural or inevitable, but neither is it simply invented, adopted or imposed. It is, rather, a positioning which draws upon historically sedimented practices, landscapes and repertoires of meaning and emerges through particular patterns of engagement and struggle.'

Sustainable Conservation and Development

Sustainable conservation requires, above all else, the acceptance of outsiders by the indigenous peoples. McCabe and others (1992: 353–66) suggest that linking conservation with human development offers the most promising course of action for long-term sustainability of nature and human life. McCabe argues that nature reserves and other protected areas must be placed into their own regional context. If the economy of the local communities is not vigorous, or is in a serious state of decline, the establishment of a wildlife reserve in its midst does not promote long-term sustainability. The population is unlikely to see any benefit from such a scheme and cooperation is unlikely. If, on the other hand, the problems of the human population are addressed and the community anticipates benefit from a combined conservation/development scheme, then cooperation and long-term sustainability are possible.

Measures that address the needs of wild and domesticated animals as well as the human group, such as veterinary care and prophylactic health campaigns for both animals and humans, water wells and water distribution, seed distribution and the extension of fodder crop growing, are a few of the broad array of programmes that can draw conservation closer to development.

Policy and principles, however, need to be translated into practice. As long as national governments are driven by global economic concerns, structural adjustment policies and debt repayment, small-scale, marginal and often illiterate indigenous communities have little chance of becoming equal partners in any participative exercise. Furthermore, multi-national corporate activities in tourism, mining, logging, and other extractive activities are powerful actors in the conservation discourse. It is of great importance that leading international conservation organizations take a more progressive stand and move beyond words into action. The study by Griffin (this volume) of the Anangu people in Uluru-Kata Tjuta National Park in Australia provides an example of how this is possible. The Anangu are recognized as landowners of the park, have accepted joint management and have begun to benefit from the income stream generated by tourism.

Along with the emerging forces and vibrant influences that many indigenous people themselves are now exerting at the local, national and international level, policy-makers, planners, managers and researchers need to remain vigilant that indigenous peoples are equal, if not more-than-equal, partners in the search for biodiversity conservation. Protecting the cultural diversity of our planet – in its continuous adaptation to its environment – is, after all, also part of the broader biodiversity that we all seek to preserve.

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