

INDIGENOUS PEOPLES, ENVIRONMENTAL PROTECTION AND SUSTAINABLE DEVELOPMENT

Based on a paper by Shelton H. Davis



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FOREWORD

In 1986 IUCN organised a major international conference in Ottawa, Canada, to review progress in achieving the objectives of the World Conservation Strategy, and to incorporate the human aspects of conservation into that Strategy. The Conference on Conservation and Development was attended by major international development organisations, aid agencies and leading conservation organisations from all over the world.

The Conference recognised that the basis for long-term improvements in quality of life must incorporate the sustainable development of local natural resources, and that current technology and property arrangements could not work efficiently without self-reliant infrastructure at the community level. Self-reliant institutions usually exist where there are strong community-level cooperative organisations, an aspect which is an important part of many traditional societies.

Unfortunately, however, indigenous groups have often been perceived as being on the receiving end of the development process. Their values and territorial integrity are seldom considered by those in development planning offices, although native peoples are potentially important shapers of local development programmes. Indigenous groups are often well-suited to analyse new development initiatives as they generally have a more fundamental understanding of complex local environmental interrelationships and a deep commitment to preserving the resource base.

This paper briefly reviews the current international debate on native populations, provides examples of how indigenous knowledge in the Americas has contributed to environmentally-sound development approaches, and sets forth additional principles about how to best incorporate native groups into the local development process. The paper is intended to provoke thought among rural planners, extension officers, policy makers and all those involved in sustainable development.

Peter Jacobs

INDIGENOUS PEOPLES, ENVIRONMENTAL PROTECTION AND SUSTAINABLE DEVELOPMENT

Man is both creature and moulder of his environment which gives him physical sustenance and affords him the opportunity for intellectual, moral, social and spiritual growth. In the long and tortuous evolution of the human race on this planet, a stage has been reached when, through the rapid acceleration of science and technology, man has acquired the power to transform his environment in countless ways and on an unprecedented scale. Both aspects of man's environment, the natural and the man-made, are essential to his well-being and to the enjoyment of basic human rights -- even the right to life itself (United Nations Conference on the Human Environment, 1972.)

INTRODUCTION

The three 'decades of development' which followed World War II saw the rapid economic growth of formerly colonised Third World countries, and the recolonisation of large areas inhabited by relatively isolated tribal groups. Although the latter process goes back centuries to the first encounters between Europeans and native peoples, the modern, post-war expansion into national frontiers of developing countries has certain unique geographic, socio-economic and environmental features.

First, the recent process of internal regional colonisation is much more rapid, technologically advanced, and territorially inclusive than frontier colonisation processes in the past. Several areas which were marginal to the making of the modern world economy, such as the tropical rainforests of South America, Africa and Asia, have become sources of food, energy, and other raw materials for urban populations.

Second, despite the existence of national legislation intended to protect their land rights and cultural integrity, the in-

digenuous peoples who inhabit these frontier areas are often the helpless victims of national development programmes and private interests. These peoples, despite their demonstrated ability to survive in natural ecosystems without destroying them, are seldom consulted about development projects, their lands and resources are frequently plundered, and their cultures are not respected. Over the past two or three decades, there has been a persistent assault on the physical and cultural integrity of the world's last remaining, unacculturated tribal societies (Bodley, 1984; Davis and Matthews, 1976; Davis, 1977; Swenson, 1982; World Bank, 1982; Narby and Davis, 1983).

Third, the growing concern for the survival of indigenous peoples has been accompanied by an increasing awareness of the deleterious environmental consequences of rapid and unplanned occupation of these internal frontiers. This awareness has resulted in indigenous groups organising themselves for participation in the development process. The case studies presented in this paper, focussing on four regions in the Americas, reflect the scope of this participation, and demonstrate the implications for future land use and resource planning.

INTERNATIONAL CONCERN

The United Nations Conference on the Human Environment which met in Stockholm in June 1972 was well aware of the grave socio-cultural and environmental problems caused by post-war economic development trends. In its Declaration on the Human Environment, Conference participants proclaimed:

A point has been reached in history when we must shape our actions throughout the world with a more prudent care for their environmental consequences. Through ignorance or indifference we can do massive and irreversible harm to the earthly environment on which our life and well-being depend. Conversely, through fuller knowledge and wiser action, we can achieve for ourselves and posterity a better life in an environment more in keeping with human needs and hopes (UN Conference on the Human Environment, 1972).

In the aftermath of the Stockholm Conference, a number of philosophical and programmatic treaties appeared which called for a more ecologically sensitive approach to development. One of these statements was the Cocoyoc Declaration, released by a group of government officials and specialists who met to discuss these issues at Cocoyoc, Mexico in 1974. Among others, this Declaration listed the following components as being integral to the new concept of ecodevelopment:

** Human activities should be designed and operated to maintain and enhance the productivity of the biosphere -- the surface layers of the earth where all terrestrial and*

aquatic ecosystems operate and upon which all life depends.

** Human activities should also be designed and operated to use wisely the energy and materials of the earth and to respect, maintain and enhance the natural processes which produce and recycle energy and materials.*

'... In our time, man's capability to transform his surroundings, if used wisely, can bring to all peoples the benefits of development and the opportunity to enhance the quality of life.'

** Development should give primary attention to meeting basic necessities of the human population, such as food, water, shelter, health, education and fundamental human rights.*

** Mechanisms must be created which will provide for the active participation of all human beings involved in, or to be affected by the development process.*

** Those technologies should be utilized in the development process which incorporate and enhance local culture and experience. Local initiative and self-reliance are to be respected and promoted, and imported technologies are to be screened to insure their adequate adaptation prior to implementation.*

** Development should respect, maintain and enhance the diversity of natural life and human cultures to maintain and expand the availability of options for this and future generations.... This requires that homogenization of land use and human lifestyles be avoided (Cocoyoc Declaration, 1974).*

Recently, indigenous peoples and their advocates have joined environmentalists in seeking development strategies which respect native land rights and traditions,

'In ... calling for greater participation of indigenous peoples in the development process, the fundamental issue is the ... protection of native land rights.'

conserve natural resources, and provide for the long-term sustainability of human populations and the environment. In 1981, for example, Unesco and the Latin American School of Social Sciences convened a conference of experts and leaders of indigenous organisations in San José, Costa Rica, to discuss topics of ethnocide and ethno-development in Latin America. One of the results of this conference was the release of a declaration calling upon national governments and international development agencies to protect indigenous peoples against ethnocide (cultural destruction) and promote their own ethno-development. The Declaration of San José, as it has come to be called, affirms that 'ethno-development is an inalienable right of indigenous groups.' The Declaration defines ethno-development as:

the amplification and consolidation of ... a culturally distinct society's own culture, through the strengthening of its capacity to guide its own development and exercise self-determination ... and implying an equitable and proper organization of power. This means that the ethnic group is a political-administrative entity, with authority over its own territory and decision-making power in areas constituting its project of development, within an expanding process of autonomy and self-management (Unesco, 1981).

In affirming the principle of ethno-development and calling for greater participation of indigenous peoples in the development process, the fundamental issue is the recognition and protection of

native land rights. The Declaration of San José states that:

For the Indian peoples, land is not only an object of possession and production. It constitutes the basis of their physical and spiritual existence, as well as their existence as autonomous entities. Territorial space is fundamental to their relationship with the universe and the maintenance of their cosmology.

These Indian peoples ... are entitled to the natural and cultural patrimony contained in their territories, as well as the right to determine freely their use and benefits.

The cultural patrimony of these peoples includes their philosophy of life and experiences, knowledge and accumulated historical achievements in the cultural, social, political, juridical, scientific, and technological fields; for this reason, they have a right to the access, utilization, diffusion and transmission of this entire patrimony.

Respect for the forms of autonomy required by these peoples is the essential condition for guaranteeing and realising these rights (Unesco, 1981).

The primacy of land and resource control to the survival of indigenous peoples is also recognised in the *Study of the Problem of Discrimination Against Indigenous Peoples* released by the UN Human Rights Subcommittee on Prevention of Discrimination and Protection of Minorities in 1983.

The Subcommittee report follows the San José Declaration in acknowledging the right of indigenous peoples to full and autonomous participation in the development process, and the responsibility of governments and international development agencies to respect this right. Without such participation in both the planning and implementation of development programmes, the Subcommittee study notes, '... there are several dangers that development projects will not only fail to satisfy the manifest needs of indigenous peoples, but may also be initiated and developed at their expense.'

'Development planners should reconcile the needs of indigenous peoples with the requirements of national economic development.'

The report holds that experts and indigenous peoples themselves are currently placing 'more emphasis on the need for self-reliance, self-management, and self-determination, and particularly on concepts of ethno-development in choosing the model of development as it affects their own interests, within the formulation of general development plans and efforts' (United Nations Commission on Human Rights, Subcommittee on Prevention of Discrimination and Protection of Minorities, 1983).

Unfortunately, most of the discussion of ethno-development to date has been of a programmatic nature, suggesting the need to integrate indigenous peoples as active participants in the development process, rather than offering specific guidelines and directives for how this is to be done. Nevertheless, there are a growing number of cases in North, South and Central America where indigenous peoples have taken an active role in local and regional development planning (Anthropology

Resource Center, 1984). The following section describes case studies of indigenous participation in development planning from Peru, Panama, the United States and Canada. The cases are presented for the light that they shed on the linkages between indigenous peoples, environmental protection and sustainable development. The last section of this document explores implications of these linkages for future project design, and offers concrete steps that development agencies can take to avoid past mistakes and ensure that indigenous peoples participate in project planning and design.

CASE STUDIES IN ETHNO-DEVELOPMENT

1. The Central Selva Natural Resources Management Project, Peru

This study demonstrates how a regional highway construction and land settlement programme was redesigned to include the interests of indigenous peoples and the environment.

In August 1980, soon after assuming office as his country's new President, Fernando Belaunde Terry announced a multi-million dollar highway construction, cattle ranching and frontier colonisation project in three river valleys of the central jungle region of Peru. Called the Pichis-Palcazu Special Project, this development effort is typical of the large-scale, road-building and colonisation projects implemented in the tropical forest regions of South America in recent years (Barbira-Scazzocchio, 1980).

In announcing the Pichis-Palcazu Special Project, President Belaunde said 'it is incredible that we have to ration the sale of meat in Lima, when we have these immense areas [of jungle] which, thanks to their resources, could feed all of Peru.' The Pichis-Palcazu Special Project proposed the investment of nearly a billion dollars in a far-reaching road

construction, colonisation and rural development scheme. These programmes, government spokesmen maintained, would turn the jungle into a new bread-basket for Peru, reducing overcrowding in Lima by resettling 150,000 people in the project area, providing a million jobs for the country's unemployed, and bringing into agricultural production over a half-million hectares of tropical forest lands.

Anthropologist Richard Chase Smith, who has spent more than a dozen years conducting research and living among native groups of the Peruvian Amazon, has recently published a monograph describing the evolution of the Pichis-Palcazu Special Project, as well as the national and international campaign directed at making the project more environmentally sound and socially responsive to the needs of the indigenous populations in the project area (Smith, 1982).

Smith points out that from its inception, the Special Project was fated to generate criticism because it was based on a persistent idea in South America which he terms 'the myth of the vast Amazonian emptiness'. As far back as 1957 when he began his political career, President Belaunde, like many other South American national leaders before him, saw the 'Conquest of the Amazon' as a way of solving other pressing social, economic and political problems. To justify such conquest through the construction of 'penetration roads' and government-sponsored colonisation programmes, the President nurtured an official myth about the expanse of a vast, bountiful and unpopulated territory, which only awaited an army of enterprising individuals to settle and harvest it.

The implications of this 'development strategy' for the native peoples and other inhabitants of the Pichis-Palcazu region is amply described in Smith's report:

In addition to ignoring the ecological, agropastoral and economic

realities of development activities in tropical forest regions ... this development strategy usually ignores the local social reality. In the case of the Pichis-Palcazu Special Project, the government chose to ignore the fact that the project area is the homeland to some 8,000 Amuesha and Campa native peoples, most of whom are living in officially-recognised Native Communities, and to some 5-8,000 settlers of Andean, Criollo and European origin who established holdings in the area throughout the past one hundred years (Smith, 1982).

Even prior to the announcement of the Pichis-Palcazu Special Project, there had been a resurgence of ethnic identity and organising among the nearly 250,000 native peoples of the Peruvian Amazon. Since the late 1960s, Amuesha, Campa, and other native peoples had been forming inter-community assemblies, federations and congresses. Following passage of the Law of Native Communities and the Promotion of Agropastoral Development in the Jungle Region (Law No. 20653) in 1974, these organised native communities began to seek official recognition and land titles from the government. By 1977, when implementation of the original law came to a standstill, 40 per cent of the existing native settlements had received official recognition and 30 per cent held land titles (Smith, 1982; and Corry, 1984).

The Pichis-Palcazu Special Project excluded representatives of native communities and poor colonists from the original planning of the project. The regional elite, comprised of large cattle ranchers and commercial interests, was represented at the first internal review of the Special Project's programme, but native peoples and colonists from the region were not allowed to participate, either as planners or as beneficiaries. Thus, it was no surprise that, as government plans for

the Pichis-Palcazu Special Project became more public, native organisations and their supporters sought a greater voice in the definition of goals, planning and implementation of the project.

In February 1981, delegates from Amuesha and Campa Congresses met with the Peruvian Minister of Agriculture, the Executive Director of the Special Project, and officials of the US Agency for International Development (USAID) -- one of the major project funders -- to express concern about the design of the Special Project. Its failure to recognise and protect native lands was especially important in the discussion. This was followed by the release of a public statement by the Commission for the Defense of Native Lands, a Lima-based coalition of professional, human rights and religious groups to defend native land rights. Led by the Inter-Ethnic Association for Development of the Peruvian Selva, the Commission initiated a national and international campaign to modify the social terms of the proposed government project, and to ensure inclusion of environmental and natural resource protection measures.

The Commission never questioned the Peruvian government's right to plan the economic development of the Pichis-Palcazu-Pachitea region. However, it did question the specific road-building and colonisation plans included in the Special Project and the Project's failure to consider native land rights and the delicate ecology of the region.

'One of the major issues raised by the Commission was the current demographic, land tenure, and soil-quality picture in the Special Project area.'

A survey by a Swiss Technical Aid Mission indicated that the region's poor soils could only support the agricultural activities of the current native and colonist populations. Any increased population generated by road building and state-sponsored colonisation would only place greater stress on an already tense demographic, social and ecological situation (Comisión Pro-Defensa de Tierras Nativas, 1981). The Commission also suggested the broad outlines of an alternative plan which included the recognition of native land rights and specific recommendations for native economic development, organisational growth, health, education and cultural services.

Under pressure from the Commission, as well as international indigenous rights and environmental groups, USAID officials decided to re-evaluate its US \$22 million contribution to the Special Project as well as to study the consequences of the original project for native peoples and the environment. Under the new name of the Central Selva Natural Resources Management Project, USAID commissioned a team of eighteen specialists, including anthropologists, to study the Palcazu Valley in depth and to suggest a socially and environmentally sound development project for the area, based on conservation, resource management, and renewable resource considerations.

As predicted by the Commission, the USAID consulting team found that a critical population and land tenure situation already existed in the Palcazu Valley. A demographic, soil, and economic production analysis of nine Amuesha communities found that only one had sufficient lands to feed its population over the next decade. Among the entire nine communities, only four were minimally endowed with agricultural lands and moderately or well-endowed with forest lands. The other five communities were all critically poor in both agricultural and

forest lands. The final report of the consulting team maintains that:

The five NNCC (native communities) rated poor are so poorly endowed with agricultural and forest lands that their situation is already critical. Serious problems have so far been avoided only because the residents of these NNCC have been relatively insulated and therefore minimally dependent on the market economy. As the Palcazu branch road will shortly pass through three of these NNCC, their needs for consumer goods will rapidly increase as will the pressure on their land and resources to produce greater cash incomes to pay for these goods. Within the decade, the resources of these NNCC will be under severe pressure, provoking serious environmental degradation and food shortages (JRB Associates, 1981, Vol. II).

In response to these findings, the USAID consulting team recommended that the Peruvian government increase the recognised land holdings of the native communities in the Palcazu Valley so as to ensure that each family had a guaranteed minimum land and resource base. The team also recommended that a more comprehensive land, resource and management plan be elaborated -- with full participation and consent of the Amuesha -- in order to provide for the long-term and sustainable economic development of the region. 'It is our opinion,' the Central Selva Resources Management report stated,

[that] all specific development projects for the Palcazu NNCC are contingent on the two conditions outlined above; without an adequate land and resource base and without a long-term land and resource management plan, other efforts

would only temporarily relieve a chronically worsening situation. With these two conditions met, the Amuesha can look forward to participating beneficially in the Peruvian nation and economy (JRB Associates, 1981, Vol. II).

Perhaps the most important outcome of the consulting team's report was that it led USAID to make several technical revisions in its original project design. This version of the Central Selva Natural Resources Management Project envisioned a development which would 'maximise the sustained productivity of the Palcazu watershed and increase the incomes of native communities ... through effective management of natural resources', and de-emphasising any influx of outside populations (emphasis added), (JRB Associates, 1981, Vol. I).

This revised plan was the result of a serious and responsible effort on the part of native organisations and their supporters to suggest revisions in a regional development project which, from its inception, was misconceived and based on faulty assumptions.

It is noteworthy that most of the original claims about the project made by Indian organisations and the Commission for the Defense of Native Lands were later confirmed by the scientific investigations of the USAID consulting team. While much of the Project was meant to mitigate the negative effects of highway construction on the environment and local populations, it also had the broader goal of utilising experience in the Palcazu Valley as a model for similar integrated resource management and development projects in other parts of the central jungle of Peru (JRB Associates, 1981, Vol. I).

The history of the Central Selva Natural Resources Management Project demonstrates that native rights and interests can

be included in regional resource management plan without sacrificing either local or national goals.

The key to such a plan lies in its emphasis on the recognition and protection of native land rights and the promotion of development projects for local residents rather than outside, intrusive populations.

As Richard Chase Smith writes in his assessment of the Central Selva Natural Resources Management Project:

The native inhabitants of an area such as the Palcazu are often the best suited participants of a long-range program of economic development. They have already developed sophisticated survival strategies based on their accumulated knowledge of the environment and long-term experimentation with appropriate technologies. Because it is their homeland, the native inhabitant has a vested interest in conserving the limited natural resources on which the future of his society depends. The new settler, on the other hand, who often sees his future in urban areas, develops strategies for exploiting the natural resources on a short-term, high-profit basis for the capitalization of economic activities outside the area. Furthermore, for the same reason, the native inhabitant is less likely to abandon the area if the development program fails (Smith, 1982).

In working on the social soundness part of the Central Selva Natural Resources Management Project report, Smith proposed the concept of 'autonomous development' as an alternative to current models of development which are essentially destructive of indigenous cultures and communities. In a detailed discussion of the concept, Smith (1982) suggests that the minimum conditions for an autonomous development strategy for in-

digenuous communities can be outlined by the following four questions:

- * Is the indigenous community in control of the conceptualisation, planning, and implementation of their development?
- * Does the indigenous community exercise control over its territory and over all the resources found within the limits of that territory?
- * Does the programme for development promote self-sufficiency and economic independence of the indigenous community?
- * Does the development process strengthen the social and cultural bonds of the community and affirm the historical identity and cultural dignity of the community members?

One of the most valuable aspects of Smith's discussion is that it sets down concrete guidelines for evaluating whether a development project actually promotes the ethno-development of an indigenous group. It provides one of the best brief discussions of how to assess and evaluate the social and cultural appropriateness of development projects taking place on indigenous people's lands.

2. The Udirbi Park, Panama

This ethno-development study concerns cooperation between indigenous peoples, environmental scientists, and development planners in establishing the Udirbi wildlife reserve and forest park on the San Blas Cua Reserve, Panama. Approximately 30,000 Kuna Indians live in the Comarca of San Blas, a 200 kilometer-long indigenous territory along Panama's Caribbean Coast. Until recently, the Kuna maintained a traditional lifestyle in this region, living in over 60 island and coastal villages and subsisting through the

cultivation of manioc, coffee, cacao, bananas, pineapples, chile peppers and other crops.

Yet over the course of the past two decades, colonists have gradually been moving in the direction of the San Blas Reserve, destroying the tropical forest and posing a potential threat to the Kuna's political autonomy, resource base, and way of life. In the mid-1970's, the Panamanian government announced the extension of a feeder road which, when built, would enter the southern part of the Comarca at a place called Udirbi (Chapin, 1985).

Aware of the potential threat of these activities, a number of young Kuna leaders began to search for a project which would protect the land area around Udirbi and ensure that no further encroachments into the San Blas Reserve would occur. At first, Kuna youth attempted various agricultural experiments, but later, on the advice of forestry experts at the Centro Agronomico Tropical de Investigación y Enseñanza (CATIE) in Costa Rica, they came upon the idea of establishing a forest park and wildlife reserve.

Today, with the help of numerous national and international institutions, the Kuna have set aside 2,024 hectares of tropical forest on the southern border of their Comarca for conservation purposes, scientific research, and scientific tourism. The reserve, one of the only of its kind ever created and managed by indigenous peoples, may someday serve as a model for native land and resource protection schemes in other parts of Central and South America (Breslin and Chapin, 1984; Chapin, 1985).

In a series of articles, anthropologist Mac Chapin, who has lived with and studied the Kuna, describes the events which led to the creation of the Udirbi wildlife

reserve and forest park. Several of the points Chapin makes about the history and organisation of this project are described below, especially for the light they shed on the larger issue of the role that indigenous peoples can play in environmental protection and natural resource management.

The Kuna are one of the few indigenous groups in Latin America to have maintained their political and cultural integrity in the face of persistent pressures from outside forces and an expanding national society. Aside from strong cultural forces which promote group identity and solidarity, the Kuna are also unique in having pressured the Panamanian government into recognising their traditional territory and authority structure.

Following an armed uprising against national guardsmen stationed in the region in 1925, the government signed a treaty with the Kuna forbidding non-Indians to own land at San Blas. In the 1930s, the government also established a Comarca for the San Blas Kuna which is still closed to most outsiders; its only connection with centres of national culture is by means of launch or small aircraft. Without such government recognition of their political autonomy and territorial integrity, the Kuna of San Blas would probably have been dislocated, deculturated, and factionalised like so many other Central and South American Indian groups.

The Kuna are not opposed to cultural change and economic modernisation; they are, however, selective in what they take from Western society and culture, and they wish to ensure that in accepting new cultural traits, they do not threaten their own cultural beliefs and values. Breslin and Chapin make this point when they observe:

'The Udirbi Project highlights some of the new and highly productive relations that are forming between environmentalists and indigenous peoples.'

From the very beginning, the Kuna have approached the West more like careful department store shoppers than awe-struck primitives. They have an instinctive ability to search through the wares of Western culture, pick out those ideas and techniques that seem useful, and then tailor them to their own traditions. They approach the world with confidence, assured of their own worth and even superiority. So conscious and proud are the Kuna of their culture, so fluent in discussing it, they can sound at times like a convention of anthropologists. And in all their discussions, the Kuna invariably stress the identification of their culture with a specific expanse of land -- the Comarca of San Blas (Breslin and Chapin, 1984).

The Kuna, like many other lowland indigenous groups, have a sophisticated knowledge of rainforest ecology and find it relatively easy to understand modern notions of conservation and resource management. Interestingly, there is a growing body of evidence demonstrating that native peoples think like modern ecologists, although it is more appropriate to describe their knowledge in terms of ethno-ecology than in the language of Western biology (Reichel-Dolmatoff, 1976; Posey, *et al.*, 1984; Denevan, *et al.*, 1984).

The Kuna have worked closely with numerous scientific, conservation and funding organisations, but they have never relinquished their power of

decision-making or control over the Udirbi project. Perhaps this is the most distinguishing feature of the Udirbi project, and the one which makes it a legitimate example of ethno-development. Again, it is instructive to quote Chapin:

... the most noteworthy aspect of the park is that it is being managed and directed by the Kuna themselves. While they fully realize that much of the technical assistance must be imported, they have no intention of allowing outsiders to dominate the project. Project staff see their dependence on non-Kuna technicians as temporary. Thus, they work closely with all visiting scientists and technicians in order to learn the skills necessary to run the park by themselves (Chapin, 1985).

The Udirbi Project highlights some of the new and highly productive relations that are forming between environmentalists and indigenous peoples. In 1982, James Clad wrote a report for the International Union for Conservation of Nature and Natural Resources (IUCN) on the convergence of interests between these two groups. Clad's report listed several countries which have created multi-purpose national parks that both protect the habitats and resources of native peoples and maintain local ecosystems. However, his report also focussed upon some of the problems which have arisen between native peoples, national governments, and environmentalists in defining the rules and regulations for the governance of these protected areas (Clad, 1984).

However, the conflicts which can occur between conservationists and indigenous peoples should not be underestimated. The lands inhabited by indigenous peoples serve as sources of food and shelter and have great historical, cultural and spiritual significance. The opening of these areas to tourism, or the setting down of rules and regulations for wildlife hunting or natural resource gathering, can often lead to denigration of the cultural spaces of native peoples and threaten their modes of livelihood and survival. Yet there is no reason why such conflicts should be inevitable; there are, as Clad argues, numerous areas where native peoples and conservationists can cooperate for their mutual interest and benefit.

The Cambridge-based indigenous rights group for Cultural Survival recently devoted a special issue of its quarterly journal to a discussion of the subject of national parks and indigenous peoples. Several articles in this issue noted that native peoples have traditionally been relocated from their aboriginal homelands when these areas have been designated by governments as national parks, nature reserves, or wildlife areas. But the Cultural Survival contributors also noted that there is a growing awareness among anthropologists, conservationists, and public policy makers that many problems can be avoided if local people actually participate in the planning of national parks; if the subsistence practices and cultures of indigenous peoples are respected; and if the local knowledge of indigenous peoples is integrated into land-use planning and natural resource management (Clay, 1985).

'... there is a growing awareness among anthropologists, conservationists, and public policy makers that many problems can be avoided if local people actually participate in the planning of national parks...'

The following case, with a focus on improving social and environmental impact assessments through reliance on native data collection centres, offers an example of how local knowledge can be integrated into modern development planning.

3. Indian Social Impact Assessment, United States

The Middle East oil embargo of 1973 and the debate surrounding national energy policy brought to public attention the vast mineral, energy, and water resources contained on American Indian lands in the western United States. Although figures are not exact, the Federal Trade Commission reports that 23 western Indian tribes control 25 per cent of US strippable coal, between 10 and 15 per cent of US uranium reserves, and at least 4 per cent of US petroleum reserves.

In the 1960s, the Department of the Interior began to lease large areas of Indian public lands for coal development in the American West. By 1973, the federal government had leased 275,432 hectares of public lands and 104,718 hectares of Indian lands containing over 20,000 million tons of coal (US Federal Trade Commission, 1975).

For most North Americans, the development of these energy resources was seen as a necessary good, providing Indian peoples with jobs and royalties, and infusing the national economy with needed supplies of energy and fuel. Many Indian leaders and tribal planners, however, had serious questions about the social and cultural consequences of large-scale energy developments on their ancestral lands. Some tribes, such

as the Navajo, took issue with the terms of agreements reached with the federal government and energy corporations in the years preceding the Middle East oil embargo. Others, such as the Northern Cheyenne, who successfully challenged all outstanding coal permits and leases on their reservation, wanted more time to study the nature of the original contracts and to analyse other paths to reservation development. No matter what approach tribes took, by the mid-1970s there was a general feeling in Indian country that information was lacking about the social and environmental costs of large-scale energy developments. They moreover felt that more independent sources of information were needed to assess the meaning of proposed energy projects for Indian cultures and ways of life (Jorgensen, 1978; Ruffing, 1979; Ortiz, 1980).

The federal government tried to alleviate the fears of Indian and other rural communities by arguing that Environmental Impact Assessments (EIAs) mandated under the National Environmental Policy Act of 1969, would provide both policy makers and local communities with information on the social and environmental consequences of energy projects. Yet, as Professor Jorgensen observes in a review article on the subject, most EIAs define 'social impacts' in terms of three limited criteria: infrastructural or capital stock needed in communities for houses, roads, sewers, etc; the need for other services such as fire and police protection, medical care and schools; and the presence or absence of prehistoric archaeological sites.

Jorgensen notes that many researchers conducting social impact assessments (SIAs) fail to even talk to local residents about their perceptions of energy developments or to use state-of-the-art methods of analysis, as mandated by the courts.

'One of the most striking features of many social impact assessments on energy-related developments in the West', he writes,

is that they were researched and written without so much as talking to residents of communities where the energy developments were to occur. In the instance of Indian reservations, when developments have been proposed on their land or adjacent federal lands, the local Indian residents have not been informed about the energy developments or their consequences, nor have they been asked about whether they want developments in areas that encompass their homes, fields, rangelands and sacred sites. Moreover, neither scheduled interviews, questionnaires, nor participant observations have normally been employed to collect data on which social analyses can be based (Jorgensen, 1981).

Jorgensen also criticises the overuse of cost-benefit analysis in social impact assessments which tends to shift the focus of attention from social and cultural con-

'... many researchers conducting social impact assessments ... fail to even talk to local residents about their perceptions of energy developments or to use state-of-the-art methods of analysis ...'

siderations to purely economic and technical matters. In the standard procedure, cost-benefit analysis is applied to social data by assigning dollar values to everything from religious beliefs and historical traditions to air quality, noise levels, and recreational and aesthetic experiences. This method takes a tool developed for analysing the market and indiscriminately applies it to society. In so doing, policy makers' attention is shifted away from the consequences of energy development

for local peoples and communities to the costs and benefits for the national economy.

Finally, Jorgensen criticises federal agencies, and the social and environmental scientists who have worked for them, for failing to share the information contained in the environmental impact assessments with members of Indian tribes and rural communities. 'In the past decade', he writes,

a mountain of information has accumulated at the Department of the Interior, yet information from those environmental impact assessments and subsequent studies of what actually happened to environments and communities after the impact assessment was approved -- and the uranium mill, coal-fired power plant or dam was put into operation -- has not been available to residents of communities facing the prospects of large-scale changes to their environments and communities (Jorgensen, 1981).

By the mid-1970s, Indians themselves began to see the problems entailed in standard assessment procedures and sought independent sources of information on the consequences of large-scale development projects on their lands. The Northern Cheyenne Tribe in southeastern Montana took the lead in this process by establishing the Northern Cheyenne Research Project (NCRP) in 1974. Although staffed by non-Indian professionals and dependent upon government grants and contracts, the NCRP was directly under the control of the Northern Cheyenne Tribal Council, had an Indian Director, and served as the research and planning arm of the tribe. By 1979, the NCRP had over two dozen staff members specialising in geology, hydrology, land-use and natural resource planning, economics, anthropology, and rural sociology (Boggs, 1978).

In 1976, the NCRP received a grant from the Old West Regional Commission to gather social, cultural and economic data on the reservation for energy development concerns. Prior to undertaking this research, the only available statistical data about reservation population consisted of relatively unreliable census tract and Bureau of Indian Affairs information. The NCRP study responded to this lack of information by conducting two household surveys on education, employment, family income, housing, mobility, shopping patterns, and attitudes of tribal members; a full tribal census of all Northern Cheyenne living on the reservation and in adjacent areas; a survey of privately-owned businesses operating on and around the reservation; and a survey of public agencies to assess the amount of money flowing into the reservation for services, together with number and types of jobs provided by public-service agencies to Cheyenne and non-Cheyenne employees.

Along with providing the Northern Cheyenne Tribe with an invaluable data base and training several tribal members in standard survey research techniques, the NCRP socio-economic studies served two other important purposes. Initially, they provided the Northern Cheyenne with a systematic and reliable body of information for intervention in various environmental impact assessments taking place in southeastern Montana. At the time the NCRP got started, there were already over a half a dozen impact assessments being conducted or scheduled for the vicinity of the reservation. Although the National Environmental Policy Act of 1969 provided no legal obstacles to Indian participation in the assessments, most of the federal and state agencies charged with their implementation were extremely reluctant to involve tribal members -- even though the tribe possessed its own research programme and requested such participation.

Hence the NCRP often found itself in an adversarial role, requesting tribal participation in social and environmental assessments being conducted by federal and state agencies. Such intervention proved successful in 1977, when the United States Environmental Protection Agency granted the Northern Cheyenne Tribe a Class I (clean) air-quality status, based on an air quality redesignation report prepared by NCRP staff for the tribe. (Because violations of the Northern Cheyenne Class I status were expected, the US Environmental Protection Agency denied a permit to Montana Power Company for the construction of two additional power plants at a site 15 miles north of the reservation) (Owens, 1978; Boggs, 1982 and 1984).

Another important aspect of the NCRP socio-economic studies was that they provided the Northern Cheyenne Tribe with a systematic profile of tribal members' attitudes and perceptions of economic development activities on or near the reservation. As part of their baseline studies, the NCRP carried out an attitude survey of a 50 per cent random sample of all Northern Cheyenne reservation households, as well as those in the adjacent Ashland area. NCRP researchers found that Northern Cheyenne appreciated that not all forms of development were consistent with Cheyenne traditions, culture, and values. Tribal members generally preferred small projects which are tribally controlled or initiated by Cheyenne (in such areas as recreation and theatre, sawmills and timber, agriculture and ranching, tribally-run coal mines and stores, etc.). Larger projects were seen to bring outsiders onto the reservation, potentially threatening tribal values and the natural landscape. The Northern Cheyenne expressed a strong fear that coal-related developments would have these very effects. On the positive side, they saw such developments as improving the reservation economy, as creating jobs and business, and as increasing the

standard of living and tribal educational opportunities. At the same time, a significant percentage of respondents viewed such developments as increasing social problems (69.2 per cent), causing environmental damage and loss of resources (42.4 per cent), producing crowding and overpopulation (38.4 per cent), leading to a loss of tradition and the Cheyenne way of life (30.0 per cent), loss of Cheyenne control over the reservation (12.6 per cent), and resulting in Cheyenne being pushed out (29.7 per cent) (Nordstrom *et al.*, 1977).

Interestingly, attitudes toward energy development similar to those of the Northern Cheyenne were found among the Navajo by the Shiprock, New Mexico Navajo Community College. The Navajo Community College research group has been conducting studies similar to those of the NCRP on the social impacts of energy developments among Navajo sheep-herding populations in the Four Corners region. Their inquiries were meant to assist the Navajo tribal government in contract negotiations with the federal government and private energy corporations. In the process, researchers learned that Shiprock residents feared that energy projects would lead to losses of economic and emotional support of their extended family and kinship groups, livestock and land, self-sufficiency and security from keeping livestock, and other activities that support the inculcation of values such as sharing and mutual support in the extended family. According to several reports, these fears of local community residents are not unfounded, as other Navajo populations who have been involuntarily relocated as a result of energy developments also expressed strong feelings of material insecurity, loneliness, despair, prolonged frustration from idleness, and shame, as well as increased illness and delinquency (Schoepfle, *et al.*, 1980; Scudder, *et al.*, 1979; Robbins, 1984).

The NCRP and the Office of Research and Development of the Navajo Community College at Shiprock are only two of several recent experiments where Native American tribes in the United States have created their own on-reservation research and planning capabilities. In an overview of this new field of Indian Social Impact Assessment (Indian SIA), Sociologist Charles C. Geisler of Cornell University notes that there are both strengths and weaknesses in these attempts to gain more understanding and control over the process of rapid resource developments. On the positive side, Indian SIA:

- * establishes a data base for tribal use in other programme evaluations, lawsuits or land and water claims;
- * expands tribal planning capabilities (social, economic, land use and other resource plans);
- * can train tribal members in research documentation useful in focussing on both traditional and modern tribal value systems;
- * complements other tribal agendas of slowing, stopping, or advancing rapid resource developments; and
- * serves to force disclosure of treaty or other legal rights that can then be better defended in the courts.

At the same time, Indian SIA also has weaknesses which are now known to several tribes. Geisler lists the following potential problems associated with Indian SIA:

- * it can misrepresent (or not represent at all) Indian values if done without Indian input and consultation;
- * it may reduce tribal sovereignty and control if performed by non-Indians;

- * it demands quality data gathering and analysis which is often costly and time-consuming;
- * there are native language barriers to SIA concepts and technical language;
- * its review of 'alternatives' is often circumscribed (Geisler *et al.*, 1982).

Thus, Indian SIA is not immune from the problems inherent in any research technique which is imposed upon an alternative cultural environment; nor is it totally free from the political constraints of standard environmental impact assessments implemented for federal agencies or private corporations. Nevertheless, as one among many strategies that Indian peoples are using to protect and develop their resources, Indian SIA has proven useful as a development planning tool for Indian tribes in the United States (Green, 1980; Gondolf and Wells, 1984-85).

4. The MacKenzie Valley Pipeline Inquiry, Canada

The last case study concerns the participation of several indigenous groups in a public enquiry into the social and environmental effects of a major regional energy project in northern Canada.

In the mid-1970s, the Canadian government asked British Columbia Supreme Court Justice Thomas R. Berger to organise a public enquiry concerning social, economic, and environmental consequences of a proposed natural gas pipeline, to run from Alaska through the Northwest Territories to the United States. Called the MacKenzie Valley Pipeline Inquiry, the study undertaken by Justice Berger examined one of the largest transportation and natural-resource development projects (in terms of capital expenditures) ever

proposed by private enterprise in Canada. An estimated \$8,000 million was to be invested in a 4,160 kilometer pipeline project, which would traverse 600 river and stream crossings, pass through the calving grounds of the last great herds of caribou in North America, affect the habitats of hundreds of thousands of migratory waterfowl and sea birds, and have major consequences on the ways of life of 30,000 northern people (Berger, 1977).

For several reasons, the MacKenzie Valley Pipeline Inquiry was a unique experience which many observers feel can serve as a model for social, economic, and environmental assessment in other ecologically sensitive areas. This is especially true in circumstances where native peoples, government planners, and private business interests have competing goals. First, Justice Berger and his co-workers defined the task of the Inquiry to include the cumulative impacts of two major energy pipelines, as well as associated roads, air strips, and other energy-related activities, rather than the analysis of a single engineering project or transportation right-of-way. Thus, to assess the cumulative effects of this 'energy corridor', the Inquiry simultaneously looked at combined social, economic, and environmental impacts of the proposed projects.

A second important feature of the MacKenzie Valley Pipeline Inquiry was that it relied heavily on the personal testimony of native people to assess these consequences of the pipeline projects. In total, Justice Berger held formal public hearings in 35 northern communities and heard testimony from almost 1,000 native witnesses. Justice Berger wrote the following about the significance of this native participation to the overall scope of the Inquiry:

I found that ordinary people, with the experience of life in the North, had a great deal to contribute. I heard from almost one thousand witnesses at the community hearings ... they used direct speech. They seldom had written briefs. Their thoughts were not filtered through a screen of jargon. They were talking about their innermost concerns and fears.

It is not enough simply to read about northern people, northern places and northern problems. You have to be there, you have to listen to the people, to know what is really going on in their towns and villages and in their minds. That is why I invited representatives of the companies that wanted to build the pipeline to come to these community hearings with me. Arctic Gas and Foothills sent their representatives to every hearing in every community (Berger, 1977, Vol. 2).

Justice Berger also notes the importance of such native participation for the technical and scientific quality of the impact assessment:

The contributions of ordinary people were ... important in the assessment of even the most technical subjects. For example ... I based my discussion of the biological vulnerability of the Beaufort Sea not only on the evidence of biologists who testified at the formal hearings, but also on the views of the Inuit hunters who spoke at the community hearings. The same is true of sea-bed ice scour, and of oil spills; they are complex, technical subjects, but our understanding of them was nonetheless enriched by testimony from people who live in the region (Berger, 1977, Vol. 2).

A third aspect of the Pipeline Inquiry was that it focussed attention on certain critical habitats and life stages which could be permanently affected by pipeline construction, even beyond proposed areas of impact. Although the Inquiry recognised the inevitable encroachment of the industrial system into the North, it also highlighted the ecologically vulnerable nature of the Arctic and sub-Arctic wildernesses and the threat posed to Porcupine Caribou herds and numerous species of migratory waterfowl and sea birds. For this reason, the Inquiry recommended that no gas pipeline should be built along the coastal or interior routes in the Northern Yukon, that a National Wilderness Park be created in this area, and that special whale and bird sanctuaries be established in the MacKenzie Delta and Beaufort Sea regions to protect species and the ecosystem in the face of planned energy developments.

* * * * *

In the MacKenzie Valley -- an area traversed by the longest river in Canada and one of the last unpolluted rivers in the world -- the issues were somewhat different from those in the more northern zones. Here, the pipeline construction and associated energy activities would pose no major threat to wildlife populations or wilderness areas, but it could have adverse environmental effects on the birds, furbearing animals, and fish upon which the numerous native communities of this region depend.

Justice Berger and his co-workers recommended that strict land-use plans and regulations be formulated for the MacKenzie Valley before a pipeline and energy corridor were built. Along with the establishment of a comprehensive programme of northern science and research,

the Inquiry argued that industrial development activities in this area should recognise the aspirations of northern native peoples and include them as the principal shapers of the northern future.

The Inquiry's discussion of northern native issues are noteworthy in three significant respects: first, the Inquiry saw the need to strengthen the native hunting, fishing, and trapping economy in the face of a powerful threat from the expanding industrial economy, which was based on the exploitation of non-renewable energy resources. While the industrial economy did offer the promise of jobs, the Inquiry noted that these were limited and short-term, and not able to replace the self-sustaining, food economy in the traditional way of life.

Second, the Inquiry discussed the probable dislocating effects on native society and culture of a too rapid and uncontrolled encounter with the industrial system. In the numerous community hearings, local villagers expressed their fears that the proposed energy projects would bring increased alcoholism, crime, violence, and other forms of social pathology to their communities. These stated fears, along with the evidence provided by experts on the social impact of rapid resource developments in other areas, led the Inquiry to conclude:

The social costs of building a pipeline now will be enormous, and no remedial programs are likely to ameliorate them. The expenditure of money, the hiring of social workers, doctors, nurses, even police -- these things will not begin to solve the problem. This will mean an advance of the industrial system to the frontier that will not be orderly and beneficial, but sudden, massive and overwhelming (Berger, 1982, Vol. 1).

'... indigenous peoples can be the shapers and beneficiaries of the development process, if their land rights are recognised and their cultures and ethnic identities are respected.'

Finally, the Inquiry focussed special attention on the need to settle native claims in the North before proceeding with the pipeline project. For native peoples, the settlement of native claims goes beyond a consideration and recognition of aboriginal land rights, although these are crucial aspects of any negotiated settlement between native peoples and the federal government. Most important, the Inquiry was told by native peoples that the settlement of native claims must be seen within the framework of a larger and more fundamental reordering of the relationship between native peoples and the rest of Canadian society.

Justice Berger's final recommendation was that the gas pipeline project for the MacKenzie Valley should be delayed for a decade to provide time to gain more knowledge about the Northern environment and its resources, to strengthen the native hunting, fishing, and trapping economy, and to settle native claims.

In an evaluation of the policy implications of the MacKenzie Valley Pipeline Inquiry, Justice Berger notes that the issues date back centuries to the earliest encounters between native peoples and Europeans, but that these issues have been intensified by the contemporary surge of the industrial system. He also notes that a number of the issues faced by northern native peoples in their relations to the government and society are the same as those encountered by indigenous peoples in other parts of the world; namely, the right to survive and develop while at the same time maintaining their separate cultural identity as people in the face of a powerful industrial threat.

While it is impossible to transfer the entire format of a public enquiry, like that discussed above, the general methods and models of such an approach may be relevant to native policy formulation and socio-environmental assessment in developing as well as industrialised countries. To date, it is one of the best examples we have of how to include both native and environmental issues in the appraisal of a major regional development project (Berger, 1982).

IMPLICATIONS FOR PROJECT DESIGN

In this report, case studies have been presented in which indigenous peoples have actively participated in the design and/or assessment of resource management and development projects. Although there are major differences in the national and ethnic contexts in which these projects have taken place, they all demonstrate that indigenous peoples can be the shapers and beneficiaries of the development process, if their land rights are recognised and their cultures and ethnic identities are respected. A key question, however, is how the private and public institutions currently charged with development planning can more adequately include the needs and preferences of indigenous peoples into their programmes. Although there is no simple answer to this question, there are several concrete steps that development agencies can take to avoid the worst mistakes and abuses of the past and assure that indigenous peoples actually participate in project planning and design.

1. Foundation in Ethno-development

Development agencies should revise their project planning in countries with large

indigenous populations, to correspond more with the philosophy of ethno-development outlined in the 1981 Declaration of San José. Whereas previous abuses linked to enforced acculturation are recognised today, many documents relating to indigenous rights are still written in the framework of post-war notions about the 'national integration' of indigenous or tribal populations. Most indigenous peoples currently reject the 'integrationist' framework and have made persistent demands before national governments and the United Nations to respect their rights to design, control, and manage the development activities that take place on their lands. The 1981 Declaration of San José clearly reflects this indigenous concern with ethno-development and could benefit from recognition and support by development agencies.

2. *Recognise Territorial Integrity*

International development agencies should ensure that all of the projects financed in areas inhabited by indigenous groups contain a component which recognises and protects not only the land rights, but also the territorial integrity and ecological balance of indigenous or tribal groups. While national rhetoric often includes several statements about the need to protect the land rights of tribal peoples, including those of hunter-gatherers and pastoralists who need extensive areas of land to survive, in practice, most governments either do not recognise indigenous land rights, or they believe that they have satisfied international agreements when they announce their intention to create indigenous reserves. In almost no cases do national governments recognise the territorial integrity of indigenous groups, especially the exclusive rights of these groups to control and use the valuable water, forestry, wildlife, mineral, and

resources on their lands. In fact, the delimitation of Indian reserves, without a commitment to maintaining their territorial integrity, is often just a first step in depriving indigenous peoples of their natural resources.

The issue of territorial integrity is so vital to both the cultural survival of indigenous societies and the promotion of ecologically viable sustainable development that it is worth quoting some of the recommendations of the 1983 United Nations study on discrimination against indigenous populations. Among other things, the United Nations study recommended that:

- * the environmental impacts of the exploitation of non-renewable resources on indigenous lands -- especially water which is so vital for survival -- should be seriously and urgently investigated;
- * in the case of those communities whose ecological equilibrium has been destroyed, the territory they occupy should be recognised as their property;
- * where ecological equilibrium has been destroyed, communities should be offered new opportunities for activities compatible with the respect due to their cultural identity; and

'The issue of territorial integrity is ... vital to both the cultural survival of indigenous societies and the promotion of ecologically viable sustainable development ...'

- * any action with respect to the territories of indigenous communities which will directly or indirectly result in the pollution of earth, air, or water, or which will in any way deplete, displace, or destroy any natural or other resources owned, occupied by, or vital to the livelihood of any indigenous nation or group should be prohibited and halted (U.N. Commission on Human Rights,

Subcommission on the Prevention of Discrimination and Protection of Minorities, 1983).

3. Include Mechanisms for Direct Participation

International development agencies should ensure that any tribal components designed for development projects in indigenous areas include advisory councils or structures for the direct participation of indigenous peoples.

To date, more attention has been placed on strengthening government agencies charged with indigenous affairs than in finding ways in which indigenous peoples themselves can actually participate in the development planning process.

Finding ways for indigenous participation now needs much more emphasis in project design. On historical grounds, a strong case can be made that strengthening these tribal agencies runs counter to the interests of tribal or indigenous peoples and that the best policy for development agencies would be to provide funds either for redefining the purposes of these agencies or for replacing them with local or regional indigenous planning boards. Short of this, however, development agencies should consider funding initiatives which provide for indigenous advisory panels to be established as integral parts of regional planning, environmental protection, resource management, or other state agencies.

4. Increase Professional Staffing in Socio-Cultural Assessment

International development agencies should increase their professional staffing in the socio-cultural assessment field. Such professional staff increases would ensure that the interests of indigenous

peoples are introduced early in the project identification and preparation stages, rather than at the appraisal stage as at present.

5. Increase Input of NGOs and Other Indigenous Defense Groups

International development agencies should make greater use of non-governmental organisations (NGOs) concerned with indigenous peoples' rights in project planning and assessment. Many of these NGOs often possess more expertise about the social and environmental effects of development projects than government agencies charged with protecting tribal populations.

Moreover, during the past decade, a growing network of organisations has emerged in North America, Europe, Asia, and Latin America dedicated to defending the rights of indigenous peoples. Development agencies should reach out to these groups for assistance and advice on how to include indigenous peoples in the development planning process. The case of the Udirbi Project among the Kuna in Panama is a model of such indigenous participation and might be fruitfully emulated in other parts of the world.

6. Promote Continuing Dialogue

Within the international arena, an ongoing dialogue should be created about the goals of development planning and the best means by which these goals can be achieved. For numerous reasons, the cultures and values of indigenous peoples pose fundamental questions about the ultimate meaning of economic development; who benefits and who suffers from the development process; and what development means for the various environments -- physical, social, economic, spiritual -- in which we live. Unfortunately, indigenous peoples have always been

perceived as being on the receiving end of the development process. Seldom, if ever, are their values understood or internalised by those individuals and institutions charged with national and global development planning.

National and international development agencies can help to reverse this process by initiating a series of dialogues or discussions on development in which indigenous peoples and NGOs supporting their interests could participate. Just as the United Nations has done in hosting international conferences on the human rights of indigenous populations, development agencies could invite cooperation and dialogue with indigenous peoples to address the issue of the place of indigenous peoples in development. Historically, indigenous peoples have always had their homelands desecrated by outsiders in the name of civilisation, progress and development. Perhaps the time has now come to reverse this historical process by inviting indigenous peoples to join, as equals, in a continuing dialogue on how to promote more environmentally sound and sustainable models of development.

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