Indigenous People and Sustainable Development: How Has UNEP Contributed?

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Our planet groans under the pressure of unsustainable living: we increasingly take from it more resources than it can spare, and pollute it faster than it can clean and renew itself. This is a road that leads to disaster – for our own and future generations.

There are people however, who have developed cultures, lifestyles and traditions that exist in integrated harmony with their natural environments. These people traditionally hunt and farm to meet their needs, and manage their surrounding environment from which they also depend in a sustainable way. If they wanted to, they could produce more and denude their resources. But they don't, because they respect the earth, and they know that such a choice would eventually destroy them. Even tough the suggestion is not that to attain a sustainable development, we should all turn to adopt the lifestyles of indigenous people, it is important for the world to support, protect and understand their unique wisdom and knowledge, also in order to find ways to ensure the survival of our planet, and incidentally, our own prosperity.

Of the estimated 6,000 cultures in the world, between 4,000 and 5,000 are indigenous, which means that indigenous peoples make up between 70 and 80 per cent of the world's cultural diversity. Looking at the global distribution of indigenous peoples, there is a clear correlation between areas of biological mega-diversity and areas of cultural diversity, which is particularly relevant for the rainforest areas in Latin America, Africa, and South East Asia. The indigenous peoples' experiences, including production and consumption patterns, are directly related to their natural environment.

INTRODUCTION

The 1st section in this essay illustrates the importance of traditional knowledge for sustainable development. Traditional knowledge refers to the complex bodies and systems of knowledge, know-how, practices and representations, which are maintained and developed by

local or indigenous communities through their history. Sustainable development refers to the maintenance of a healthy equilibrium between civilisation and the surrounding natural resources on which it relies. The preservation of traditional knowledge is directly linked to the preservation of indigenous peoples.¹

Section 2 will demonstrates how UNEP intervenes to protect indigenous peoples directly through means such as the UNEP/GRID Arendal Polar Programme, it will also articulate the various other means UNEP has developed to protect the intellectual rights of indigenous people such as the Convention on Biological Diversity. UNEP also plays a crucial role in contributing to sustainable development directly by changing the ways in which we perceive and relate to our environment. Section 3 sketches the possible futures open to UNEP.

Before we proceed there is a question of semantics that we must surmount in order to properly address the productive role UNEP has played in protecting indigenous peoples' rights. This concerns how to define indigenous people. There has been some ambiguity over the years as to what 'indigenous people' is.

The term: 'Indigenous People'

Crucial for understanding the concept of indigenous people is identifying the origin of the concept. In this context, the adoption of the term has been largely due to the lobbying of the indigenous movement, which has consistently called on international institutions and the donor community to uphold indigenous peoples' rights and take account of their priorities in development policy and practice. The indigenous people's campaign for recognition of their rights by governments and development agencies began in the 1950s, gathered pace in the 1970s and consolidated in the 1980s. During the latter decade, indigenous organizations and human rights, environment and development NGOs were successful in exposing and making aware the devastating negative impacts on indigenous

peoples and local communities through energy exploitation, mining, agricultural, huge dam projects as well as many environmental and conservation projects in general, which were and are financed by multilateral agencies such as the World Bank and the European Commission.

In the late 1980s, indigenous representatives made powerful testimonies to the World Commission on Environment and Development (WCED) hearings on environment and development in which they urged governments and development institutions to protect indigenous land, resources and participation rights and to value traditional knowledge and land use as alternative models for sustainable development.

The term indigenous people does not stand alone but is linked to issues such as the use of traditional knowledge for sustainable development but also to environmental degradation.

The United Nations Conference on Environment and Development, held in Rio de Janeiro, Brazil, in June 1992, was an important development for indigenous peoples and their rights related to the environment. The Conference, through article 22 of the Rio Declaration, recognized that indigenous peoples and their communities have a critical role to play in managing and developing the environment:

"Indigenous people and their 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"

The importance of indigenous peoples' traditional knowledge and practices was also acknowledged in Agenda 21 in which the international community committed itself to promoting, strengthening and protecting the rights, knowledge and practices of indigenous peoples and their communities.

Throughout the years, several definitions have been proposed concerning Indigenous People and their related issues. A number of the formal contemporary definitions, which have been offered and widely accepted, are described as follows.

In 1972 the United Nations Working Group on Indigenous Populations (WGIP) accepted as a preliminary definition a formulation put forward by Mr. José Martinez Cobo, Special Rapporteur on Discrimination against Indigenous Populations:

"Indigenous populations are composed of

the existing descendants of the peoples who inhabited the present territory of a country wholly or partially at the time when persons of a different culture or ethnic origin arrived there from other parts of the world, overcame them, by conquest, settlement or other means, reduced them to a non-dominant or colonial condition; who today live more in conformity with their particular social, economic and cultural customs and traditions than with the institutions of the country of which they now form part, under a state structure which incorporates mainly national, social and cultural characteristics of other segments of the population which are predominant."

The limitations of the definition were subsequently noted by the organization. The definition applies mainly to pre-colonial populations, excluded other isolated or marginal societies. In 1983 the WGIP enlarged this definition (E/CN. 41Sub.2/1983/21 Adds. para. 3 79) to include the following criteria:

- (a) they are the descendants of groups, which were in the territory at the time when other groups of different cultures or ethnic origin arrived there;
- (b) precisely because of their isolation from other segments of the country's population they have almost preserved intact the customs and traditions of their ancestors which are similar to those characterized as indigenous;
- (c) they are, even if only formally, placed under a state structure which incorporates national, social and cultural characteristics alien to their

In 1986 it was further added that any individual who identified himself or herself as indigenous and was accepted by the group or the community as one of its members was to be regarded as an indigenous person (E/CN.4/Sub.2/1986/7/Add.4. para.381).

The draft Universal Declaration on the Rights of the Indigenous Peoples prepared by the DWIG does not provide a specific definition of indigenous peoples or populations. According to the Chairperson, Ms. Erica Irene Daes, Rapporteur of the Working Group, this was because "historically, indigenous peoples have suffered, from definitions imposed by others" (E/CN.4/Stib.2/AC.4/1995/3, page 3).

A definition as used by the International Labour Organisation (Convention No. 169, concerning the working rights of Indigenous and Tribal Peoples, 1989) applies to:

- (a) tribal peoples in countries whose social, cultural and economic conditions distinguish them from other sections of the national community and whose status is regulated wholly or partially by their own customs or traditions or by special laws or regulations, and
- (b) peoples in countries who are regarded by themselves or others as indigenous on account of their descent from the populations that inhabited the country or a geographical region to which the country belongs, at the time of conquest or colonization or the establishment of present state boundaries an who, irrespective of their legal status, retain, or wish to retain, some or all of their own social, economic, spiritual, cultural and political characteristics.

A description of Indigenous Peoples given by the World Bank (operational directive 4.20, 1991) reads as follows:

Indigenous Peoples can be identified in particular geographical areas by the presence in varying degrees of the following characteristics: a) close attachment to ancestral territories and to the natural resources in these areas; b) self-identification and identification by others as members of a distinct cultural group; c) an indigenous language, often different from the national language; d) presence of customary social and political institutions; and e) primarily subsistence-oriented production.

THE LINK BETWEEN TRADITIONAL KNOWLEDGE AND SUSTAINABLE DEVELOPMENT

The Current Threat to Traditional Knowledge and its Ramifications

Modern cultures abetted by new technologies are encroaching upon on once isolated peoples with drastic effect on their way of life and on the environments, which they inhabit. Destruction of lands and livelihoods, the spread of consumerism, pressures for assimilation into dominant cultures are among the factors threatening the world's biodiversity as well as its cultural and linguistic diversity.

These forces are also fostering changes in perceptions and attitudes of the indigenous people. These have often led to the abandonment of traditional knowledge and behaviours and of the languages that are the repositories and means of transmission of such knowledge. With the advent of globalisation, however, traditional knowledge and its environmental benefits are threatened. On the one hand, world trade has created increased demand from distant markets for locally-sourced agricultural, fisheries and forest products, pushing producers to harvest resources beyond the sustainable limits that traditional knowledge would normally advise. On the other hand, traditional knowledge transmission to current and future generations is faltering as global communications and mobility attract younger generations to a diverse set of non-traditional livelihoods, often in distant urban settings.

The loss of cultural diversity means a loss of intellectual diversity. Each culture and language is a unique tool for analyzing and synthesizing the world, incorporating the knowledge and values of a speech community. To lose such a tool is to forget a way of constructing reality. It means blotting out perspectives evolved over many generations.

UNEP's recent publication "Cultural and Spiritual Values of Biodiversity" points out that out of 6000 languages that are spoken today, 2,500 are in danger of extinction.² The threat to linguistic resources is now recognized as a worldwide crisis.

There is another argument as well - the broader interest in social justice. We should care about preventing the extinction of culture and languages because of the human costs to those most directly affected. Along with the accompanying loss of culture, language loss can destroy a sense of self worth, limiting human potential and complicating efforts to solve other problems such as poverty, family background, school failure and substance abuse. The link with poverty is also clear. It must be remembered that the depletion of cultural and linguistic diversity does not happen in privileged communities. It happens to the dispossessed and the disempowered who most need their cultural resources to survive.

UNEP's Prioritisation of Indigenous People

From the beginning, the United Nations Environment Programme (UNEP) has recognized indigenous peoples as its natural allies; that most indigenous cultures are based on a profound respect for nature and that their consumption patterns and lifestyles are premised on the prin-

ciple of sustainability - a principle best summed up in the adage, "Take no more than you need."

UNEP has an abiding interest in the relationship between the natural environment and indigenous peoples. Indeed, there is a remarkable overlap between the global mappings of world's areas of biological megadiversity and areas of high cultural diversity. An estimated 300 million indigenous people inhabit more than 70 countries worldwide. They live in a wide range of ecosystems- from polar regions and deserts to the savannas and tropical forests.

Throughout the years, UNEP has found common cause with indigenous peoples from the Arctic to the Amazon, from Australia to Argentina. Indigenous peoples have solutions to the many challenges facing the world, and there are numerous examples of the great contributions indigenous peoples have made to sustainable development: The Arctic peoples developed a comprehensive management plan based on centuries of oral traditions encoding time and space coordinators on population dynamics and subsistence use. The Mebengokre people have responsibly managed parts of the Brazilian Amazon Forest for centuries, and their practices are a model for sustainable forest management. The San of the Kalahari in Southern Africa provides a model for sustainable living in a fragile

UNEP has been focused on putting the practical knowledge indigenous cultures have accumulated over centuries to technical use at the global level. This knowledge will be of particular use when dealing with the detrimental effects of climate change.

Local coping strategies and technologies for adaptation to climate-related events have evolved over a long period of time in many parts of the world. These are based mainly on traditional knowledge, also referred to as 'indigenous' or 'local' knowledge, which embodies a wide variety of skills developed outside the formal education system and is closely linked to community survival and subsistence. Indigenous knowledge is borne out of continuous experimentation, innovation and adaptation, blending many knowledge systems to solve local problems. A common disadvantage for local coping strategies is that they are often not documented, but rather handed down through oral history and local expertise.

Disseminating information on experiences in

using traditional knowledge to support the identification of adaptation options to climate change is especially important for developing countries. In 2004, the Least Developed Countries Expert Group (LEG) of the UNFCCC agreed to initiate work on developing a database on local coping strategies, which would provide easy access to such information. Strategies included in this database will help countries identify different adaptation options in the preparation phase of their national adaptation programmes of action (NAPAs), and will also serve as important input into the identification of opportunities for regional synergy in the NAPA implementation phase.

Floods and excessive rainfall are other examples of climate change impacts. There is great diversity in the impacts of floods, as a result of differences in intensity of flooding as well as local experience and historical adaptations to these events. For example, people living in flood plains in Bangladesh have developed livelihoods and adapted to the constant presence of water through building on raised ground or on stilts, and using boats for transport. In Bhutan, reduced crop yield due to irregular rainfall resulting in food insecurity can be mitigated by enhancing and documenting traditional knowledge of forestbased food products. The Monpas of Bhutan harvest a wide variety of seasonal wild vegetables, fruits, tubers and other edibles from the forest during food-scarce seasons. In Peru there are ancient irrigation and drainage systems, consisting of earthworks about one meter high and 10 to 15 meters wide surrounded by wide, shallow canals, which, when filled with water, ensure a microclimate that acts as a buffer against frost and provides moisture during droughts and drainage during the rainy season.

Another devastating impact of climate change is sea level rise, which threatens many communities around the world, especially in developing countries. One of its associate consequences is reduced availability of land for agriculture due to water logging. In Bangladesh, alternative agriculture methods have been used, such as hydroponics. Crops are grown on beds floating in water. The floating beds are usually made of water hyacinth and straw of aman rice along with duckweed and other aquatic plants. After harvesting the crops, the beds are used as organic manure in the fields.

Coping with droughts is another challenge

strongly associated with climate change. In Burkina Faso, droughts accompanied by water shortage and soil degradation have led to development of zai, an indigenous water harvesting and soil fertility management practice used by Mossi farmers in Yatenga Province. Jessour, is an indigenous method of soil and water conservation practiced by farmers in Tunisia. It consists of a series of stone and earthen walls, called tabias, built across the stream beds of narrow valley watersheds. In some areas of India drought resistant millet, bajra, is widely used especially in low -rainfall areas and on light soils. In Rajasthan, shortage of water due to drought is addressed through construction of med bandhi (contour bunds) in agricultural fields to check water flow. This reduces wastage of water by allowing the excess water from the fields to flow to adjacent fields which are at a lower elevation.

Many collected case studies show the importance of mutual support at the community level as an adaptation strategy. Households often practice a form of insurance through reciprocity within the community. For example, families will rely on their friends and families to tide them through climate disasters. Another form of insurance practiced at the household level is the gradual selling off of livestock, which of ten constitute the family's savings.

These are just some of the examples of the unique knowledge accumulated in various communities around the globe. Experience in coping with impacts of climate change already exists; many communities around the world possess knowledge for coping with extreme events and different ranges of climate variability. Researchers, international agencies, and organizations working towards sustainable development can greatly benefit from these experiences at the local level.

There is need to document local coping strategies and technologies and to evaluate their effectiveness. Exchange of experiences between regions facing similar climatic threats and risks would help broaden the knowledge base on adaptation. Sharing of experiences between regions facing similar threats would be very useful.

The traditional knowledge of resilient communities has developed over time as a reaction to change. The existence of such knowledge is a testimony to its success and may provide models of broader application, even when change is more

rapid. The climate change process encourages indigenous peoples organizations to continue their participation in the process and to share their traditional knowledge with Parties in the global effort to reduce climate change and to protect the climate system for present and future generations.

UNEP AND THE PROTECTION OF TRADITIONAL KNOWLEDGE AS A MEANS TO SUSTAINABLE DEVELOPMENT

The United Nations Conference on Environment and Development, held in Rio de Janeiro, Brazil, in June 1992, was an important development for indigenous peoples and their rights related to the environment. The Conference, or Earth Summit as it is called, recognized that indigenous peoples and their communities have a critical role to play in managing and developing the environment. A number of legal instruments adopted at the Earth Summit, such as the Rio Declaration, Agenda 21 and the Convention on Biological Diversity, established international legal standards to protect indigenous peoples' rights to their traditional knowledge and practices in the area of environmental management and conservation.3 Most importantly, there now exists an international legal framework which recognises the unique relationship indigenous people have with their traditional lands.

As for UNEP, the Governing Council recognized that changes in the environment have social, cultural and economic impacts (Decision 1 (I), 1973), and that eco-development should encompass cultural, social, technological, political and environmental dimensions (Decision 8 (II), 1974). Later on, several Governing Council decisions have referred to the importance of the sociocultural dimension of environmental management and the need to involve all relevant stakeholders. It was, however, the 2000 Malmö Declaration that has given UNEP a mandate to work on indigenous issues.

In the context of global issues such as biological diversity, intellectual property, trade negotiations, climate change, sustainable development, health, cultural diversity and human rights-based approaches to development, it is recognized that they require global efforts. Likewise, protection and promotion of traditional knowledge should also be global and in a co-ordinated manner by

effectively involving holders of such knowledge, indigenous peoples and their communities and integrating their perspectives in all stages of processes. UNEP provides the means by which this is realised. The UNEP/GRID Arendal Polar Programme constitutes one such attempt to protect indigenous peoples' rights and their constituent environment. It also illustrates the necessity for a global institution that mitigates the negative impacts of climate change and the importance of precautionary measures.

UNEP/GRID Arendal Polar Programme

A non-sustainable development in the Arctic may furthermore disrupt important renewable resources such as fish stocks in the Arctic seas, and may affect unique biodiversity and wilderness areas that are of benefits to the Arctic's people as well as for the global community at large. For these obvious reasons UNEP is increasing its focus on environmental conservation linked to sustainable development in the Arctic.

Many chemicals released to air or water by activities in Europe and North-America accumulate in the High North. Hazardous substances may lead to genetic defects, and may result in metabolic changes, reduced fertility, and cancer. Nervous systems and muscle functions may also be affected. All in all, such pollutants may seriously affect the health and welfare of entire Arctic communities. The Stockholm Convention on Persistent Organic Pollutants (POPs), negotiated under the auspices of UNEP, and expected to come into force in 2004, sets out control measures that address the production, import, export, disposal, and use of POPs.

Other threats include the fragmentation of wildlife habitats, over-harvesting of the region's once-abundant fish stocks and unsustainable use of other natural resources such as its vast forests. Unique plant and animal species are under threat or disappearing due to climate change. Piecemeal development is also beginning to have a major cumulative effect on the Arctic environment, with adverse economic and social consequences for its indigenous peoples.

UNEP has currently under development and implementation several projects in Arctic Russia addressing POP's, biodiversity, climate change and protection of the marine and terrestrial environments, amounting to a total of 40 million USD.

The fact that the resources of the Arctic are

of extreme importance and value for the outside world, but also that the Arctic's small population, numbering less than 4 million people, cannot reap the economic and social benefits from resource use, represent political and moral challenges. There are needs for new sustainable strategies in place to control this development. Many indigenous people and subsistence based communities still rely heavily on reindeer and caribou, and like the Saamiis, they may gradually lose more and more traditional land and their incomes as a result of this bit-by-bit development.

Other UNEP Projects

- UNEP has also undertaken the ECORA project (An Integrated Ecosystem Management Approach to Conserve Biodiversity and Minimise Habitat Fragmentation in Three Selected Model Areas in the Russian Arctic). Major outcomes of the project will include approved integrated ecosystem management strategies and action plans in three selected Model Areas in the Russian Arctic. In support of these strategies and action plans, the project will implement a number of activities including biodiversity and socio-economic inventories and assessments; targeted training programmes; legislative, administrative and institutional capacity building; specific conservation measures; and pilot activities to test integrated ecosystem management approaches for conserving and sustainably using natural resources. The project will help to secure the integrity of some of the world's last remaining pristine areas and support livelihoods of indigenous and local peoples.
- UNEP is working hard to boost the number of nations contributing to its finances so as to improve cash flow and a wider sense of ownership among countries. The new Ireland Trust Fund for Africa covers the following four priority areas: Protection of freshwater resources; Access to environmental information for decision-making; Protection of coastal and marine environment (with an emphasis on coastal and marine fisheries management); and Conservation of biological diversity (with an emphasis on monitoring of land cover, protected areas, and indigenous vegetation change). In all areas, the work focuses on poverty alleviation, capacity building and sustainable development.4

- · UNEP is also operative in other parts of the world and is constantly involved in publishing reports relevant to the protection of indigenous peoples' habitats. In Latin America, deforestation is driven by the expansion of the agricultural sector, demographic pressure, logging and inequitable land distribution. So far, forestry policies in the region have not been effective, mainly because they have failed to take into account the differing needs of different forest users. UNEP has promoted the implementation of comprehensive forest policy frameworks at the national level. These are fundamental to achieving the goal of sustainable resource use in Latin America. Sustainable development can play a key role in reducing pressure on forests and replacing the processes leading to forest degradation and deforestation.5
- A project of UNEP's regional office for Latin America is aiming specifically at enhancing inter cultural dialogue and following up on the UN processes on the protection of indigenous people rights in environmental and sustainable development matters. The indigenous people of the Caribbean Antilles, Belize, Guyana and Suriname are one of the most marginal people of the western hemisphere and their rights are continually under threat. Issues affecting their concerns are rarely featured in the political discussions in the region. Yet, the collective knowledge of indigenous people, especially in relation to biological resources, traditional knowledge, innovations and practices is of significant value for the current and future development of Caribbean societies. Despite the growth of indigenous people organisations, these entities remain relatively weak without the necessary technical, financial, institutional and legal support. UNEP's project is intended to address these issues. More specifically, it will provide structures within the region to facilitate intercultural dialogue among the indigenous people, and to represent their views in regional and international for a. the target groups are the indigenous people of the Caribbean Antilles, Saint Lucia, Saint Vincent, the Grenadines and Dominica, Belize, Guyana, Suriname, Trinidad and Tobago.

UNEP not only plays a crucial role in reducing the detrimental impact of pollution and unsustainable development upon indigenous people, but also aims at protecting their rights over intellectual property.

The Convention on Biological Diversity

UNEP has an abiding interest in the relationship between the natural environment and indigenous peoples. In a major report, The Global Environment Perspective, published in 1987, UNEP identified the need for an international, legally binding instrument to protect the world's biological resources and indigenous peoples' rights over their long-acquired knowledge. In 1987 and 1988, UNEP convened two Ad Hoc Working groups of Experts on Biological Diversity. These Working Groups reviewed existing biodiversity-related conventions and prepared the framework for the Convention on Biological Diversity. Through this convention, UNEP assumed responsibility for ensuring that States recognize and foster the traditional methods and knowledge of indigenous peoples, and for ensuring that indigenous peoples share in the economic and commercial benefits that accrue from the use of those traditional methods and knowledge.

The UNEP Governing Council decision GCSSVII/5 on Civil Society, adopted in Cartagena, specifically includes the indigenous people as a group that should have enhanced engagement in UNEP's work. An inventory of civil society engagement UNEP-wide has been initiated.

The Convention on Biological Diversity contains a number of provisions of particular importance to indigenous peoples. These provisions are contained in Articles 8(j), 10(c), 17.2 and 18.4. Of these, Article 8(j) is regarded as the core provision. It calls upon Contracting Parties to respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities relevant to the conservation and sustainable use of biodiversity, subject to national legislation. The Convention encourages Parties to promote the wider application of such knowledge, innovations and practices with the approval and involvement of the indigenous peoples concerned. Article 8(j) also requires that benefits arising from the application of traditional knowledge, innovations and practices should be shared equitably with the indigenous communities concerned.

Indigenous people are also encouraged to participate in meetings. Given the wide range of issues addressed during meetings under the Convention, it is in the interest of indigenous peoples and their organizations to make sure that they are well-represented at those meetings.

Observers from NGOs, including indigenous organizations and communities, may attend, participate in and contribute to meetings of the COP, as well as those of its subsidiary bodies. The Conference of the Parties encourages indigenous participation in the meetings of the Ad Hoc Working Group on Article 8(j). Attendance at these meetings also provides important opportunities for indigenous representatives to share information, network and lobby.

Indigenous peoples also participated in UNEP's Global Biodiversity Assessment project. This research project identified five major causes of biodiversity loss: degradation or outright loss of habitats, over-exploitation of biological resources, pollution, the introduction of nonnative (alien or exotic) species, and climate change. The report concluded that forests, marine and coastal areas, and agricultural and inland water ecosystems are among those most threatened. The project also included research into "Human Values of Biodiversity" which focused on traditional, religious and cultural values related to biological diversity and emphasized the interdependence between indigenous peoples and their environment. The research culminated in the report, Cultural and Spiritual Values of Biodiversity: A Complementary Contribution to the Global Biodiversity Assessment, which was published by UNEP in 1999.

UNEP also addresses the rights of indigenous peoples under international environment law. A recent UNEP publication, New Way Forward: Environmental Law and Sustainable Development, includes a chapter dedicated to indigenous peoples and the environment.

Article 8(j) also requires that benefits arising from the application of traditional knowledge, innovations and practices should be shared equitably with the indigenous communities concerned. The Parties to the CBD have taken steps to comply with these commitments. The Conferences of the Parties (COP)- the Convention's supreme decision-making body, composed of all the governments that have ratified the conventionestablished a subsidiary body - the Ad Hoc Openended Inter-sessional Working Group on Article 8(j) and Related Provisions- to address these issues and to develop an ambitious programme of work, which was adopted by the Conference of the Parties in 2000 and provides the basis for action on traditional knowledge within the framework of the Convention.6

The Working Group was mandated to oversee the implementation of the programme of work, which focuses on the following issues:

- The effective participation and involvement of indigenous and local communities in policy development and decision-making relating to the use of their traditional knowledge and practices relevant to the conservation and sustainable use of biological diversity;
- The development of mechanisms and legislation to foster the effective participation of indigenous and local communities in decision-making policy, policy planning and development and implementation of the conservation and sustainable use of biological diversity at all levels:
- The preparation of a composite report on the status and trends regarding traditional knowledge of indigenous and local communities;
- The development of guidelines on environmental, cultural and social impact assessment for developments proposed to take place on sacred sites and on lands and waters occupied by indigenous and local communities;
- The development of guidelines on the sharing of benefits arising from the utilization of traditional biodiversity-related knowledge and innovations;
- The development of elements of sui generis systems for the protection of traditional knowledge;
- In addition, traditional knowledge is an important component of the thematic programmes of work on agricultural biodiversity, forest biological diversity, marine and coastal ecosystems, inland waters, and dry and sub-humid lands established by the Conference of the Parties to the Convention.

CBD has been actively considering the question of the preservation of sacred sites and lands and waters occupied by indigenous and local communities. In February 2004, COP 7 adopted guidelines for the conduct of cultural, environmental and social impact assessments regarding developments proposed to take place on, or which are likely to impact on, sacred sites and on lands and waters traditionally occupied or used by indigenous and local communities, known as the "Akwé: Kon Guidelines."

The Akwé: Kon Voluntary Guidelines provide guidance to Governments on the incorporation of cultural, environmental and social considerations of indigenous and local communities into new or existing impact assessment procedures. The COP requested governments to use these guidelines whenever developments are proposed to take place on, or are likely to impact on, sacred sites and on lands and waters traditionally occupied or used by indigenous and local communities.

UNEPhas also initiated a joint UNEP-UNCTAD Capacity Building Task Force on Trade, Environment and Development (CBTF). This creates projects aimed at preserving traditional knowledge. This is in line with the Rio Declaration which clearly recognises this, stating that "Indigenous people and their communities, and other local communities, have a vital role in environmental management and development because of their knowledge and traditional practices."

UNEP has played a crucial role in contributing to sustainable development. The preservation of traditional knowledge as an aid to sustainable development has constituted a large part of this and will prove invaluable information for future generations. But the promotion of sustainable development does not just entail the protection of indigenous peoples' intellectual rights but also their surrounding environment. The present mode of economic development prioritises a set of principles conducive to certain interests. UNEP has proved effective at mitigating the detrimental effects of this mode of economic development so as to make it sustainable via various initiatives such as the UNEP/GRID Arendal Polar Programme and the Convention on Biological Diversity. UNEP is also working to change the way in which people relate with their surrounding environment at an ideational level in the hope of promoting more environment friendly behaviour.

Changing Norms

UNEP is dedicated to changing unsustainable patterns of production and consumption. On a more fundamental level, sustainable consumption implies a change in the global economy, sociocultural values and economic relationships between the North and the South. It also raises the question of equity.

UNEP's promotes the concept of "life cycle economy". This involves viewing the production, use and disposal of a product or function, as a comprehensive cycle covering all the processes required: extraction and processing; manufacture, transport and distribution; use, reuse and maintenance; recycling, and final disposal. Life

cycle thinking implies that everyone in the whole chain of a product's life cycle from the cradle to the grave has a responsibility and a role to play, taking into account the all relevant external effects.

The latest legislative proposals by the European Union that aim to ban batteries containing cadmium by 2008 and make producers of electric and electronic equipment responsible for collecting and recycling waste product are a first step in this direction. We have to move away from a "throw away" society and aim towards a society in which producers and consumers assume responsibility for their own actions and decisions. It is UNEP's contention that good environmental management is not a technical exercise separate from everyday economic and political life. It is not something tacked on after the fact of development. It can only come about when environmental values are embedded within political and economic life.

UNEP, in partnership with various industry organisations, launched a reporting initiative to gauge progress by the private sector towards sustainable development. This effort contributed to the wider review of progress with the implementation of Agenda 21, under the framework of the World Summit on Sustainable Development (WSSD). Ultimately, this effort will result in an unprecedented industry-driven initiative to outline the way ahead towards sustainable entrepreneurship. The UNEP has concerned itself with the preservation of the past so as to provide a healthy foundation for the future.

WHAT CAN UNEP DO IN THE FUTURE?

· UN agencies dealing with indigenous traditional knowledge will need to work collectively to give an economic value for this knowledge and to the genetic resources nurtured by indigenous people, just as we protect intellectual property rights. It is estimated that 40% of the global economy is based on biological products. Some of the financially poorest regions harbour the majority of the world's biodiversity essential for the survival of humankind in general and not only for the ethnic groups living there. It is of course difficult to measure the economic value of biodiversity due to its multi-dimensional importance for all life. But it is undeniable that biodiversity plays an economic role because of the extensive genetic resources it holds that

- benefits humankind, such as through biotechnology and its medical potential.
- The UN agencies and other bodies dealing with traditional knowledge in the various countries should ensure continuous participation and empowerment of indigenous people.
- The UN voluntary fund could support micro projects for the protection, promotion and preservation of traditional knowledge at local level.
 For example the creation of indigenous centres at the community level for the preservation of Indigenous traditional knowledge.
- Make use of globalisation as an opportunity, not a threat to indigenous people rights and lifestyles: the enormous driving force of globalisation may give the impression that everything is connected and that as a result, the world is merging and leading to uniformity. The more we loose diversity, being biological or cultural, the more we run the risk of instability. Globalisation and interconnection also offer the opportunity to disseminate and exchange on diversity and learn experiences to deal with natural phenomena.

CONCLUSION

This essay has portrayed the diverse ways in which UNEP has contributed to sustainable development. UNEP associates the maintenance and protection of indigenous peoples' culture and traditions as symptomatic of such sustainable development. UNEP also recognises that the preservation of indigenous people and their constitutive traditional knowledge as crucial to better our understanding of how society can best develop in sync with our finite environment. The preservation and protection of indigenous people is thus recognised as a means to sustainable development and also an ends in itself. We need to preserve indigenous people so that we can transpose the lessons they have learnt over centuries to the global level. But we need to protect them since they constitute the only effective indication of sustainable development. They are both the catalyst and the marker to a healthy sustainable development at the global level. The means and the ends of a healthily evolving economy in stable equilibrium with the resources on which it depends upon.

NOTES

- 1 Indigenous Peoples can be identified in particular geographical areas by the presence in varying degrees of the following characteristics: a) close attachment to ancestral territories and to the natural resources in these areas; b) self-identification and identification by others as members of a distinct cultural group; c) an indigenous language, often different from the national language; d) presence of customary social and political institutions; and e) primarily subsistence-oriented production.
- 2 Cultural and Spiritual Values of Biodiversity (Edited by Darrell Addison Posey, ITDG Published 2000)
- 3 Article 22 of the Rio Declaration, recognized that indigenous peoples and their communities have a critical role to play in managing and developing the environment.
- 4 Website: http://www.grida.no/newsroom.cfm?press ReleaseItemID=115
- Website: http://www.grida.no/geo2000/aps-lac/
- The Programme of Work on Article 8(j) and related provisions is contained in the Annex to decision V/ 16. Decisions VI/10 and VII/16 further develop the work program. All are available at http://www.biodiv.org/decisions/
- 7 The Life Cycle Initiative is a response to the call from governments for a life cycle economy in the Malmö Declaration (2000). It contributes to the 10-year framework of programmes to promote sustainable consumption and production patterns, as requested at the World Summit on Sustainable Development (WSSD) in Johannesburg (2002).

REFERENCES

- Secretariat of the Convention on Biological Diversity. 2005. "The Convention on Biological Diversity and Traditional Knowledge." Conference Room Paper for The Workshop on Traditional Knowledge, 21-23 September, 2005, Panama.
- UNEP 2002. The Arctic is getting more and more vulnerable, UNEP warns. *UNEP Press Releases*, 13 August 2002. Retrieved 20 August 2006, from http://www.grida.no/newsroom.cfm?pressReleaseItemID = 70>
- UNEP. 2006a. Industry Sector Report for WSSD. Sustainable Agri-Food Production and Consumption Forum. Retrieved 20 August 2006, from http://www.agrifood-forum.net/wssd.htm
- UNEP. 2006b. Life Cycle Thinking as a Solution. UNEP Press Releases. Retrieved 20 August 2006, from http://www.unep.fr/pc/sustain/lcinitiative/background.htm
- United Nations Association in Canada. 2006. The Human Rights Approach to Sustainable Development: Environmental Rights, Public Participation and Human Security. Retrieved 20 August 2006, from http://www.unac.org/youth_sd/youth_e/HRandSD_FINALhtml2.htm
- United Nations. 2005. Workshop on Traditional Knowledge, the United Nations and Indigenous Peoples, 21-23 September, 2005, Panama.

KEYWORDS UNEP; indigenous people; sustainable development

ABSTRACT Of the estimated 6,000 cultures in the world, between 4,000 and 5,000 are indigenous. This means that indigenous peoples make up between 70 and 80 per cent of the world's cultural diversity. Looking at the global distribution of indigenous peoples, there is a clear correlation between areas of biological mega-diversity and areas of cultural diversity, which is particularly relevant for the rainforest areas in Latin America, Africa, and South East Asia. The indigenous peoples' experiences, including production and consumption patterns, are directly related to their natural environment.

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