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Assessment, monitoring and early warning: state of the environment

Follow-up to the World Summit on Sustainable Development: contribution of the United Nations Environment Programme to the forthcoming session of the Commission on Sustainable Development

# **Environment and cultural diversity**

# Note by the Executive Director

The Executive Director has the honour to provide, in the annex to the present note, a report on the implementation of Governing Council decision 22/16 on environment and cultural diversity, as called for by that decision. The annex is being circulated without formal editing.

\* UNEP/GC.23/1.

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# Annex

# Report on the implementation of Governing Council decision 22/16 on environment and cultural diversity

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# I. Introduction

"The connections between culture and development, between culture and nature, and between development and conservation are the key to understanding and preserving the natural world today."

(R. McCormack Adams)<sup>1</sup>

## A. Background

1. Since its establishment in 1972 and in pursuance of its mandate, UNEP has been promoting a dialogue among nations on environment-related issues through its regular activities. The following documents, conventions and conferences have expressed and advanced this mission:

2. The 2000 Malmö Declaration stresses that success in combating environmental degradation is dependent on the full participation of all actors in society, an aware and educated population, respect for ethical and spiritual values and cultural diversity, and protection of indigenous knowledge. It is therefore essential to understand and act upon the interlinkages between cultural diversity and the environment and in particular biological diversity with a view to achieving sustainable development. The United Nations Millennium Declaration emphasized "differences within and between societies should be neither feared nor repressed, but cherished as a precious asset of humanity. A culture of peace and dialogue among all civilisations should be actively promoted." Chapter 26 of Agenda 21 calls for the strengthening of the role of indigenous peoples and their communities. The Convention on Biological Diversity was one of the first major international instruments to give due attention to the role of indigenous and local communities in in situ conservation. Despite these commitments, the situation of indigenous and local knowledge in the modern world remains highly precarious. While scientific and commercial interest in the ecological knowledge and practices of indigenous peoples is growing, that knowledge is under serious threat.

3. In 1999 UNEP published "Cultural and spiritual values of biodiversity", an addendum to the Global Biodiversity Assessment in which scholars, practitioners, indigenous representatives and minority advocates addressed the issue that biodiversity must be appreciated in terms of human diversity because different cultures and people from different walks of life perceive and appreciate biodiversity differently as a consequence of their distinct heritages and experiences. It argued that if we the international community are to conserve the cultural and natural gift on earth, we must learn more about it our interactions with the gift. The publication made clear that cultural diversity and biodiversity are nowadays both threatened. Causes for this threat are the "unsustainable exploitation of the earth's natural resources, [...] the growing marginalization and dispossession of indigenous and minority groups"<sup>2</sup>, the "ever-growing assimilation pressures that promote incorporation into 'mainstream' society"<sup>3</sup> and additionally the ignorance of the rights of Indigenous Peoples. These causes are amplified by the process of homogenization that comes along with globalization.<sup>4</sup>

4. To initiate further discussions on the topic, UNEP convened together with UNESCO a highlevel Roundtable on "Cultural Diversity and Biodiversity for Sustainable Development" during WSSD in 2002 which in essence recommended to add cultural diversity as the fourth pillar to achieve sustainable development in addition to the environmental, economic and social pillar.

5. The Human Development Report (2004), from UNDP, which focuses on cultural liberty in today's diverse world reiterates what the World Summit on Sustainable Development's Plan of

<sup>&</sup>lt;sup>1</sup> R. McCormack Adams (Secretary of the Smithsonian Institution in Washington DC.);

http://cbik.org/Sources/Culture\_conservation.htm [Nov. 2002]

<sup>&</sup>lt;sup>2</sup> "Linguistic Diversity"; Maffi, L.; in *Cultural and Spiritual Values of Biodiversity*; Posey, D. A. (ed.); UNEP; 1999; Nairobi; p.21

<sup>&</sup>lt;sup>3</sup> "Linguistic Diversity"; Maffi, L.; in *Cultural and Spiritual Values of Biodiversity*; Posey, D. A. (ed.); UNEP; 1999; Nairobi; p. 24

<sup>&</sup>lt;sup>4</sup> Opening remarks made by Jacques Chirac during the Roundtable on Biodiversity, Cultural Diversity and Ethics at the WSSD; Johannesburg; 2002; http://www.elysee.fr/actus/dep/2002/etranger/09-johanburg/biodiversity.htm [Nov. 2002]

Implementation commits to in its introduction "Peace, security, stability and respect for human rights and fundamental freedoms, including the right to development, as well as respect for cultural diversity, are essential for achieving sustainable development and ensuring that sustainable development benefits all." The Report 2004 successfully highlighted that the vast potential of building a more peaceful, prosperous world lies in bringing issues of culture to the mainstream of development thinking and practice.

6. This is only one of the recent documents which demonstrate that there is a growing attention towards the need to further incorporate and respect cultural aspects, values and perceptions in approaches, policies and development implementation programmes in order to achieve sustainable development including human well-being. As much as a healthy environment is of crosscutting importance to achieve sustainable development in the areas of poverty alleviation and health especially, so is the need to consider in development approaches the local perceptions, knowledge and experiences of the people affected.

7. With the current trends in population and economic growth and consumption patterns, the natural environment is under increasing stress of loosing diversity. The result is a seriously reduced quality of life, if not the loss of the very meaning of life itself. If we allow languages and cultures to die, we directly reduce the sum of our knowledge about the environment and the various and many benefits that humankind can derive from it. UNEP has demonstrated through various publications, roundtables, workshops and other activities its commitment to approach and integrate the cultural as well as ethical dimensions into many of its key working areas, i.e. biodiversity, health, civil society, in particular women, indigenous peoples and youth.<sup>5</sup> The establishment of the Permanent Forum on Indigenous Issues (PFII) in 2001, a subsidiary body to ECOSOC, has increasingly enhanced the understanding that the global environmental degradation has particularly made indigenous groups and local communities vulnerable in their survival and development.

8. Encouraged by the positive responses of the Roundtable's participants during the World Summit on Sustainable Development in 2002, UNEP presented a draft decision to the Governing Council at its 22<sup>nd</sup> session in 2001 on "environment and cultural diversity", which was adopted as decision 22/16.

9. This report is the result of a survey which gives an insight about the relationship between the environment and cultural diversity and possible developments to further deepen the understanding of the linkages and their possible enduring effects in sustainable development strategies.

# B. UNEP decision GC 22/16 on environment and cultural diversity

10. Since its first session in 1973 the UNEP Governing Council has repeatedly emphasized the importance of a more holistic approach to achieve environmental protection and sustainable development. In its first sessions, the Governing Council of UNEP 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).

11. In 1978 the Governing Council stated that population, resources, environment, and development are interrelated issues, and that UNEP should play an important role in the solution to the related problems (Decision 20 (III), 1975, Decision 6/1, 1978). To address the issue of interrelationship between people, resources, environment and development, a high-level group of experts provided recommendations to include issues of traditional rural societies, culture, tradition, religion and myths to its work (Annex II, Decision 8/17, 1980, and Appendix to Annex II, Decision 9/14, 1981).

<sup>&</sup>lt;sup>5</sup> Some important publications are: *Ethics and Agenda 21: Moral implications of a global consensus*, UNEP, 1994; *Earth and Faith: A book of reflection for action*, 2000; *The environmental dimensions of the dialogue among civilizations, UNEP's contribution to the UN Year of Dialogue among civilizations*, 2001; *Cultural and Spiritual Values of Biodiversity*, Posey, D. A. (ed.), UNEP, 1999; *Etica, vida sustenabilidad*, UNEP, 2002.

Some important conferences on the topic are: the roundtable jointly convened with UNESCO during WSSD on "Cultural diversity and biodiversity for sustainable development" (a booklet was published in 2002/2003); the TUNZA International Children's conference on the environment in 2004 had a strong focus on indigenous people's issues as had the WAVE conference (Women as the voice for the environment) convened in October 2004, whose manifesto, recommendations and project proposals draw also a focus on cultural diversity and indigenous women's issues.

12. On the theme of desertification, the Governing Council in its decision 8/17 of 1980 called upon Governments to increase their efforts to close the gaps in knowledge and appropriate technology related to combating desertification, with particular emphasis on socio-cultural dimensions.

13. In 1987, the Governing Council encouraged Governments to undertake natural and cultural heritage inventories (Decision 14/21, 1987). In 1991 The Governing Council decided that UNEP, as a catalytic and coordinating organization for the environment, should stimulate the participation of all main actors in the implementation of Agenda 21 (Decision 16/13, Annex II, 1991). In 1995, the Governing Council recognized the importance of major groups, especially women, youth and local communities, in the implementation of Council decisions (Decision 18/39, 1995). In its decision 20/28 of 1999 the Governing Council decided that there should be promotion of the linkages among global environmental issues and human needs, and requested the Executive Director to continue to address global environmental issues with a more holistic and synergistic policy framework.

14. Finally, Decision 21/15, concerning support to Africa, recognized that global environmental changes produce adverse social, cultural and economic effects and with its Governing Council's decision GC 22/16 the concept of cultural diversity is for the first time mentioned explicitly: The decision's operative paragraph requests "the Executive Director, subject to availability of voluntary funds, to examine the issue, inter alia, by conducting a survey, in cooperation with the United Nations Educational, Scientific and Cultural Organization and relevant stakeholders, on the state of current work and possible developments on environment and cultural diversity, with particular attention to human well-being, and to report back to the Governing Council/Global Ministerial Environment Forum at its twenty-third session for its consideration."

# C. Objectives and approaches of the Survey

15. The adoption of Decision GC 22/16 in February 2003 was made following an intensive negotiating process. Governments desired more information on linkages and emerging areas for intervention before requesting UNEP's further input in this area. The question is to understand if safeguarding cultural diversity is a prerequisite to preserve the environment. The growing interest that the theme of environment and cultural diversity has begun to awaken in the different international treaties, agreements, and conferences as well as in other entities and interest groups offers an ideal opportunity investigating the interdependence of environment and cultural diversity in a globalising world through an active inter-institutional co-operation. UNEP offers, in all its different areas of expertise related to the global environment, an extensive insight to the causes and consequences of environmental degradation worldwide. UNEP has therefore the capacity to open a wider debate about the root causes of environmental degradation and its ultimate consequences for nature and humankind.

16. The objective of this approach is to reveal the level of diversity and interlinkages between environment and culture and its state of art in the different discourse, programmes and activities. Both are assets of peoples and our planet for prosperity for present and future generations and are therefore essential for achieving sustainable development and human well-being. Research as well as exchange with other agencies and organizations is necessary to channel efforts and experiences and find ways for common action and projects in the future.

17. UNEP and UNESCO, together with the CBD held various consultative meetings on environment and cultural diversity, as requested in GC 22/16 taking into account previous investigations, studies and existing literature on the topic. The survey report as presented here below takes basically previous existing studies, as well as the findings and results of the consultative meetings with UNESCO and the CBD into account. In addition women participants during the WAVE (Women as the Voice for Environment) meeting, held in October 2004 in Nairobi were provided with a questionnaire related to the topic of cultural diversity, environment and sustainable development and their views and visions are attached to this report as annex No 5.2. This mosaic of women's voices provides direct evidence on how relevant, real and important the links of culture in many of its dimensions are to the relation with the environment.

# D. Collaborative agreement between UNEP and UNESCO to implement UNEP GC 22/16

18. After the first consultative meeting between UNESCO and UNEP held in September 2003 a collaborative agreement was signed by both organizations, whose basis for joint action is provided by the operative paragraph of the decision with the main objective to examine the issue of environment and cultural diversity through the proposed survey as a tool to identify the current state of work, gaps, and make recommendations for possible future work.

19. As agreed, the conceptual approach to this survey was holistic and relied upon the integration of culture-based and ecosystem-based frameworks. Priority was given to those interlinkages having an effect on human well-being, such as poverty alleviation. The survey was designed to allow adaptation to emerging topics, to be scientifically sound and to allow a broad-based participation. Collaborative modalities for conducting the survey include the establishment of a small Steering Committee of representatives of UNEP and UNESCO in charge of organizing and managing the survey. The Committee benefited from the assistance of partners, including international organizations and other stakeholders as well as from the inputs of relevant networks.

# II. Thematic approach

20. Environmental conservation is today much more complex than it was some decades ago. Conservation was then perceived by many people, as protection of nature from human activities. Today we know that human activities are part of ecosystems, and many ecosystems and species are also dependent on human involvement. This is especially the case in the field of agriculture, through which human society has interacted with nature over time and created biotopes that depend upon the usage of man. Today separation between nature and culture seems not to be optional. In order to conserve and sustainably use biodiversity and biological resources, we need to better understand how human societies interact with the environment. We also need to know how this interaction has developed through history to understand its present trends. The traditional and local knowledge that developed in the past is also valuable for the use of nature today. The human aspects are as important as the biological aspects on all levels. At the global level, we need more knowledge on how different societies value and use nature in order to discuss environment and in particular biodiversity and reach a global understanding to work from. This common ground needs to be based not only on scientific knowledge but also on informal and local knowledge and a shared appreciation of the importance of human values and ethics, including our respect and affection for life. An important challenge today for scientists and professionals is to create areas to incorporate non-scientific ways of understanding the world into our work in the context of environmental protection and sustainable development. There is also need for bridging current gaps between different disciplines within the current Western epistemologies, academic and non-academic, in order to enable the synthesis of knowledge in meaningful ways that respond to current socio-environmental changes and challenges both on local and on global scales.<sup>6</sup>

21. Natural resources have been the foundation of defining peoples' lives, their society and civilizations. Various forms of cultures and institutions in human society – political, religious, social and economic – have been built upon services provided by a unique natural environment and its natural resources. Throughout history, the interaction between people and their environment has given rise to different cultural patterns, depending on the particularities of their territory and resources. Cultural diversity is the expression of multiple forms of adaptation, characterised by history, ethnic origin, language, spirituality, knowledge, technology, creativity, artistic expression and ethical values, which together form the common patrimony of humanity.

22. A direct correlation between environment and cultural diversity is evident in the tropical regions, where the greatest concentration of the planet's biological and cultural diversity can be found. It is estimated that there are currently around 6,000 different cultures in existence world-wide, of which 80% are indigenous<sup>7</sup> – many of which are under threat of extinction. 2,500 languages are in imminent

<sup>&</sup>lt;sup>6</sup> Bridging Scales and Epistemologies in Swedish Nature Conservation – Some challenges and lessons learned; Malin Almstedt and Marie Byström, Swedish Biodiversity Programme; Stockholm, (MA 2004).

<sup>&</sup>lt;sup>7</sup> Note of the understanding of the term "indigenous peoples" from the Martinez Cobo Study (UN Study on Indigenous Populations, U.N. Sales No. E.86.XIV.3): "Indigenous communities, peoples and nations are those which, having a historical continuity with pre-invasion and pre-colonial societies that developed on their territories, consider themselves distinct from other sectors of the societies now prevailing on those territories, or parts of them.

danger of disappearing, along with the biodiversity and ecosystems management associated with this knowledge. The respect for cultural diversity and indigenous cultures in particular does not mean to establish an unchanging deposit that just needs preserving, but it is a prerequisite base for a continuous, unifying dialogue between all expressions of identity.<sup>8</sup>

23. As mentioned above, in this context though one cannot interpret cultural diversity as entirely pertaining to and concerning only local, indigenous and traditional cultures and groups but must be understood and recognised as a dynamic source of exchange, creativity and innovation in any culture anywhere in the whole world, including the industrialised world and the developing countries. In the context of globalisation, which is not a new phenomenon as various waves of economic, political and cultural globalisation have washed over the planet, one has also to recognise globalisation as a non-linear process of mixing global and local elements that are also generating new cultural forms and causing cultural change.

24. Unsustainable consumption and production patterns, the introduction of alien species, increasing production of waste and pollutants, urban development, international conflicts and continuing inequities in the distribution of wealth and resources have caused a considerable impact on our natural environment. The repercussions of this have been felt not only on the environment, but also on many social and cultural systems. This has generated conflict, threatening the stability of many regions around the planet, widening the poverty gap and reducing the range of solutions that a healthy environment based on functioning and resilient ecosystems as well as human diversity with its associated knowledge, its adaptability and complex capacities can provide for sustainable development. If we allow languages and cultures to die, we directly reduce the sum of our knowledge about the environment and the various and many benefits that humankind can derive from it.

25. The growth and spread of cities are the most significant cultural changes over the last century, and present another challenge in relation to cultural diversity and the environment. It is within megacities that most intercultural interchange happens; this also where production and consumption patterns have a direct influence on the local, regional and global environment. Urban consumerist lifestyles, the pollution, waste and patterns of production and consumption, have a direct impact on natural resources, biodiversity, atmosphere and freshwater supply, and can negatively impact on environment and other cultures often hundreds of kilometers away.

26. The role of faith in promoting responsible behavior, maintaining an ethical milieu, encouraging a self-discipline that overcomes the urge for instant gratification without responsibility and self-interest for the sake of some long-term and comprehensive benefit for humanity and the environment, cannot and should not be underestimated. The Millennium and Malmö Declarations and the WSSD Plan of Implementation, all mention the spiritual dimension and the need for a common ethical framework for sustainable development. Ethics is the foundation upon which societies build their codes of behavior between people, society and nature. In traditional indigenous cultures this code of ethics is embedded in their cosmovision and incorporates the interaction of culture with the environment on which they depend on. The question is how best to raise awareness of the crucial role of value systems and ethical principles, to ensure that they are fully integrated into and guide public policy, international relations, economic systems and individual behavior. Ethical values, such as justice, equality, solidarity, tolerance, protection of the environment and respect for human rights and diverse cultures, provide the very foundation for sustainable development. The challenge is how to define these ethics and values,

<sup>8</sup> "The goal of human rights-based sustainable development, a concept endorsed by the General Assembly, is particularly significant for indigenous peoples. It has been noted that the traditional approach to economic development, [...] has not yielded the desired results; social and cultural objectives must be included, as noted in the Human Development Report 2004. Failure to do so can lead to serious violations of the rights of indigenous peoples, as has been the case in the past. If the Millennium Development Goals are to be achieved, particular attention must be paid to the rights of indigenous peoples." (Report of the Special Rapporteur on the situation of human rights and fundamental freedoms of indigenous issues (A/59/258, para. 35).

They form at present non-dominant sectors of society and are determined to preserve, develop and transmit to future generations their ancestral territories, and their ethnic identity, as the basis of their continued existence as peoples, in accordance with their own cultural patterns, social institutions and legal systems. [...] On an individual basis, an indigenous person is one who belongs to these indigenous populations through self-identification as indigenous (group consciousness) and is recognized and accepted by these populations as one of its members (acceptable by the group). [...] This preserves for these communities the sovereign right and power to decide who belongs to them, without external interference."

and adapt them to the changing and emerging threats to environment and culture in the new millennium. Dignity, respect, tolerance and peace are the principal prerequisites for cultural diversity and environmental integrity. A dialogue is needed that prevents polarization, resolves the main concerns of globalization, sustainable development and the environment that we face today, and promotes respect and builds confidence amongst cultures<sup>9</sup>.

27. "If the world is to reach the Millennium Development Goals and ultimately eradicate poverty, it must first successfully confront the challenge of how to build inclusive, culturally diverse societies. Not just because doing so successfully is a precondition for countries to focus properly on other priorities of economic growth, health and education for all citizens, but also because allowing people full cultural expression is an important development end in itself. Human development is first and foremost about allowing people to lead the kind of life they choose – and providing them with the tools and opportunities to make those choices."<sup>10</sup> One important precondition in this context is a healthy environment that meets the basic needs of the people.

28. The challenge in the context of globalization is also to address the criticism and grievances of marginalized groups, like disaffected indigenous groups and minorities in many developing countries as well as new immigrants across the developed world in the era of globalization. Failing to do so, does not just create injustice, but it constructs real problems for the future such as an unemployed, disadvantaged youth that is angry at the status quo and demands change, often violently. But there are also real opportunities stemming from globalization. There is a vast potential of building a more peaceful, prosperous world by bringing issues of culture to the mainstream of development thinking and practice by complementing and strengthening each other. The flip side of the development divide is that developing countries are often able to draw on richer, more diverse cultural traditions – whether captured in language, art, music or other forms – than their wealthier counterparts in the North. The globalization of mass culture – from books to films to television – clearly poses some significant threats to traditional cultures. But it also opens up opportunities, from the narrow sense of disadvantaged groups like Australian Aborigines or Arctic Inuit tapping global art markets, to the broader one of creating more prosperous, peaceful, vibrant, creative, exciting societies.<sup>11</sup>

29. Sustainable development is a multi-faceted concept, especially in the era of globalization and any approach that only addresses biophysical impacts of the environment on man and vice versa, is incomplete. UNEP has recognized that the loss of biological diversity, weakening of cultural diversity and the poverty phenomenon, which have been dealt with separately, are in fact closely connected. Dealing with this requires a holistic and more comprehensive approach for action at all levels, including the respect for culturally diverse societies, as the latest HDR 2004 states precisely.

# A. Definitions and terminology

#### 1. Environment, ecosystems and biodiversity

30. The environmental perspective within the current context is taking into account an ecosystem approach, as it is presented within the CBD principles and determined within the Millennium Ecosystem Assessment (MA) which has adopted mountains, forests, drylands, marine areas, coasts, islands, water ecosystems, polar, cultivated and urban ecosystems as ecosystem categories. The ecosystem approach is an integrated procedure and recognises that humankind is an integral part of many different ecosystems and takes into consideration how human activities and human demand for ecosystem services such as food and clean water are growing, but human actions are at the same time diminishing the capabilities of many ecosystems to meet these demands. The ecosystem approach considers the complex range of goods and services derived from ecosystems and also integrates social and economic information about the ecosystem to fulfil these needs.

31. An ecosystem is a dynamic complex of plant, animal, and microorganism communities and the nonliving environment interacting as a functional unit. Humans are an integral part of ecosystems. Ecosystems vary enormously in size; a temporary pond in a tree hollow and an ocean basin can both be ecosystems. Ecosystem services are the benefits people obtain from ecosystems. These include

<sup>&</sup>lt;sup>9</sup> Cultural Diversity, Common Heritage, Plural Identities; UNESCO 2002.

<sup>&</sup>lt;sup>10</sup>;HDR; UNDP; 2004; p. V

<sup>&</sup>lt;sup>11</sup> Ibid.

provisioning services such as food and water; regulating services such as regulation of floods, drought, land degradation, and disease; supporting services such as soil formation and nutrient cycling; and cultural services such as recreational, spiritual, religious and other nonmaterial benefits (MA 2004).

32. In this context, biodiversity is fundamental to the survival and the well being of human kind. All our natural resources depend on one or another natural component. The CBD defines biological diversity as: "The variability among living organisms from all sources, including inter alia terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems."(CBD, Article 2, Use of terms). The "biological resources include genetic resources, organisms or parts thereof, populations, or any other biotic component of ecosystems with actual or potential use or value for humanity."(CBD, Article 2, use of terms). The World Summit on Sustainable Development (WSSD) Plan of Implementation states that biodiversity plays "a critical role in overall sustainable development and poverty eradication, [and] is essential [...] to the livelihood and cultural integrity of people".<sup>12</sup>

33. Biodiversity has an enormous value to human development in general, since it feeds the growth and development of human societies. It is also the basis of innumerable environmental services, from the provision of clean water to pollination.<sup>13</sup> Many rural communities live in direct dependence upon the biodiversity continued existence for their livelihood needs, such as food, fuel, shelter, transportation and medicine. The greatest range of biodiversity is held by some of the world's poorest countries. Those areas are being exploited by extraction of products or conversion of the land to other uses like intensive cropping in order to meet the country's development needs. This has provided cheaper food in greater quantity for urban dwellers, the loss of these areas has been to the detriment of those groups originally dependent upon them. As populations grow and consumption increases, the rate of biodiversity change and loss is faster and the ever more vulnerable areas are under pressure by continuous commercial interests and local inhabitants directly dependent from them for their survival. If harmful impacts on biodiversity are permitted and tolerated to continue in their severity, the poor are likely to be hit the hardest since they have fewest alternatives to fall back on. Whilst this is a critical consideration in the context of poverty reduction and human well-being, it is also indispensable to consider that no individual, community or nation will escape the potentially disastrous consequences of severe alteration to the world's biodiversity.

34. Biodiversity provides people with the opportunity to diversify their use of biological resources as well as with alternatives. It gives them an opportunity to choose, for example, when a crop fails due to drought, affected people have an option to find alternatives in an environment with high biological biodiversity. The diverse use of the biological resource base, coupled with specialization within the family or community allows for flexibility in times of stress and would be clearly impossible without access to biodiversity. Using various available natural resources in a sustainable manner not only in stress situations but also on a regular basis however requires also a wide range of knowledge. The knowledge skills associated with biodiversity use have to be carefully cultivated, practiced and transmitted from one generation to another in order to maintain the capability of benefiting from it. People who do not speak in their mother tongue have limited access to traditional and local knowledge and can be excluded from vital accumulated knowledge, their heritage and identity, information about subsistence, health, and sustainable use of natural resources, agriculture, religious and cultural practices.

## 2. Cultural diversity

35. Culture is defined "as the set of distinctive spiritual, material, intellectual and emotional features of society or a social group, and that it encompasses, in addition to art and literature, lifestyles, ways of living together, value systems, traditions and beliefs."<sup>14</sup> Cultural diversity is considered as a diversity which "encompasses all communities in the world, each of them with their own identity determined by

<sup>&</sup>lt;sup>12</sup> The World Summit on Sustainable Development (WSSD) Plan of Implementation; (IV.42; p.21); Advance unedited text, 4 September 2002.

<sup>&</sup>lt;sup>13</sup> Diversity not adversity; Koziell, I.; IIED, DFID, 2001; p. 6ff.

<sup>&</sup>lt;sup>14</sup> UNESCO Universal Declaration on Cultural Diversity; Cultural Diversity Series No. 1; Stenou, K. (ed.); UNESCO; Paris, France; 2002.

ethnicity, history, language, religion and art."<sup>15</sup> Culture is formed through social and ecological circumstances in which different human groups develop over time. The specific relationships each group establishes among its members and with other people around, as well as with their surrounding, lead to different and historically changing ways of defining, understanding and interpreting the world through language.

36. There is further a remarkable overlap between the world's linguistic and biological diversity<sup>16</sup> and in addition languages are today acknowledged as the bond between sustainable traditions, belief systems and natural resource management and nature.

37. As Luisa Maffi states, "initially the language(s) we learn give us the categories to conceive our natural and social world. If an object, process or relationship has been important in the life of our people, it gets named, and by learning that word we also learn what is vital for us to know in our natural and social environment."<sup>17</sup>

38. The concept of cultural diversity is tied to an anthropological notion of culture. As social beings, 'culture' is the invisible and taken for granted matrix of norms, values, relations and interactions through which we live our day-to day lives. Accordingly, each individual, as a member of society, is part and parcel of the cultural diversity that constitutes the world. It is important to emphasise that 'culture' as defined here embraces all aspects of society.

39. In conclusion it is vital to recognise that not only do we live in a world of great cultural diversity but that every society, every culture, has the right to be different. With respect to the cultural diversity and environment theme, this includes the right to different values, relations and uses of the natural environment. <sup>18</sup> UNESCO acknowledges in their Universal Declaration on Cultural Diversity that "cultural rights are an integral part of human rights, which are universal, indivisible and interdependent."<sup>19</sup>

40. Some remarks have to be made in regarding the term of "Traditional Knowledge" (TK). The CBD convention text itself uses the term "knowledge and relevant practices of traditional communities" for "Traditional Knowledge". But this is also a problematic term as it suggests that the body of knowledge concerned, being 'traditional', is something of the past, is immutable and passed on from generation to generation with little or no change. The knowledge concerned (also referred to as indigenous or local knowledge) is clearly contemporary, and beyond that it is also dynamic subject to a continuous cultural process of adaptation and development and therefore constantly evolving through experimentation and innovation, fresh insight and external stimuli. There was a common understanding between UNEP and UNESCO that within the present context any definition of Traditional Knowledge will reflect its contemporary and dynamic nature. Therefore the term local and indigenous knowledge might be more appropriate.

41. In many regions of the world local knowledge and practices, relevant to the conservation and sustainable use of biological resources, have ceased as a result of for example the loss of land or of national programs for modernization and resettlement. Indigenous and tribal peoples possess knowledge over the local environment and the sustainable use of natural resources embedded in their spiritual and cultural beliefs. Conservationists from outside are often lacking such knowledge. For the successful conservation of biological diversity it is thus necessary to promote and revitalize traditional knowledge of natural resources.

<sup>&</sup>lt;sup>15</sup> "Cultural Diversity and Biodiversity for Sustainable Development – a jointly convened UNESCO and UNEP high-level Roundtable held on 3 September 2002 in Johannesburg, South-Africa during the World Summit on Sustainable Development"; UNEP; 2003, Nairobi.

<sup>&</sup>lt;sup>16</sup> "Linguistic Diversity"; Maffi, L.; in *Cultural and Spiritual Values of Biodiversity*; Posey, D. A. (ed.); UNEP; 1999; Nairobi; p. 26.

<sup>&</sup>lt;sup>17</sup> "Linguistic Diversity"; Maffi, L.; in "Cultural and Spiritual Values of Biodiversity"; Posey, D.A. (editor); UNEP; 1999; Nairobi, Kenya; p. 21

<sup>&</sup>lt;sup>18</sup> UNESCO, definition as discussed during the 2nd consultative meeting in November 2003, Nairobi and as agreed upon in the meeting report.

<sup>&</sup>lt;sup>19</sup> UNESCO Universal Declaration on Cultural Diversity; Cultural Diversity Series No. 1; Stenou, K. (ed.); UNESCO; 2002; Paris, France

42. The continued maintenance and application of traditional knowledge, innovations and practices is the core for successful long-term conservation of biodiversity. It is critical to understand that cultural traditions and belief systems are not static and therefore it is not necessary to 'preserve' them from changes but to integrate them as a distinct, dynamic part of the world's cultural heritage. The most successful cultural mechanisms for natural resource management in the world were dynamic, creative and innovative. They were continually adapting to the changing social, economic, environmental and political conditions around them.<sup>20</sup>

43. The preservation of traditional knowledge and the promotion of cultural diversity are in this case connected with a willingness of the modern approach to accept the differences of other conservation practices. This approach acknowledges that the "older cultural mechanisms for natural resource management are not exotic institutions or idealizations of the past."<sup>21</sup> It is also clear that this way is one emerging conflict as institutions, organizations, communities and peoples have to learn to accept the differences between the distinct cultures and to respect each other without imposing one culture on the other and to remain proud of the own culture.

44. In response to lessons from previous international assessments and in recognition of unique features of an ecosystem assessment that are unlike previous global assessments of climate and ozone, the Millennium Ecosystem Assessment was designed as a multi-scale assessment and has established mechanisms to incorporate information and knowledge from non-peer-reviewed sources including local and traditional knowledge.

#### 3. Human well-being

45. Human well-being has multiple constituents, including basic material for a good life, freedom and choice, health, good social relations, and security. Well-being is at the opposite end of a continuum from poverty, which has been defined as a "pronounced deprivation in well-being." The constituents of well-being, as experienced and perceived by people, are situation-dependent, reflecting local geography, culture, and ecological circumstances. Human well-being and progress toward sustainable development are vitally dependent upon improving the management of Earth's ecosystems to ensure their conservation and sustainable use as stated by the Millennium Ecosystem Assessment (MA). The MA further states in its summary that: "Humanity has always depended on the services provided by the biosphere and its ecosystems. Further, the biosphere is itself the product of life on Earth. The composition of the atmosphere and soil, the cycling of elements through air and waterways, and many other ecological assets are all the result of living processes – and all are maintained and replenished by living ecosystems. The human species, while buffered against environmental immediacies by culture and technology, is ultimately fully dependent on the flow of ecosystem services."

46. Ecosystem services are the benefits people obtain from ecosystems. These include provisioning, regulating, and cultural services, which directly affect people, and supporting services needed to maintain the other services. Changes in these services affect human well-being through impacts on security, the basic material for a good life, health, and social and cultural relations. These constituents of well-being are, in turn, influenced by and have an influence on the freedoms and choices available to people.

47. The knowledge of plants and their spiritual and medicinal modalities were an essential part of traditional health systems and therein lays the deep connection with the surrounding environment. Indigenous Peoples possessed and in many parts of the world still do- an incredible knowledge over the plants and their medicinal value and use. Furthermore, they have cultivated an immense variety of medicinal plants in their surroundings and thus promoted biodiversity. In addition to the loss of the cultural background for such health systems, indigenous health practices have been condemned up to now as primitive and inefficient.

<sup>&</sup>lt;sup>20</sup> Cultural Mechanisms for Natural Resource Conservation and Management in Asian Mountain Ecosystems: Cultures Conflicting, Mediating and Adapting With Selected Case Studies and Analysis; Messerschmidt, D.; Asia High Summit 2002; Kathmandu;

source: http://cbik.org/Sources/asia\_high\_summit\_2002.pdf [Dec. 2002]

<sup>&</sup>lt;sup>21</sup> Cultural Mechanisms for Natural Resource Conservation and Management in Asian Mountain Ecosystems: Cultures Conflicting, Mediating and Adapting With Selected Case Studies and Analysis; Messerschmidt, D.; Asia High Summit 2002, Kathmandu; http://cbik.org/Sources/asia\_high\_summit\_2002.pdf [Dec. 2002]

48. A cultural and human perspective of the approach will aim to strengthen a better understanding of the linkages and impacts of different cultures on their environment and more specifically on the ecosystems in which they live and on which they depend not only economically but also socially with all their cultural dimensions and expressions.

# **B.** Types of enduring relationships between environment and cultural diversity<sup>22</sup>

49. Inter-relationships between environment/biodiversity and cultural diversity or human society are part and parcel of all cultures, even though the nature, form and intimacy of these inter-relationships may vary considerably.

50. City dwellers, for example, living in largely artificial, man-made environments, might be considered quite remote from biodiversity. Yet they rely daily on a wide array of natural resources for food, clothing, building materials, energy, water, etc. Admittedly, several layers of intermediaries intervene between the individual who consumes and the environment where goods are grown and produced. The relationship to the natural world of small-scale farmers, artisanal fishers or huntergatherer peoples, who fulfill the major part of their needs by exploiting directly their natural surrounding, is clearly quite different from that of urban populations. But despite these differences, the essential fact remains that all societies and all cultural groups interact in one way or another with biodiversity and the natural environment.

51. The theme of the interdependence of environment and cultural diversity draws attention to this incredible range of human relationships with nature. On the one hand, it is through cultural practices that a significant part of the world's biodiversity is created and maintained, both domestic and wild, and from the level of genes, species and ecosystems to entire landscapes. On the other hand, cultural diversity relies in its turn upon key elements and events in the natural world to maintain entire assemblages of social, cultural, economic and political expression. Following are the areas of interdependence of both, environment and cultural diversity:

## 1. Language and linguistic diversity

- Language (e.g. terms, concepts and categories relating to nature)
- Linguistic diversity (the relation of linguistic diversity to biological diversity)

# 2. Material culture

• Material culture (e.g. objects created from and/or representing biodiversity, including those reflecting spiritual and religious beliefs and aspirations, and the arts)

# 3. Knowledge and technology

- Technology and techniques (e.g. practice & processes relating to the use of natural materials)
- Traditional and local knowledge (e.g. about places, resources, ecological relations; early warning systems, risk management and coping with natural disasters, traditional medicine)
- Transmission of knowledge and skills from one generation to the other (e.g. formal and informal education)
- Mechanisms for the revitalization of traditional knowledge
- Mechanisms for the adaptation of new knowledge and technology, technology transfer

# 4. Modes of subsistence

- Natural resource use, resource-based livelihoods and resource management (e.g. agriculture, industrial agriculture, horticulture, agroforestry, pastoralism, fishing, hunting, nomadic practices and shifting cultivation)
- Land/sea use and management (e.g. indigenous landscape management using fire, customary marine tenure systems)
- Plant/animal domestication and selective breeding (e.g. creation and maintenance of genetic diversity plant/animal varieties, local and traditional knowledge relating to

<sup>&</sup>lt;sup>22</sup> Developed in the context of a consultative meeting with UNESCO.

the maintenance of genetic diversity, such as wine and cheese varieties in Europe; or potato, corn and rice varieties.)

• Supplementing economic/subsistence activities with significant economic and/or social contribution (e.g. hunting, fishing, berry and mushroom picking in Europe)

### 5. Economic relations

- Economic relations (e.g. partnerships based on trading natural resources, often across ecological boundaries)
- Management of common property resources

#### 6. Social relations

- Attachment to place (e.g. cultural identity inscribed in natural places, such as national parks or sacred sites)
- Social relations (e.g. genealogy maintained through resource sharing, social roles relating to differential resource use)
- Gender (e.g. gender and biodiversity management/loss, "wild food" gathering, medicinal plants, gender specific environmental knowledge)
- Political relations (e.g. control over differential resource access)
- Legal institutions (e.g. customary law governing resource/land access, as well as contemporary/national legislation and legal aspects of conventions)

# 7. Belief systems

- Rites and rituals (e.g. those celebrating seasonal events and marking rites of passage such as first animal killed or first seed planted etc.)
- Sacred sites (e.g. the conservation of sacred forests)
- Mythology, worldview, cosmology and spirituality (e.g. representations of humannature relationships, symbolic acts to maintain cosmological order)
- Constructing identity with/through the natural world (e.g. totemism, nagualism, tonalism etc.)

52. In order to understand the links between these exemplatory enduring relationships it is important to ask the right questions about the links between environment, cultural diversity and human wellbeing. Main lessons learnt in best practices examples can help to formulate guidelines that can assist decisions makers in improving human well-being outcomes through the sustainable management of the environment using local knowledge experiences in the relevant context.

## C. State of work in the international context

53. At an institutional level UN agencies and Convention Secretariats have developed a series of initiatives in relation to the different Conventions and Declarations on indigenous people, cultural diversity and biodiversity, as a result of the effort to develop adequately their mandates and programmes. International debate on cultural diversity is recent and has been focused mainly on indigenous peoples and human rights. The International Labor Organization (ILO), Convention No. 107 (revised by no. 169, 1989) was the first effort in international law instruments securing indigenous peoples' rights in land, labor, health and education and integrates indigenous communities' concerns about culture, traditions and customs in farming and sustainability.

54. Indigenous peoples and biodiversity linkages were addressed for the first time in the Rio Declaration and Agenda 21, and further developed in the Convention on Biological Diversity (CBD) especially within Article 8(j). Issues around cultural diversity were specifically taken into account in the Malmö and Millennium Declarations, the proclamation of the United Nations (UN) Year of Dialogue among Civilizations and the United Nations Education and Scientific Organization (UNESCO) Declaration on Cultural Diversity. In its introduction, the World Summit on Sustainable Development (WSSD) Plan of Implementation included, that respect for cultural diversity is essential for achieving sustainable development.

55. Particular reference should be made to Draft United Nations Declaration on the Rights of Indigenous Peoples, E/CN.4/Sub.2/1994/2/Add.1 (1994) which affirms that all peoples contribute to the diversity and richness of civilizations and cultures, which constitute the common heritage of

humankind. Furthermore it states that there is a need to respect and promote the inherent rights and characteristics of indigenous peoples, especially their rights to their lands, territories and resources, which derive from their political, economic and social structures and from their cultures, spiritual traditions, histories and philosophies. It reiterates that respect for indigenous knowledge, cultures and traditional practices contribute to sustainable and equitable development and proper management of the environment.

56. Special mention should also be given to the Convention on Biological Diversity (CBD) adopted in June 1992 at the Rio Summit and enter into force in December 1993, an international instrument, almost universally ratified by UN Member States, contains several articles that affect indigenous peoples, with direct mention in Articles 10(c) and 8(j) that expressly recognizes inter-linkages that exist between traditional cultures, knowledge, innovations and practices and the conservation and sustainable use of biological diversity.

57. The 2000 Malmö Ministerial Declaration is an important conceptual bench mark not only referred to indigenous issues but because it is the first time the concept of cultural diversity is included in their postulates which includes not only environmental aspects, but in its preamble states that "success in combating environmental degradation is dependent on the full participation of all actors in society, an aware and educated population, respect for ethical and spiritual values and cultural diversity, and protection of indigenous knowledge." The Declaration, in its section on the private sector and the environment, points out that "the ethical and social implications must be carefully considered. There must be recognition of the public interest in knowledge related to biodiversity, including the interest of indigenous and local communities. A corporate ethic guided by public interest should be promoted." The Declaration also stresses, in its section on civil society and the environment, that special attention must be paid to "threats to cultural diversity and traditional knowledge, in particular of indigenous and local communities, which may be posed by globalization." As such, the Malmö Ministerial Declaration placed upon the importance of diversity in cultural and environmental dimensions.

58. In general terms, contacts with other international organizations were well received and discussion on the theme of cultural diversity and its inter-linkages with biodiversity for sustainable development has generated considerable interest and enabled the creation of a space for reflection on related themes. Many agencies recognize the importance of the theme and the need to look at in more depth. Similarly, there is general recognition of the way that cultural diversity and biodiversity have been dealt with in a separate way. There is consensus that the themes and debates relating to cultural diversity have been framed within the CBD discussions, and especially its article 8(j); and that cultural diversity is much broader as a theme, and should be seen as more than the inter-relationship between indigenous peoples and biodiversity. There is also a general recognition of the importance of addressing the theme of ethics, as a fundamental element in human behaviour in relation to their environment.

59. Programmes and projects implemented or supported by the different agencies have in general been associated with topics on cultural diversity and ecosystem diversity, but without challenging the interdependence of both. Many efforts have been concentrated on the agency's respective mandates, and it is only recently that the theme is being discussed and incorporated into internal discussions, and in some cases into programmes and projects, as well as in decisions taken by their directive bodies.

# D. Examples of current activities of selected programmes

60. The LINKS (Local and Indigenous Knowledge Systems) project within UNESCO is promoting local knowledge for sustainable resource use and biodiversity management. LINKS has developed field projects with the participation of UNESCO's five programme sectors as an example of interdisciplinary action. There is special emphasis on the importance of youth in maintaining the dynamism of traditional knowledge, and the need to reinforce its transmission from elders to youth. UNESCO's last General Conference, held in October 2003 further adopted the programme and budget for 2004-2005 for the **Main Line of Action (MLA) on "biodiversity and cultural diversity"**, which combines the activities of two different sectors within UNESCO, namely the Natural Science and Culture sectors. The aim of the MLA is to demonstrate that linkages and synergies between cultural and biological diversity are a key component of conservation and development. Member states will be assisted to put in place strategies for the conservation of cultural and biological diversity, thus responding to the objectives of the Seville Strategy for the Biosphere Reserves, UN Programmes of Action for Small Islands Developing States, the CBD and the MDG 1. 61. The composite report of the CBD (UNEP/CBD/WG8J/3/INF/1 + 3/4) on the status and trends regarding the knowledge, innovations and practices of indigenous and local communities relevant to the conservation and sustainable use of biodiversity is based on an expert consultancy, including a desk-study and regional consultations with relevant stakeholders. Relevant topics are the findings on the state of retention of traditional knowledge (TK) and the identification and assessment of measures and initiatives to protect, promote and facilitate the use of TK, such as:

- 1. The relationship between biological, cultural and linguistic diversity.
- 2. Identification of national processes that may threaten the maintenance, preservation and application of TK.
- 3. Identification of processes at the local community level that may threaten the maintenance, preservation and application of TK.
- 4. Trends regarding the recognition and implementation of article 8(j) and related provisions.
- 5. Conclusions: lessons learned and identifications of best practices for the maintenance, preservation and application of TK.

62. The composite report is a worldwide review of trends of traditional/indigenous knowledge and will hopefully promote a wider application of TK and also strengthen the capacity of indigenous peoples in decision-making processes, since some governments have already undertaken initiatives to establish the appropriate mechanisms. Examples from CBD and UNESCO give a good insight into initiatives undertaken by both partners.

63. **UNEP's Global Women's Assembly on Environment/WAVE (Women As the Voice for Environment)** convened in October 2004 for the first time in Nairobi, had a wide range of roundtables and working sessions, and a special session on local-global women's linkages on sustainable development. Indigenous women participants were invited to this assembly and ensured through their participation that their views and visions were taken into account and brought to the global agenda and included in the manifesto, the recommendations and concrete project proposals (see attachment No. 4 for the complete outcomes of WAVE 2004). UNEP is planning to organize and convene a WAVE meeting every two years, to which local and indigenous women's representatives will be invited to participate and contribute on a regular basis. The recommendations related to the environment and cultural diversity within the manifesto, the list of recommendations as well as concrete project proposals included the following:

64. The Manifesto carried the deep concerns about: The widespread violation of women's human rights, including their access to and ownership of essential resources, such as clean sustainable energy, water, land and biodiversity, and the increasing threat to defenders of women's human and environmental rights, as well as the criminalization of active dissent; the increasing marginalization and loss of cultural diversity and traditional values, as well as indigenous languages; the relentless appropriation of indigenous knowledge by outside actors (e.g. researchers, multinationals, governments) and the persistent denial of the rights of indigenous peoples, especially indigenous women's rights. UNEP and other international, regional and national organizations that deal with environment and sustainable development were urged to incorporate into its mandate issues linking cultural diversity, the environment and sustainable development, as well as the development of mechanisms for addressing indigenous women's concerns and their practical and strategic needs, within sustainable development processes. In addition, it was reiterated that UNEP needs to continue to strengthen the empowerment of women as a major group in the policy development and implementation of UNEP and the work of its Governing Council/Global Ministerial Environment Forum. The 140 participants at the WAVE Assembly developed ideas to be implemented by UNEP, in cooperation with other actors and in partnership with women's organizations. Proposed and future WAVE projects are presented in the chapter on short-term developments at the end of this report.

# E. Summary of exemplary relevant legal provisions from international, regional and national legal regimes

65. After reviewing international, regional, sub regional and national legislation, there appears to be a tendency to include cultural diversity and related aspects in recent international legal instruments. However, the practical relevance at this stage seems to be rather limited, since they not entered into force or provisions were drafted in a non-obligatory way. An analysis of interlinkages between environment and cultural diversity in legal frameworks is provided as annex 5.1 to this survey report.

# **III.** Conclusion

66. Of the 350 million indigenous people in the world, half live in tropical rain forests, which are known to harbour 80 per cent of our planet's biological diversity. Of the 12 mega-centres for biological diversity, 10 can be found among the 25 countries containing the largest number of endemic languages. Cultural and biological diversity are inextricably interrelated. Local knowledge is a pillar of traditional medicine and health systems. Up to 80 per cent of the non-industrial world's population rely on traditional forms of medicine, and many of the world's top-selling drugs are derived from natural sources. In international debates on biodiversity conservation, it is becoming clear that the link between cultural and biological diversity is often an inextricable one, and that it is necessary to think of preserving the world's biological and cultural diversity as an integrated goal.

67. Fostering this convergence of perspectives requires strengthening the links among various fields of research and applied work involved in diversity conservation:

- Experts from many different specialties must overcome disciplinary and other institutional and intellectual barriers that exist among themselves and the indigenous peoples, and work together to devise solutions on this complex issue;
- Both of these developments will require a profound re-thinking of approaches to teaching and training at all levels of education, and to promote intercommunication between the biological sciences, the social sciences and the humanities;
- It will be no less than essential to broadcast these views among the general public in order to gain support for research and action in this domain.

68. It will be necessary for the implementation of successful projects and for a more effective work within the UN, that UNEP increases its collaboration with other UN agencies such as UNESCO, FAO, UNDP and the WHO. The increased collaboration in the field of biodiversity will foster the effectiveness of each project and the global work of the United Nations, in integrating the scientific knowledge of the different experts (in health, education, agriculture, development, environment) in the evolution of projects and strategies.

69. One particular issue that arose during the informal discussions with other agencies has been the lack of inter-institutional coordination and the lack of coordination within the different organisations. In general the organisations are fragmented in such a way that in many cases experiences are repeated and efforts duplicated, and in other cases there are no clear procedures for inter-disciplinary and inter-institutional work. This is an area of great concern for many of the persons interviewed, who have shown their will for advancing new forms of cooperation. Without exception, all agreed on the importance of cooperation as one of the institutional imperatives in the new millennium, with entities maintaining their own mandate and identity.

70. Within the academic and scientific sectors, there is increasing consensus on the need for a holistic focus for the solution to problems. A theme that remains the focus of much debate is the relationship between scientific and traditional knowledge, an area that should be stimulated in the future. Finally, it is important to highlight that all those interviewed recognise the existing vulnerability due to the loss of all forms of diversity, especially cultural, biological and food diversity, and the threats to the future well being of humanity and its societies if current trends continue. There are many diagnostics that show this vulnerability, but which should be compiled and distributed in an effective way so as to raise awareness, call attention and contribute to the debates and policy-definition in the different international, regional and local fora.

71. Throughout the discussions, there has been a very favourable disposition towards interinstitutional cooperation for a shared initiative, which would enable the different partners to develop their capacities and strengthen their mandates, in the midst of globalisation processes. The theme of environment and cultural diversity is relatively new and innovative, as is the approach from agriculture. For this reason it requires yet further analysis and the exchange of ideas between people, groups and entities that have delved into the theme, in order to advance in the conformation of a solid foundation for documented justification that can be translated into policies and concrete actions.

# IV. Possible developments and a way ahead

# A. Possible short-term developments

72. The following activities are linked to the broader theme of environment and cultural diversity and will as a result give insights on environmental, cultural and social impact assessments in natural areas, gender and cultural perceptions on environment, indigenous and local knowledge in relation to environmental protection and in the context of environmental education making special reference to health and environment linkages.

# 1. Implementing the recommendations to UNEP as stated by the Permanent Forum on Indigenous Issues at its second (E/2003/43,E/C.19/2003/22) and third (E/2004/43, E/C.19/2004/23) session, which include:

- To integrate the human rights, and special concerns and needs of indigenous women into UNEP programmes and policies and report regularly to the Forum.
- Adopt positive measures to address indigenous education issues, in environmental education. Research should be undertaken and best practices and knowledge should be promoted throughout the UN system and to all Member States. UNEP should focus on local and indigenous environmental education and publish regional relevant guidebooks in close collaboration with the Regions and their offices.
- Mainstream indigenous gender issues and knowledge in national environmental policies and programmes, recognizing the unique contributions made by indigenous women in terms of possessing and transmitting through the generations a wealth of knowledge on the conservation of biodiversity and sustainable development.
- To support indigenous peoples' organizations in order to develop capacity on research, work and proposals on human indicators applicable to the implementation of the environmental conventions and the plans and programmes of work of the CBD.

# 2. Health and environment linkages

73. As proposed in the UNEP Programme of Work 2006-2007, capacity enhancing workshops on Health and Environment Linkages for experts in environment and health will contribute to different perspectives and understandings of human well-being. Furthermore educational and promotional material on environment and health linkages with special attention to children and women to promote environmental health education at all levels and in all the regions are planned. These planned activities will give the possibility to include indigenous children and women's particular vulnerable exposure on health matters. Thus, today many areas throughout the world are in danger of losing their medicinal plant biodiversity. The recognition of the medicinal knowledge of indigenous Peoples and the support and revitalization of their traditional health systems will improve their health on one side and promote the preservation of biodiversity on the other. The promotion of formal and informal education systems is also one important step to promote the sustainable use of natural resources in combining traditional ecological knowledge, spiritual beliefs, cultural bounds and traditional values with modern knowledge and requirements to achieve human well being and health in particular.

### 3. Possible developments based on the WAVE assembly outcomes

• UNEP should work with the Office of the High Commissioner for Human Rights (OHCHR) and other relevant UN agencies to ensure that special mandates, including the thematic social rapporteurs on the highest attainable standards of physical and mental health, the right to food, the human rights and fundamental freedoms of indigenous peoples, and others, receive training and technical assistance on the intersections between environment, women's rights, health and sustainable development.

- [...] Educational systems must incorporate traditional, indigenous and alternative values and knowledge; best practices and inculcate respect for other paradigms and knowledge bearers.
- [...] Environmental and sustainable development education should be undertaken across science, social sciences and professional disciplines (law, medicine, accounting, engineering), promoting cultural respect and non-violence attitudes, as well as practical skills and multi-disciplinary problem solving.
- Indigenous peoples' rights must be recognized at the local, national and global levels. UNEP, with the full and effective participation of indigenous peoples, should develop guidelines for the participation of indigenous peoples, particularly indigenous women, in environmental policy development and implementation.
- Concrete, accessible mechanisms must be developed to ensure recognition and realization of the collective ownership of traditional and indigenous knowledge, innovations, practices and products, as well as natural resources, and to protect the intellectual property rights of indigenous peoples.
- Women's political empowerment, leadership and capacity building, as well as information dissemination among indigenous women, should be guaranteed, in order to enable an effective participation in the decision-making process related to the environment and sustainable development at all levels.
- UNEP should endorse the outcomes of the Permanent Forum on Indigenous Issues and take action on the specific recommendations made to all United Nations agencies and governments as previously mentioned under point 4.1.1.

Concrete projects were also forwarded for UNEP's attention and implementation:

- A project, in partnership with other organizations, such as the International Labor Organization (ILO), the International Centre for Integrated Mountain Development (ICIMOD), the International Fund for Agricultural Development (IFAD), the Global Environment Facility (GEF), the Global Resource Information Database (GRID)-Arendal, and local women's groups, on the restoration of ecological balances and sustainable increase in biomass production and monitoring the effects on local women and girls with regard to their health, income and workload.
- A pilot project, in liaison with other United Nations agencies and local groups, on women and health in an area where women exclusively use natural products and indigenous knowledge. Such a project should mainstream gender at all levels and monitor health and environment indicators throughout the project.
- A policy/research project that highlights how much indigenous and local women depend on the natural environment in rural areas and how environmental degradation contributes to women's impoverishment in all fields (social, cultural, political, economic). The project can assess the role of cultural diversity in allowing, or preventing access to, control and sustainable use of natural resources by indigenous women.

## 4. Organization of a workshop on cultural, environmental and social impact assessments

74. As requested by the Permanent Forum on Indigenous Issues (PFII) to the CBD in coordination with the World Bank, UNDP, FAO, IFAD and UNEP. The Akwé: Kon Voluntary Guidelines - as adopted by the CBD-COP in February 2004, 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" are an important instrument and will provide guidance to Parties and Governments on the incorporation of cultural, environmental and social considerations of indigenous and local communities into new or existing impact-assessment procedures. This workshop is aimed at further strengthening the understanding between cultural diversity and the environment. Sacred sites accumulate the local knowledge and cultural values of many communities. In addition, sacred sites are often located within important natural areas with significance for biodiversity conservation. The protection of the sacred sites by indigenous peoples can make a substantial contribution to biodiversity protection. Sacred sites also provide an opportunity to establish environmental and social monitoring by the local community. A close collaboration with different divisions and regional offices, including GRID-Arendal will be initiated on this project.

# 5. Organizing and implementing a regional workshop on ethics, customs and traditions on environmental protection with a view to integrating the cultural and spiritual dimensions, as well as traditional (ethic) knowledge in development of environmental policy and law.

75. The workshop will also look into the various socio-cultural dimensions of environmental protection at the grass-root and community level. This workshop has the strong support of the Hans-Seidel Foundation in Singapore and will be implemented in cooperation with UNEP's Regional Office for Asia and the Pacific (ROAP).

# B. Long-term possible developments

76. Based on the results of the current study a deeper analysis in form of a comprehensive desk study in collaboration with other agencies, in particular with UNESCO and the CBD could be envisaged to highlight concrete implementable steps to demonstrate the interlinkages between environment and cultural diversity to achieve human well-being. This analysis would include consultations with the greatest possible number of interested groups and entities, including indigenous peoples' organisations at the local, sub regional and regional levels, through consultations whereby initiatives in progress could be identified, along with practical experiences and the multiple interpretations and approaches to the theme.

77. Given the extraordinary geographic and ecosystem diversity in which the experiences and environmental and cultural practices are framed within the present proposal, a regional approach would enable a better understanding of the complexity in the diversity of relations between the environment and cultural diversity, as well as the identification of best practices, initiatives in progress and possible future developments. This insight would be made available through the organization of regional consultative workshops involving relevant stakeholders, like academia, experts, civil society and indigenous peoples' organizations in the regions and could be organized by UNEP's Regional offices with the support of relevant UNESCO Field offices.

- 78. In summary, the following procedures could be employed to undertake the analysis:
  - To undertake a review of the interlinkages of cultural diversity and the environment and their effects on human well-being through a desk study, which includes an overview of the main theoretical approaches in the academic discourse on the topic. The desk study will also include a review on the practical work being carried out on the topic of environment and cultural diversity in the different regions;
  - A questionnaire will be sent out to relevant networks covering institutions and organizations related to the topic on environment and cultural diversity;
  - Regional consultative workshops will be organized and held in all the six UNEP regional offices, during which the questionnaires' results and answers among the invited experts will be discussed as well as best practices examples presented.

79. The analysis will culminate in a final report that will take into consideration the results of the desk study, the evaluation of the questionnaire, as well as the outcomes of the regional consultations. Interactive consultations with the consultants, the Regional offices, the involved stakeholders and the steering committee of UNEP and UNESCO will serve as a basis to develop the final report including its recommendations for future developments in this area. This report will include following: Presentation of current concepts and theoretical approaches to the topic; Identified exemplary illustrations and success stories in projects and initiatives at the local, national, sub-regional, regional and global level, which have employed an approach of environmental and cultural diversity and highlight practical experience; Identified difficulties encountered within these projects to implement and maintain the approach; Analysis of existing programmes and identification of areas that need further development; Identified policy trends at international and national level; Identified potential future initiatives that enable an active inter-institutional cooperation and the participation of different non-governmental, civil society and indigenous peoples' organizations. A careful legal analysis that goes beyond the Multilateral Environmental Agreements and Environmental Agreements is necessary in order to interpret the spaces and opportunities provided by other agencies, which have an impact on the themes of cultural diversity, biodiversity and agriculture.

80. The links between the environment, cultural diversity and human well-being are very rarely acknowledged and the potential for capturing the synergies between the three in achieving sustainable development could therefore be multiplied exponentially. Moreover, integrating the responses for capturing these synergies within development projects related to environmental protection and poverty reduction would be beneficial and cost effective. Most developing countries have some form of a national development plan and more recently poverty reduction programs. However, there has been little effort to integrate the cultural aspects and relevant local knowledge into these broader national development plans or poverty reduction strategies. Although there is a growing acknowledgement on the linkages between environment and cultural diversity, there is no guidance available how to link environment and cultural aspects conditions to human well-being (i.e. health and poverty reduction) outcomes and which analysis to undertake which will best address environment and culture links and how to do this in a systematic manner.

It is important to promote an exchange of experience on the ways in which different cultures have integrated the environmental dimension of the relation between culture and development. This must emphasise re-evaluating how environmental degradation has contributed to the disappearance and collapse of past civilisations. Civilisations have disappeared as a result of military conflict, foreign invasion or domination, but also from patterns of anthropogenic environmental degradation. Various civilisations have caused erosion, deforestation, salinization of arable lands and desertification similar to that generated by modern agricultural practices. Human history also reveals the existence of culturally integrated environmental ethics that served to minimise the impact of humans on the environment.

Further in acknowledging that local cultures and indigenous natural resource management systems have been adapting to changes – it is important to work dynamically with Indigenous Peoples to manage natural resources. That means that conservation policy has to reflect the reality of the politics and socioeconomic needs of the contemporary world. The recognition of the dynamic character of traditional knowledge and practices, as to integrate the needs of the Indigenous Peoples surrounded by a western dominated world, and most important the willingness of non-indigenous organizations to rethink their institutions and conservation approach will be the challenge of a successful conservation policy.

Learning from cultures whose values are rooted in nature may help make sustainable development a reality. To realize such a vision, we must learn more about the sustainable environmental practices of indigenous peoples and, most important, to step up international efforts aimed at preserving and maintaining this unique wealth of mankind also through supporting the UN-PFII.

# V. Annex I: legal analysis of interlinkages between environment and cultural diversity

81. As part of a survey to implement GC 22/16, UNEP has conducted a preliminary study of international, regional, subregional and national legal regimes, with a view to identifying whether, and in what context, "environment" and "cultural diversity" are referred to, and to draw initial conclusions on the interlinkages between these two concepts. The results of the study indicate that various international, regional and national legal regimes recognize and promote the interlinkages between cultural diversity and environment, although in most cases, in an indirect way.

82. It can be observed that such interlinkages are generally taken into account when the protection of cultural diversity and related aspects are instrumental to the protection of the environment (e.g. in the Convention on Biological Diversity (1992) (*CBD*)), and, to a lesser extent, vice versa. Furthermore, most of the legal instruments, which refer to aspects of both cultural diversity and the environment, are primarily concerned with the environment or trade.

83. While "environment" and "culture" are defined in a number of legal instruments, cultural diversity has not been defined. The UNESCO Universal Declaration on Cultural Diversity adopted by the UNESCO General Conference on 2 November 2001 refers to certain aspects of cultural diversity but does not include a definition of this term.

84. It appears from the study that debate on cultural diversity at a national level is reflected in the international *fora*, particularly because of the participation and contribution of NGOs in the negotiation of international agreements. An example of this was the negotiation of the CBD, which focused *inter alia* on the recognition of local communities' rights in relation to biodiversity resources. In this case,

the focus on protection of the environment was instrumental to the recognition of cultural diversity and social issues more generally. Accordingly, the promotion of cultural diversity may be a consequence of a more general recognition of social rights. For instance, through the protection of local communities and indigenous peoples the CBD indirectly promotes cultural diversity, although this was not necessarily the original objective of proponents supporting the rights of local communities.

### A. Environment-related legal instruments

85. Cultural diversity aspects can be found in two major multilateral environmental agreements: The CBD and the FAO Treaty on plant genetic resources for food and agriculture (*TPGRFA*). At the regional level, the revised African Convention on the Conservation of Nature and Natural Resources and the decisions adopted under the Andean Community Treaty also offer relevant and illustrative examples.

#### 1. Inter-linkages between environment and cultural diversity at the global level

# (a) Cultural Diversity and related concepts in the CBD: Indigenous and local communities' rights on biodiversity

86. The major international legally binding instrument protecting traditional knowledge is the CBD. The CBD protects traditional knowledge that applies to environmental conservation and recognizes ownership rights to the holders of such knowledge.

87. The CBD recognizes the close dependence of many indigenous communities on biological resources and the desirability of sharing the benefits that come from using traditional knowledge, innovations and practices to conserve biological diversity, including species diversity.

88. The CBD 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 CBD 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.

89. The CBD does not use the term "indigenous peoples", but refers to them in terms of "indigenous and local communities embodying traditional lifestyles". This phrase is interpreted to include the estimated 1.5 to 2 billion people around the world who have not adopted industrialized practices to exploit agricultural, forest, animal and fisheries resources.

90. Article 10, which deals with the sustainable use of components of biological diversity, requires that each Contracting Party protects and encourages the use of biological resources in accordance with traditional cultural practices that are compatible with conservation and sustainable use requirements. This Article has important implications for cultural survival, since particular species form the spiritual and economic focus of many indigenous cultures. The continued customary use of such species is therefore essential to the existence of such cultures.

91. At its fifth meeting in Nairobi, Kenya, in May 2000, the COP recognized that maintaining knowledge, innovations and practices of indigenous and local communities is dependent on maintaining cultural identities and the material base that sustains them. The COP invited Parties and Governments to take measures to promote the conservation and maintenance of such identities (Decision V/16, para. 16).

92. Article 17, concerning exchange of information relevant to the conservation and sustainable use of biological diversity, requires that such information includes indigenous and traditional knowledge, and, when feasible, repatriation of information. This has important consequences for those indigenous communities seeking to retrieve valuable information collected decades, if not centuries ago by museums and research institutions about their traditional knowledge and practices concerning their use

of plants and animals. Such information can be used to fill gaps in current knowledge, or even help revive certain traditional practices related to particular species.

93. Article 18 seeks cooperation for the development and use of technologies, including indigenous and traditional technologies. The COP recognizes that traditional knowledge should be given the same respect as any other form of knowledge in the implementation of the CBD, and therefore should be considered to be as useful and necessary as other forms of knowledge, including scientific knowledge.

#### (i) COP decisions relevant to indigenous peoples

94. Since the CBD entered into force, the COP has made a number of decisions on the implementation of Article 8 (j) and its related provisions:

*Decision III/14:* The decision set the stage for the establishment of an inter-sessional process, which included a five-day workshop on Traditional Knowledge and Biological Diversity, which took place in Madrid in November 1997 (the Madrid Workshop).

*Decision III/17*: The COP decided that the traditional knowledge, innovations and practices of indigenous and local communities must be protected in implementing the CBD, and should be considered in relation to other agreements, such as the World Trade Organization's Agreement on Trade-related Aspects of Intellectual Property (*TRIPs*).

*Decision IV/9:* This decision led to the establishment of the ad hoc open-ended inter-sessional working group on Article 8(j), and an invitation to submit case studies.

#### (ii) Ad Hoc Open-ended Intersessional Working Group on Article 8 (j)

- 95. The mandate of the Working Group includes:
  - Providing advice on the application of legal and other appropriate forms of protection for traditional knowledge;
  - Providing advice to the COP related to the implementation of Article 8(j) and related provisions, especially on the development and implementation of a programme of work at national and international levels;
  - Developing a programme of work; and
  - Providing advice to the COP on measures to strengthen cooperation at the international level among indigenous and local communities, and suggesting ways to strengthen the mechanisms that support such cooperation.

#### (iii) Funding through the Global Environment Facility

96. By ratifying the CBD, developed countries are committed to providing financial resources to ensure that developing countries can implement the CBD. This funding, which can be made through bilateral, regional or multilateral donations, is channeled through the Global Environment Facility (GEF), which operates the financial mechanism of the CBD. The COP requested that the GEF finances projects that strengthen the involvement of local and indigenous peoples in conserving biological diversity and in maintaining the sustainable use of its components, and supports the priority activities identified in the programme of work on Article 8(j) and related provisions.

## (b) Cultural Diversity and related concepts in the FAO TPGRFA: The Farmer's rights

97. The Treaty is aimed at guaranteeing food security through the conservation, exchange and sustainable use of the world's plant genetic resources. The Treaty recognizes the important contribution that farmers and their communities have made and continue to make to the conservation and development of plant genetic resources. This is the basis for Farmer's rights, which include the protection of traditional knowledge, and the right to participate equitably in benefit-sharing and in national decision-making about plant genetic resources; the treaty gives the Government the responsibility for implementing these rights.

98. Article 9 – Farmers' Rights:

9.1 The Contracting Parties recognize the enormous contribution that the local and indigenous communities and farmers of all regions of the world, particularly those in the centers of origin and crop diversity, have made and will continue to make for the conservation and development of plant genetic resources which constitute the basis of food and agriculture production throughout the world.

9.2 The Contracting Parties agree that the responsibility for realizing Farmers' Rights, as they relate to plant genetic resources for food and agriculture, rests with national governments. In accordance with their needs and priorities, each Contracting Party should, as appropriate, and subject to its national legislation, take measures to protect and promote Farmers' Rights, including:

- (a) Protection of traditional knowledge relevant to plant genetic resources for food and agriculture;
- (b) The right to equitably participate in sharing benefits arising from the utilization of plant genetic resources for food and agriculture; and
- (c) The right to participate in making decisions, at the national level, on matters related to the conservation and sustainable use of plant genetic resources for food and agriculture.

9.3 Nothing in this Article shall be interpreted to limit any rights that farmers have to save, use, exchange and sell farm-saved seed/propagating material, subject to national law and as appropriate.

### 2. Interlinkages between environment and cultural diversity at the regional level

# (a) Cultural Diversity and related concepts in the African Convention on the Conservation of Nature and Natural Resources: New associated rights for the local communities

99. The revised version of the African Convention adopted by the African Union Assembly on 11 July 2003 (but not yet in force) contains a new provision of relevance to cultural diversity. The new article 17 on "Traditional rights of local communities and indigenous knowledge" states that:

"1. The Parties shall take legislative and other measures to ensure that traditional rights and intellectual property rights of local communities including farmer's rights are respected in accordance with the provisions of this Convention.

"2. The Parties shall require that access to indigenous knowledge and its use be subject to the prior informed consent of the concerned communities and to specific regulations recognizing their rights to, and appropriate economic value of, such knowledge."

100. Annex 2 on Conservation Areas requires that objectives of management of protected landscapes include "to maintain the harmonious interaction of nature and culture through the protection of landscape and/or seascapes and the continuation of traditional land use, building practices and social manifestations".

# (b) Cultural Diversity and related concepts in the Andean Community Decisions (Bolivia, Colombia, Ecuador, Peru and Venezuela): A comprehensive approach to environment and cultural diversity

101. Decision 391 of the Andean Community on Common Regime on Access to Genetic Resources requires Member States to "recognize and value the rights and the power of decision of indigenous, Afro American and local communities over their traditional knowledge, innovations and practices associated with genetic resources and derivate products thereof" (Article 7). In addition, the access requests and contracts should include conditions such as the strengthening and development of the capacities of the indigenous, Afro American and local communities as related to the associated intangible component of the relevant genetic resources and their derivatives.

102. When in existence, private or communal property regimes over biological resources containing the genetic material or derivates sought, are not altered by the provisions of Decision 391. Property owners or holders are not entitled to determine access to genetic resources. However, property owners or holders can control access to genetic resources indirectly by controlling the physical access of a bioprospector to the areas or materials containing genetic resources. This ability to assert control enables these actors to negotiate a share of benefits via "accessory contracts".

103. Decision 345 of the Andean Community on Common Provisions on the Protection of the Rights of Breeders of New Plant Varieties, Article 25: The breeder's certificate shall not confer on the owner thereof the right to prevent third parties from using the protected variety where such use is made:

(a) in a private circle, for non-commercial purposes (farmer's privilege)

Article 26: Anyone who stores and sows for his own use, or sells as a raw material or food, the product of his cultivation of the protected variety shall not be thereby infringing the breeder's right (farmer's privilege).

#### 3. Interlinkages between environment and cultural diversity at the national level

104. At the national level, we note recent developments of integrated legislation comprehensively envisaging environmental and social aspects, including cultural diversity.

105. Examples include:

*Philippines Republic Act Number* 8371 (1997), adopted in accordance with ILO 169, affords specific preservation of identified ancestral domains and lands:

- Giving the indigenous communities the right to use and protect cultural and spiritual sites from excavation and resource removal. (Section 33)
- Establishes an Ancestral Domains Office to be responsible for management of the protected domains and the issuance of leases with the community's consent before the excavation of any natural resources. (Section 46a)
- Also attempts to preserve unoccupied land that is the site of traditional activities, especially for nomadic groups. (Section 51)

*Peru Law, N. 27811* Introducing a Protection Regime for the Collective Knowledge of Indigenous Peoples Derived from Biological Resources

Article 1: "Recognition of rights.

*The* Peruvian State recognizes the rights and power of indigenous peoples and communities to dispose of their collective knowledge as they see fit."

Article 5: Objectives of the regime

The following shall be the objectives of this regime:

- (a) To promote respect for and the protection, preservation, wider application and development of the collective knowledge of indigenous peoples;
- (b) To promote the fair and equitable distribution of the benefits derived from the use of that collective knowledge;
- (c) To promote the use of the knowledge for the benefit of the indigenous peoples and mankind in general;
- (d) To ensure that the use of the knowledge takes place with the prior informed consent of the indigenous peoples;
- (e) To promote the strengthening and development of the potential of the indigenous peoples and of the machinery traditionally used by them to share and distribute collectively generated benefits under the terms of this regime;

(f) To avoid situations where patents are granted for inventions made or developed on the basis of collective knowledge of the indigenous peoples of Peru without any account being taken of that knowledge as prior art in the examination of the novelty and inventiveness of the said inventions."

106. It is worth noting that it is through the prism of international negotiations and instruments that local communities find the possibility, through States obligation to implement international agreements, to have their rights recognized.

# B. "Trade-related" legal instruments

107. Article 27.3(b) of TRIPs enables Members to exclude from patentability "plant and animals other than micro-organisms, and essentially biological processes for the production of plant or animal other than non-biological and microbiological processes. However, Members shall provide for the protection of plant varieties either by patent or by an effective *sui generis* system or by a combination thereof." Those *sui generis* systems, or systems "of their own" offer the possibility for Member States to develop IPR legislation for plant varieties other than the individual systems offered by the patent or the UPOV systems by shaping IPR regimes allowing shared and/or collective protection of plant varieties, for example for indigenous people or local communities.

# C. "Social" legal instruments

108. "Social" legal instruments are natural entry points for cultural diversity. In some cases, provisions relating directly or indirectly to cultural diversity are in turn linked to environmental management. We can mention here objective 14 of the action plan attached to the UNESCO Declaration of Cultural Diversity, focusing on "Respecting and protecting traditional knowledge, in particular that of indigenous people; recognizing the contribution of traditional knowledge, particularly with regard to environmental protection and the management of natural resources, and fostering synergies between modern science and local knowledge". However, this instrument is not legally binding.

109. Also of relevance in this context is, "The Convention for the Safeguarding of the Intangible Cultural Heritage", which was adopted in 2003 and will enter into force after its thirtieth ratification. It considers the importance of the intangible cultural heritage as a mainspring of cultural diversity and as a guarantee of sustainable development. The agreement safeguards intangible cultural heritage, which includes, "knowledge and practices concerning nature and the universe," though it does not affect intellectual property or ecological resource rights. "This intangible cultural heritage, transmitted from generation to generation, is constantly recreated by communities and groups in response to their environment, their interaction with nature and their history, and provides them with a sense of identity and continuity, thus promoting respect for cultural diversity and human creativity." (Article 2.1).

110. The UNESCO Convention Concerning the Protection of World Cultural and Natural Heritage of 1972 aims to safeguard and encourage awareness of both cultural properties and conservation of nature via reporting systems, professional training and public education initiatives. "By regarding heritage as both cultural and natural, the Convention reminds us of the ways in which people interact with nature, and of the fundamental need to preserve the balance between the two." Cultural heritage may "(v) be an outstanding example of a traditional human settlement or land-use which is representative of a culture or cultures, especially when it has become vulnerable under the impact of irreversible change" and natural heritage may "(iv) contain the most important and significant natural habitats for in situ conservation of biological diversity, including those containing threatened species of outstanding universal value from the point of view of science or conservation."

111. The International Covenant on Social, Economic and Cultural Rights, was adopted by the General Assembly in 1976 and is legally binding. Furthermore, much of it can be considered customary law and binding on countries that have not ratified it. The Covenant requires an allegiance to safeguard economic, social and cultural rights, including the preservation of these rights at work (i.e. traditional farming) and benefits from authorship (i.e. traditional knowledge).

112. This overview provides an insight into the legal aspects of interlinkages between environment and cultural diversity in legal regimes and testifies to the fact that these interlinkages are recognized and promoted at different levels (international, regional and national) in legally binding instruments. Further research should be conducted to determine the extent to which policies and legal regimes contribute to the mutual supportiveness of cultural and environmental aspects.

# VI. Annex II: Questionnaire on women, diversity and sustainable development

113. In order to stimulate reflections on the theme of "Enhancing Global-Local Linkages: Indigenous and local women's perspectives on sustainable development" a brief questionnaire with eight questions was developed and distributed on the occasion of the Global Women's Assembly on Environment WAVE (Women As the Voice of the Environment), held in Nairobi from 11-13 October 2004. The aim of presenting the outcomes of this sample survey is to integrate personal perspectives of women and their relation to the environment. In total, 15 women replied (9 from Africa, 3 from Europe, 1 from Asia and 1 from North America).

## 1. In which environment did you grow up? What did you like there? And what not?

114. Most answers emphasized the importance of experiencing nature during childhood fostering a close relation to the environment and leading them to an environmentally sensitive behavior in their present lives. However, the lack of opportunities for personal development and employment forced many of them to move to urban areas where pollution is high and nature has often been reduced to a merely decorative function. Overall, the responses show that even though it is more likely that a rural background with close contact to relatively intact nature and direct dependency on it endorses environmental concerns, an urban background can also lead to environmental activism – often as a result of deprival from a natural environment.

2. What are the most obvious relationships between nature, the environment and human beings in your community?

115. An indigenous woman from Nevada, USA provided an illustrative example for the relationships between nature, the environment and human beings in her community:

"Our identity, our language and our culture are all intertwined with our environment. My tribe is called Kuyuidakado, or Kuyui Eaters, a fish found only in Pyramid Lake. In our mythology the origin of humans is directly related to our territories and its specific landmarks as well as other parts of our oral history. Today, we still struggle to protect the survival of the Kuyui fish, an endangered species because of the increasing desertification. If the Kuyui becomes extinct, what does that mean for our tribe, the Kuyui eaters?"

3. Is cultural diversity important for nature conservation and sustainable development? Why?

116. The importance of cultural diversity for nature conservation and sustainable development was unanimously underscored. Especially indigenous cultures are inextricably linked with their land, its flora, fauna, and the climatic conditions. They have developed geographically distinct knowledge for the careful use of natural resources and a balanced relationship with their environment. Preserving local knowledge systems does not only contribute to the protection of cultural wealth but also to long-term sustainability.

"Cultural diversity, particularly in relation to land-based societies, is inextricably linked to the territories they currently or traditionally occupied. This geographically distinct knowledge is important because these societies maintain knowledge systems that are crucial for future sustainable practices and lifestyles – practices that have been developed for centuries."

"Cultural diversity is critical for the survival of nature because the different cultures that the world comprises have developed unique mechanisms manifested in customs, traditions and taboos that use, relate and return the benefits of life to Mother Nature. Cultural diversity entails different perceptions, values and attachments that are central to a harmonious and sustainable relation the contribute to the good health of Mother Nature."

"Cultural diversity is important for nature conservation and sustainable development especially in communities whose cultures are highly attached to the environment. Traditions of indigenous communities and their entire livelihood are highly linked to nature. They live in and from it, for example by the use of medicinal plants, animals for food and clothing, or simply because they see it as a sacred entity where their gods are incarnated. These cultures protect and conserve the environment and practice sustainable development."

"Sustainable development is like an integrated and interdependent relationship. [...] Culture is a form of administration of nature and a lived expression of a reciprocal relationship. People are inspired through the natural environment and it constructs the history of the peoples."

4. *How would you describe the importance of linkages between culture, nature, environment and human wellbeing?* 

> 117. In regard to the importance of linkages between culture, nature, environment and human wellbeing, all respondents were persuaded of a strong inter-dependence of all these aspects:

"I think that our mission is to preserve the all natural heritage and to ensure a healthy environment for everyone. This mission can only be fulfilled with strong support and partnership of governmental institutions, local authorities and the public represented by NGOs, companies, academic circles and with active participation by all of us."

"The linkages between culture, nature, environment and human well-being are important and essential. The environment will be protected and conserved by those communities whose culture and general well-being are linked to it. Without this relationship the environment will suffer from negative human attitudes followed by adverse effects on human well-being by climate change and other developments."

118. One respondent defined the linkages as being:

"Like an integrated relationship, which is interdependent; it is like sustainable development, without one or the other, it simply does not work. Culture is a form of administration of nature, expression and is being nurtured and lived (reinforced) through the people. People are getting inspired through the natural environment."

5. How does the relationship between you and nature/the environment manifest itself in your culture and social habits

119. Some answers included:

"Our language, Numu yadua, reflects our environment, and the histories of our ancestors. This is reflected in the different ways of living and cultural practices."

"My culture and our social habits are in many ways influenced by the attributes of Mother Nature and the environment. Traditional songs, tales, food and dressing mirror the values and linkages with Mother Nature and the environment. Most traditional songs, for example, include reflections on the human kind, forests, wildlife and their interactive processes. The songs contain imitations of animal sounds. Disrespectful treatment of our Mother Nature such as unnecessary or indiscriminate killing of wildlife is protected through taboos."

"I am from the nomadic Fulani community; nomadism is my cultural identity. Nomadic tradition can manifest itself only in a particular environment. As herders of cattle, sheep and horses my community has been roaming over the savannah of West and Central Africa grazing and multiplying our animals until the herd reaches a number of animals that the land can no longer sustain. Then we move on to more spacious and abundant pastures. [...] The social life of the community is deeply linked to this tradition and a particular environment. Changes in nature and environment will automatically affect our social habits. During the rainy seasons the families are more relaxed as the supply of water and grass is abundant and the alimentary production is high."

"In my community, women are not allowed to plant trees. This is considered a bad omen because trees are considered to be very powerful and are only associated with men. Similarly, women cannot cut down a big tree. You can only collect firewood from dried branches. Since women are the ones who remain in the rural areas while the men look for alternative livelihoods in urban centers, this practice has ensured that there are some trees on farms, as the woman cannot cut them down."

6. What are the human or cultural responses to environmental change, including loss of biodiversity and climate change, in your community? Any best practices on how you cope with these changes?

120. Some answers included:

"We are experiencing increasing desertification, resulting in a loss of biodiversity. We are not able to gather certain roots and berries because they are not as plentiful. The water diversions and desertification has reduced the amount of springs in the area. This forces people to depend on commercial sources for these things."

"Examples of the human or cultural responses to environmental changes including loss of biodiversity are: (1) Migration to areas that are still considered virgin or providing attributes lost in their original home areas. The migration from my home district started in 1950s and is still continuing. (2) Development of coping mechanisms such as the reduction to one meal a day in order to manage deficiencies resulting from degradation linked to environmental changes or the adoption of seeds or animal breeds with advantageous qualities (e.g. quick growth, resistance to diseases or droughts)."

"In the past there existed cultural responses to climatic changes. During the dry season when the dry and hot weather resulted in a drastic loss of biodiversity, the nomads moved down the valleys where the animals could get food and water. Just after the rain had come, they migrated back to the upper areas so that their grasslands had enough time to recover. This tradition is still practiced today. But in areas where the climatic changes are too drastic, the nomads have to abandon their home areas and try to find new land that suits their needs. In our time, these cultural responses are highly challenged because the conventional farming communities occupy most grazing lands. ... This has often rendered the nomadic way of life impossible. ... Over-grazing resulting from large-scale farming has resulted in land degradation and increasing poverty in nomadic communities. In their desperate situation, some followed recommendations from national or international NGOs or their government: they have reduced their livestock and improved their pastures by planting imported grass varieties. However, many of them have difficulties in dealing with this cultural change as it has always been the nomadic way of life to roam freely on common land."

"There are different forms of responses. Climate change has become very obvious in my community but some of these changes have transformed problems into new economic opportunities. The sale of fish, for example, is not restricted to a certain season anymore because heavy rains during the last years have created lagoons in the north of my country where fishing is possible throughout the year."

7. Could you provide an example where activities of women have helped to preserve and manage the environment in a sustainable manner? Would this example have been applicable to men as well? If yes, why and if no, why not?

121. Some answers included:

"Our tribe is actively involved in fishery restoration and improving the riverbank to be more suitable for fish spawning. We also try to minimize cattle grazing against the resistance of male farmers."

"Women in Rwere, Kabale District have adopted a 'Zero Grazing' technology and improved the management of fodder in general. This resulted in an improved soil fertility, increased household

incomes and nutrition supplies. However, this example is not applicable to the men of Kabale because most of their time is bound in non-farming activities. Additionally, the 'Zero Grazing' program requires prudence, patience and determination, attributes that are more prevalent among women than among men."

8. Do women have a different relationship with nature/environment than men? In what way?

122. "Women have a closer link with the environment and the forces of nature. We bring new life into the world and the environment sustains our lives. We have a responsibility for the wellbeing of our children as well as the unborn generations. This requires from us to take care of our environment so that it supports our health and nurtures us."

"Every woman can feel the nature in all its dimensions, because the nature gave her the most precious - to be a mother. This is exactly the eternal relationship with nature that differentiates women from men."

"Women have a different relationship to the environment than men because of their value systems, attitudes to the environment and interaction with environment. Furthermore, the impact of environmental changes to their livelihood is more direct. Women as stewards of environment interact with the environment more closely during land management activities such as plowing, seeding, weeding and harvesting whereas men are usually rather engaged in market activities such as buying and selling land. Women are more affected by manifestations of environmental mismanagement. The reduction of soil fertility, for example, affects women more than men because it is up to them to care for and feed their children. Because of that, women are much more willing to address environmental issues and can be easily mobilized."

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