



CONVENTION ON BIOLOGICAL DIVERSITY

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KNOWLEDGE, INNOVATIONS AND PRACTICES OF INDIGENOUS AND LOCAL COMMUNITIES

Note by the Secretariat

1. BACKGROUND

1. By recommendations I/2 and I/9, the SBSTTA decided to include in the draft provisional agenda for its second meeting the item: "Ways and means to identify and protect the knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles, and to compensate through the equitable sharing of the benefits arising from the use of such knowledge, innovations and practices, in accordance with Article 8(j) of the Convention on Biological Diversity" (UNEP/CBD/COP/2/5).

2. In its decision II/1, the Conference of the Parties took note of the report of the first meeting of the SBSTTA and requested the second meeting of the SBSTTA, in considering its programme of work for 1996, to ensure that the programme is based on the priorities set in the programme of work for the Conference of the Parties for 1996 and 1997, as contained in decision II/18.

3. In its decision II/18, the Conference of the Parties decided to consider at its third meeting in 1996 the agenda item: "Knowledge, innovations and practices of indigenous and local communities - Implementation of Article 8(j)".

4. The present note has been prepared by the Secretariat to assist the SBSTTA in its consideration of this item and with the preparation of scientific, technical and technological advice to the Conference of the Parties on options for the implementation of Article 8(j). The note draws upon a previous note prepared by the Interim Secretariat for the second session of the Intergovernmental Committee on the Convention on Biological Diversity entitled *Farmer's Rights and Rights of Similar Groups - The rights of indigenous and local communities embodying traditional lifestyles: experience*

and potential for implementation of Article 8(j) of the Convention on Biological Diversity (UNEP/CBD/IC/2/14).

5. The present note updates the information contained in section 2 of the previous note ("Existing Mechanisms: Insight for Implementation?"), and offers further recommendations on ways and means to implement Article 8(j) and a possible process by which the necessary work might be undertaken.

6. The meeting will also have before it document UNEP/CBD/SBSTTA/2/Inf.3, prepared by the Secretariat in accordance with paragraph 2(a) of decision II/9 of the Conference of the Parties, as a contribution to the preparation of the Report of the Secretary-General on "Traditional forest-related knowledge" to be submitted to the third session of the Intergovernmental Panel on Forests.

7. The provisions of Article 8(j) are closely linked to those of Articles 10(c), 17.2 and 18.4, and the SBSTTA may wish to consider possible advice to the Conference of the Parties on the merits of a co-ordinated consideration of these Articles and recommend an appropriate process for this.

2. THE CONVENTION'S PROVISIONS ON INDIGENOUS AND LOCAL COMMUNITIES EMBODYING TRADITIONAL LIFESTYLES.

8. Indigenous and local communities have been developing, conserving and sustainably using the biological resources on their lands and territories for millennia. Indigenous and local communities have developed a wide variety of plants and animals for food, medicine and other purposes. Traditional knowledge has and will continue to give critical clues to scientists in the agricultural, medicinal and industrial fields. In addition, traditional knowledge provides important directions for natural resource use and ecosystem management. Indigenous and local communities not only have extensive knowledge of their surrounding environment, but they also have an important role in implementing any conservation policy on the ground.

9. The Convention recognises the importance of indigenous and local communities to the conservation and sustainable use of biological diversity. It also recognises that indigenous and local communities should share in the benefits derived from ideas and innovations they have developed that prove useful to others. Indeed, these communities need incentives to conserve, if they are to resist pressure from other economic interests which may have adverse impacts on biological diversity.

10. In the Preamble, the Contracting Parties recognise:

"the close and traditional dependence of many indigenous and local communities embodying traditional lifestyles on biological resources, and the desirability of sharing equitably benefits arising from the use of traditional knowledge, innovations and practices relevant to the conservation of biological diversity and the sustainable use of its components".

11. Implicit in the recognition of the desirability of sharing benefits with these communities is the notion that communities should receive benefits when techniques or knowledge from their traditional practices become more widely used and valued. The paragraph recognises the links between the conservation of biological diversity and of cultural diversity, and the dependence of such communities on the continuation of their traditional access to biological resources. In addition, it recognises that

their knowledge of biological resources and techniques for use may have value outside the communities themselves.

12. Article 8(j) casts the recognition of the Preamble as a legal obligation as follows:

"Each Contracting Party shall, as far as possible, and as appropriate ...:

"(j) Subject to its national legislation, respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and promote their wider application with the approval and involvement of the holders of such knowledge, innovations and practices and encourage the equitable sharing of benefits arising from the utilisation of such knowledge, innovations and practices".

13. The obligations of Article 8(j) can be described as containing several requirements. They are that each Party, subject to its national legislation, shall:

(i) respect, preserve and maintain the knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity;

(ii) promote the wider application of such knowledge, innovations and practices with the approval and involvement of the holders;

(iii) encourage the equitable sharing of the benefits arising from the use of such knowledge, innovations and practices.

14. In keeping with the general orientation of the Convention, this provision leaves it up to individual countries to determine how it will be implemented. In addition, Article 8(j) subjects its obligations to national legislation implying that existing national legislation will take precedence.

15. Several other articles contain references to indigenous and local communities. Article 10(c) states that each Contracting Party shall "protect and encourage customary use of biological resources in accordance with traditional cultural practices that are compatible with conservation or sustainable use requirements". Article 17.2 includes indigenous and traditional knowledge among the categories of information that are to be exchanged among Parties. Finally, Article 18.4 commits countries to "encourage and develop methods of co-operation for the development and use of technologies, including indigenous and traditional technologies, in pursuance of the objectives of this Convention". These provisions overlap with Article 8(j) and thereby mutually reinforce each other and further elucidate the requirements of Article 8(j). The closely related nature of all these provisions points to the advantages of dealing with them together in any consideration of the rights of local and indigenous communities which arise from provisions of the Convention.

3. RECENT DEVELOPMENTS

16. This section will briefly update the information contained in section 2 ("Existing Mechanisms: Insights for Implementation?") of UNEP/CBD/IC/2/14. The order in which this information is presented reflects the structure of that note and does not imply any order of priority.

3.1 ILO Convention No.169: Convention on Indigenous and Tribal Peoples in Independent Countries

17. ILO Convention No.169 addresses in Parts I ("General Policy") and II ("Land") issues relevant to the implementation of Article 8(j) of the Convention. Article 2, paragraph 2 (b), provides for action to protect the rights of indigenous peoples, including measures "promoting the full realisation of the social, economic and cultural rights of these peoples with respect for their social and cultural identity, their customs and traditions and their institutions". Article 4 provides that "special measures shall be adopted as appropriate for safeguarding the persons, institutions, property, labour, cultures and environment of the peoples concerned" in accordance with their own "freely-expressed wishes".

18. Article 13 obligates governments to "respect the special importance for the cultures and spiritual values of the peoples concerned of their relationship with the land or territories [..] which they occupy or otherwise use, and in particular the collective aspects of this relationship". Article 14 provides that "the rights of ownership and possession of the peoples concerned over the lands which they traditionally occupy shall be recognised" and Article 15 provides that "the rights of peoples concerned to the natural resources pertaining to their lands shall be specially safeguarded. These rights include the right of these peoples to participate in the use, management and conservation of these resources." Intellectual property rights of indigenous and tribal peoples are not dealt with as such in ILO Convention No.169.

19. A further three countries (Denmark, Guatemala and Honduras) have ratified ILO Convention No.169, bringing the total to ten countries, and ratification is under serious consideration in a number of other countries. Germany has enacted legislation linking its development assistance to ILO Convention No.169 and several countries, including the Netherlands, are examining ratification with a view to orienting their development assistance programmes to the provisions of the Convention.

3.2 Commission on Human Rights

3.2.1 Draft United Nations Declaration on the Rights of Indigenous Peoples

20. In its resolution 1995/32 of 3 March 1995, the Commission on Human Rights decided to establish an open-ended inter-sessional working group to elaborate a draft United Nations Declaration on the Rights of Indigenous Peoples, considering the draft agreed upon by the members of the Working Group on Indigenous Populations and contained in the Annex to resolution 1994/45 of the Sub-Commission on Prevention of Discrimination and Protection of Minorities.

21. The background to the draft declaration and the relevance to the Convention on Biological Diversity of various provisions in the draft adopted by the Sub-Commission were discussed in the previous Note (UNEP/CBD/IC/2/14) and will not be repeated in the present Note.

22. The working group established by the Commission on Human Rights held its first session in Geneva from 20 November to 1 December 1995 and will hold its second session in October 1996.

23. In its resolution 1995/32, the Commission on Human Rights requested the Secretary-General to invite Governments, intergovernmental organisations, non-governmental organisations in consultative status with the Economic and Social Council and organisations of indigenous people

authorised to participate to submit, for consideration by the working group, comments on the draft declaration.

3.2.2 Protection of the heritage of indigenous people

24. At its forty-seventh session in 1995, the Sub-Commission on the Prevention of Discrimination and Protection of Minorities considered the final report submitted by the Special Rapporteur on the protection of the heritage of indigenous people (E/CN.4/Sub.2/1995/26) and the Annex containing draft principles and guidelines for the protection of the heritage of indigenous people. This report represents an expansion of the Special Rapporteur's earlier study on the protection of the cultural and intellectual heritage of indigenous peoples (E/CN.4/Sub.2/1993/28).

25. The report contains, in its Annex "Principles and Guidelines for the Protection of the Heritage of Indigenous Peoples" provisions of relevance to the issues raised by Article 8(j) of the Convention. Of particular relevance are paragraphs 6 (Principles) and 12, 36, 41, 56 and 58 (Guidelines). The report also recommends "the convening of a United Nations technical meeting [..] to propose mainly practical modalities for the co-operation of relevant United Nations bodies and specialised agencies in protecting the heritage of indigenous peoples" (para.33).

26. Resolution 1995/40 of the Sub-Commission requested the Special Rapporteur to prepare a supplementary report on the basis of comments and information received from Governments, indigenous communities and intergovernmental and non-governmental organisations concerned, and to submit it to the Sub-Commission at its forty-eighth session in 1996. In response to a request from the Special Rapporteur, the Secretariat has provided relevant information concerning the Convention for inclusion in the supplementary report.

3.2.3 Treaties, agreements and other constructive arrangements between States and indigenous populations

27. In its resolution 1989/77 of 24 May 1989, the Economic and Social Council approved the recommendation of the Commission on Human Rights that a study be conducted on the potential utility of treaties, agreements and other constructive arrangements between indigenous populations and Governments for the purpose of ensuring the promotion and protection of the human rights and fundamental freedoms of indigenous populations.

28. A first progress report was submitted to the Working Group on Indigenous Populations and to the Sub-Commission by the Special Rapporteur in 1992. A second progress report was submitted in 1995 and a third progress report will be considered by the Sub-Commission at its forty-eighth session in 1996.

3.2.4 Evolution of standards concerning the rights of indigenous people

29. At its forty-seventh session in 1995, the Sub-Commission requested (in resolution 1995/38) that the Chairperson-Rapporteur of the Working Group on Indigenous Populations prepare a working paper on the concept of "indigenous people". This working paper (E/CN.4/Sub.2/AC.4/1996/2) was considered by the Working Group at its fourteenth session (29 July to 2 August 1996) and will be

considered by the Sub-Commission at its forty-eighth session. It contains an historical review of international practice and critical legal analysis, with conclusions and recommendations.

3.2.5 Consideration of a permanent forum for indigenous people

30. In the Vienna Declaration and Programme of Action, the World Conference on Human Rights recommended that the establishment of a permanent forum for indigenous people in the United Nations system be considered. Following consideration of this recommendation by the General Assembly and by the Commission on Human Rights, the Centre for Human Rights organised a workshop on the possible establishment of a permanent forum in the United Nations system. This workshop was held in Copenhagen in June 1995 at the invitation of the Government of Denmark and the Greenland Home Rule Government.

31. The report of this workshop (E/CN.4/Sub.2/AC.4/1995/7) was considered by the Working Group on Indigenous Populations which supported the idea that a permanent forum be established in the course of the International Decade of the World's Indigenous People. The Working Group felt that such a forum: should report to the Economic and Social Council; should be open to all indigenous people; and that its mandate should cover issues such as human rights, health, development, environment, education and culture (E/CN.4/Sub.2/1995/24).

32. The Sub-Commission endorsed the Working Group's recommendations in its resolution 1995/39 of 24 August 1995. The General Assembly, in its resolution 50/157, recommended that the Secretary-General undertake a review of the existing mechanisms, procedures and programmes within the United Nations concerning indigenous people, and report to the General Assembly at its fifty-first session. The Secretariat, in response to a request from the Centre for Human Rights, has provided relevant information on the Convention on Biological Diversity for the preparation of the Secretary-General'sreview.

3.3 United Nations Conference on Environment and Development and the Commission on Sustainable Development

33. The previous note (UNEP/CBD/IC/2/14, paras.49 and 50) considers instruments containing provisions on indigenous and local communities and biological diversity adopted at the United Nations Conference on Environment and Development and the Commission on Sustainable Development. These include Principle 22 of the Rio Declaration, chapter 26 of Agenda 21, and principles 5(a) and 12(d) of the Forest Principles.

34. At its third session in 1995, the Commission on Sustainable Development established an open-ended ad hoc Intergovernmental Panel on Forests. Programme element 1.3 of the Programme of Work of the Panel requires the Panel to make recommendations on how "consistent with the terms of the Convention on Biological Diversity, [to] encourage countries to consider ways and means for the effective protection and use of traditional forest-related knowledge, innovations and practices of forest-dwellers, indigenous people and other local communities, as well as fair and equitable sharing of benefits arising from such knowledge, innovations and practices."

35. The contribution to the preparation of the Report of the Secretary-General for the substantive discussion of this programme element at the third session of the Panel, prepared by the Secretariat in

accordance with decision II/9 of the Conference of the Parties, is contained in document UNEP/CBD/SBSTTA/2/Inf.3.

3.4 Policies of Multilateral Development Banks and International Agencies

3.4.1 The World Bank

36. Operational Directive (OD) 4.20 ("Indigenous Peoples") is the principal policy statement of the World Bank on the relationship between its operations and indigenous people paragraph 8 of OD 4.20 states:

"the Bank's policy is that the strategy for addressing the issues pertaining to indigenous peoples must be based on the informed participation of the indigenous people themselves. Thus, identifying local preferences through direct consultation, incorporation of indigenous knowledge into project approaches, and appropriate early use of experienced specialists are core activities for any project that affects indigenous peoples and their rights to natural and economic resources."

37. The World Bank is currently preparing an Operational Directive on social assessment, following which a revision of OD 4.20 will take place. The Bank's Operational Policies, Bank Procedures and Good Practices for Natural Habitats (OP/BP/GP 4.04) and for Forestry (OP/BP/GP 4.36) are also relevant.

3.4.2 The Inter-American Development Bank (IDB)

38. In 1990 the IDB issued guidelines for dealing with environmental and social impacts in its operations. These guidelines are contained in *Strategies and Procedures on Socio-Cultural Issues as Related to the Environment*, and include:

"[T]he recognition that indigenous people have a unique socio-cultural heritage that should be preserved for future generations; that they are part of the biological diversity of the ecosystems they inhabit and are very valuable sources of knowledge on tropical species and on proven technologies for management of fragile ecosystems; that this body of knowledge should be preserved, understood and utilised; and that indigenous populations should be recognised as natural allies in the solutions to safeguard the environment."

39. In 1995 the IDB established an Indigenous Peoples and Community Development Unit and is currently in the process of drafting a strategy on indigenous people for submission to its Policy Committee in late 1996 or early 1997.

3.4.3 The Asian Development Bank (ADB)

40. In 1994 the ADB began drafting its first policy on indigenous people. Following agreement between indigenous peoples' organisations and the ADB on a consultative process, a revised draft of the policy paper has been prepared and will form the basis for national-level consultations with indigenous representatives, expected to take place in August and September 1996. Based on these consultations, another draft will be prepared for presentation to the ADB Board of Executive Directors in October 1996 and it is hoped that a final policy statement on indigenous people will be approved by the Board by the end of the year.

3.4.4 The African Development Bank (AfDB)

41. The AfDB has no specific policies on indigenous or local communities. In June 1996 the president of the AfDB stated that the Bank "is committed to ensure that the development process promotes indigenous people's participation and encourages full consideration for their dignity, human rights and cultural uniqueness.[.] The Bank recognises that indigenous and forest-dwelling populations are important social actors in forest-related programmes [possessing] forestry-relevant knowledge and skills".

3.4.5 The European Bank for Reconstruction and Development

42. The EBRD has no policy on indigenous and local communities. Its guidelines on "political aspects of the mandate of the European Bank in relation to ethnic minorities" support the principles contained in the Final Act of the Helsinki Agreement and in the European Convention on Human Rights.

3.4.6 The United Nations Development Programme (UNDP)

43. The UNDP has prepared draft 'Guidelines for support to indigenous peoples'. The operational part of these guidelines is mainly adapted from ILO Convention No.169 and the Draft Declaration on the Rights of Indigenous Peoples agreed upon by the Working Group on Indigenous Populations. It is anticipated that the draft guidelines will be submitted to the Executive Board of UNDP in late 1996.

44. Paragraph 22 of the draft guidelines states:

"Projects that gather, use and/or are based upon indigenous customary knowledge should include measures that promote the recognition of this knowledge as "intellectual property", as well as measures that prevent the dissemination of this knowledge without prior consent of the "proprietors" or without any acknowledgement or compensation to the indigenous custodians of this knowledge." 45. The UNDP is supporting the 'Indigenous Knowledge Programme' to be implemented through the Indigenous Peoples Biodiversity Network (IPBN) and the International Development Research Centre (IDRC) of Canada. In the Programme Justification, UNDP states:

"For several reasons, the discussion on the need to preserve indigenous knowledge (i) systems has taken place in a 'policy vacuum'. At the global level, indigenous peoples' organisations and representatives have hardly been allowed to participate in the discussion. [..] At the national level, few countries have begun to discuss national policies and strategies with regard to bioprospecting and the preservation of indigenous knowledge. At the local level, communities and local authorities are usually unaware of the value and importance of the innovation system. This 'vacuum' has allowed scientists and industries to conduct research on indigenous knowledge without paying attention to some important broader, longer-term concerns and doubts. For example, with regard to the integrity of innovation systems, it is seriously doubted that it is possible to commidify and commercialise knowledge without destroying the continuation of the social structures that have generated this knowledge and on which the livelihoods of many indigenous communities depend. [..] Similarly, but at another level of abstraction, how do intellectual property rights over products based on biological resources relate to the sovereign rights - as reaffirmed in the Convention on Biological Diversity - of States over biological resources" (draft project proposal, 31 August 1995, section B, para.I.8);

(ii) "[It] is of the utmost importance that indigenous people get the opportunity to voice and put forth their concerns, that they be able to ensure the continuation of indigenous innovation systems, and that they initiate their own programmes to protect their knowledge from being lost and appropriated without fair compensation" (para.I.9);

(iii) "The overall question is how to preserve the social structures that have generated and continue to generate knowledge within indigenous communities. The basic issues to be tackled by this programme are how to strengthen the capacity of indigenous peoples to defend and advocate for their own interests in this area and to prepare and implement activities that ensure the continuation of their innovation systems" (para.I.10).

46. The UNDP expects that at the end of this programme:

(i) the overall awareness of governments, scientists, environmentalists, indigenous communities, and others as to the importance of conserving indigenous knowledge systems as an integral part of the social structures of indigenous peoples' and farmers' communities will have been raised;

(ii) the capacity of key indigenous peoples' organisations to advocate the positions and interests of indigenous peoples, to conduct research on matters related to the conservation of their knowledge, and to conduct policy analysis and formulation will have been enhanced;

(iii) studies will have been conducted on, for example, the relation between biodiversity conservation and indigenous knowledge, bioprospecting agreements, intellectual property rights and customary laws, and the relations between indigenous knowledge and the emancipation of indigenous peoples; and

(iv) pilot projects will have been implemented in indigenous communities aimed at the revitalisation [and] strengthening of indigenous knowledge systems (draft project proposal, 31 August 1995, Summary, page 2).

47. The project steering committee is constituted entirely by indigenous members. UNDP and donor agencies make up an advisory group. A secretariat is being established and two small-grants funds for participatory research and for community development projects are being set up.

3.5 Declarations of indigenous peoples

48. The previous note considered the Charter of the Indigenous-Tribal Peoples of the Tropical Forests, the Kari-Oca Declaration of Indigenous Peoples on Environment and Development, and the Mataatua Declaration on Cultural and Intellectual Property Rights of Indigenous Peoples (UNEP/CBD/IC/2/14, paragraphs 51 to 56).

49. As part of the preparatory process for the Indigenous Knowledge Project referred to above, three regional meetings of representatives of indigenous peoples were held:

(i) the Regional Meeting on Intellectual Property Rights and Biodiversity organised by the Coordinadora de las Organizaciones Indígenas de la Cuenca Amazónica (COICA), Santa Cruz de la Sierra, Bolivia, 28-30 September 1994;

(ii) the Asian Consultation Workshop on the Protection and Conservation of Indigenous Knowledge organised by Partners of Community Organisations in Sabah (PACOS) and the Southeast Asia Regional Institute for Community Education (SEARICE), TVRC Tambunan, Sabah, Malaysia, 24-27 February 1995;

(iii) the Consultation of Indigenous Peoples' Knowledge and Intellectual Property Rights organised by the Pacific Concerns Resource Centre (PCRC), Suva, Fiji, April 1995.

50. The final statements of these meetings address issues raised by the provisions of Article 8(j).

3.6 Traditional Knowledge Networks

51. The increasing interest in, and preoccupation with, questions related to the knowledge, innovations and practices of traditional and local communities is demonstrated by the growing number of traditional knowledge networks established by scientific, indigenous and non-governmental organisations. A list of access points to those networks currently identified by the Secretariat is contained in document UNEP/CBD/SBSTTA/2/Inf.3, Annex 3.

52. Further sources can be found in *The People and Plants Handbook: sources for Applying Ethnobotany to Conservation and Community Development* being produced under the People and Plants Initiative of WWF, UNESCO and the Royal Botanic Gardens, Kew (UK).

3.7 Codes of conduct of professional/academic/research organisations, private sector arrangements, and public sector arrangements

53. The previous note considered examples of such arrangements known to the Secretariat at the time (UNEP/CBD/IC/2/14, paras.61 to 75).

4. PREVIOUS CONSIDERATION OF THE KNOWLEDGE, INNOVATIONS AND PRACTICES OF INDIGENOUS AND TRADITIONAL COMMUNITIES UNDER THE CONVENTION

54. The Open-ended Intergovernmental Meeting of Scientific Experts on Biological Diversity (Mexico City, 11-15 April 1994) considered under item 3(c) of its agenda ("Identification of innovative, efficient and state-of-the-art technologies and know-how relating to the conservation and sustainable use of biological diversity and the ways and means of promoting development and/or transferring such technologies") the sub-item "Ways to integrate, in modern management practices, knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles".

55. The Meeting adopted the paper prepared by the open-ended sub-group established to address this sub-item. The paper is reproduced as Annex VII to the Report of the Meeting (UNEP/CBD/IC/2/11). Relevant traditional knowledge and technologies are also identified in:

(i) Annex II: Indicative list of technologies and know-how relevant to the identification, characterisation and monitoring of ecosystems, species and genetic resources:

-traditional knowledge about local ecosystems (I.(e));

-traditional knowledge about ecosystem function (II.(g));

-traditional knowledge of territories and habitats (III.(f));

-traditional and advanced taxonomies (IV.(a));

-uses, both traditional and current (IV.(b));

-traditional knowledge of [technologies to determine species and genetic resource status] and of population norms over time (V.(e));

-traditional techniques for communication and information transmittal (VI.(d));

(ii) Annex III: Indicative list of technologies appropriate for the *in-situ* conservation of components of biological diversity:

-traditional knowledge and technologies for *in-situ* conservation (I.(h));

(iii) Annex V: Indicative list of technologies for sustainable use of biological diversity and its components:

-spiritual and cultural uses (I.(b));

-traditional medicine production techniques (II.1.(e));

-natural resource management with the use of indigenous knowledge and technologies (II.2.(b));

-methodologies for evaluation of biological diversity, including non-economic values such as existence, religious, ethical and cultural values (III.(a));

(iv) Annex VI: Indicative list of ways and means of promoting development and/or transferring of innovative, efficient and state-of-the-art technologies relevant to the conservation and sustainable use of biological diversity:

-both traditional and modern technologies are necessary to implement the Convention on Biological Diversity (III.(a));

(v) Annex VIII: Indicative list of scientific and technical programmes for training in conservation of biological diversity and sustainable use of its components (at regional, national and local levels):

-traditional culture knowledge transmittal (II.a.(ii));

(vi) Annex IX: Data collection, management and transfer

-ethnobiological [data collection] techniques (I.(g));

-traditional information management systems (II.(e));

-traditional transmittal techniques, e.g., puppetry, songs, dance, plays (III.(e)).

56. The Interim Secretariat prepared a note for the second meeting of the Intergovernmental Committee on the Convention on Biological Diversity containing a suggested Agenda for Scientific and Technological Research (UNEP/CBD/IC/2/Inf.2). Item 9 of this proposed agenda related to "studies on ethnobiology and adaption [sic] of traditional knowledge and skills (Articles 8(j) and 10(c))". The objectives would be to: (a) identify traditional knowledge; (b) develop means to maintain traditional knowledge; and (c) identify means to apply traditional knowledge to conservation of biological diversity and sustainable use of its resources. Eight examples of facilitating research activities were offered.

57. Details of the consideration by the second meeting of the Intergovernmental Committee on the Convention on Biological Diversity of the report of the Open-ended Intergovernmental Meeting of Scientific Experts on Biological Diversity, of the suggested Agenda for Scientific and Technological Research, and of "The rights of indigenous and local communities embodying traditional lifestyles: experience and potential for implementation of Article 8(j) of the Convention on Biological Diversity" are contained in document UNEP/CBD/COP/1/4 (*Report of the Intergovernmental Committee on the Convention on Biological Diversity*), paragraphs 211-221 and 235.

5. ARTICLE 8(j) OF THE CONVENTION ON BIOLOGICAL DIVERSITY

58. As noted before, Article 8(j) can be interpreted as requiring Parties subject to their national legislation (both current and, by implication, future legislation) to:

(i) respect, preserve and maintain the knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant to the conservation and sustainable use of biological diversity;

(ii) promote the wider application of such knowledge, innovations and practices with the approval and involvement of the holders;

(iii) encourage the equitable sharing of the benefits arising from the use of such knowledge, innovations and practices.

5.1 Respect, preserve and maintain the knowledge, innovations and practices of indigenous and local communities

59. This requirement of Article 8(j) is echoed in Article 10(c), which requires Parties to "protect and encourage customary use of biological resources in accordance with traditional cultural practices that are compatible with conservation or sustainable use requirements". Such customary uses can be considered to be synonymous with the "practices" referred to in Article 8(j), when both are relevant to or compatible with the conservation and sustainable use of biological resources.

60. Taken together, these provisions therefore require Parties to recognise that biological diversity is maintained, and very often enhanced, by the knowledge, innovations and practices of indigenous and local communities and that the preservation and maintenance of biological diversity goes hand-in-hand with the preservation and maintenance of cultural diversity. In order that indigenous and local communities may continue to maintain and develop their knowledge, innovations and practices (in other words, are able to ensure their cultural survival), they need secure access to the basis of such biological diversity and its components - their traditional lands.

61. The need for Governments to recognise and guarantee rights to land for indigenous and traditional communities is thus a prerequisite both for the preservation and maintenance of the knowledge, innovations and practices referred to in Article 8(j), and for the protection of customary use of biological resources referred to in Article 10(c). In the absence of such rights, cultural diversity will be lost and this loss is likely to be accompanied by a corresponding loss of biological diversity and of traditional ecological knowledge. The Contracting Parties have recognised this in the first section of preambular paragraph 12 of the Convention.

62. The "respect" referred to in Article 8(j) can thus be taken to include the requirement for Parties to respect the entitlement of indigenous and traditional communities to secure tenure of their traditional lands. In order to fulfil their requirements under this Article, Parties are thus obligated to enact a legal framework and to take the necessary administrative measures to ensure that the rights to land of indigenous and local communities are safeguarded.

63. There is (as noted above and in the previous note, UNEP/CBD/IC/2/14) a growing body of principles and guidelines concerning the recognition of land rights of indigenous and local communities in addition to ILO Convention No.169 and those which exist in national legislation and policies.

64. A second aspect of the "respect" Parties are required to show with regard to the knowledge, innovations and practices of indigenous and local communities can be understood as the requirement to accord such knowledge, innovations and practices a status comparable to that shown to other types of knowledge, innovations and practices. Relevant "traditional" knowledge should thus be accorded a status in national life comparable to that shown to "scientific" knowledge. Relevant innovations carried out by indigenous and local communities should be given a status similar to innovations arising from the scientific and technological communities. Relevant practices and customary uses should be recognised as comparable, when not superior, to "modern" land-use management, agricultural, fishing, medicinal and other activities using biological resources.

65. The manifestation of such respect need not necessarily take a monetary form. It could take the form of: incorporating relevant traditional knowledge into educational syllabuses and vocational training; of engaging the holders of such knowledge as teachers, researchers, extension agents, policy analysts, public administrators, health workers, environmental managers and in other relevant roles; of

publicly recognising the benefits to society arising from traditional knowledge, for example by granting to holders, individual or collective, honorary degrees, titles, medals or other honours; of including holders of traditional knowledge in national delegations to relevant intergovernmental fora and international meetings.

66. In order to meet their obligations to respect, preserve, maintain, protect and encourage, Parties will be required to identify knowledge, innovations and practices that are relevant for the conservation and sustainable use of biological diversity and to identify customary use compatible with conservation or sustainable use requirements. The indicative lists prepared by the Open-ended Intergovernmental Meeting of Scientific Experts on Biological Diversity and the proposed Agenda for Scientific and Technological Research considered by the Intergovernmental Committee represent a preliminary attempt to assist Parties with this identification.

67. Measures that act as incentives for the preservation and maintenance of the knowledge, innovations and practices of indigenous and local communities are included in the incentive measures Parties are required to adopt in accordance with Article 11.

5.2 Promote their wider application with the approval and involvement of the holders of such knowledge, innovations and practices

68. The realisation of this provision of Article 8(j) is dependent on the fulfilment by Parties of the preceding provision. In other words, if Parties fail to respect, preserve and maintain the knowledge, innovations and practices of indigenous and local communities in the ways suggested above, cultural diversity will be lost and with it the traditional knowledge in question. There will thus be ever fewer examples of knowledge, innovations and practices for wider application.

69. In its contribution on traditional forest-related knowledge (TFRK) to the Intergovernmental Panel on Forests, the Secretariat noted that TFRK is made up of the following linked features:

(i) information about the various physical, biological and social components of a particular forested landscape;

(ii) rules for using them without damaging them irreparably;

(iii) relationships among their users;

(iv) technologies for using them to meet the subsistence, health, trade and ritual needs of local people; and

(v) a view of the world that incorporates and makes sense of all the above in the context of a long-term and holistic perspective in decision-making (UNEP/CBD/SBSTTA/2/Inf.3, para.1).

70. It noted that these aspects of TFRK have various kinds of meaning and potential usefulness to global society, but most of the knowledge concerned cannot, and the rest should not, be taken from its owners without their consent. It must therefore be accessed through negotiation and partnership. Most TFRK will mean little outside the environment where it arose, however, and is likely to be most valuable only as a means to achieve on-site sustainable forest management. To do this the owners of TFRK must be involved in:

(i) ownership partnerships, in which local people and the state agree ownership regimes for forest land;

(ii) planning partnerships, in which traditional and other forms of knowledge are used together in making decisions on the use of forests; and

(iii) management partnerships, in which the partners collaborate to put their plans into effect (para.2).

71. The arguments presented here with regard to traditional forest-related knowledge apply equally to the knowledge, innovations and practices of indigenous and local communities within other ecosystems. It thus follows that in order to implement this requirement of Article 8(j), Parties should first examine the potential for the wider application of traditional knowledge at the local or ecosystem level.

72. Such application would need to be through the planning and management partnerships referred to above. There is a growing body of experience, and corresponding literature, on stakeholder identification and participatory planning methodologies. Examples are referred to in the earlier sections of the present note and in the list of sources contained in UNEP/CBD/SBSTTA/2/Inf.3, Annex 1.

73. Article 8(j) requires that such wider application should be with the approval and involvement of the holders of such knowledge, innovations and practices. This is also required by the provisions of the Convention on access to genetic resources, requiring that this be on the basis of prior informed consent and mutually agreed terms, and the provisions of the Convention on technology transfer which require this to be on mutually agreed terms. Such transmission requires mutual respect and understanding, and cannot occur when feelings of inequality persist. For indigenous and local communities to participate fully in such partnerships and to offer their knowledge for the benefit of other stakeholders, certain conditions will need to be met. Holders of traditional knowledge will need to feel secure in their land tenure arrangements; reassured that they have been accorded equal status to other members of the partnerships; and convinced of a common purpose compatible with their cultural and ecological values. Furthermore any special needs regarding participation should be catered for. These may include the need for capacity-building (e.g., negotiation skills, understanding of the environmental management issues under review and of the reasons behind the outside interest in their knowledge, legal support) and mechanisms for compensating the real costs of participation (foregone labour or social investments as well as out of pocket expenses).

74. Document UNEP/CBD/SBSTTA/2/Inf.3 offers examples of how such partnerships can work in the case of forests (paragraphs 50-59). Once a settlement of the ownership partnership has been achieved, planning partnerships can be established. Here, stakeholders collaborate to understand the landscape using both traditional and global approaches to the discovery and use of knowledge. Such procedures also involve adopting guidelines for managing the landscape's ecosystems sustainably for various purposes, and adapting them to local conditions in the light of traditional and other knowledge. Detailed rules for operating a management partnership should emerge from this process, helping to guide the use of the landscape in practice. The details cannot be prescribed, and must emerge from dialogue between knowledgeable people in the context of planning and management partnerships. The evidence is strong that once governments have recognised the nature and value of traditional knowledge and have accepted the need to manage resources through local partnerships, then such arrangements are both feasible and effective.

75. All this suggests that traditional knowledge can provide a strong basis for sustainable ecosystem management for two main reasons. The first is the quality of the information and the interpretative systems possessed by local people after living in an ecosystem many generations, while the second draws on the strength of their commitment to sympathetic ecosystem management that

results from having such knowledge. In other words, they know much and because of this they care greatly.

76. Indigenous and local communities do not know everything, however, nor are they able to regulate every use of every component of an ecosystem. Gaps in knowledge and control mean that they are unable to manage an ecosystem to the limit of its productive capabilities in every dimension. Broad margins for error are built into traditional systems, and depend on social measures to limit the number of users, for example by defending group territories, limiting fertility, and regulating the timing and extent of access to certain areas. These margins buffer the managed ecosystem against the effects of human error and of unexpected events.

77. These measures are able to achieve sustainable use provided the underlying conditions remain fairly constant. A management system based on traditional knowledge can however unravel quickly if population density increases, if access controls break down, or if new technologies are introduced that allow goods to be sold on external markets. Conversely, there are ways for a stable, traditional knowledge-based system to be maintained while selectively importing new ideas and investments to increase the range of materials harvested and the revenues obtained. These ways require that the holders of traditional knowledge concerned retain their authority to decide how the ecosystem is used, and are able to decide for themselves which ideas to import and which investments to undertake, and when.

78. It is important to understand that traditional knowledge systems are dynamic:

"What is 'traditional' about traditional knowledge is not its antiquity, but the way it is acquired and used. In other words, the social process of learning and sharing knowledge, which is unique to each indigenous culture, lies at the very heart of its 'traditionality'. Much of this knowledge is actually quite new, but it has a social meaning, and legal character, entirely unlike the knowledge indigenous peoples acquire from settlers and industrialised societies. This is why we believe that protecting indigenous knowledge necessarily involves the recognition of each peoples' own laws, and their own processes of discovery and teaching" (Submission to the Executive Secretary from the Four Directions Council, Canada, 15 January 1996).

79. The contribution from the Four Directions Council provides an example of the speed by which new knowledge can be tested and taught in a traditional context.

"Diabetes appeared among Blackfoot people only within the last 75 years, although it has now reached epidemic proportions. Within the past generation, a herbal tea has gradually come into widespread use by Blackfoot traditional healers, which is effective in controlling the metabolic symptoms of diabetes. The same plant had unrelated medicinal uses at least a century ago, so it appears that healers have been experimenting with the applications of their existing pharmacopoeia to diabetes and other 'new' and introduced diseases. It is important to recognise that Blackfoot healers generally agree today on a single herbal remedy as the most effective. Hence they have not only been experimenting, but sharing the results with each other."

80. It is thus the combination of accumulated knowledge and the potential for innovation and adaptation of traditional systems, and the equivalent knowledge base and innovative capacity of

'modern' or 'scientific' systems which, if encouraged, offers unquantifiable, but probably substantial, opportunities for identifying improved techniques for conservation and sustainable use of biological diversity.

81. Article 17.2 obliges Parties to facilitate the exchange of information on, *inter alia*, indigenous and traditional knowledge as such and in combination with the technologies referred to in Article 16, paragraph 1. Article 18.4 provides that Parties shall encourage and develop methods of co-operation for the development and use of technologies, including indigenous and traditional technologies, in pursuance of the objectives of the Convention. Notwithstanding the view expressed above that most traditional knowledge will mean little outside the environment where it arises and is likely to be most valuable as a means to achieve on-site sustainable ecosystem management, it follows that, for Parties to have arrived at an identification of such information meriting exchange between Parties, or of indigenous and traditional technologies to be developed and used in co-operation, they must have fulfilled these provisions of Article 8(j) through the establishment of the requisite ownership, planning and management partnerships.

82. The indicative lists prepared by the Open-ended Intergovernmental Meeting of Scientific Experts on Biological Diversity and the proposed Agenda for Scientific and Technological Research considered by the Intergovernmental Committee identify some of the elements to be addressed by Parties for their fulfilment of this provision of Article 8(j). In this respect the SBSTTA may wish to consider carefully the views contained in Annex VII of the report of the Mexico meeting (UNEP/CBD/IC/2/11) and in particular the view expressed that:

"The question itself has to be rephrased. The challenge is not to find the ways to integrate, in modern management practices, knowledge, innovations and practices of indigenous and local communities. Rather, it is to define, in collaboration with indigenous and local communities, which modern tools may be of help to them, and how these tools might be used, to strengthen and develop their own strategy for conservation and sustainable use of biological diversity, fully respecting their intellectual and cultural integrity and their own vision of development."

5.3 Encourage the equitable sharing of the benefits arising out of the utilisation of such knowledge, innovations and practices

83. This requirement of Article 8(j) embodies the recognition expressed by Contracting Parties in preambular paragraph 12 of the desirability of sharing equitably benefits arising from the use of traditional knowledge, innovations and practices relevant to the conservation of biological diversity and the sustainable use of its components. The medium-term work programme of the SBSTTA called upon this meeting, in particular, to consider ways and means to compensate local and indigenous communities through the equitable sharing of the benefits arising from the use of such knowledge, innovations and practices, in accordance with Article 8(j) of the Convention.

84. Equitable sharing of the benefits arising from the use of the knowledge, innovations and practices of local and indigenous communities would be significantly advanced through implementing many of the aforementioned measures, since they would assist in creating an environment which enabled such communities to negotiate with users from the wider community, or society in general, on a more equitable basis.

85. However these techniques do not of themselves provide a basis by which these communities could share in the intangible value that these practices represent. As suggested above, such intangible benefits are significant and perhaps represent economically the most important use by the wider community of such knowledge, innovations and practices. (Their economic value is indicated in the Note prepared by the Secretariat on the economic valuation of biological diversity, see document UNEP/CBD/SBSTTA/2/13). Controlling such use therefore represents an important way that local and indigenous communities could be compensated for the use of their knowledge, innovations and practices. From the perspective of local and indigenous communities control of such intangible goods largely relies upon using either intellectual property rights or contractual licensing arrangements.

86. Reliance upon contractual methods to capture benefit for local and indigenous peoples is widely thought of as the most practical approach to benefit-sharing. It is considered attractive because the contractual concept is one with which most societies are familiar and because it is a relatively private bargain involving minimal governmental intervention. However, the contractual approach presents severe limitations. Factors such as contracts not being binding on third parties, high transaction costs for the parties, the unfamiliarity of indigenous and local communities with formal national legal systems and the disparity in bargaining power, limit significantly the extent to which this approach can be used by local and indigenous peoples to capture the true value or benefit.

87. The identification of holistic approaches to intellectual property which allocate to the holders of traditional knowledge, innovations and practices rights and protection comparable to those offered under existing intellectual property regimes is the subject of much debate. Different options for the development of contractual methods and *sui generis* intellectual property right regimes have been proposed.

88. The previous note by the Secretariat (UNEP/CBD/IC/2/14) reviewed the utility of intellectual property rights in this respect and concluded that there were "no international legal instruments or standards which adequately recognise indigenous and local communities' rights over their knowledge, innovations or practices", let alone gave them ownership of their genetic resources. It went on to observe that "[c]urrent systems of intellectual property rights alone are not sufficient to ensure that benefits flow back to indigenous and local communities. It is difficult to classify indigenous knowledge, innovations and practices into categories of intellectual property developed for use in industrialised countries. Some sort of intellectual property protection for indigenous and local communities may be valuable"... but that "even if the system is effectively adapted, or a *sui generis* system created, most indigenous communities lack the financial, technical and legal means to claim such rights or ensure their effective implementation. Also, it is unclear what mechanism would need to be in place so that the form or type of benefits returning to the community support the conservation and sustainable use of biological diversity". The Secretariat concluded that "[a]t present, any protection afforded the knowledge, innovations and practices of indigenous and local communities seems to depend on contractual agreements and the guidelines used or recommended by intergovernmental, academic, and public and private sector institutions in their dealings with these communities. Reliance on the goodwill of these companies and institutions is unlikely to be sufficient to implement the relevant provisions of the Convention. Positive action by Governments is apt to be necessary."

89. An alternative *sui generis* intellectual property rights system which has been proposed is the Traditional Resource Rights (TRR) concept:

"The term Traditional Resource Rights (TRR) has emerged to define the many "bundles of rights" that can be used for protection, compensation, and conservation.

[..] TRR is an integrated rights concept which recognises the inextricable link between cultural and biological diversity, and is guided by human rights principles including: basic human rights; the right to self-determination; collective rights; land and territorial rights; religious freedom; the right to development; the right to privacy and prior informed consent; environmental integrity; intellectual property rights; neighbouring rights; the right to enter into legal agreements; rights to protection of cultural property, folklore and cultural heritage; the recognition of cultural landscapes; recognition of customary law and practice; and farmers' rights. [..] These rights are mutually supportive and entirely consistent with the Convention on Biological Diversity since the destiny of traditional peoples largely determines and is determined by, the state of the world's biological diversity. Significantly, they are not inconsistent with the requirements of GATT/WTO and FAO/IUPGR." (Posey, D.A. Provisions and Mechanisms of the Convention on Biological Diversity for Access to Traditional Technologies and Benefit Sharing for Indigenous and Local Communities Embodying Traditional Lifestyles OCEES Research Paper, Oxford Centre for the Environment, Ethics and Society, April 1996).

90. A number of overlapping areas of international law provide not only the ideological basis for TRR but also the legal basis for these rights. Despite the considerable number of instruments referred to, TRR cannot be considered self-executing rights and require implementation by national law-making bodies. Posey observes with regard to the relationship between the Convention and Intellectual Property Rights in general, and TRR in particular, that "[d]evelopment of Intellectual Property Rights is necessary because the [Convention] treats traditional knowledge as technology, thereby requiring adequate protection as for industrial technologies. Unfortunately, existing Intellectual Property Rights regimes are not adequate or appropriate for protection of indigenous and traditional peoples. Alternative regimes (or *sui generis* systems) are urgently needed that will be guided by a bundle of rights approaches such as TRRs [sic]. This integrated rights approach offers mechanisms for "harmonising" the CBD with other international agreements and conventions by recognising that human rights have over-riding precedence in ordering global priorities."

91. Other suggested framework *sui generis* regimes include an Intellectual Integrity Framework (Rural Advancement Foundation International *Conserving Indigenous Knowledge: Integrating Two Systems of Innovation An independent study for the United Nations Development Programme*, n/d) and a Conceptual Framework and Essential Elements of a Rights Regime (Nijar, G.S. *In Defence of Indigenous Knowledge and Biodiversity* Third World Network, Penang, Malaysia, 1995).

92. Despite the need for new forms of intellectual property rights to enable local and indigenous communities to benefit properly from the use of their knowledge, innovations and practices, much may still be gained from carefully considering how existing intellectual property rights can be adapted to meet the specific needs of these communities. Although existing intellectual property rights require change before they can properly meet these needs, it may be possible to use and adapt existing systems so that they could better meet the needs of local and indigenous communities. For example, altering the scope of any intellectual property rights is simply a matter of changing the legislation which establishes such rights. Benefit sharing can be encouraged by making the validity of intellectual property rights dependent upon the applicant providing full and frank disclosure as to the sources of the material used to develop the product. It can be encouraged further by requiring the applicant to warrant that they have adhered to the access regulations of the relevant countries or that they have observed an industry code of conduct such as the FAO's International Code of Conduct for Plant

Germplasm Collecting and Transfer. This could also help to overcome monitoring and enforcement problems. Enforcement and administration costs could be defrayed by establishing regional patent offices which have a fast track quasi-judicial review procedure, such as the dispute resolution mechanism adopted by the World Intellectual Property Organisation in 1994.

93. It has been suggested that Parties could improve benefit-sharing by creating a positive link between their patent legislation and their legislation governing access to genetic resources (Yamin, F *The Biodiversity Convention and Intellectual Property Rights* World Wide Fund for Nature, Gland, October 1995). Specific suggestions made include requiring:

(i) patent applicants to disclose the country of origin of biological samples used in research leading to the invention in the normal invention description to be submitted to the patent office;

(ii) applicants to state what part, if any, existing rural, local and indigenous knowledge, innovations or techniques played in identifying the properties and location of relevant samples, including samples that were helpful in the research even though these do not form the basis of the final product or process;

(iii) applicants to enclose an undertaking confirming that to the best of their knowledge, all national laws relating to access to genetic resources, conservation and use of natural resources, customary laws of rural and indigenous peoples and any biodiversity prospecting arrangements entered into by the prospective patentee have been complied with;

(iv) that if no such laws exist, applicants should be required to give an undertaking that any collection was done in compliance with an internationally recognised code, such as the FAO's Code of Conduct for Plant Germplasm Collecting and Transfer or its Code of Conduct on Biotechnology;

(v) that failure to fulfil these requirements should bar the grant of a valid patent and subsequent discovery of false or negligent information should invalidate a patent and lead to appropriate legal proceedings against the patent-holder; and

(vi) that upon receiving adequate documentation, and as a normal part of their scrutiny of patent applications, patent offices should inform designated authorities in the country of origin and any local communities of the pending application concerning them. Countries of origin and local communities should have an opportunity to oppose the grant of a patent and to undertake investigations into whether or not a patentee has fulfilled any relevant code of conduct or biodiversity prospecting arrangements.

94. The possibilities of adapting existing intellectual property rights are difficult to estimate. On the one hand, Intellectual Property Rights have in the past been flexible enough to cope with new technologies and developments. A case in point is the way that Intellectual Property Rights regimes have adapted to allow for protection of computer software programmes. Some 19 countries have enacted a *sui generis* system of IPR for the integrated circuits (or semi-conductor "chips") industry. These laws are a hybrid between standard patent law and copyright protection, offering inventors more flexibility than patents but less control than is normally granted by copyright. Another *sui generis* system is currently being proposed to protect databases. A further example, second tier protection, has been introduced in some Intellectual Property Rights regimes in order to allow small traders and businesses daunted by their experiences of the patent system to have a cheap and quick quasi-intellectual property right protection. This flexibility can also be seen in the way that plant

breeders rights were developed to meet the needs of the agricultural industry in protecting the intellectual property associated with "modern" techniques of crop development.

95. On the other hand inertia and the uncertainty that change brings may work against adapting existing intellectual property rights quickly enough for local and indigenous communities.

96. Adapting existing intellectual property rights and/or developing new types of intellectual property rights requires an examination of the existing legal, social and economic conditions prevailing in the particular country or region as well as consideration of the beneficiaries and markets which rely upon the rights. Owing to these sensitivities, it is not possible to develop a universally applicable right which will meet the needs of all local and indigenous communities, nor is it likely that such a right exists.

97. Most discussion of benefit-sharing has concentrated on access to the knowledge, innovations and practices of indigenous and local communities with meaning outside the local context and potential commercial value. Another scenario under which the provisions of Article 8(j) would come into play should be considered. This involves the free sharing of knowledge by indigenous and local communities with others, most likely at the local level.

98. Such a scenario could involve an indigenous or local community sharing site-specific techniques and best practice with fellow occupants. An example could be an indigenous community sharing information on its agricultural or extractive practices with newcomers to the region, such as settlers in rural colonisation projects. If such sharing resulted in benefits to the wider community, such as successful installation of the colonists and rising incomes, it would be incumbent upon the government, whether local or national, to ensure through fiscal and policy measures that the indigenous community benefited from the increase in local prosperity. Such benefits could take the form of an improved and equitable provision of public services (health, education, water, transport) or of social security benefits. Decisions on the nature and specific form of such benefits would need to be arrived at through a participatory process involving the community that contributed the knowledge and would need to conform to the perceived needs and cultural and social values of the community.

99. It should also be remembered that any consideration of this issue directly impinges on many other aspects of the work programme of the SBSTTA and the COP. For example, the SBSTTA will recall that in addition to the item knowledge, innovations and practices of indigenous and local communities: implementation of Article 8(j)' the Conference of the Parties will consider at its third session:

(i) the compilation of views of Parties on possible options for developing national legislative, administrative or policy measures, as appropriate to implement Article 15 (decision II/18);

(ii) the impact of intellectual property rights systems on the conservation and sustainable use of biological diversity and the equitable sharing of benefits derived from its use in order to gain a better understanding of the implications of Article 16.5 (decision II/12);

(iii) ways to promote and facilitate access to and transfer and development of technology, as envisaged by Articles 16 and 18 of the Convention (decision II/18).

100. Action with regard to any of these items will also develop the ability of local and indigenous communities to benefit more fully from the use of their knowledge, innovations and practices. For example, the provisions in Article 15 are prior informed consent and mutually agreed terms. In a Note prepared by the Secretariat (UNEP/CBD/COP/2/13) drawing on experience to date in order to

describe possible meanings of "mutually agreed terms" it was observed that the "Convention's provisions calling for access to genetic resources "on mutually agreed terms" strongly suggest that negotiated agreements will be the primary vehicle for obtaining access to genetic resources and for sharing the resulting benefits including technologies." It also observed that the types of actors and beneficiaries of such arrangements might include, "private sector firms, universities, conservation groups, government agencies and local and indigenous communities". Finally the note observed that on experience to date in controlling access and seeking to capture benefit, any agreement based on mutually agreed terms which reflect equitable sharing might included terms on:-

(i) providing a range of monetary benefits for various types of access, such as standard fees for samples or royalty rates, etc.;

(ii) providing for standard types of technology transfer or training, or providing circumstances under which joint research ventures should be undertaken, such as leaving not only duplicate samples from a collecting mission but also the technology to maintain these samples properly;

(iii) minimum reporting requirements to the provider on results of future research or development involving the genetic resources;

(iv) agreement on respective IPR over the genetic resources and the technologies developed to use them;

(v) standard practices on agreeing to cite or acknowledge sources of genetic resources; and

(vi) providing benchmarks for providing benefits to local and indigenous peoples.

101. Despite the complexity of the issue, the local sensitivities of control mechanisms and its overlap and dependence with other issues on the agenda, the SBSTTA may wish to consider the following propositions for general guidance:

(i) Most traditional knowledge will mean little outside the environment where it arises and is likely to be most valuable as a means to achieve on-site sustainable ecosystem management;

(ii) Much of this knowledge cannot, and the rest should not, be taken from its holders without their consent and participation;

(iii) Of those forms of traditional knowledge that do have meaning outside their place and culture of origin and potential usefulness to global society, some have no potential for commercial application, but are nevertheless the intellectual property of their holders;

(iv) Forms of traditional knowledge that have both meaning outside their local context and potential commercial value require the establishment of holistic approaches to intellectual property which allocate to the holders of traditional knowledge, innovations and practices rights and protection comparable to those offered under existing IPR regimes. Such holistic regimes should, *inter alia*, establish the right to collective ownership of such knowledge, protect the holders' rights and permit the equitable sharing of benefits;

(v) Such intellectual property protection for traditional knowledge would need to include:

(a) The recognition of groups possessing traditional knowledge as legal entities for the purposes of entering into access agreements concerning traditional knowledge;

(b) The acknowledgement of the right of any such group not to reveal such traditional knowledge;

(c) The recognition in law of the traditional knowledge concerned as the common property of the group entering into the access agreement;

(d) The need for all access to traditional knowledge to be through an access agreement with its holders, where these can be identified;

(e) The definition of the terms of access agreements for the three main circumstances in which access to traditional knowledge might be sought: where the aim is to manage an ecosystem by partnership between the people who live there and the government; where the aim is to invent patentable products for commercial use; and where the aim is to share knowledge freely with others.

6. CONCLUSIONS

102. The fulfilment by Parties of the provisions of Article 8(j) is fundamental to their wider fulfilment of the three-fold objectives of the Convention. Recognising the importance and complexity of the issues surrounding the identification of options for the implementation of Article 8(j) and the need to provide appropriate guidance to Parties, the SBSTTA may wish to consider ways by which these issues could be explored in depth and make recommendations to this end to the Conference of the Parties.

103. In view of the high priority given to these issues, the SBSTTA may wish to recommend the establishment of an ad hoc Technical Panel of Experts in accordance with its modus operandi. If so it may wish to suggest draft terms of reference for such a Panel, which could consist of consideration of the relevant issues organised under three headings, corresponding to the elements of Article 8(j):

(i) ways and means to respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles;

(ii) ways and means to promote their wider application with the approval and involvement of the holders of such knowledge, innovations and practices;

(iii) ways and means to encourage the equitable sharing of the benefits arising from the use of such knowledge, innovations and practices.

104. The SBSTTA may wish to recommend the inclusion in the terms of reference of such a Panel the re-assessment of the indicative list prepared by the Open-ended Intergovernmental Meeting of Scientific Experts on Biological Diversity and of the proposed Agenda for Scientific and Technological Research. It may also wish to include in the terms of reference consideration of Articles 10(c), 17.2 and 18.4 and to advise on the co-ordination of the Panel's work with the consideration by the Conference of the Parties under its Medium-Term Programme of Work of matters relating to Articles 15, 16 and 18. It may also wish to advise the Conference of the Parties on the relationship between the implementation of Article 8(j) and of Articles 11, 12 and 13.

105. The SBSTTA may wish to consider the role of the clearing-house mechanism in respect of the issues raised by Article 8(j). It may also wish to recommend that the Panel consider specific guidance to be given to the institutional structure operating the financial mechanism concerning the implementation of Article 8(j).

106. The SBSTTA will wish to consider how such a Panel could ensure that it receives the widest range of information and views relevant to its terms of reference, in particular the views and recommendations of indigenous and local communities. A possible contribution to meeting this imperative might be to recommend that an early meeting of the Panel be held in Geneva immediately before or after the next session of the Working Group on Indigenous Populations. In this way a large number of representatives of indigenous and local communities could provide input to the work of the Panel.

107. The SBSTTA may wish to consider how work on these issues can inform and draw upon relevant processes in other institutions, in particular the issues being addressed under the aegis of the Commission on Human Rights and of the Commission on Sustainable Development; the elaboration of relevant guidelines and procedures by multilateral development banks, international agencies and donor agencies; and the elaboration of codes of conduct and model contractual arrangements for public and private sector organisations.