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FARMERS' 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<sup>1</sup>

Note by the Interim Secretariat<sup>2</sup>

1. INTRODUCTION

1.1 Background

1. At the first session of the Intergovernmental Committee on the Convention on Biological Diversity held at Geneva from 11 to 15 October 1993, the Committee agreed to a proposal by Nigeria, on behalf of the African Group, that the issue of farmers' rights and the intellectual property rights of similar groups (see UNEP/CBD/IC/2/2, annex 1, para. 22). In accordance with the recognition of their experience and expertise in this issue,<sup>3</sup> the Food and Agriculture Organization of the United Nations (FAO) has, at the invitation of the Interim Secretariat, prepared a background paper on farmers' rights (UNEP/CBD/IC/2/13, section IV).

2. In subsequent discussions with the Interim Secretariat, the original proposer of the item clarified on behalf of the African Group that the

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<sup>1</sup> The title of the present note reflects the nature and purpose of the African Group's request as subsequently clarified by the original proposer. See paragraph 2 of the note, and item 4.2.4 of the annotated provisional agenda (UNEP/CBD/IC/2/1/Add.1).

<sup>2</sup> The Interim Secretariat gratefully acknowledges the helpful input and insight of its colleagues at the United Nations Educational, Scientific and Cultural Organization (UNESCO) in the conceptualization of the present note.

<sup>3</sup> See paragraph 4(b) of resolution 3 of the Nairobi Final Act of the Conference for the Adoption of the Agreed Text of the Convention on Biological Diversity (United Nations Environment Programme, *Convention on Biological Diversity* (Environmental Law and Institutions Programme Activity Centre), June 1992, p.13).

request was also meant to cover the provision of background information to the Committee on the intellectual and other rights of indigenous and local communities. The goal of the request was to provide the basis for further elaboration and study of possible mechanisms for benefit-sharing with these communities and means of implementing the relevant provisions of the Convention.<sup>4</sup>

3. In response to the clarified request, the present note examines legal and other methods by which the rights of indigenous and local communities have been recognized for insight into implementation options under the Convention. It first looks to legal regimes including existing intellectual property rights systems, legal instruments on addressing the rights of indigenous peoples, and concludes with a discussion of issues national-level legal regimes may wish to address. The note next examines the evolution of standards within the United Nations system. In accordance with the recognition in the Convention (Article 8(j)) of the need for the participation of indigenous and local communities, the note also examines the declarations and statements of indigenous organizations. Finally, the practical experience of a variety of organizations with arrangements, programmes or projects related to or affecting indigenous and local communities is analysed. Information on these "ad hoc" mechanisms is particularly valuable because most of the active protection of the knowledge of indigenous and local communities is taking place in this arena.

4. The aim of the present note is not to provide answers or solutions, but to explore possibilities. It poses questions for examination. Can intellectual property law provide indigenous peoples with a right to a share of the benefits that accrue from the process of developing pharmaceutical, agricultural or other products? Are there other arrangements that can be developed that share benefits with these communities? What light do legal regimes, recent legal developments and practical experience shed on answering these questions?

5. Concrete implementation measures will only emerge through dialogue and discussion among the relevant actors internationally and nationally. The relevant actors include the members and representatives of the indigenous and local communities themselves. Just as Article 8(j) of the Convention affirms the participatory right of these communities, the establishment of effective implementation regimes requires their active involvement and an understanding of their ways of approaching these problems.

1.2 The importance of indigenous and local communities embodying traditional lifestyles for the conservation and sustainable use of biological diversity: the basis for concern

6. The loss of the world's fundamental living resources -- its genes, species, habitats and ecosystems -- is proceeding at an unprecedented and alarming rate. This loss is most immediately and keenly felt by those communities whose livelihood depends directly upon their surrounding environment.

7. Indigenous communities are situated predominantly in areas of high biological diversity. Many indigenous and local communities have cultivated and sustainably used the biological diversity of their surrounding environments for thousands of years. If species and ecosystems are to be conserved and used sustainably, these communities must have a

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<sup>4</sup> For the discussion of the relevant provisions of the Convention, see sect.1.3 *infra*.

stake and interest in maintaining them. As on-site managers with extensive knowledge of the local environment, these communities are ultimately responsible for implementing any conservation and sustainable-use policies.

8. The contribution of indigenous and local communities to the conservation and sustainable use of biological diversity goes far beyond their role as natural resource managers. The skills and techniques developed in the various forms of sustainable development practised by indigenous and local communities provide valuable information to a global community challenged by a growing population and a shrinking resource base. Traditional knowledge of ecology and ecosystem management may also have commercial value.<sup>5</sup> In addition, there is growing appreciation of the value of the knowledge and experience in the use of the medicinal, agricultural, and other useful properties of endemic flora and fauna.

9. Between 300,000 and 750,000 plant species are thought to exist in the world, with much of the diversity found in tropical zones. While fewer than one per cent of this diversity has been documented by science for their medical or chemical properties, valuable information about these resources is contained within culturally diverse knowledge systems.<sup>6</sup>

"Traditional remedies, although based on natural products are not found in 'nature' as such; they are products of human knowledge. To transform a plant into a medicine, one has to know the correct species, its location, the proper time of collection (some plants are poisonous in certain seasons), the part to be used, how to prepare it (fresh, dried, cut in small pieces, smashed), the solvent to be used (cold, warm or boiling water; alcohol, the addition of salt, etc.), the way to prepare it (time and conditions to be left on the solvent), and, finally, posology (route of administration, dosage)."<sup>7</sup>

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<sup>5</sup> For example, in the 1970s the Mikmaq fisherfolk in Nova Scotia, Canada, applied traditional knowledge of the marine ecosystem to solve the problem of growing oysters on soft muddy bottoms. Unfortunately, their method was copied by non-indigenous businesses who did not share the economic benefit realized with the Mikmaq people. See, "Study on the protection of the cultural and intellectual property of indigenous peoples, by Erica-Irene Daes, Special Rapporteur of the Sub-Commission on Prevention of Discrimination and Protection of Minorities and Chairperson of the Working Group on Indigenous Populations", (E/CN.4/Sub.2/1993/28), p.26, para.104 (hereinafter cited as Daes Study).

<sup>6</sup> J. Kloppenburg Jr., "No Hunting! Biodiversity, indigenous rights, and scientific poaching." *Cultural Survival Quarterly*, Summer 1991, p.15.

<sup>7</sup> E. Elisabetsky, "Folklore, Tradition or Know-How? The ethnopharmacological approach to drug discovery depends on our ability to value non-Western knowledge of medicinal plants." *Cultural Survival Quarterly* Summer 1991 p.10.

10. It is estimated that three quarters of the plants that provide active ingredients for prescription drugs came to the attention of researchers because of their use in traditional medicine.<sup>8</sup> Michael Balick of the New York Botanical Gardens found that using traditional knowledge increased the efficiency of screening plants for medical properties by more than 400 per cent.<sup>9</sup> The current value of the world market for medicinal plants derived from leads given by indigenous and local communities is estimated to be US\$ 43 billion.<sup>10</sup> Furthermore, the value of crop varieties improved and developed by traditional farmers to the international seed industry is estimated to be US\$ 15 billion.<sup>11</sup> In addition to medicines and agricultural products, other natural products developed by indigenous peoples and local communities such as sweeteners, perfumes, fabrics and cosmetics are in everyday use. With a growing market for natural products the value of these contributions will continue to rise.<sup>12</sup> Underlying the request to which this note is responding, is undoubtedly a concern over the growing asymmetry between the recognition given to information, innovation and resources contained in developing countries and that given to information, innovation and resources found in industrialized nations and its impact on the ability to arrive at equitable benefit-sharing arrangements. The focus of this asymmetry is the expanding intellectual property rights regimes of many industrialized countries. Indeed, this is why the original request for a background paper from the Interim Secretariat was formulated specifically in relation to intellectual property rights.

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<sup>8</sup> Andrew Gray, "Between the spice of life and the melting pot: Biodiversity conservation and its impact on indigenous peoples." International Working Group for Indigenous Affairs (IWGIA), document 70, 1991.

<sup>9</sup> Michael Balick, Ethnology and the identification of therapeutic agents from the rainforest. Bioactive Compounds from Plants, (D.J. Chadwick and J. Arsh, eds. 1990).

<sup>10</sup> A. Gray, "Indigenous Peoples and the Marketing of the Rainforest". *The Ecologist*, vol. 20, No. 6. 1991; and D. Posey, "Intellectual Property Rights and Just Compensation for Indigenous Knowledge". *Anthropology Today*, vol. 6, No. 4, August 1990.

<sup>11</sup> D. Posey, loc.cit., p.15.

<sup>12</sup> While recognizing the value of the contribution of knowledge and innovations emanating from developing countries, concern has been expressed regarding unrealistic expectations about the market potential of all genetic resources. John H. Barton and Eric Christensen, "Diversity Compensation Systems: Ways to Compensate Developing Nations for Providing Genetic Materials" in Seeds and Sovereignty: The Use and Control of Plant Genetic Resources, (1988), page 338. See also Stephen Brush, "Indigenous Knowledge of Biological Resources and Intellectual Property Rights: The Role of Anthropology", *American Anthropologist*, 95 (3): 653-686 (1993). Brush notes that crop germplasm is stored in quantity in industrialized countries and in international agricultural research institutions and may be both more valuable and accessible than uncollected germplasm. He states that currently the supply of collected crop germplasm exceeds demand.

11. Historically, nations freely exchanged plant genetic resources which were considered the "common heritage" of humankind.<sup>13</sup> The growth of technologies which use and raise the commercial value of genetic resources combined with the loss of biological diversity worldwide, has led to a narrowing of the free exchange principle. Thus far, this contraction of the free-exchange principle has been largely one-sided. The contributions of public and private sector institutions in industrialized countries tend to be considered patentable innovation while the role of indigenous and local communities in developing and conserving land races, or traditional healers' knowledge of medicinal plants are given no value.

12. The intellectual-property-rights regimes are expanding in many industrialized countries to cover genetically engineered materials whether whole organisms, tissue cultures, cells, or DNA sequences. As noted at the Madras Plenary Session of the Keystone International Dialogue Series in February 1990, if this trend continues, the only forms of human innovation that will not be protected under an intellectual-property-rights regime will be those informal innovations in developing countries:

"The twin dangers of expansion of the scope of formal patent rights on the one hand, and non-recognition of informal innovation systems on the other, will lead to a widening of the economic gap between industrialized and poor nations" (KIDSPGR report, 1990:6).

13. A policy of treating traditional knowledge and biological materials as "free goods" discounts their value despite their recognized utility. It also fails to recognize the critical links between incentive systems and the conservation and sustainable use of biological diversity. Incentives are needed if indigenous and local communities are to resist economic pressures for other forms of land use such as the production of cash crops or logging.

14. There is no doubt that academic and corporate scientists in industrialized nations are adding value to the information and materials they acquire from developing nations. What needs to change is the lack of recognition of the value already in existence when the material is collected.

15. The recognition of rights, whether in intellectual property or other forms, is the basis for benefit-sharing arrangements and the incentive systems they create. Rights over commercial products or processes are well developed. Rights over the material from which the products or processes were derived may also be well developed, but they remain largely unrecognized at the national and international levels. The objective of a system of rights in this context is to create a benefit-sharing regime which provides incentives for indigenous and local communities to explore, discover, inventory, conserve and sustainably use biological resources. The policy challenge facing Governments in the implementation of the Convention's benefit-sharing provisions in relation to indigenous and local communities revolves around determining the appropriate scope and nature of indigenous rights and the attributes of an effective benefit-sharing regime.

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<sup>13</sup> The recognition of farmers' rights in the International Undertaking on Plant Genetic Resources was an attempt to address this imbalance. FAO Conference resolution 5/89 endorsed the concept of farmers' rights which recognized the intellectual contribution of farmers to germplasm conservation and development and vested these rights in the international community as trustee for present and future generations of farmers. (See, UNEP/CBD/IC/2/13, section IV).

1.3 The Convention's provisions on indigenous and local communities  
embodying traditional lifestyles<sup>14</sup>

16. The Convention provides new possibilities for recognizing the importance of indigenous and local communities in concrete terms. One such possibility is contained in the Convention's direct references to benefit-sharing with indigenous and local communities. In the preamble, the Contracting Parties recognize:

"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".

17. 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. This section recognizes the link between many communities and their traditional access to genetic resources. In addition, it recognizes that their knowledge of biological resources and techniques for use may have value outside the communities themselves.

18. Article 8 (j) formulates the recognition of the preamble as a legal obligation under the Convention:

"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 utilization of such knowledge, innovations and practices".

19. While several other articles of the Convention are relevant (see Articles 10(c), 17(2) and 18(4) discussed below), this provision and the section of the preamble concern indigenous and local communities exclusively and therefore contain the main thrust of the Convention as regards these communities. Article 8(j) obligates each Party, subject to its national legislation, to "respect, preserve and maintain knowledge,

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<sup>14</sup> There is no internationally accepted definition of "indigenous" nor does Article 2 (Use of Terms) of the Convention attempt a definition. The Working Group on Indigenous Populations considered the meaning of "indigenous" but ultimately chose not to adopt a formal definition in order to accommodate the widely disparate views of various governments (See, Hannum, *New Developments in Indigenous Rights*, 28 Va.J.Int'l L. 649, 664 (1988)). Indigenous groups have emphasized their right to define themselves and have generally not accepted definitions put forward by others. The Convention on Biological Diversity uses the phrase "indigenous and local communities embodying traditional lifestyles". To avoid repeating the lengthy phrase throughout the present note, the phrase "indigenous and local communities" will be used with the understanding that this is convenient shorthand for the full terminology used in the Convention.

innovations and practices" of indigenous and local communities where these involve biological diversity. The next part of the paragraph calls for the promotion of wider application of traditional knowledge and is an implicit recognition of the importance of the knowledge and practices to the rest of the world. It also affirms participatory rights for indigenous and local communities by stating that the promotion and dissemination of this information is subject to the approval and involvement of these communities. Finally, the provision "encourages" the equitable sharing of benefits arising from the use of traditional knowledge, innovations and practices.

20. Consistent with the general orientation of the Convention as a whole, 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.

21. 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 of sustainable use requirements." Article 17(2) includes indigenous and traditional knowledge in the types of information that are to be exchanged among Parties. Finally, Article 18(4) commits countries to "encourage and develop methods of cooperation for the development and use of technologies, including indigenous and traditional technologies, in pursuance of the objectives" of the Convention.

## 2. EXISTING MECHANISMS: INSIGHT FOR IMPLEMENTATION?

22. This section discusses three broad areas where norms may be found or developed to implement the Convention's provisions concerning indigenous and local communities: legal frameworks; evolving international standards on the rights of indigenous peoples; and the current practice of a cross-section of public and private institutions with programmes affecting indigenous and local communities.

### 2.2.1. Legal frameworks

#### 2.2.1.1. Intellectual property rights

23. There is no uniform international system of intellectual property rights protection.<sup>15</sup> None the less, there are international agreements which attempt to harmonize national patent laws. Most attempts are efforts to harmonize procedural requirements, such as the patent application process, but some aim at substantive harmonization.<sup>16</sup>

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<sup>15</sup> The conventional use of the term intellectual property rights applies to six forms of protection: trade secrets, patents, petty patents, plant breeders' rights, copyright and trademark.

<sup>16</sup> The most recent example is the Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPs), an element of the Uruguay Round of the General Agreement on Tariffs and Trade (GATT) adopted in late 1993. See paragraph 26 of the present note.

24. Despite the attempts at harmonization, substantial variations among national laws remain. In particular, there are important differences among national systems regarding what is patentable subject matter. Significantly, no international agreement achieves an internationally accepted definition of intellectual property nor of the rights appertaining thereto.

25. By its resolution 1991/31 of 29 August 1991, the Sub-Commission on Prevention of Discrimination and Protection of Minorities requested the Secretary-General to prepare a concise report on the extent to which indigenous peoples can utilize existing international standards and mechanisms for the protection of their intellectual property.<sup>17</sup> While recognizing the possible relevance of existing agreements, the report concluded that they do not give full and proper recognition to the wide variety of plants developed by indigenous peoples for food, medicines and other purposes<sup>18</sup> and that "existing international agreements on intellectual property appear largely inadequate to meet the concerns of indigenous peoples for protection of their indigenous knowledge."<sup>19</sup>

26. The Uruguay Round of the General Agreement on Tariff and Trade (GATT) was concluded in late 1993.<sup>20</sup> It incorporates an element called Trade Related Aspects of Intellectual Property Rights (TRIPs). TRIPs is an important, but limited, step towards establishing international standards for intellectual property rights protection.

27. TRIPs is not likely to facilitate the recognition of the intellectual property rights of indigenous peoples. Because intellectual property laws vary from country to country, the intellectual property rights of indigenous peoples depend on the laws of the country under whose jurisdiction they fall. Articles 65, 66 and 67 of the adopted text provide for special consideration for least developed countries and flexibility for transitional arrangements for developing countries. These provisions may limit the ability of indigenous peoples to obtain intellectual property rights in traditional knowledge in those countries without strong intellectual property legislation. In addition, Article 27 provides flexibility to all Parties in determining whether or not to allow for patents on plants and animals<sup>21</sup> so that a uniform system within which to

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<sup>17</sup> By resolutions 1990/59 and 1991/31, the Sub-Commission also suggested that the World Intellectual Property Organization (WIPO) advise on whether the interests of indigenous peoples can be protected by the Berne Convention (the Paris Act), the Paris Convention (industrial property), the Geneva Treaty (scientific discoveries), the Budapest Treaty (micro-organisms), the Madrid Agreement (trademarks), the Lisbon Agreement (appellations of origin), The Hague Agreement (industrial designs), the Model Provisions on folklore, and other agreements. WIPO has not yet issued a report in response to the Sub-Commission suggestion.

<sup>18</sup> Intellectual property of indigenous peoples: concise report of the Secretary-General, (E/CN.4/Sub.2/1992/30), p.3, para.10 (hereinafter referred to as the report of the Secretary-General).

<sup>19</sup> *Ibid.*, p.6, para.21.

<sup>20</sup> MTN/FA II-A1C, Geneva 1993.

<sup>21</sup> Article 27 provides in relevant part:

"3. Members may also exclude from patentability:  
"...



address the intellectual property rights of indigenous and local communities in these resources has not been created. Developing countries opposed to intellectual property rights in general or in particular areas, such as patents for most life forms, are not likely to have to make major changes under TRIPs nor are they required to make any changes in the near future.

28. Bearing in mind the national character of intellectual property systems, these systems in industrialized countries do share a somewhat common orientation. Understanding this general orientation is useful in evaluating their potential to recognize and reward the intellectual contribution of indigenous and local communities. In the context of biological diversity, the intellectual property rights regimes of industrialized countries have been designed to reward those that can, for example, patent certain types of innovation, but do not recognize those who were often directly or indirectly the originators of that innovation.<sup>22</sup> At the same time, no existing or proposed agreements provide for explicit legal protection for the intellectual contributions of indigenous peoples. Consequently, intellectual property rights regimes are currently protecting only a small part of the genetic resource innovations taking place globally.

29. Implementing intellectual property rights for indigenous knowledge under the standard existing systems will face certain obstacles. The conventional intellectual property rights system described above is designed to protect readily identifiable, differentiated contributions to existing general knowledge. The intellectual contribution of indigenous and local communities is often collective and acquired over generations and many countries will not consider long-held knowledge to be sufficiently novel or inventive to qualify for patent protection. Also, traditional knowledge is often acquired across boundaries. "Here questions of what constitutes an indigenous group and where boundaries between groups can be drawn become relevant and problematic because of social, legal, and political ambiguity, cultural heterogeneity, and uneven distribution of knowledge of biological resources."<sup>23</sup>

30. Even if an indigenous product is patentable, this does not necessarily preclude another party from obtaining a patentable product that may be based on the indigenous product. If, for example, the traditional preparation of a medicinal plant qualified for patent protection, a pharmaceutical company could still obtain a patent for a non-obvious and

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"(b) plants and animals other than micro-organisms, and essentially biological processes for the production of plants or animals other than non-biological and microbiological processes. However, Members shall provide for the protection of plant varieties either by patents or by an effective sui generis system or by any combination thereof..."

<sup>22</sup> For a comprehensive analysis of the requirement of United States intellectual property rights law and its potential application to the traditional knowledge, innovations and practices see Josephine Axt, M. Lynne Corn, Margaret Lee, and David M. Ackerman, Biotechnology, Indigenous Peoples, and Intellectual Property Rights, CRS report for Congress, 16 April 1993, pp.32-63 (hereinafter referred to as CRS report).

<sup>23</sup> Stephen B. Brush, "Indigenous Knowledge of Biological Resources and Intellectual Property Rights: The Role of Anthropology," *American Anthropologist* 95(3):653-686 at 663.

novel derivative.<sup>24</sup> Under the current system the patentee of the traditional preparation would have no legal right to a share of the profits accruing to the derived product or process.

31. Trade-secret and copyright protection have been raised as other possible intellectual property mechanisms that indigenous and local communities might use to protect their intellectual property.<sup>25</sup> If recorded in a tangible medium, indigenous people could have a copyright in the documentation of their knowledge. The copyright would, however, protect only the specific expression and not the knowledge itself. Anyone could use this knowledge.<sup>26</sup> It may also be possible in some circumstances to consider indigenous knowledge as a proprietary asset in the form of a trade secret and thereby be given contractual protection. Indigenous people must, however, be in a position to withhold their knowledge until they negotiate satisfactory agreements on protection and compensation. This is likely to be difficult when traditional knowledge by definition has been handed down over the generations.<sup>27</sup>

32. The concluding comments of the Secretary-General's report on the intellectual property rights of indigenous peoples stressed: "If existing agreements do not protect the intellectual property rights of indigenous people, they may merit review and amendment."<sup>28</sup> Their potential for extending protection to the traditional knowledge, innovations and practices warrants exploration.<sup>29</sup>

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<sup>24</sup> For example, the rosy periwinkle of Madagascar was brewed by local communities as a tea to treat diabetes. This was the lead that led scientists from industrialized countries to explore the plant. It was, however, isolated, purified alkaloids identified as being effective against leukemia that served as the basis for patent protection. The products and processes subsequently patented in industrialized countries would likely have been patentable even if a patent had been granted for the traditional tea treatment of diabetes.

<sup>25</sup> See for example: Michael A. Gollin, "An intellectual property rights framework for biodiversity prospecting" in Biodiversity Prospecting: Using Genetic Resources for Sustainable Development, A World Resources Institute Book, May 1993, p.159; Mohamed H. Khalil, Walter V. Reid and Calestous Juma, "Property Rights, Biotechnology and Genetic Resources", Biopolicy International, No. 7, 1992; Intellectual property of indigenous peoples: concise report of the Secretary-General (E/CN.4/Sub.2/1992/30), CRS report p.47.

<sup>26</sup> See CRS report p.47.

<sup>27</sup> See report of the Secretary-General, p.7, para.24.

<sup>28</sup> Report of the Secretary-General, p.8, para.28.

<sup>29</sup> For example, is it possible to adapt the corporate model where a community of people is granted the legal standing of an individual to surmount the problem posed by collectively-held information? Certainly, the current pattern even in the industrialized world is to award patents to companies or research institutions and not to the individual scientist or inventor.

33. In considering the creation or modification of an intellectual property regime, Governments must identify the characteristics and attributes of an intellectual-property-rights regime that would provide for benefit-sharing with indigenous and local communities for past and future contributions and incentives for conservation. In order to develop a new or modified system it needs to be clear what the objectives of the system are. The greater the number of objectives, the more challenging the process of creating or modifying the regime will be.

2.1.2. International Labour Organisation (ILO) Convention No. 169:  
Convention on Indigenous and Tribal Peoples in  
Independent Countries<sup>30</sup>

34. International Labour Organisation Convention no. 169, the Indigenous and Tribal Peoples Convention of 1989 (hereinafter referred to as Convention No. 169), is the only international instrument that is concerned exclusively with the rights of indigenous and tribal peoples. Convention No. 169 revised the Indigenous and Tribal Populations Convention and Recommendation of 1957 (ILO Convention No. 107) which emphasized assimilation rather than cultural preservation and did not prove effective in the ratifying countries.<sup>31</sup>

35. ILO Convention No. 169 entered into force on 5 September 1991 and as of 1 April 1994 had seven ratifications.<sup>32</sup> The Convention offers the possibility for binding international rules about how Governments treat their indigenous peoples.

36. 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".

37. While these provisions do not explicitly refer to the intellectual or any other kind of property rights of indigenous peoples, they appear to be broad enough to require measures to protect the heritage of the peoples concerned. The protection and recognition of the institutions, property, and environment of indigenous peoples provided for in Article 4 might include the protection of rights in traditional knowledge. This could

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<sup>30</sup> International Labour Organisation: Convention No. 169.

<sup>31</sup> The preamble to Convention 169 states:

"Considering that the developments which have taken place in international law since 1957, as well as developments in the situation of indigenous and tribal peoples in all regions of the world, have made it appropriate to adopt new international standards on the subject with a view to removing the assimilationist orientation of earlier standards."

<sup>32</sup> Bolivia, Colombia, Costa Rica, Mexico, Norway, Paraguay and Peru.

provide the basis to establish mechanisms to ensure that indigenous and local communities are compensated for the use of their traditional knowledge whether or not this knowledge would qualify for protection under a conventional intellectual-property-rights regime.

38. At present it is unclear whether ILO Convention No. 169 will attract more than the 27 ratifications of its predecessor, Convention No. 107. As noted by one author, "no matter how many Governments ratify Convention No. 169 its value as a guarantee of indigenous rights is suspect if it is widely opposed by indigenous peoples."<sup>33</sup> While some indigenous groups supported the Convention, the indigenous preparatory meeting for the seventh session of the Working Group on Indigenous Populations in 1989 submitted a resolution condemning the Convention, asking States not to ratify it, and demanding that it be ignored in the development of the draft declaration on the rights of indigenous people.<sup>34</sup> The objection of most relevance to the Convention on Biological Diversity was the dissatisfaction expressed with the provisions regarding land and natural resource rights.

#### 2.1.3. National legal frameworks: issues for consideration

39. The Convention on Biological Diversity does not challenge the existing international norm that the States within whose jurisdiction indigenous and local communities reside have the primary responsibility for protecting the interests of these people. Article 8 (j) not only does not establish an international mechanism for implementation, it states that implementation is "subject to national legislation". The provision leaves it up to individual State Parties to determine how to "promote" the wider dissemination of indigenous knowledge and "encourage" the equitable sharing of benefits with these communities.

40. There is a broad spectrum of ways in which national Governments relate to the indigenous peoples within their boundaries. Systems range from limited self-rule with regard to discrete parts of indigenous affairs to full independence from the national Government with varying degrees of political and economic autonomy found in between. Different patterns of implementation of Article 8(j) and related provisions will undoubtedly be developed depending on the resource areas, the legal systems of the national Government and the needs and aspirations of the indigenous and local communities under the Government's jurisdiction.

41. The following is a list that sketches out some general measures Governments may wish to consider as they begin determine the most suitable means of implementation. The list is interrelated with overlap among the items. The list is not meant to be comprehensive but simply to stimulate a discussion which will refine the ideas and bring other possible measures to the fore. Ideally, Governments and indigenous communities will work together to find mutually acceptable means of implementation.

(a) *State recognition of communal rights.* This could empower indigenous and local communities and provide the legal basis for ensuring that some of the benefits accruing from the collection of genetic resources or local knowledge is shared directly with the source community.

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<sup>33</sup> Andrée Lawry, "Contemporary Efforts to Guarantee Indigenous Rights under International Law", *Vanderbilt Journal of Transnational Law*, vol. 23, No. 4, 1990, 703, 718.

<sup>34</sup> For the discussion of the Working Group see section 2.2.1. *infra*.

(b) *State recognition of appropriately defined forms of indigenous property rights, including the ability to control access to genetic resources within their territory.*<sup>35</sup> Recognition as a legal entity able to own property collectively, control access and enter into contractual arrangements with outside entities are just some of the components that may be important for ensuring a flow of benefits to indigenous and local communities.

(c) *Access to the formal legal system.* Legal standing in the national judicial system and recognition in the legislative process can be critical to establishing and enforcing indigenous rights.

(d) *The right to participate.* The right to participate directly in the national decision-making process on issues pertaining to their rights will help ensure the decisions are well-suited to the local environment and capable of being implemented at that level.

(e) *Modification of "perverse" genetic resource and agricultural policies.* Policies that have the effect of inhibiting informal innovation should be examined.

(f) *Access to financial and technical resources under the Convention on Biological Diversity.* Capacity-building for indigenous and local communities could be significant for the effective implementation of the Convention.<sup>36</sup> It will also require financial and technical resources. Governments may wish to consider what would be an effective national policy on access to (and influencing requests for) resources under the Convention.

(g) *Strengthen capacity for use of national laws.* Governments may wish to consider how they may facilitate the strengthening of the institutional capacity of indigenous and local communities to take advantage of existing national laws, including intellectual property laws.

(h) *Control over production and marketing.* Encouraging the production and marketing of indigenous rather than Western-motivated products may be more likely to create an incentive regime capable of conserving biological resources. Governments may wish to consider mechanisms for local control over production and marketing.

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<sup>35</sup> Bolivia, Brazil, Colombia, Ecuador and Venezuela have all recognized land rights of indigenous communities that have inhabited and conserved tropical forests for centuries. See Alan Thein Durning, "Let's Put a Proper Price on Trees", International Herald Tribune, 1 February 1994. See also, German Sarmiento, "The New Constitution of Colombia: Environmental and Indigenous People's Issues." in *Widening Perspectives on Biological Diversity*, Krattiger et.al, eds., International Academy of the Environment and IUCN - The World Conservation Union, 1994, which discusses the Colombian constitution's recognition of the "territorial entities" of indigenous peoples. The sharing of national experience would be valuable to the Parties to the Convention on Biological Diversity as they consider measures to implement Article 8 (j) and related articles.

<sup>36</sup> Examples of capacity-building might include building the abilities of indigenous and local communities to supervise research on their territories or to develop their own institutions for ecological and medical research.

42. The emphasis on national-level decision-making in the Convention makes information on government experience valuable to Parties as they consider possible means to implement Article 8(j) and related provisions. The Working Group on Indigenous Populations<sup>37</sup> is undertaking a study on "treaties, agreements and other constructive agreements between states and indigenous populations." The results of this study, projected to be available in 1995, may provide useful examples that can be applied to implementation measures under the Convention on Biological Diversity.

## 2.2. Evolution of standards concerning the rights of indigenous peoples

### 2.2.1. The United Nations

#### 2.2.1.1. Draft declaration on the rights of indigenous peoples<sup>38</sup>

43. The Working Group on Indigenous Populations was established in 1982. Five individual experts from the Sub-Commission on Prevention of Discrimination and Protection of Minorities compose the Working Group. Its task is two-fold: (a) to review developments affecting the rights of indigenous peoples; and, (b) to develop standards concerning the rights of indigenous peoples. In 1984, the Sub-Commission instructed the Working Group to consider drafting principles on indigenous rights.

44. The Working Group has been very accessible to indigenous and local communities accepting written and oral comments from any indigenous organization whether or not it is formally recognized by the Economic and Social Council. Comments have been received on the draft declaration which was revised as agreed upon by the members of the Working Group at the second reading at its eleventh session, in 1993.

45. Articles 26 and 29 are noteworthy in attempting to establish norms of relevance to the provisions on indigenous and local communities in the Convention on Biological Diversity. Article 26 provides in part:

"Indigenous peoples have the right to own, develop, control and use the land and territories, including the total environment of the lands, air, waters, coastal seas, sea-ice, flora and fauna and other resources which they have traditionally owned or otherwise occupied or used."

Article 29 states:

"Indigenous peoples are entitled to the recognition of the full ownership, control and protection of their cultural and intellectual property.

"They have the right to special measures to control, develop and protect their sciences, technologies and cultural manifestations, including human and other genetic resources, seeds, medicines, knowledge of the properties of fauna and flora, oral traditions, literatures, designs and visual and performing arts."

46. Article 26 is an example of a provision that could serve as the foundation upon which benefit-sharing arrangements may be struck. The article provides indigenous communities with the right to own and control the use of their land, including its flora and fauna. The right established over flora and fauna enables indigenous communities to regulate

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<sup>37</sup> See section 2.2 *infra*.

<sup>38</sup> Report of the Working Group on Indigenous Populations on its eleventh session (E/CN.4/Sub.2/1993/29), annex I.

access to the genetic resources on their land and territories. The ability to exclude others from using the resources creates the basis for a bargain for rights to use the resources. This, in turn, ensures that a system of returns to the community can be established.

47. Article 29 recognizes that conventional intellectual property rights may not recognize the contribution of indigenous and local communities and special measures may be necessary for the protection of these rights.

2.2.1.2. United Nations Technical Conference on Practical Experience in the Realization of Sustainable and Environmentally Sound Self-Development of Indigenous Peoples

48. The United Nations Technical Conference on Practical Experience in the Realization of Sustainable and Environmentally Sound Self-Development of Indigenous Peoples was held in Santiago, Chile from 18 to 22 May 1992. Several of the principles and recommendations adopted call for actions to protect the intellectual property rights and traditional knowledge of indigenous peoples. In particular, recommendation 10 called for:

"The United Nations system, with the consent of indigenous peoples, to take measures for the effective protection of property rights (including intellectual property rights) of indigenous peoples. These include, *inter alia*, cultural property, genetic resources, biotechnology and biodiversity.<sup>39</sup>

2.2.1.3. United Nations Conference on Environment and Development

49. In addition to the Convention on Biological Diversity, three other instruments containing provisions on indigenous peoples and biological diversity were adopted at the United Nations Conference on Environment and Development. While none are legally binding instruments, the Rio Declaration on Environment and Development,<sup>40</sup> Agenda 21,<sup>41</sup> and the Non-Legally Binding Authoritative Statement of Principles on the Management, Conservation and Sustainable Development of All Types of Forests<sup>42</sup> all contain provisions calling upon States to promote the involvement of indigenous peoples in the conservation and sustainable use of biological diversity and make use of their knowledge about biological resources.

Principle 22 of the Rio Declaration states:

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

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<sup>39</sup> E/CN.4/Sub.2/1992/31, sect. V, recommendation 10.

<sup>40</sup> *Report of the United Nations Conference on Environment and Development, Rio de Janeiro, 3-14 June 1992* (A/CONF.151/26/Rev.1 (Vol.I and Vol.I/Corr.1, Vol.II, Vol.III and Vol.III/Corr.1)) (United Nations publications, Sales No. E93.I.8 and corrigenda), vol. I: *Resolutions adopted by the Conference*, resolution I, annex I.

<sup>41</sup> *Ibid.*, annex II.

<sup>42</sup> *Ibid.*, annex III.

An example from chapter 26 of Agenda 21, which is devoted entirely to the role of indigenous peoples and their communities, provides:

"26.4 Some indigenous people and their communities may require, in accordance with national legislation, greater control over their lands, self-management of their resources, participation in development decisions affecting them, including where appropriate, participation in the management of protected areas. The following are some specific measure which Governments could take:

"...

"(b) Adopt or strengthen appropriate policies and/or legal instruments that will protect indigenous intellectual and cultural property and the right to preserve customary and administrative systems and practices."

Paragraph 12 (d) of the Forest Principles states:

"(d) Appropriate indigenous capacity and local knowledge regarding the conservation and sustainable development of forests should, through institutional and financial support and in collaboration with the people in the local communities concerned, be recognized, respected, recorded, developed and, as appropriate, introduced in the implementation of programmes. Benefits arising from the utilization of indigenous knowledge should therefore be equitably shared with such people."

50. The provisions emerging from the Conference in these instruments provide strong support for the development of new measures -- whether national, international or some combination thereof-- for the protection of indigenous peoples' heritage.

#### 2.2.2 Declarations of indigenous peoples

51. There are many declarations by indigenous peoples which establish the principles and standards they would wish to see governing their relations with the national Governments exercising jurisdiction over them and with other entities outside the indigenous community. These declarations are important to understanding how indigenous communities themselves would ideally define their rights. Recognizing that the extent and nature of rights desired may vary from community to community, an understanding of the general principles and standards set out in these declarations provides valuable insight for Governments considering implementation means under the Convention.

##### 2.2.2.1. Charter of the Indigenous-Tribal Peoples of the Tropical Forests

52. The International Alliance of the Indigenous-Tribal Peoples of the Tropical Forests adopted a Charter of Indigenous-Tribal Peoples of the Tropical Forests on 15 February 1992. Articles 40-42, and 44 specifically concern rights related to the Convention on Biological Diversity and provide:

"40. Programmes related to biodiversity must respect the collective rights of our peoples to cultural and intellectual property, genetic resources, gene banks, biotechnology and knowledge of biological diversity; this should include our participation in management of any such project in our territories, as well as control of any benefits that derive from them.

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"41. No programmes to conserve biodiversity should be promoted on our territories without our free and informed consent ...

"42. The best guarantee of the conservation is that those who promote it should uphold our rights to the use, administration, management and control of our territories ...

"44. Since we highly value our traditional technologies and believe that our biotechnologies can make important contributions to humanity, including 'developed' countries, we demand guaranteed rights to our intellectual property, and control over the development and manipulation of this knowledge."

2.2.2.2. Kari-Oca Declaration of Indigenous Peoples on Environment and Development

53. The World Conference of Indigenous Peoples on Territory, Environment and Development adopted the Kari-Oca Declaration on 30 May 1992. The Declaration is divided into three sections, the first on human rights, the next on development strategies and the third on culture, science and intellectual property. While many of the provisions are pertinent, of particular significance in reflecting the desire to establish a right of relevance to the Convention on Biological Diversity is paragraph 102, which provides:

"As creators and carriers of civilization which have given and continue to share knowledge, experience and values with humanity, we require that our right to intellectual and cultural properties be guaranteed and that the mechanism for each implementation be in favour of our peoples and studied in depth and implemented. This respect must include the right over genetic resources, gene banks, biotechnology and knowledge of bio-diversity programs."

2.2.2.3. Mataatua Declaration on Cultural and Intellectual Property Rights of Indigenous Peoples

54. In June 1993, the Nine Tribes of Mataatua in the Bay of Plenty Region of Aotearoa, New Zealand convened the First International Conference on Cultural and Intellectual Property Rights of Indigenous Peoples. The Conference adopted the Mataatua Declaration. The Declaration's preamble noted the Working Principles of the United Nations Technical Conference<sup>43</sup> and endorsed the Kari-Oca Declaration. The Mataatua Declaration is divided into three sections of recommendations: the first section is to indigenous peoples; the second to States, national and international agencies; and the third to the United Nations.

55. The recommendations to States, national and international agencies contains a subsection which explicitly addresses biological diversity and customary environmental management. Its statement of norms are relevant to the Convention on Biological Diversity and provide in part:

"2.6 Indigenous flora and fauna is inextricably bound to the territories of indigenous communities and any property rights claims must recognise their traditional guardianship.

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<sup>43</sup> See section 2.2.1.2 *supra*.

"2.7 Commercialisation of any traditional plants and medicines of Indigenous Peoples, must be managed by indigenous peoples who have inherited such knowledge.

"2.9 Companies, institutions both governmental and private must not undertake experiments or commercialisation of any biogenetic resources without the consent of the appropriate indigenous peoples."

56. In addition, in its general recommendations to States, national and international agencies, the Declaration notes that existing protection mechanisms are insufficient for the protection of indigenous peoples intellectual property rights (para. 2.3) and recommends that an intellectual property rights regime should incorporate collective ownership and origin (para. 2.5).

### 2.3. Current practice with impact on indigenous and local communities

57. The Convention on Biological Diversity does not recognize any property rights in the use of traditional knowledge nor is there any obligation in existing international law that recognizes property rights of indigenous peoples in their traditional scientific knowledge. In the absence of internationally accepted standards, international and governmental and non-governmental organizations, professional societies and the private sector have developed their own explicit or implicit methods of relating to indigenous and local communities. What follows is a brief description of examples from these sectors. As with the sections above, the examples are meant to be illustrative of the general principles and norms that may help in considering means of implementing the Convention's provisions. Many other important examples undoubtedly exist but a comprehensive analysis of experience is beyond the scope of the present note. It should be noted that experience with these mechanisms is recent and in most cases actual long-term results have yet to be seen.

#### 2.3.1. Code of Conduct for Plant Germplasm Collecting and Transfer

58. Over the last five years FAO has developed a Code of Conduct for Plant Germplasm Collecting and Transfer. The Code, which was adopted by the FAO Conference at its twenty-seventh session, in November 1993 (resolution 8/93 of 22 November 1993) is a voluntary agreement concerned with the ethics and responsibilities related to mission planning and approval, management of germplasm collection work, and the transfer, conservation and use of germplasm. It is primarily directed to Governments.

59. One of the objectives of the Code is the promotion of respect for local traditions and cultures and the establishment of mechanisms for compensating local communities and farmers for their conservation and development activities (article 1). Measures for achieving these goals are set out in articles 8, 10 and 11. These articles require: collection permits subjectable to certain conditions, including financial obligations; that restrictions be placed on the distribution or use of the germplasm or improved materials derived from it; the use of care in the collection process; and provision of duplicate sets of the collected materials to the country upon request. Articles 12-14 create separate obligations for sponsors, curators and users respectively.

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60. The Code is consistent with the Convention on Biological Diversity and is meant to help implement its provisions.<sup>44</sup> Its status as a voluntary guideline may limit the Code's utility but it can be a valuable source for Governments looking for models to develop legal and other mechanisms for compensating indigenous and local communities for their conservation and development activities.

#### 2.3.2. Ethics and codes of conduct of professional/academic/research organizations

61. In July 1988, the International Society for Ethnobiology produced a position statement called the Declaration of Belem.<sup>45</sup> The Declaration establishes a set of principles for its members engaged in research and work with indigenous and local communities. It is the first international document specifically calling for the just compensation of native peoples for their knowledge and the legal defence of indigenous intellectual property rights.

62. Many professional bodies engaged in research involving biological diversity and indigenous peoples have followed suit and issued their own codes of conduct or ethical guidelines.<sup>46</sup>

63. Both the New York Botanical Gardens<sup>47</sup> and Kew Royal Botanical Gardens<sup>48</sup> have arrangements for the involvement and compensation of traditional communities in countries where they have projects. Compensation is interpreted more broadly than simply monetary remuneration and includes such things as training, institution building and information transfer.

64. Other organizations, including many non-governmental organizations, are exploring these issues. For example, the Fundacao Brasileira de Plantas Medicinales (FBPM) has worked on behalf of indigenous communities in Brazil to win more benefits for these communities. It has convinced some pharmaceutical companies to purchase plant materials in processed form, thereby increasing local employment, the value of the resource and the ability to share more equitably in the profits emerging from the useful

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<sup>44</sup> Eric Canal-Forgues, "Code of Conduct for Plant Germplasm Collecting and Transfer" in *Review of European Community and International Environmental Law*, vol. 2, issue 2, 1993.

<sup>45</sup> The Declaration is reproduced in full in E/CN.4/Sub.2/1993/28, pp.46-47.

<sup>46</sup> For example, the Society of Economic Botany, to which a large proportion of molecular prospectors belong, is considering the adoption of a code of professional ethics. The Society for Applied Anthropology is engaged in a similar process. The Code of Ethics (1971) of the International Council of Museums encourages museum officials to consult the cultural authorities of the country of origin before acquiring any doubtful object.

<sup>47</sup> *Personal communication* between Interim Secretariat and Drs. Douglas Daly and Hans Beck, January, 1994.

<sup>48</sup> *Personal communication* between Interim Secretariat and G. Lucas, March 1994. For detailed discussion of these types of agreements, see S. Laird, *Contracts for Biodiversity Prospecting in Biodiversity Prospecting: Using Genetic Resources for Sustainable Development* Walter Reid, et al., (World Resources Institute, May 1993).

information. In addition, in its arrangements with foreign companies FBPM tries to obtain the right to distribute medicines produced by Brazilian species, so that all Brazilians including the indigenous peoples can share in the medical as well as economic benefits of research.<sup>49</sup>

65. These guidelines and arrangements are voluntary and therefore depend of the goodwill of the parties involved. Nevertheless, they provide guidance and valuable experience on the issues and the effective components of benefit-sharing arrangements that Governments may wish to consider in implementing the articles of the Convention on Biological Diversity.

### 2.3.3. Private-sector arrangements

66. At present over 200 companies and research organizations are screening compounds from plants, and to some extent from animals, for their potential for medical purposes<sup>50</sup>. The number of pharmaceutical companies engaged in bio-prospecting is growing with most having eco-derived research departments.<sup>51</sup> A small, but growing part of the pharmaceutical community is exploring the use of indigenous peoples to target the most promising plants and animals in areas of high, but largely unstudied biological diversity.

67. Shaman Pharmaceuticals has adopted what it calls an "ethnobotany-based discovery process" developing new pharmaceutical products based exclusively on the knowledge of indigenous peoples. Shaman has entered into cooperative arrangements with indigenous organizations for plant collection. In addition, it has formed a non-profit conservation arm called the Healing Forest Conservancy to support grassroots initiatives by indigenous peoples by channeling some of the profits generated at Shaman to the people and countries where the research is carried out.

68. Two anti-viral drugs screened using the ethnobotany-based discovery process are currently undergoing clinical trials. Shaman's cost of discovering and developing these new drugs is estimated to be one-tenth of the cost of laboratory synthesis and screening methods.<sup>52</sup> Shaman's goal is to be a profitable pharmaceutical company that not only supports the conservation of biological diversity but strengthens indigenous communities as well.

69. Most pharmaceutical companies that have used indigenous knowledge, or genetic resources from other countries, have not provided compensation to the country of origin nor to the indigenous and local communities that helped identify promising new compounds. Even today, with an increasing number of pharmaceutical companies involved in bio-prospecting and tapping indigenous knowledge, formal contractual arrangements are generally not made directly with indigenous communities. Contracts with the collectors or host Governments may mention the need to share benefits with traditional communities but specific measures are not required nor are mechanisms to ensure the flow of benefits to indigenous communities put in place.<sup>53</sup>

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<sup>49</sup> See, E/CN.4/Sub.2/1993/ 28, p. 25, para. 98.

<sup>50</sup> New Pharmaceutical Derived from Plants (1988). Technology Management Group, New Haven, CT. pp.1-37.

<sup>51</sup> CRS Report, page 15.

<sup>52</sup> E/CN.4/Sub.2/1993/28, p.24, para.97.

<sup>53</sup> *Ibid.*, p.24.

#### 2.3.4. Public-sector arrangements

70. To date, the following are the only examples of public-sector arrangements that have come to the attention of the Interim Secretariat.

71. The United States National Cancer Institute (NCI) has been collecting and studying naturally occurring substances for their potential application of the treatment of cancer and other medical problems since 1960. After a lull in plant-based research in the late 1970s and early 1980s, NCI's bio-prospecting activities reintensified in 1986. Today, NCI is a leader in eco-derived screening and the use of indigenous knowledge to facilitate the identification of potentially useful species.

72. NCI has moved away from a non-legally binding letter of intent to a letter of collection (LOC) which is a legally binding contract that binds both NCI and the participating source country and source country institution(s) to the provisions included. While the standard provisions of the LOC do provide for compensation of indigenous people, NCI as an agency of the United States Government, must recognize the right of source countries to decide how best to meet the needs of their citizens, and therefore does not attempt to direct the use of specific mechanisms for compensation of the indigenous populations.

73. Another public sector arrangement is the International Cooperative Biodiversity Groups (ICBG) programme funded by several institutes of the National Institutes of Health, the United States Agency for International Development, and the National Science Foundation.

74. The ICBG programme integrates conservation and development addressing equally the interdependent issues of biodiversity conservation, sustained economic activity, and human health in terms of drug discovery for diseases of concern to both developing and developed countries. Through the use of novel contractual mechanisms (biodiversity-prospecting agreements) among the members of each group, equitable economic benefits from these discoveries accrue to the country, community, group or organization of origin, including indigenous peoples, which facilitated the discovery of the natural product. Due to United States Government contributions for training, infrastructure development, and research support, and up-front contributions from the pharmaceutical firms, benefits flow to the developing countries immediately as well as upon the discovery of active compounds.

75. Five groups, consisting of diverse private and public institutions including pharmaceutical companies and environmental organizations in seven countries, collaborate on projects which address biodiversity conservation and the promotion of sustained economic activity through drug discovery from natural products. Support for this programme totals approximately \$2.5 million per year for the next five years. The Fogarty International Centre, the international arm of the NIH, both administers the programme on behalf of the sponsoring agencies and contributes to it along with the National Cancer Institute, the National Institute of Allergy and Infectious Diseases, the National Institute of Mental Health, and the National Heart, Lung, and Blood Institute.

### 3. CONCLUSION

#### 3.1 Lessons learned

76. Indigenous and local communities have been developing, conserving and sustainably using the biological resources on their lands and territories for centuries. Indigenous and local communities have developed a wide variety of plants and animals for food, medicine and other purposes.

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Indigenous knowledge has and will continue to give critical clues to scientists in the agricultural, medicinal and industrial fields. In addition, indigenous 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 are also ultimately responsible for implementing any conservation policy on the ground.

77. The Convention on Biological Diversity recognizes the importance of indigenous and local communities to the conservation and sustainable use of biological diversity. It also recognizes 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.

78. Understanding that rights for these communities can serve as the basis for incentives to conserve, sustainably use and further local innovation, the African Group requested the Interim Secretariat to prepare a background paper on these rights. In response to that request, the aim of the present note has been to explore the issue of rights for indigenous and local communities as a means of implementing the relevant provisions of the Convention. Its purpose has not been to set out in detail the mechanisms by which the relevant provisions might be implemented. The Convention leaves the choice of means of implementation to national Governments. Guidance on the most effective and appropriate measures will only emerge with dialogue, discussion and the building and sharing of experience.

79. The present note examined legal and other methods by which the rights of indigenous and local communities are implicitly or explicitly recognized. The following general conclusions can be drawn:

(a) There are no international legal instruments or standards which adequately recognize indigenous and local communities' rights over their knowledge, innovations or practices. The discussion and evolution of rights in this context will be of interest to Parties to the Convention on Biological Diversity as they face the challenge of strengthening and/or creating regimes to implement the relevant provisions of the Convention. In addition, studies prepared for the organizations engaged in these matters, such as the study on constructive arrangements between Governments and indigenous peoples currently under preparation for the Working Group on Indigenous Populations of the Sub-Commission on Prevention of Discrimination and Protection of Minorities, contribute to a better understanding of the issues involved;

(b) Current 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 industrialized countries. Some sort of intellectual property protection for indigenous and local communities may be valuable but is only one possible means to implement Article 8(j) of the Convention. Furthermore, 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;

(c) The Convention leaves it to national Governments to determine the scope and nature of indigenous rights necessary to give meaning to its provisions. A discussion of common issues and sharing of national experience among Governments, indigenous communities and experts will be critical to the success of national level efforts. In addition, continuing dialogue is vital for assessing whether or not other measures will be

helpful or necessary. It is up to each Contracting Party to take the necessary measures to implement Article 8(j) and for the Conference of the Parties to determine if other measures are desirable;

(d) At 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. Still, the experience these arrangements are building in the relatively new area of benefit-sharing with indigenous and local communities and the promotion of the conservation and sustainable use of biological diversity, provides valuable input for the development of implementation measures under the Convention.

### 3.2. Possible steps forward

80. Whether existing legal structures, modifications thereof or completely new approaches are used, norms that recognize the value of traditional knowledge, innovation and practices need to be put in place to implement effectively the provisions of the Convention. The attainment of the objectives of Article 8(j) is primarily the responsibility of the States within whose jurisdiction the communities live. The possibility of establishing an agenda to help the Contracting Parties with this responsibility is up to the Conference of the Parties.

81. The Conference of the Parties may wish to consider:

(a) Requesting the permanent Secretariat of the Convention to establish a forum for the exploration of these issues;

(b) Enlisting the support of the Subsidiary Body on Scientific and Technical and Technological Advice on particular subject matters;

(c) Whether guidelines or other mechanisms such as model legislation or a binding international agreement, would be helpful to Governments in considering implementation options.

82. Guidelines in conjunction with a continuing voluntary information exchange would allow for the informed development of effective implementation measures. It would also allow an assessment of whether or not the measures are effectively implementing the provisions of the Convention and whether further steps may be desirable.

83. There are no provisions in the Convention requiring States to adopt specific measures on indigenous and local communities. There are also no barriers preventing Parties from cooperating to achieve effective implementation through mechanisms considered appropriate and effective. The Convention recognizes the importance of the contribution of indigenous and local communities to the conservation and sustainable use of biological diversity. Effective implementation of the relevant provisions is therefore valuable both to the global community and to the individual nations that make up that community.

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