Recognizing the Vital Role of Local Communities in International Legal Instruments for Conserving Biodiversity

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I.
INTRODUCTION

This article analyzes legal approaches for meeting the needs and interests of local human communities that utilize biodiversity and inhabit areas important for their conservation. Effectively addressing these needs is a crucial area for international law concerned with the sustainable development of biological diversity.[1] This article further suggests directions that international law should take to promote realization of this objective. It draws upon the perspective of law as process.[2] In this context, it recognizes that indigenous and other long-term occupant communities are participants[3] in the international system, and proposes that international political and legal structures must accommodate this reality in order to find adequate solutions to many challenges facing global society.

The majority of existing international instruments have failed to provide a supportive legal environment for local resource de-

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1. The term "biological diversity" or "biodiversity" is generally understood to refer to variability among living organisms and the ecological communities which they inhabit. It encompasses three broad categories: genetic diversity, species diversity, and ecosystem diversity. *See* WORLD CONSERVATION MONITORING CENTRE, GLOBAL BIODIVERSITY: STATUS OF THE EARTH'S LIVING RESOURCES xiii (Brian Groombridge ed., 1992). This meaning is reflected in the definition of the term in the Convention on Biological Diversity, June 5, 1992, 31 I.L.M. 818, 823 (1992).

2. For further discussion of this approach, see R. HIGGINS, PROBLEMS AND PROCESS. INTERNATIONAL LAW AND HOW WE USE IT 1-16 (1994).

3. This view is supported by various publicists. *See, e.g.,* W. M. Reisman, *Protecting Indigenous Rights in International Adjudication,* 89 AM. J. INT'L L. 350, 350-65 (1995); S. JAMES ANAYA, INDIGENOUS PEOPLES IN INTERNATIONAL LAW 39-58 (1996).

pendent populations that would enable these populations to manage in a sustainable manner forests and other components of biodiversity which they utilize or over which they exercise effective control. This state of affairs has devalued the worth of resources to local communities and has acted as a disincentive[4] for them to promote sustainable development. It has interfered with the overall effectiveness of conservation regimes. Until very recently, conservation initiatives generally have ignored the following three components vital to meeting their purposes: recognizing resource access rights and security for local communities; enabling local communities to participate effectively in resource management decisions under the regimes; and requiring equitable sharing with local communities of benefits arising out of the use of natural resources. Realizing sustainable development of the world's remaining biodiversity requires that these imperatives be integrated into the relevant international instruments.

The challenge for international law is either to modify existing conventions and other regimes dealing with conservation, or to create new, more appropriate instruments that accurately reflect the link between long-term occupants and conserving biodiversity. This concern applies particularly to those aspects of the biological heritage lying outside of protected areas or in officially protected areas that are also the home and/or source of livelihood for local resource-user communities.[5]

Some recent international texts generally reflect a changing perspective on the status of local communities in facilitating environmental protection and sustainable development.[6] Pronouncements in Agenda 21,[7] the UNCED Forest Principles [8] and the

4. *See* E.B. BARBIER, ET AL., ELEPHANTS, ECONOMICS AND IVORY 142 (1990); *see also* M. COLCHESTER, UNITED NATIONS RESEARCH INSTITUTE FOR SOCIAL DEVELOPMENT, SALVAGING NATURE: INDIGENOUS PEOPLES, PROTECTED AREAS AND BIODIVERSITY CONSERVATION, (1994).

5. *See, e.g.,* THE LAW OF THE MOTHER: PROTECTING INDIGENOUS PEOPLES IN PROTECTED AREAS 3-11, 61-68 (Elizabeth Kemf ed., 1993).

6. *See, e.g.,* United Nations Commission on Human Rights Sub-Commission on Prevention of Discrimination and Protection of Minorities: Draft United Nations Declaration on the Rights of Indigenous Peoples 34 I.L.M. 541, 553 (1995); Art. XX, Draft Inter-American Declaration on the Rights of Indigenous Peoples, September 2, 1995, OEA/Ser/L/V/II.90 doc.9, rev.1; *Report of the United Nations Conference on Environment and Development,* 26th Sess., Agenda Item 21, Vol. II at 104, paras. 15.4(g), 15.5(e), U.N. Doc. A/Conf.151/26 (1992) [hereinafter *Conference on Environment].*

7. *See Conference on Environment, supra* note 6, at chs. 26 and 32.

Rio Declaration,[9] providing that governments should promote participation of local communities in the environmental protection and development process, evidence this shift in focus. However, much of the content of these instruments does not address the core issue of creating inducements for local communities to manage forests and other resources of biological diversity sustainably. This issue is not limited to the developing countries. It cuts across the North-South divide. In the United States, the controversy manifests itself between local (logging and fishing) communities and state and local authorities in the Pacific Northwest over the management of old growth forests and salmon fisheries.[10]

The treaties and other instruments that constitute the international regimes for conserving living resources, by and large, emphasize cooperation among states, and more recently international organizations,[11] to achieve their objectives. Given the transboundary character of many major environmental threats, including biodiversity depletion, multilateral cooperation is both desirable and necessary for addressing these challenges. However, attention to the socio-economic needs and interests at the local level and, in particular, the concerns of local communities, including traditional and/or long-term occupant communities, has been distinctly absent or at best given only peripheral treatment in most existing conventions.

For purposes of this discussion, the term "long-term occupant communities" includes those groups that have been variously described as First Nations or Native Americans, as well as aboriginal, indigenous, and tribal populations, peoples, or communities. However, the term "long-term occupant communities" also embraces socio-cultural groups that may not fall easily under existing definitions of "indigenous" or "tribal" peoples, but which

8. Non-Legally Binding Authoritative Statement of Principles for a Global Consensus on the Management, Conservation and Sustainable Development of All Types of Forests, 31 I.L.M. 881, 882 (1992).

9. United Nations Conference on Environment and Development, 31 I.L.M. 874, 880 princ. 22 (1992).

10. *See* CHARLES VICTOR BARBER ET AL., BREAKING THE LOGJAM: OBSTACLES TO FOREST POLICY REFORM IN INDONESIA AND THE UNITED STATES 57-58 (1994).

11. For example, at the conference for the adoption of the Agreed Text of the Convention on Biological Diversity, Resolution 1 on "Interim Financial Arrangements" provided that the Global Environment Facility ("GEF") administered by UNEP, UNDP and the World Bank, would operate the financial mechanism under Article 21 of the convention. *See* Conference for the Adoption of the Agreed text of the Convention on Biological Diversity, 31 I.L.M. 842, 843 (1992).

nonetheless have lived for long periods of time in particular areas and often depend upon the natural resources of those locales for their livelihood and sustenance.[12]

This article seeks to address the causes and/or consequences of biodiversity depletion facing long-term occupant communities in general. It will draw upon legal materials related specifically to "indigenous"[13] peoples because of the relevance of these texts to the overall evolution of international law concerning the link between long-term occupants and conservation. The issue of sustainable utilization of natural resources in the face of present accelerated resource consumption is a common concern affecting all of these groups, in relation to their national governments and the international community.

II.

THE CURRENT INTERNATIONAL FRAMEWORK

The inability of extant international legal structures to deal effectively with the socio-political and economic prerogatives of indigenous communities and other non-state actors results from continued adherence by various vested interests to "classical" state-centered approaches. Contemporary international law and the institutions created to administer it are largely the products of classical statist theories.

International society at present is not comprised exclusively of nation states.[14] Increasingly, non-state actors or non-state per-

12. *See* O. Lynch, Bridgebuilding Among Local and International Constituencies: The Need for Local Level Incentives in Sustainable Development and International Law (1994), (paper prepared for the International Symposium on Sustainable Development and International Law, Baden bei Wien). *See generally* JOHN G. ROBINSON & KERT H. REDFORD, NEOTROPICAL WILDLIFE USE AND CONSERVATION (1991).

13. *See, e.g.*, S. James Anaya, INDIGENOUS PEOPLES IN INTERNATIONAL LAW, (1996); *see also* Convention Concerning Indigenous and Tribal Peoples in Independent Countries, 28 I.L.M. 1382, 1382-92 (1989); United Nations Economic and Social Council Commission on Human Rights Sub-commission on Prevention of Discrimination and Protection of Minorities, 36th Sess., Agenda Item 11, U.N. Doc.E/CN.4/Sub.2/1983/21/Add. 4 (1983); 1994 Draft United Nations Declaration on the Rights of Indigenous Peoples, 34 I.L.M. 541, 541-55 (1995).

14. *See* Philippe J. Sands, *The Environment, Community, and International Law,* 30 HARV. INT'L L.J., 393, 396-401 (1989); *see also Report of the Sixty-sixth Conference, Held at Buenos Aires Argentina,* International Law Association, International Committee on Legal Aspects of Sustainable Development, Aug. 14, 1994, at 17:

> The main characteristics of a civil society are the ability of people to limit government authority and to influence policy on the basis of universally recognized human rights. Thus Governments should no longer take it for granted that the UN side with States rather than with peoples in a conflict. Since the end of the cold

sonalities are important and effective participants in the international system. These non-state international actors include not only international organizations, some of which have now been accorded many of the rights and privileges of states under international law,[15] but also individuals, non-governmental organizations, indigenous peoples, and other local communities, as well as transnational business enterprises and other groups interested in or advocating on behalf of various issues and constituencies. This reality was acknowledged in Agenda 21,[16] which recognized that the achievement of sustainable development requires the participation of a spectrum of players.[17] That text identified nine major categories of non-state actors, including indigenous peoples and "farmers," as fundamental in this process.[18] As a "soft law"[19] document, Agenda 21 is not legally enforceable. However, it is a leading instrument suggesting the progressive development of international law through its promotion of legal frameworks for securing the interests of local communities in conserving biodiversity.

A. *The Classical Statist Approach*

An early proponent of the "classical" statist view was the 18th century Swiss legal theorist Vattel,[20] who espoused the idea of a separate body of law concerned exclusively with nation-states and who averred that states are the legitimate "subjects" of international law. Out of this approach developed the notion that all other socio-political groupings are merely considered "objects" of international law. Because states are the only players in this paradigm, only states can create and employ international law.

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war [sic] citizens tend to identify with other human collectivities rather than with States (citations omitted).

15. For example, the political organs of the United Nations have recognized international legal personalities and the laws that govern their operations are deemed to be part of the corpus of international law. *See* Reparations for Injuries Suffered in the Service of the United Nations (Advisory Opinion), 1949 I.C.J. 174. *See also* HIGGINS, *supra* note 2, at 46-48; ROSYLN HIGGINS, THE DEVELOPMENT OF INTERNATIONAL LAW THROUGH THE POLITICAL ORGANS OF THE UNITED NATIONS (1963).

16. *See Conference on Environment, supra* note 6, at 13.

17. *Id.* at chs. 23-32.

18. *Id.* at ch. 32.

19. See Pierre-Marie Dupuy, *Soft Law and the International Law of the Environment,* 12 MICH. J. INT'L L. 420 (1991).

20. EMER DE VATTEL, THE LAW OF NATIONS, OR THE PRINICPLES OF NATURAL LAW, APPLIED TO THE CONDUCT AND TO THE AFFAIRS OF NATIONS AND OF SOVEREIGNS (James Brown Scott ed., Classics of International Law Series, C.G. Fenwick trans., 1916).

According to this view, although a state may have obligations to its own citizens and those of neighboring states that its activities may harm, arguably it does not formally owe any duty to international society as a whole, including non-state participants.[21]

This "classical" view of international law continues to be reflected in the writings of important contemporary publicists.[22] It remains deeply embedded within the dominant political and economic attitudes of those who head nation-states and in international legal structures and institutions.[23] It is premised on ideas regarding the "sovereign equality of states," a duty of non-intervention on the part of states in the internal affairs of other states, and state consent to international obligations.[24] It effectively excludes the direct and official participation of other types of actors[25] who have expertise and concerns that can help make the international system more broad-based, democratic, fair, and responsive to concerns arising outside of the official purview of nation-states and national governments.

Since the end of the Second World War, international organizations—namely, the organs of the United Nations system—and regional political and economic entities such as the Organization of American States ("OAS"), the European Communities (now "European Union"), and military/security bodies such as the North Atlantic Treaty Organization ("NATO") have emerged as

21. In at least one decision, however, the I.C.J. recognized in *dicta* the possibility of international obligations states owe to the international community as a whole, i.e., *erga omnes*. *See* Barcelona Traction, Light, and Power Company, Limited (Belgium v. Spain), 1970 I.C.J. 4, 32 (Feb. 5, 1970). Also, the I.C.J. has recently recognized as part of the corpus of international law "[t]he existence of the general obligation of States to ensure that activities within their jurisdiction and control respect the environment . . . of areas beyond national control." International Court of Justice: Advisory Opinion on the Legality of the Threat or Use of Nuclear Weapons, 35 I.L.M. 809, 821 (1996).

22. See IAN BROWNLIE, PRINCIPLES OF PUBLIC INTERNATIONAL LAW, 287 (3d ed. 1979); D.W. BOWETT, THE LAW OF INTERNATIONAL INSTITUTIONS (4th ed. 1982).

23. For example, the only parties that are recognized for purposes of bringing an action before the International Court of Justice are nation states. *See* Statute of the International Court of Justice, June 26, 1945, 59 Stat. 1055. Also, all members of the United Nations Organization must be nation states. *See* U.N. CHARTER art. 4.

24. *See* L.F. OPPENHEIM, INTERNATIONAL LAW 32 (R.F. Roxburgh ed., 3rd ed. 1920).

25. Charlesworth has provided a feminist critique on what she perceives to be the oppressive exclusivity of the state-centric approach, which she argues has sanctioned the "invisibility of individual or group concerns in international law." *See* H. Charlesworth, *The Public/Private Distinction and the Right to Development in International Law,* 12 AUSTRALIAN YEARBOOK INT'L L. 190, 194 (1992); *see also* Hilary Charlesworth et al., *Feminist Approaches to International Law*, 85 AM J. INT'L L. 613 (1991).

supra-national personalities. International organizations, particularly the multilateral development institutions, as well as transnational commercial enterprises, religious movements, and non-governmental organizations ("NGOs"), play a major role in shaping international society and the attitude and behavior of states.[26] For example, much global economic activity and many resulting environmental and human rights controversies involve transnational commercial enterprises, both legal and illegal, which have a major impact on global stability and security.

B. *Deficiencies in the Classical Approach and Challenges to its Continuation*

Prevailing notions concerning the purpose and operation of international law appear ill-suited to finding adequate solutions for the myriad problems that are transnational in scope.[27] Among these are global warming, ozone depletion, over-fishing, deforestation, marine pollution, narcotics and contraband armaments traffic, illegal trade in endangered species of flora and fauna, and unregulated financial transfers. These phenomena exceed the capacities of any individual state or even any bloc of states to regulate effectively. The current seemingly futile attempts by the United States and the European Union to control cross-border drug-trafficking provide telling examples. Likewise, the failure of any state to bring an action against the Soviet Union for damages arising out of the 1986 Chernobyl nuclear accident arguably demonstrates that states have failed to exercise any supposed "right of guardianship"[28] they may claim over the global environment.

The "classical" approach imposes serious handicaps on efforts to create legal incentives for promoting the sustainable management of natural resources. For example, this paradigm would deny indigenous societies the opportunity to appear before official international fora such as the International Court of Justice

26. *See, e.g.*, O. Schachter, The Erosion of State Authority and its Implications for Equitable Development (May 2, 1996) (paper prepared for ILA Committee/Dutch ILA Working Group on Legal Aspects of Sustainable Development, International Law Association Seminar, "International Economic Law with a Human Face," Amsterdam May 2-4, 1996).

27. *See generally*, Philip Allott, *State Responsibility and the Unmaking of International Law*, 29 HARV. INT'L L.J. 1 (1988); PHILIP ALLOTT, EUNOMIA: NEW ORDER FOR A NEW WORLD, (1990).

28. *See* Phillippe J. Sands, *The Environment, Community and International Law*, 30 HARV. INT'L L.J. 393 (1989).

("ICJ"). Indigenous and other long-term occupant societies and communities would be unable to seek redress[29] even when their respective national governments refuse to recognize their legal rights to natural resources such as tropical forests they may have occupied for many generations and continue to utilize for their survival. The rationale for this denial is that these communities do not qualify under the law of nations as "states,"[30] and thus are not "subjects" of international law.[31]

Alternative viewpoints exist to the perspective that only nation-states are subjects in international law. Thomas Aquinas and the influential 16th century Dominican theologian de Vitoria acknowledged that non-state entities such as indigenous peoples are not mere objects, but possess rights independent of European monarchies.[32] For reasons of economic and political expediency, however, this view was not acceptable to the majority of state governments interested in acquiring colonial territories or to legal writers who recognized only foreign entities with the characteristics of European states[33] as legitimate participants in international law and the international system. Instead, much of the world, including areas inhabited by peoples not "permanently united for political action [from a European-western perspective],"[34] was considered to be *territoria nullius.*[35] The 1975 *Western Sahara* case partially eroded this view when the ICJ noted

29. Inroads are being made into this exclusive structure. For example, to provide an official channel for affected groups to address their concerns regarding IBRD compliance with its own operational policies, such as the World Bank instruments on forestry, indigenous peoples and involuntary resettlement, the organization set up an Inspection Panel in 1994. *See* Inspection Panel for the International Bank for Reconstruction and Development International Development Association, 34 I.L.M. 503 (1995).

30. *See* ANAYA, *supra* note 3, at 13-23. Anaya sees the traditional statist view of international law as deficient in that it "is not alive to the rich variety of intermediate or alternative associational groupings actually found in human cultures, nor is it prepared to ascribe to such groupings any rights not reducible either to the liberties of the citizen or to the prerogatives of the state." *Id.* at 14.

31. Indigenous peoples have formally responded to this view by asserting that the are not mere "objects", but rather are "subjects" of international law. *See* par. 15, Declaration of Principles and Rights of Indigenous Peoples, U.N. Doc. E/CN.4/Sub.2/1987/22.Annex 5 (1987).

32. *See* M.F. LINDLEY, THE ACQUISITION AND GOVERNMENT OF BACKWARD TERRITORY IN INTERNATIONAL LAW 12-17 (1926); Owen J. Lynch, Jr., *The Legal Bases of Philippine Colonial Sovereignty: An Inquiry,* 62 PHILIPPINE L.J. 279, 287 (1987).

33. Among these were Turkey and Japan. *See* ANAYA, *supra* note 3, at 21.

34. *See* LINDELY, *supra* note 32, at 80.

35. "Empty Territory" and thus open for acquisition.

that at the time of its occupation by Spain in the 19th century, the region now known as the Western Sahara was inhabited by peoples who, although "nomadic, were socially and politically organized in tribes and under chiefs competent to represent them."[36]

In light of *Western Sahara*, W. Michael Reisman has called attention to continued serious limitations on the capacity of the ICJ to come to terms with the deeper implications of views held by indigenous and other non-western, non-statist approaches to legal legitimacy. According to Reisman:

> [Judges of the International Court of Justice] . . . have often said some of the politically correct things, but the Court has carefully avoided giving *any* meaningful legal effect to territorial claims based on indigenous theories of law.[37]

Increased demands—and increased successes—by indigenous peoples and other long-term occupant communities, advocating for the right to be recognized as distinct autonomous actors in international law,[38] are now reflected to some degree in international instruments such as the Convention on Biological Diversity ("CBD"),[39] Agenda 21,[40] and most recently in the 1996 Joint Communique of the Governments of the Arctic Countries on the Establishment of the Arctic Council.[41] These demands are also contained in documents expressly concerning indigenous peoples' interests, namely the 1994 Draft United Nations Declaration on the Rights of Indigenous Peoples,[42] and the Inter-American Commission on Human Rights Draft Declaration on the Rights of Indigenous Peoples.[43] These texts reflect an aware-

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36. *See* Western Sahara, 1975 I.C.J. 4 (Advisory Opinion). Also, the Australian High Court case, Mabo v. Queensland, 107 A.L.R. 1 (1992) constitutes a landmark decision at the national level in rectifying centuries of denying land and other resource access rights to indigenous communities, based on the theory of *territorium nullius*. See Gerald P. McGinley, *Indigenous Peoples' Rights: Mabo and Others v. State of Queensland- The Australian High Court Addresses 200 Years of Oppression*, 21 DENV. J. INT'L L. & POL'Y 311 (1993).

37. *See* W. Michael Reisman, *Protecting Indigenous Rights in International Law*, 89 AM. J. INT'L L. 350, 354 (1995).

38. *See generally*, ANAYA, *supra* note 30.

39. The CBD highlights the distinct role played by indigenous and other local communities in conserving biodiversity. *See* Convention on Biodiversity, *supra* note 1, at pmbl., para. 12 & art. 8(j).

40. *See Conference on Environment, supra* note 6.

41. This instrument recognizes indigenous communities as "Permanent Participants" in the Arctic Council along with the member state Parties. 35 I.L.M. 1382, 1388 (1996).

42. 34 I.L.M. 541 (1995).

43. Sept. 1995, OEA/Ser/L/V/II.90 Doc. 9 Rev.1, 21 [hereinafter Rights of Indiginous Peoples].

ness by human rights advocates that securing the rights of indigenous communities includes protection of their cultural values and knowledge, and in particular, local knowledge related to biodiversity conservation and sustainable use.[44] For example, Article 29 of the 1994 U.N. Draft Declaration on Indigenous Peoples states:

> Indigenous peoples have the right . . . to their traditional medicines and health practices, including the right to the protection of vital medicinal plants, animals and minerals [Art. 24] . . . [and] . . . to special measures to control, develop and protect their sciences, technologies and cultural manifestations, including human and other genetic resources, seeds, medicines,[and] knowledge of the properties of fauna and flora . . . [Art 29].[45]

C. *A Normative Agenda Proposed by Long-Term Occupant Communities*

Indigenous peoples and other long-term occupant communities have articulated their own agendas for the normative framework concerning control and management of the resources which they have traditionally utilized and husbanded. In February 1992, indigenous and tribal peoples issued the Charter of the Indigenous-Tribal Peoples of the Tropical Forests. The following selection of provisions from that document expresses the concerns of these communities:

> 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 biodiversity; this should include our participation in the management of any such project in our territories, as well as control of any benefits that derive from them.
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> 41. Conservation programmes must respect our right to the use and ownership of the lands and natural resources that we depend on. No programmes to conserve biodiversity should be promoted on our lands without our free and informed consent.
>
> 42. The best guarantee of the conservation of biodiversity is that those who promote it should uphold our rights to the use, adminis-

44. *See* Rio Declaration on Environment and Development, June 14, 1992, 33 I.L.M. 874, princ. 22, 33 [hereinafter Rio Declaration]; Recognizing and Strengthening the Role of Indigenous People and their Communities, Agenda 21, A/CONF.151/26, Aug. 13, 1992 Chap. 26; Convention on Biodiversity, *supra* note 1, at pmbl., para. 12.

45. *See also* Rights of Indigenous Peoples, *supra* note 43, at art XX (Intellectual Property Rights).

> tration, management and control of our territories. We assert that guardianship of the different ecosystems should be entrusted to us, indigenous peoples, given that, we have inhabited them for thousands of years and our very survival depends on them.
>
> 43. Environmental policies and legislation should recognize indigenous territories as effective 'protected areas', and give priority to their legal establishment as indigenous territories.[46]

The above Charter evidences that these indigenous and other long-term occupant communities have an expressed and definite perspective on their role in biodiversity conservation in relation to their national governments and the international community.

Also, an inter-disciplinary group, which included anthropologists, historians, agriculturists, lawyers, and biologists, issued a statement in the Philippines in May 1994, known as the Baguio Declaration.[47] The documents's underlying premise is the need for "broad-based structural reforms" at the national and international levels to facilitate the effective operation of community-based management structures in promoting conservation of biodiversity, including forests. The preamble to the Baguio Declaration emphasizes the vital role of local community resource management in achieving sustainable development and stresses the need for effective community participation and resource access/land tenure security if conservation efforts are to succeed:

> [S]tate-centric management and conservation strategies have been marked by widespread failure, in large part due to the lack of appropriate and fair involvement by affected communities; and . . . [t]he required conditions for social and ecological sustainability of most environmentally important and/or threatened areas include tenurial security, informed and organized local participation and decision-making, and integrated resource use and management approaches . . . .[48]

The preamble also expressly refers to the provisions in the Rio Declaration and the CBD that mention the role of indigenous and other local communities in conserving natural resources. It therefore builds upon the normative foundation established

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46. *See* Charter of the Indigenous-Tribal Peoples of the Tropical Forests, Feb. 1992, Malay., arts. 40-44, *in* COLCHESTER, *supra* note 4.

47. *See* Baguio Declaration, NGO Workshop on Effective Strategies for Promoting Community-Based Forest Management: Lessons from Asia and other Regions, Villa la Maja Inn (May 19-23, 1994) (transcript available at Center for International Environmental Law, Washington, D.C.).

48. *Id.* at pmbl.

under already internationally recognized instruments. The Baguio Declaration also contains the following principles:

> Principle 1: Community-based natural resource rights of indigenous and other long-settled communities should be recognized and protected as are the rights of others (sic) sectors.
>
> Principle 4: Measures, mechanisms, and transparent processes need to be established, and improved to ensure that the rights of all people to participate meaningfully and benefit equitably in community-based natural resource management are guaranteed.
>
> Principle 9: Development and conservation initiatives must guarantee that any affected community will receive an equitable share of any benefits and not bear disproportionate costs arising from the activity.
>
> Principle 10: The development of new and innovative community-based resource management systems should be encouraged as an alternative to state control, especially where community-based systems do not exist.[49]

Although neither the Baguio nor Penang documents are enforceable "law" at present, they do testify to the emergence of local communities as a new voice in the international arena regarding the conservation of biological resources. In content and tone, the Baguio Declaration and the Penang Charter seek to establish new legal standards at the local, national, and international levels. Some of the norms articulated in these two documents, as well as in Chapters 26 and 32 of Agenda 21, have been codified in the Desertification Convention,[50] to be discussed later in this article. Additionally, the Draft United Nations Declaration on the Rights of Indigenous Peoples affirms the positions enumerated in the Penang and Baguio instruments in linking land and other resource access security for indigenous communities with environmental protection,[51] and in articulating indigenous demands for legal recognition of their rights over resources, including lands that they occupy, husband, or otherwise utilize.[52] The above norm-professing expressions by indigenous

49. *Id.*

50. United Nations Convention to Combat Desertification in those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa, June 17, 1994, 33 I.L.M. 1332.

51. United Nations Commission on Human Rights Sub-Commission on Prevention of Discrimination and Protection of Minorities: Draft United Nations Declaration on the Rights of Indigenous Peoples, Aug. 26, 1994, 34 I.L.M. 541, pmble., para. 9.

52. *Id.* at art. 26.

and other long-term occupant groups affirm the dissatisfaction of these communities with existing legal and regulatory structures for promoting conservation, and their awareness that much of the current international conservation framework has not met its goals because of inadequate attention to rights and interests of local populations and to indigenous perspectives on managing resources.

Scientific and other studies, national implementation efforts, and instruments produced by indigenous and related communities reveal that if there is to be sustainable utilization and conservation of biodiversity, the international regimes must incorporate three principle concepts: recognizing resource access rights and the security of local communities; enabling local communities to participate effectively in resource management decisions under the regimes; and requiring equitable sharing of the benefits arising out of the use of the natural resources with local communities. These three concepts are arguably emerging international legal norms.[53] As such, they also can serve, individually and collectively, as incentives[54] for encouraging the conservation of resources of biological diversity by local communities.

III.

THE CURRENT FIELD LEVEL SITUATION

Much of the world's remaining biodiversity is threatened[55] with degradation or annihilation.[56] Present rates of species ex-

53. *See* Gregory F. Maggio et al., Human Rights, Environment, and Economic Development: Existing and Emerging Standards in International Law and Global Society, (Nov. 15, 1997) (paper prepared for Earth Council; copy on file with author).

54. The Commentary to the IUCN Draft International Covenant on Environment and Development states that the term incentive

> should be understood broadly . . . [to include] all regulatory activity which induces voluntary pursuit of an objective." For purposes of effecting conservation and sustainable utilization of biodiversity under the CBD, the IUCN Guide to the CBD says: "Incentives encourage desired behaviour. [They constitute]...any inducement which is specifically intended to incite or motivate governments, business and industry or local people to conserve biological diversity and sustainably use its components . . . .

See LYLE GLOWKA ET AL., A Guide to the Convention on Biological Diversity, 63 (Environmental Law Center, IUCN, 1994).

55. The principal threats to global biodiversity include habitat modification and destruction, over-harvesting, the introduction of alien organisms, and human-induced environmental pollution. *See generally*, GLOBAL BIODIVERISITY, (WCMC, 1992).

56. *See* T.M. SWANSON, THE INTERNATIONAL REGULATION OF EXTINCTION (1994); S.L. Pimm, *et al.*, *The Future of Biodiversity*, 269 SCIENCE 347 (1995); T.M.

tinction have not occurred since the disappearance of the dinosaurs sixty-five million years ago.[57] Although the creation of protected areas is a vital and necessary step toward conserving endangered species, populations, and habitats, and will assist in protecting global biodiversity,[58] protected areas are inadequate in size, number, and often in degree of actual protection provided[59] to address the current global biodiversity crisis. Existing protected areas contain only a fraction of the extant global biodiversity, and a number of them do not cover adequately the habitat requirements of many species.[60] The international conservation community is aware that conservation strategies must encourage effective stewardship of biodiversity on private lands[61] as well as in publicly protected areas.[62]

Consumption patterns in the industrialized world, as well as rapidly expanding populations in developing countries, place unprecedented demands upon existing natural resources. Infrastructural, agricultural, and commercial development activities,

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Brooks, et al., *Deforestation Predicts the Number of Threatened Birds in Insular Southeast Asia*, 11 CONSERVATION BIOLOGY 382 (1997); E.O. WILSON, THE DIVERSITY OF LIFE (1992).

57. *See Global Biodiversity Strategy*, WRI/IUCN/UNEP, 1992, at 7; WILSON, *supra* note 56, at 243-342.

58. *See* Convention on Biological Diversity, *supra* note 1, at art. 8 para. (a)-(b).

59. Many national parks and reserves are merely "parks on paper," affording little or no protection. Though legally protected, these parks are threatened by agricultural interests, poachers, and herders and their livestock, unauthorized mining and other illegal activities. In some cases the boundaries of these areas are poorly demarcated or undefined, and many are under serious threat from human activities. *See* John F. Oates, *The Dangers of Conservation by Rural Development: A Case-Study from the Forests of Nigeria*, 29 ORYX 115 (1995).

60. *See* N.H. ROBINSON & K.H. REDFORD, NEOTROPICAL WILDLIFE USE AND CONSERVATION 33 (1993):

> Studies of insular ecology . . . have shown that creation of national parks and reserves will not guarantee the long-term survival of all, or even most, of the wild species initially present. Increasingly parks function as islands in a sea of intensive human activity and...may prove incapable of sustaining biotic diversity over the long term. Extinctions occur even in the best-protected parks largely as a function of inadequate area, and lead to faunal collapse.

61. The "Sandhills Habitat Conservation Plan" provides private landowners with administrative incentives for enhancing the habitat of the red-cockaded woodpecker, an "endangered" species under the Endangered Species Act (16 U.S.C. §§ 1531): this is a promising national response to ensure biodiversity. U.S. Fish and Wildlife Service, Red-cockaded Woodpecker Field Office, Clemson, South Carolina, Mar., 1995.

62. This need is especially relevant to many developing countries where governments that are over-burdened with external debt and related socio-economic problems, and infrastructural inadequacies have minimal financial or other resources to devote to conservation, even for officially protected areas.

especially throughout the developing world, have displaced millions of people. In a litany of well-documented situations, those involuntarily removed individuals and groups have regularly been from traditional and long-term occupant communities.[63] These groups often have minimal input in national or international decision-making, including determinations affecting their livelihood and place of abode. Because they often are treated as peripheral for decision-making, their views are not heard and they perceive that international decision-making processes — whether implemented by their national governments or by international assistance organizations — do not adequately reflect their interests.[64]

Large cross-sections of existing biodiversity, especially tropical forest species and habitats, are contained within resource use areas of traditional and other local communities in developing countries.[65] However, short-sighted and socially insensitive development projects, including the creation of some wildlife protection areas,[66] have failed to address the continued needs of these communities to have adequate access to resources. Also, inappropriate attempts to promote socio-economic development in areas of high biological diversity can disrupt demographic patterns and threaten wildlife resources.[67]

The majority of international and national legal instruments to date contain structural and functional inadequacies that thwart achieving their goals. For example, two major recognized impediments to the success of the Convention on International Trade in Endangered Species of Wild Fauna and Flora ("CITES")[68] regime are ineffective or non-existent executing legislation in a

63. *See generally,* BRUCE RICH, MORTGAGING THE EARTH: THE WORLD BANK, ENVIRONMENTAL IMPOVERISHMENT, AND THE CRISIS OF DEVELOPMENT (1994).

64. *See generally,* Dianne Otto, *A Question of Law or Politics? Indigenous Claims to Sovereignty in Australia,* 21 SYRACUSE J. INT'L L. & COMM. 65 (1995); ANAYA, *supra* note 3.

65. *See generally,* INTERNATIONAL INSTITUTE FOR ENVIRONMENT AND DEVELOPMENT, WHOSE EDEN? AN OVERVIEW OF COMMUNITY APPROACHES TO WILDLIFE MANAGEMENT (1994).

66. *See generally,* COLIN M. TURNBULL, THE MOUNTAIN PEOPLE (1972).

67. A 1995 study in Nigeria discussed the negative impacts to biodiversity through logging, farming, and other habitat conversion arising out of a rural development scheme in a wildlife sanctuary. The project, which was hailed as an example of "sustainable rural development" was encouraging large-scale immigration of agriculturalists from other regions into the protected area. *See generally,* Oates, *supra* note 59, at 115.

68. Convention on International Trade in Endangered Species of Wild Fauna and Flora, Mar. 3, 1973, 12 I.L.M. 1085.

large number of Party states, and the lack of enforcement by many Parties due to lack of financial and technical capability.[69] The effectiveness of international conventions for conserving biodiversity such as CITES and the CBD will continue to be undermined if the instruments cannot be properly implemented or enforced at the national level. Birnie has written: "[E]nforcement has since CITES' inception, proved to be the weakest link in the chain of its controls over trading. The profits deriving from wildlife trafficking far outweigh the resources available, nationally and internationally to stop the trade in wildlife . . . ."[70]

Lack of appropriate implementing legislation and insufficient technical and financial resources are particularly serious challenges for many African states, as well as in other parts of the developing world. These inadequacies are exacerbated by additional existing constraints on conserving forests and other aspects of biodiversity, such as national legal systems in which local community resource use and land tenure rights are not secure or are not in practice accorded formal legal recognition.[71] This proposition is substantiated in the work of Lynch and Talbott regarding forest resource user communities in the Philippines and elsewhere in Asia.[72] They write:

> [T]he overwhelming majority of forest-zone occupants are legally considered to be squatters, regardless of their length of occupancy. Millions are living within existing natural resource concessions granted to outsiders engaged in commercial extraction. The tenurial instability which results among actual occupants erodes customary conservation values and undermines incentives to conserve the local resource base and make long term improvements.[73]

The circumstances for local communities generally, and traditional long-term occupant groups in particular, have become even more precarious in recent years in the face of severe pressures on the resources and lands from logging and mining companies,[74] public authorities, hydro-power and other development

69. Personal communications with Dr. H. Corrigan, WCMC, Cambridge, April 1993 and Feb. 1995.

70. P. Birnie, The Case of the Convention on Trade in Endangered Species 12 (1995) (manuscript on file with author).

71. *See generally* Owen J. Lynch & Kirk Talbott, *Legal Responses to the Philippine Deforestation Crises* 20 N.Y.U. J. INT'L L. & POL. 679 (1988).

72. OWEN J. LYNCH & KIRK TALBOTT, BALANCING ACTS, COMMUNITY-BASED FOREST MANAGEMENT AND NATIONAL LAW IN ASIA AND THE PACIFIC (1995).

73. *See* Lynch & Talbott, *supra* note 71, at 688-89.

74. An internal World Bank evaluation of Latin American efforts found that even when indigenous lands have been demarcated and recognized by governments, they

projects, ranchers, land speculators, illegal drug production rings, and colonists from other areas.[75]

A. *Scientific and Socio-Political Research*

In contrast with the paucity of attention traditionally afforded to the local community aspect of biodiversity conservation in international legal regimes, the scientific community has produced a wealth of materials.[76] Studies in Latin America, Africa, and in the Asia-Pacific region have noted that the areas of this planet which contain the highest concentrations of global biodiversity are generally those inhabited by long-term occupant communities often exercising community-based resource management systems. In a wide variety of these cases, local communities have been directly responsible for the protection of the existing resource base and even the enhancement of its biodiversity.[77]

Often community practices and institutions for managing and conserving the resource base are sanctioned on religious and other traditional authority grounds.[78] In some situations the last remaining tracts of natural habitat are sacred forests or other religio-cultural sites.[79] This is understandable given the direct awareness of many traditional and long-term occupant communities that their well-being is dependent directly on the quality of their social and physical environment.[80] Despite the anthropological and other scientific evidence of local community stewardship

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are still being exploited by settlers, and logging operations. *See* J.B. Alcorn, *Indigenous Peoples and Conservation*, 7 CONSERVATION BIOLOGY 425, 426 (1993).

75. *See* JUDITH KIMERLING, NATURAL RESOURCES DEFENSE COUNCIL, AMAZON CRUDE (1991).

76. In the context of coastal fisheries management alone, see FAO/Japan Consultation on the Development of Community-Based Coastal Fishery Management Systems for Asia and the Pacific FAO Fisheries Report No. 474 Suppl. Vols. I and II, Kobe, Japan, 8-12 June 1992, FIDP/R474.

77. *See* D.A. Posey, *Indigenous Knowledge in the Conservation and Use of World Forests, in* WORLD FORESTS FOR THE FUTURE: THEIR USE AND CONSERVATION, 59-77 (Kilaparti Ramakrishna & George M. Woodwell eds. 1993).

78. *See* CLEMENT DORM-ADZOBU, et. al., WORLD RESOURCES INSTITUTE, RELIGIOUS BELIEFS and ENVIRONMENTAL PROTECTION: THE MALSHEGU SACRED GROVE IN NORTHERN GHANA (1991). *See also* C. Zerner, Imagining Marine Resource Management Institutions in the Maluku Islands, Indonesia 1870-1992 (Oct. 18, 1993) (prepared for the Liz Claiborne Art Ortenberg Foundation Community Based Workshop, Airlie Virginia).

79. *See* Oates, *supra* note 59, at 116.

80. "In traditional societies, nature is viewed as part of human society, and proper relations with nature are necessary in order to have proper relations between people, including past and present generations. The commitment of indigenous peoples to conservation is complex and very old." Alcorn, *supra* note 74, at 425.

over natural resources in a wide variety of contexts, traditional community normative precepts and incentives for promoting sustainable resource use are under threat particularly in the areas where conservation is most needed for promoting human welfare.[81]

It is very unlikely that local long-term occupant communities will retain their cultures and resource management institutions under these conditions[82] or act as beneficent stewards of the remaining resources in their areas while other actors such as loggers, illegal mining, and other extraction enterprises, as well as public authorities, deplete these same resources and trample upon the socio-economic and cultural identity and institutions of these communities. A major contributor to the breakdown[83] of traditional community institutions and practices has been the socio-economic disruption caused by external factors.[84] The undermining of the authority of traditional community institutions has impacted negatively upon local community resource management.

B. *Promising Emerging National Level Responses*

Effective implementation of the international legal instruments will necessitate incorporation of the interests of local communities at the national and local levels. UNEP has recognized this in its Basic Law on Environmental Protection and the Promotion of Sustainable Development,[85] a model law for Latin America and

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81. GLOBAL BIODIVERSITY STRATEGY: GUIDELINES FOR ACTION TO SAVE, STUDY, AND USE EARTH'S BIOTIC WEALTH SUSTAINABLY AND EQUITABLY, WORLD RESOURCES INSTITUTE 79 (1992) (citing statement by Celso Roque, Undersecretary, Department of Environment and Natural Resources, Philippines, and main text).

82. *See* K.R. Redford & A. M. Stearman, *Forest-Dwelling Native Amazonians and the Conservation* of *Biodiversity: Interests in Common or in Collision?* 7 CONSERVATION BIOLOGY 248, 251 (1993).

83. For example, see C.K. Omari, *Traditional African Land Ethics, in* ETHICS OF ENVIRONMENT AND DEVELOPMENT (Engel & Engel eds., 1990).

84. *See generally*, Kimerling, *supra* note 75; Joe Kane, *With Spears From All Sides*, THE NEW YORKER, Sept. 27, 1993, at 56- 79; Victoria C. Arthaud, *Environmental Destruction in the Amazon: Can U.S. Courts Provide a Forum for the Claims of Indigenous Peoples?*, 12 GEO. INT'L ENVTL L. REV. 195 (1994).

See also data relating to cultural and economic transformation among traditional communities in Papua New Guinea due to construction and operation of OK Tedi Gold/Copper Mine *in* R. T. JACKSON, CRACKED POT or COPPER BOTTOMED INVESTMENT ? THE DEVELOPMENT OF THE OK TEDI PROJECT 1982-1991 (Melanesian Studies Centre: James Cook Univ. of North Queensland 1993).

85. *See* UNITED NATIONS ENVIRONMENTAL PROGRAMME REGIONAL OFFICE FOR LATIN AMERICA AND THE CARIBBEAN, PROPOSAL FOR A BASIC LAW ON ENVIRON-

the Caribbean. That instrument provides for national conservation, recovery, and sustainable use programs that will "[p]ropose practices for the sustainable management of wild fauna and promote their use, encouraging particularly the social and economic development of indigenous and local communities, for which measures shall also be adopted to ensure profitable marketing for producers."[86]

A 1994 Uganda Government report demonstrates an evolving awareness in some government circles that previous conservation approaches have been deficient because they ignored local community interests. It advocates ensuring that local communities participate in wildlife management and receive direct benefits from its utilization:

> Presently, the ownership and management of wildlife is dominated by Government, its agencies and their staff. Meaningful involvement and access to the management and development of wildlife resources is restricted to only a few persons. Accordingly, there is insufficient support for wildlife and protected area conservation at the local level, because communities do not benefit from nor appreciate the value of these resources. Government will address this situation through extension programmes and by putting into place mechanisms to enable local communities to participate in the management of wildlife resources, and to directly benefit from them without compromising its obligations towards the conservation of Uganda's bidiversity.[87]

Additionally, a few governments have begun to reverse state resource control policies and to explore possibilities for local community resource management. This transformation in attitude and practice has been based on recognition that it is necessary to

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MENTAL PROTECTION AND THE PROMOTION OF SUSTAINABLE DEVELOPMENT (1993).

86. *Id.* at art. 134.

87. *See* WILDLIFE AND ANTIQUITIES, UGANDA MINISTRY OF TOURISM, RESTRUCTURING OF: UGANDA NATIONAL PARKS AND THE GAME DEPARTMENT. A DRAFT ORGANIZATIONAL AND POLICY OUTLINE (1994).

meet people's socio-economic needs[88] in order to conserve resources of biological diversity.[89]

Philippine Executive Order No. 247 of 1995[90] is directed at instituting participation in the form of equitable sharing[91] as a legal obligation for prospecting biological resources. This law attempts to conserve resources of biological diversity and promote sustainable development through their utilization by mandating, first partnership research agreements between foreign collectors of biological material and the National Government, through technological cooperation and benefit sharing with the Government; and second, prior informed consent of communities from which biological resources were obtained as well as agreements on royalties to be paid to local communities for commercial use derived from any resources obtained from that community.[92]

The CAMPFIRE[93] program in Zimbabwe and similar initiatives in other southern African nations[94] seek to conserve biodiversity outside of protected areas by creating financial, resource management, and utilization incentives for local communities.[95] CAMPFIRE responds to the concerns raised in the

88. *See* BARBER, *supra* note 10, at 37. *See also* KIRK TALBOTT & SHANTAM KHADKA, HANDING IT OVER. AN ANALYSIS OF THE LEGAL AND POLICY FRAMEWORK OF COMMUNITY FORESTRY IN NEPAL (1994); S.B. Roy, *Forest Protection in West Beryal, India, in* LEGAL FRAMEWORKS FOR FOREST MANAGEMENT IN ASIA: CASE STUDIES OF COMMUNITY/STATE RELATIONS (Jefferson Fox ed., 1993). MARK POFFENBERGER, JOINT MANAGEMENT FOR FOREST LANDS: EXPERIENCES FROM SOUTH ASIA, A FORD FOUNDATION PROGRAM STATEMENT 11-13 (1990).

89. Nepal and India are two countries in which community-based forest management schemes have achieved notable success in conserving and rehabilitating degraded forest-lands and in providing subsistence resources and income to otherwise very poor people. Regarding a project in India's West Bengal state, however, research assessors stressed that community management rights must be secured through legitimation by statute or other legal channels if such schemes are to remain viable in the long run. *See* Roy, *supra* note 88.

90. Executive Order No. 247 of 1995, "Prescribing Guidelines and Establishing a Regulatory Framework for the Prospecting of Biological and Genetic Resources".

91. This law is a national attempt to implement the provisions of Article 8(j) of the Convention on Biological Diversity, *supra* note 1 (access to genetic resources).

92. *See* J.O. MUGABE ET AL., ACCESS TO GENETIC RESOURCES. EMERGING REGIMES TO FACILITATE REGULATION AND BENEFIT SHARING (1996).

93. "CAMPFIRE" is the acronym for the Zimbabwean Government's "Communal Areas Management Programme for Indigenous Resources". It was created in 1986 pursuant to a 1982 amendment to the 1975 Parks and Wildlife Act.

94. "ADMEDE" in Zambia and "NRMP" in Botswana. *See* A. Steiner & E. Rihoy, *The Commons Without the Tragedy? in* THE COMMONS WITHOUT THE TRAGEDY? STRATEGIES FOR COMMUNITY BASED NATURAL RESOURCES MANAGEMENT IN SOUTHERN AFRICA. PROCEEDINGS OF THE REGIONAL NATURAL RESOURCE MANAGEMENT PROGRAMME ANNUAL CONFERENCE, (E. Rihoy ed., 1995).

95. *Id.*

Ugandan Government statement above regarding nurturing local community support in effecting conservation of biodiversity. The Zimbabwean Government decided to conserve significant amounts of remaining biodiversity outside of officially protected reserves and promote local community development for economically marginalized populations by creating a supportive legal structure emphasizing devolution of management authority and receipt of benefits for wildlife utilization to local populations.

Under CAMPFIRE, the Zimbabwe Department of National Parks and Wildlife Management ("DNPWLM") is statutorily authorized[96] to give district councils "appropriate authority," which provides district councils in communal lands with full custodial rights over local wildlife. This enables the council to collect revenues from safari hunting, photographic tourism, and the culling of game for meat, hides and tusks. Devolution of "appropriate authority" occurs on condition that the district council develops a "wildlife management plan"[97] for its jurisdiction. District councils are expected to use the profits for local development projects and share a fixed percentage of the revenues with the local people.[98]

As of 1995, out of twenty-four participating districts, thirteen were reported to have generated significant revenues through wildlife management to realize earnings in accordance with the above profit structure. In those communal areas where wildlife is not abundant, the program has sought to diversify into non-wildlife based natural resource management activities such as forestry, ostrich farming, and mining of black granite and river sand for sale to industrial construction interests.[99]

The implementation of CAMPFIRE appears to have had a considerable impact on participating local community perceptions and behavior regarding wildlife resources. It has fostered a proprietary interest among locals over wildlife on their lands, resulting in a decline in both commercial and subsistence poaching in CAMPFIRE areas.[100] Prior to the operation of CAMPFIRE

96. *See* the 1982 Amendment to the Parks and Wildlife Act.

97. *See* Steiner & Rihoy, *supra* note 94, at 10.

98. *Id.* at 12; KAY MUIR & JAN BOJO, ECONOMIC POLICY, WILDLIFE AND LAND USE IN ZIMBABWE (The World Bank Environment Working Paper No. 68, 1994).

99. Interview with E. Rihoy, Washington, D.C., 17 December 1996.

100. However, a 1994 IBRD sponsored study suggested that CAMPFIRE needed to create legal mechanisms to give local communities "full control over utilization and poaching. . . [thus significantly reducing] management costs in wildlife protection . . . ." *See* MUIR & BOJO, *supra* note 98, at 10. The study suggested that such

only approximately thirteen percent of Zimbabwe's territory was officially devoted to wildlife habitat. At present, thirty-three percent is formally available for wildlife and approximately sixty percent of this is the result of the operation of CAMPFIRE. It remains to be seen whether the CBD or future international instruments will provide a supportive structure for the development and operation of national-level conservation initiatives through management and benefit sharing arrangements with locals as suggested by CAMPFIRE.

C. *The Legal Challenge Presented to Governments*

However, many governments are suspicious of devolution of resource management authority schemes, particularly where they involve indigenous communities that might also be seeking greater autonomy over their internal affairs.[101] This situation presents a difficult challenge to those advocating increased participation by non-state actors as a means for making the international system more effective. It is in the interest of the international community to develop legal approaches that encourage equitable and participatory mechanisms for sustainable utilization of natural resources by the communities which directly exploit them, while at the same time assuring nations concerned with continued security of their national sovereignty.[102]

The remainder of this article will evaluate international legal instruments dealing with conservation of biological diversity resources in light of the recommendations and findings articulated in the scientific, political, legal, and other data already discussed. It will review the effectiveness of the regimes in conserving and promoting sustainable development of resources in relation to:

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control would provide an incentive for locals to police themselves and report illegal poaching. *Id.*; Steiner & Rihoy, *supra* note 94.

Additionally, there have been concerns regarding the selectivity of species conservation exercised by local communities under CAMPFIRE, namely that species which are desired by wealthy foreign safari hunting groups, such as elephants, are protected, but others are treated as vermin. However, the program has in general been successful in halting further wildlife habitat conversion and in conserving some animal populations that otherwise would have disappeared outside of protected areas.

101. *See, e.g.*, David Maybury-Lewis, *From Savages to Security Risks: The Indian Question in Brazil, in* THE RIGHTS OF SUBORDINATED PEOPLES, (Oliver Mendelsohn & Upendra Baxi eds. 1994).

102. *See* Susan H. Bragdon, *National Sovereignty and Global Environmental Responsibility: Can the Tension be Reconciled for the Conservation of Biological Diversity?* 33 HARV. INT'L L. J. 381 (1992) .

participation, equitable sharing, and resource access security for long-term occupant communities.

IV.
EXISTING INTERNATIONAL INSTRUMENTS FOR CONSERVING BIODIVERSITY

This section provides an overview of efforts by major pre-UNCED regimes for conservation of resources of biological diversity in addressing the role of local community rights and interests.

A. *Regimes with Special Provisions for Aboriginals and Other Subsistence Users*

For many local resource user communities, and especially traditional and long-term occupant groups, the harvesting of biological resources — both floral and faunal — provides a significant source of nutrition and medicine.[103] In many parts of Latin America, Africa, and Asia products derived from these resources also provide considerable income for local populations when traded with urban populations. Subsistence utilization by long-term occupant groups is also often integral for their cultural survival.[104]

There has been some consideration for subsistence concerns of local communities in marine mammal and migratory wildlife conventions[105] involving species traditionally utilized by the aboriginal peoples of North America. Since the end of the last century, the U.S. Government has protected subsistence use by aboriginals in national legislation[106] and in its international agreements.[107] In general the treaty regimes in these situations have carved out exceptions to enable long-term occupant subsis-

103. *See e.g.,* J.G. ROBINSON & K.H. REDFORD, NEOTROPICAL WILDLIFE USE AND CONSERVATION 6 (1991); GLOBAL BIODIVERSITY STRATEGY 2-4 (1992); G.L. Boye & O. Ampofo, *The Role of Plants and Traditional Medicine in Primary Health Care in Ghana*, 4 ECON. MED. & PLANT RES. 28, 28-37 (1990).

104. *See* Michael L. Chiropolos, Comment, *Inupiat Subsistence and the Bowhead Whale: CanIindigenous Cultures Coexist with Endangered Animal Species?*, 5 COLO. J. INT'L ENVTL. L. & POL'Y, 213, 224 (1994).

105. *See, e.g.*, Conservation Agreement between Canada and the United States of America on the Conservation of the Porcupine Caribou Herd, CANADIAN TREATY SERIES No. 31 (1987); Agreement on the Conservation of Polar Bears, Nov. 15, 1973, Can.-Den.-Nor.-U.S.S.R.-U.S., art. III, 13 I.L.M. 13, 14 (1974).

106. *See, e.g.,* Marine Mammal Protection Act of 1972, 16 U.S.C. § 1371(b) (1994); Endangered Species Act of 1973, 16 U.S.C. § 1539(e) (1994).

107. *See* 1991 IWC Schedule, Amendments to the Schedule, ICRW, June 10, 1991, WL 494871.

tence resource users to maintain their cultural and related nutritional practices. Under these circumstances the greatest amount of harvesting and greatest threat to the continued survival of the resource has come from commercial or non-aboriginal and non-subsistence activities. The wildlife involved in these treaties are of the types often considered to be shared natural resources.[108]

i. *Bering Fur Seal Regime*

The Bering Fur Seal regime[109] was perhaps the first truly international conservation regime. It was notably successful during the first fifty years of its existence[110] in conserving Bering Fur Seal (*Callorhinus ursinus*) populations, meeting economic interests of the state Parties[111] through regulated commercial harvesting, and in addressing at least partially the equity interests of local resource dependent communities by protecting subsistence use rights.[112] However, it does not offer incentives for local communities to manage sustainably the resource in the context of subsistence hunting. Furthermore, it suggests that long-term occupant communities, such as the fur seal dependent peoples of

108. *See* Cyril de Klemm, *Migratory Species in International Law*, 29 NAT. RESOURCES J. 935, 949 (1989).

109. For the history leading up to the establishment of the regime, *see* Fur Seal Arbitration. Proceedings of the Tribunal Of Arbitration, convened at Paris, under the treaty between the U.S. and Great Britain, concluded at Washington, Feb. 29, 1892, for the determination of questions between the two governments concerning the jurisdictional rights of the U.S. in the waters off the Bering Sea, S. EXEC. DOC. No. 177, pt. 1-16 (1895) [hereinafter Fur Seal Arbitration].

110. In the face of recorded scientific uncertainty regarding the cause of a continued dramatic decline in the Pribilof herd of Fur Seals beginning in the 1960s, the United States Senate decided in 1985, to terminate commercial harvesting of the Pribilof herd and not to extend the 1957 Interim Convention on Conservation of North Pacific Fur Seals. This unilateral decision by the United States vitiated the continuation of the multilateral regime. *See* Interim Convention (with schedule) on Conservation of North Pacific Fur Seals, Feb. 9, 1957, U.S.-Can.-Japan-U.S.S.R., 314 U.N.T.S. 105 (1958) [hereinafter Interim Convention]; *Marine Mammal Commission in Hearing before the Committee on Foreign Relations United States Senate,* 99th Cong. 316-319 (1985) (statement of R.J. Hoffman, Ph.D., Scientific Programs Director); *C.W. Fowler, Marine Debris and Northern Fur Seals: a Case Study*, 18 MARINE POLLUTION BULL. 326 (1987).

111. *See* 314 U.N.T.S. 105 (1958) (parties to 1957 agreement were U.S., Can., Japan, and U.S.S.R.); Convention providing for the preservation and protection of fur seals, Jul. 7, 1911, U.S.-Gr. Brit.-Japan-Russ., 37 Stat. 1542.

112. The U.S. Government provided an eloquent defense of subsistence needs of aboriginal communities in its pleadings before the Fur Seal Arbitrations Tribunal in 1892. *See* Fur Seal Arbitration, *supra* note 109, at pt. 15, 11 (oral argument of the U.S.); *see also* Interim Convention, *supra* note 10, at arts. V(2)(d), VII, 314 U.N.T.S. 105, 109-111(subsistence use provisions incorporated in the multilateral regime).

Alaska, should be treated in the same manner as large scale industrial enterprises when harvesting for commercial purposes.

The Bering Fur Seal regime sought to effect a reasonable compromise between subsistence needs, commercial demands, and conservation objectives, but its approach is probably of limited use in many developing countries where long-term occupant groups are heavily dependent on the sale of locally harvested products to supplement their subsistence income and may have little alternative employment sources.

ii. *International Convention for the Regulation of Whaling ("ICRW")*

The harvesting of whales and related cetaceans for commercial and subsistence[113] uses has been practiced by humans for centuries. The 1931 Convention for the Regulation of Whaling[114] was the first international regime directed at conserving cetaceans. It was inspired by the 1911 Bering Fur Seal Treaty.[115] Both instruments contained exemptions for aboriginal subsistence harvesting, providing that aboriginals used traditional vessels and weapons and were not under contract to deliver their catch to third Parties.[116] One reason for these provisions was to ensure that the aboriginal allowance was not abused by others seeking to circumvent commercial harvesting restrictions under the treaty by employing aboriginals for non-subsistence taking.

The regime established under the International Convention for the Regulation of Whaling (ICRW)[117] of 1946 has continued the pattern begun in the North Pacific Fur Seal regime providing a special exemption for aboriginal subsistence hunting.[118] The schedules to the ICRW permit aboriginal whaling, subject to strict catch limits, of certain species otherwise prohibited to com-

113. *See* Nancy C. Doubleday, *Aboriginal Subsistence Whaling: The Right of Inuit to Hunt Whales and Implications for International Environmental Law*, 17 DENV. J. INT'L L. & POL'Y 373, 373-74 (1989); *see also* Chiropoulos, *supra* note 103.

114. Convention for the Regulation of Whaling, Sept. 24, 1931, S. Afr.-Alb.-Germany-U.S.-Austl., etc. 155 L.N.T.S. 349 (1935).

115. Treaty providing for the preservation and protection of fur seals, Feb. 7, 1911, U.S.-Gr. Brit., 37 Stat. 1538.

116. *See e.g.,* Convention for the Regulation of Whaling, *supra* note 114, at art. 3, p. 357.

117. International Convention for the Regulation of Whaling (with annexed schedule), Dec. 2, 1946, Arg.-Austl.-Braz.-Can.-Chile, etc. 161 U.N.T.S. 72 (1953).

118. *See* 1 P. BIRNIE, INTERNATIONAL REGULATION OF WHALING 147 (1985).

mercial whaling. They also mandate that the whales harvested must be for local consumption and not for commercial gain.[119]

However, the ICRW does not define either "commercial" or "subsistence." For purposes of the ICRW, the United States uses the following definition for aboriginal subsistence whaling: "whaling, which is conducted by native whalers with a long history of whaling for cultural and nutritional purposes."[120] At present, spears and other traditional implements, as well as modern equipment such as guns, are employed for aboriginal subsistence whale hunting in the U.S. and other Party states. At IWC[121] meetings, animal welfare NGOs have condoned the use of modern killing methods which are deemed to be more humane than traditional weaponry.[122] This situation puts into question whether use of explosives and other firearms legitimately contributes to the continuation of "traditional" subsistence hunting practices.

Despite the IWC's indefinite moratorium on commercial whaling imposed in 1982,[123] based on overwhelming evidence of serious depletion of most whale stocks, Norway and Japan, two states with significant non-aboriginal whale harvesting communities, have continued to argue for whaling by their coastal communities where it "had taken place for generations, was a vital interest and might now be regarded as so rooted in history and culture as to be accepted as a new form of subsistence whaling."[124] The arguments, which these states continue[125] to make before the IWC, have not been accepted by the majority of the Parties or by the International Whaling Commission because this type of whaling is admittedly practiced both for commercial as well as subsistence purposes. The issues raised by Norway and Japan challenge existing notions regarding permissible groups in the sustainable utilization of components of global biodiversity, the definition of "subsistence" needs, and the development of

119. *See* 2 P. BIRNIE, INTERNATIONAL REGULATION OF WHALING 620 (1985).

120. *See* U.S. DEPT. OF STATE, U.S. INTERNATIONAL WHALING POLICY 9 (1995).

121. *See, e.g.*, INTERNATIONAL WHALING COMMISSION, FORTY-FIFTH REPORT (1995).

122. Interview with Dr. K. Chu, U.S. National Marine Fisheries Service, in Woodshole, Mass. (Dec. 19, 1996).

123. At its 1982 annual meeting, the IWC adopted an amendment to paragraph 10(e) of the Schedule to the convention, setting all commercial catch limits at zero.

124. *See* ECO Vol. XXIV (1), July 18, 1983; BIRNIE, *supra* note 119, at 267; *see also* IWC Resolution 1995-3, app. 4 (regarding Japanese community-based whaling), *in* IWC 1996 Chairman's Rep. of 47th Ann. Mtg. (June 1996).

125. *See generally*, IWC 1996 Chairman's Rep. of 47th Ann. Mtg. (June 1996).

criteria regarding participants in the management of such resources.

The text of the ICRW contains no provisions for participation by affected communities in implementation. Certain Parties to the Convention, such as the United States and Denmark (for Greenland), regularly include members from aboriginal subsistence communities on their delegations[126] to International Whaling Commission ("IWC") meetings. However, the presence of representatives from these groups on delegations is purely at the pleasure of individual state Parties.

Sustainable utilization entails the direct formal participation in development and implementation of regime objectives by local communities. Only the 1987 U.S.-Canada bilateral Porcupine Caribou Agreement[127] expressly recognizes the participation of local resource user communities along with governments in the international coordination of the treaty's conservation objectives.[128] In general, however, the existing aboriginal exceptions in the sealing, whaling, and migratory animals conventions are more a concession to the preservation of traditional indigenous cultures than part of an overall plan for sustainable resource utilization.[129]

However, the 1994 meeting of the IWC adopted a "Resolution on a Review of Aboriginal Subsistence Whaling Management Procedures" recommending that the Scientific Committee of the IWC should investigate potential management regimes for aboriginal subsistence whaling. The resolution was directed at "ensur[ing] that the risks of extinction to individual stocks are not seriously increased by subsistence whaling as the objective to be given highest priority in any potential regime."[130] The U.S. Gov-

126. Interview with Mr. C. Donovan, IWC, in Cambridge, U.K. (Mar. 1996).

127. Conservation of the Porcupine Caribou, *supra* note 105.

128. *Id.* The progressive aspects of the Porcupine Caribou Agreement are attributable to the fact that it is a relatively recent agreement (and thus influenced by current concepts about sustainable use and the concerns of long-term occupant communities) and also is a bilateral instrument between two state Parties sharing similar interests about the utilization of a common transboundary resource.

129. In the above situations, subsistence hunting has not historically been viewed as the primary reason for creating the respective conservation regimes. The causes of biodiversity depletion throughout much of the world at present, however, are based on a combination of factors resulting from both large scale commercial/industrial exploitation and utilization for commercial and non-commercial purposes by local communities.

130. *See* IWC Resolution 1994-4 (regarding review of aboriginal subsistence management procedures) pars. (1), (3), and (4).

ernment has permitted Native Alaskan subsistence users to take a fixed quota of whales, including bowhead whales, a species deemed by the IWC Scientific Committee to be endangered.

The impact of aboriginal subsistence harvesting on the viabilty of whale species was discussed at the 1996 IWC meeting in Aberdeen Scotland.[131] IWC members are confronted with the possibility that existing aboriginal subsistence harvesting provisions may threaten the conservation of endangered whale species, unless these provisions are more effectively integrated into the overall managment of the regime.[132] The rights of aboriginal subsistence users to harvest individual whales from even depleted whale species, as a nutritional and social component for Native Alaskan cultural survival presents a potential clash between meeting human rights and environmental protection objectives.

B. *Convention on International Trade in Endangered Species of Wild Fauna and Flora ("CITES")*

The text of the Convention on International Trade in Endangered Species of Wild Fauna and Flora ("CITES")[133] does not address[134] the issue of local community harvesting and consumption of floral and faunal resources for domestic subsistence or commercial purposes, despite extensive documentation that local consumption of species otherwise protected under CITES is a significant conservation issue.[135] For example, the African Elephant (*Loxodonta africana*) is a species listed on Appendix I as "endangered" under CITES. The World Conservation Union ("IUCN") conducted a study of the ivory trade in nine African countries four years after the 1989 CITES ban[136] on international

131. *See generally*, IWC 1996 Chairman's Rep. of the 47th Ann. Mtg. (June 1996).

132. *See IWC Meeting*, 16 TRAFFIC BULL. 40, 41 (1996).

133. Mar. 3, 1973, 12 I.L.M. 1085 [hereinafter CITES].

134. Of the pre-CITES broad based wildlife conservation regimes, only the 1968 African Convention on the Conservation of Nature and Natural Resources, Sept. 15, 1968, 1001 U.N.T.S. 3 recognizes a role for local populations in conservation in its Article XI on "Customary Rights": "The contracting States shall take all necessary legislative measures to reconcile customary rights with the provisions of this Convention." However, customary rights are not defined and Article XI depends upon national implementation to be effective. The 1976 Convention on Wetlands of International Importance Especially as Waterfowl Habitat, Feb. 2, 1976, 996 U.N.T.S 245 [hereinafter Ramsar Convention] also says nothing about the role of local populations inhabiting areas designated as Ramsar wetland protected sites.

135. *See* WORLD CONSERVATION MONITORING CENTRE, GLOBAL BIODIVERSITY 359 (Brian Groombridge ed. 1992).

136. At the 1989 meeting, the COP decided to list the African Elephant as an Appendix I species, pursuant to Resolutions 7.8 and 7.9, effective 18 January 1990.

trade in elephant ivory. The report found that in some areas of Cameroon, Malawi, and Nigeria, elephants were killed primarily for locally consumed meat and ivory.[137] Elephant ivory is legally sold domestically in shops in many African countries, a factor affecting elephant conservation which CITES does not cover.

Also, CITES does not address the problem of increased resource conflicts between growing local human populations and wildlife over remaining habitat.[138] Lack of attention to these issues weakens the effectiveness of the CITES regime in achieving its overall objective, namely species conservation through sustainable trade. However, the Conference of the Parties ("COP") to CITES has recently recognized the importance of the local community link for the success of the treaty. At the November 1994 COP, the Parties adopted a resolution on "enforcement" (Resolution Conf. 9.8) recommending that Parties "promote incentives to secure the support and cooperation of local and rural communities in managing natural resources and thereby combating illegal trade."[139]

V.

UNCED: A WATERSHED SUGGESTING FUTURE DEVELOPMENTS

The role of long term occupant communities in managing biodiversity was highlighted[140] in several instruments arising out of

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China, The United Kingdom (for Hong Kong), South Africa, Namibia, Zimbabwe and several other southern African states took out reservations against the Appendix I listing. Personal communication with Dr. J. Caldwell, WCMC, Cambridge, 17 June 1996, interview with Dr. J. Caldwell, in Cambridge U.K. (June 17, 1996).

137. *See* H.T. DUBLIN, ET AL., FOUR YEARS AFTER THE CITES BAN: ILLEGAL KILLING OF ELEPHANTS, IVORY TRADE AND STOCKPILES 42-50, 79-83 (1995).

138. The IUCN study concluded that on the grounds of human population growth patterns and the subsequent reduction in available wildlands, the continental population of the African elephant will continue to decline even if killing for the commercial trade in ivory is brought under control. *See* Dublin, *supra* note 137, at 7, 89-91; *see also* I.S.C. Parker & A.D. Graham, *Men, Elephants and Competition, in* THE BIOLOGY OF LARGE AFRICAN MAMMALS IN THEIR ENVIRONMENT 241, 242-43 (eds. P.A. Jewell & G.M.O. Maloic, Symposia of the Zoological Society of London, No. 61, 1989).

139. *See* B.J. Kelso, *Ninth Meeting of the Conference of the Parties to CITES*, 15 TRAFFIC BULL. 65 (1995).

140. The need to incorporate local resource user communities into biodiversity conservation had been recognized at least as far back as the 1968 UNESCO Man and the Biosphere Programme, pursuant to which economic activities of traditional communities were to be included in the planning and management of biosphere reserves, *see* UNESCO, USE AND CONSERVATION OF THE BIOSPHERE 195-96 (1970). However, the 1992 Convention on Biological Diversity ("CBD") is the first multi-

the United Nations Conference on Environment and Development ("UNCED") held in Rio de Janeiro in 1992 .

A. *Rio Declaration*

Principle 22 of the Rio Declaration is devoted to what the drafters termed the "vital role" of "[i]ndigenous people . . . and other local communities" in environmental management and development. It proclaims that "[s]tates should" recognize and duly support the "identity, culture and interests [of these communities] and enable their effective participation in the achievement of sustainable development."[141] However, this language provides no guidance to states for facilitating effective participation by local communities. Nor does it suggest how indigenous culture, identity, and interests — whatever these may be — will be supported. The weakness of this section is demonstrated by use of the verb "should" rather than the obligatory language of "shall," which is employed in such high profile sections as Principle 3 on the "right to development" and Principle 7 on inter-state cooperation.[142] However, the fact that local communities are mentioned at all reflects a growing trend to recognize the role of these groups in environmental protection in international legal instruments.

Although the Rio Declaration is politically charged with the tensions of "North v. South,"[143] it does set out a normative framework highlighting the possible future direction of international law in this area. The Rio Declaration's recognition of the interests and important role of indigenous societies in the environment-development paradigm was elaborated upon further the following year in the Vienna Declaration and Programme of Action[144] of the World Conference on Human Rights ("Vienna Declaration"). In discussing specific aspects of the right to development as a human right, the Vienna Declaration expressly considers the status of indigenous communities: "[the Conference]

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lateral instrument to promote, *inter alia*, sustainable development of resources on lands adjacent to protected areas, such as communal lands of long-term occupants, as a tool for enhancing conservation, *see* Convention on Biological Diversity, *supra* note 39, at art. 8(e), p. 825.

141. Rio Declaration, *supra* note 44, at 880.

142. *Id.* princs. 3, 7, at 877.

143. For further discussion on this issue, see Ileana M. Porras, *The Rio Declaration: A New Basis for International Cooperation, in* GREENING INTERNATIONAL LAW, 22-23 (Philippe Sands ed., 1993).

144. June 25, 1993, 32 I.L.M. 1661 [hereinafter Vienna Declaration].

reaffirms the commitment of the international community to [indigenous peoples'] economic, social and cultural well-being and their enjoyment of the fruits of sustainable development."[145] The latter statement linking sustainable development with indigenous communities' equitable interests suggests what is lacking in most existing international instruments dealing with conservation of biodiversity.

Like the Rio Declaration, the Vienna Declaration is not legally enforceable according to conventional conceptions of international law.[146] In contrast with Principle 22 of the Rio Declaration, however, Paragraph 20 of the Vienna Declaration provides a normative imperative for promoting indigenous peoples' welfare in the context of sustainable development: "[s]tates should ensure the full and free participation of indigenous people in all aspects of society, in particular in matters of concern to them."[147] In light of the fact that security over access to and use of natural resources is a documented matter of primary concern for indigenous communities, the Vienna Declaration suggests that participation will enable indigenous people to affect decisions regarding natural resource development relevant to their cultural and economic well-being.

The Vienna Declaration, however, does not go far enough to address the issue of resource access security or incentives to promote sustainable development of resources. The 1996 United Nations Conference on Human Settlements Habitat II has identified denial of access to land and tenure insecurity as causes of "environmental degradation" and particularly highlighted its negative impacts on indigenous and other vulnerable groups.[148] Arguably, these issues are human rights concerns. The United Nations Human Rights Committee has recognized that for indig-

145. *Id.* para. 20, at 1668. This objective reappears in par. 253 (c) of the Draft Declaration and Draft Platform for Action for the Fourth World Conference on Women, 4-15 September 1995, Future A/CONF.177/L.1, at 24 (1995).

146. Of course, these declarations are not devoid of legal effect and depending on the circumstances may articulate existing customary international law, and/or assist in the crystallization of emerging international law. On the legal implications of declarations, resolutions and other instruments produced at international conferences and through the political organs of the United Nations, see HIGGINS, *supra* note 2, at 24-28; O. Schachter, INTERNATIONAL LAW IN THEORY AND PRACTICE, 99 (1991); Stephen M. Schwebel, *The Effect of Resolutions of the U.N. General Assembly on Customary International Law,* 73 AM. SOC'Y OF INT'L LAW PROC. 301, 302 (1979).

147. Vienna Declaration, *supra* note 144, at 1668.

148. *See* pars. 36 & 72, Report of the United Nations Conference on Human Settlements (Habitat II), A/CONF.165/14 (1996) (preliminary version).

enous communities "traditional land tenure is an aspect of the enjoyment of culture protected under Article 27 of the [United Nations Convention on Civil and Political Rights]."[149]

B. *The Convention on Biological Diversity*

The preamble to the Convention on Biological Diversity ("CBD") notes "the close and traditional dependence of many indigenous and local communities embodying traditional lifestyles on biological resources . . . ."[150] The language "embodying traditional lifestyles" is controversial. The IUCN commentary to the CBD implies that these words would exclude groups recently descended from "indigenous and local communities embodying traditional lifestyles," but which at present do not maintain "traditional lifestyles."[151] This could preclude coverage of millions of persons from long-term occupant communities who have assimilated in varying degrees into mainstream, non-traditional economy and society.

This section of the preamble also makes an oblique reference to "the desirability of sharing equitably benefits arising from the use of traditional knowledge, innovations and practices"[152] regarding conservation and sustainable use of biological resources. Although the text highlights "equitable sharing" of benefits arising out of the use of traditional knowledge and practices, it is ambiguous regarding whether indigenous and other local communities actually will be sharing "equitably."

The drafting history of the CBD is unclear. The IUCN Commentary on the CBD indicates that local communities are by implication among the anticipated beneficiaries of the equitable sharing.[153] However, the language of the CBD never expressly articulates this point. But, Chapter 15 of Agenda 21, entitled "Conservation of Biological Diversity," spells out clearly that governments should ensure that local communities share in the economic benefits derived from their traditional methods and

149. *See* Omniyak, Chief of the Lubicon Lake Band v. Canada, Communication No. 267/1984, U.N. Doc. A/45/40, Annex 9(A) (1990); *See also Petition by The Mayagna Indian Community of Awas Tingni and Jaime Castillo Felipe against Nicaragua*, INTER-AMERICAN HUMAN RIGHTS COMMISSION, Oct. 2, 1995, at 20.

150. Convention on Biodiversity, *supra* note 1, at pmbl., para. 12.

151. *See* L. GLOWKA, ET AL., A GUIDE TO THE CONVENTION ON BIOLOGICAL DIVERSITY (IUCN Environmental Law Centre, Environmental Policy and Law Paper No. 30, IUCN, Gland, Switzerland 1994).

152. Convention on Biodiversity, *supra* note 1.

153. *See* Glowka, *supra* note 151, at 11, 60.

knowledge. It was drafted after the relevant sections of the CBD.[154] The failure to spell it out in the CBD may have been a drafting oversight.

However, statements from country delegations at the negotiations also suggest that the language was intentionally left open-ended. During the drafting sessions, several developing countries with large indigenous populations expressed dissatisfaction that the language concerning "equitable sharing" in the CBD inadequately addressed the concerns of local communities. Colombia attached the following declaration to the Final Text of the CBD:

> [O]ur country welcomes the full recognition within the convention of the knowledge, innovations and practices of indigenous communities, but considers that such communities must be fully guaranteed participation in the benefits arising from the use of such knowledge, innovations and practices and not only that such participation should be encouraged, as the text of [the] Convention rather weakly states. We therefore believe a future instrument under the Convention should endeavour to improve upon this point.[155]

i. *Article 8(j) of the Convention on Biological Diversity*

Article 8(j) of the CBD requires Parties to 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 "subject to its national legislation."[156] Some have opined that this qualification defeats the purpose and potential impact of the instrument.[157] The qualifier in Article 8(j) reveals just how far nation states, which negotiated the CBD, were willing to permit international law to affect an area over which they have claimed exclusive sovereignty. The current state-dominated international system continues to affirm the preeminence of state sovereignty over resources of biological diversity, as re-

154. *See* 2 EARTH SUMMIT BULLETIN 4 (1992).

155. *See generally* Report of the Intergovernmental Negotiating Committee for a Convention on Biological Diversity, U.N.E.P., 7th Session, at 27, U.N. Doc. UNEP/Bio. Div./N7-INC. 5/4 (1992).

156. Convention on Biodiversity, *supra* note 1, at 826. Paragraph 4 of the preamble also reaffirms that "States have sovereign rights over their own biological resources . . . . " *Id.* para. 4 at 822.

157. *See* F. Burhenne-Guilmin & S. Casey-Leftkowitz, *The Convention on Biological Diversity: A Hard Won Global Achievement*, 3 Y.B. INT'L ENVTL L. 43, 51 (1992).

vealed in the 1996 Leipzig Declaration on Conservation and Sustainable Utilization of Plant Genetic Resources for Food and Agriculture.[158]

It has been suggested that the above qualifier in the CBD was actually inserted at the behest of countries such as the United States, where the government's relationship with the nation's indigenous communities is governed by federal treaties. Requiring that a Party's obligation be made "'subject to its national legislation' . . . preserves the US relationship with Native American tribes as well as other national laws governing that relationship."[159] This language supposedly serves to protect a special relationship with indigenous peoples enshrined in laws which accord Native American tribes the status of dependent nations.[160] One commentator who worked on the U.S. delegation to the CBD negotiations states that:

> It was feared that without this clause, unilateral involvement by a government in the affairs of its indigenous people could be seen as invasive or, at best, paternalistic. Finally, [under the terms of the CBD] a Party is not obligated to unilaterally dictate how benefits should be shared in a private transaction between indigenous people and other entities; rather, the Party has an obligation to "encourage" the equitable sharing of benefits.[161]

This rationale may be appropriate in Canada, the United States, and New Zealand[162] where indigenous peoples have achieved a recognized degree of autonomy, political leverage, and commercial sophistication in relation to the dominant society. It does not address the circumstances of indigenous and other local communities in many developing countries such as Papua New Guinea, the Solomon Islands, and parts of Latin America where private transactions between outside commercial enterprises and local

158. *See* para. 2, Annex I, Leipzig Declaration on the Conservation and Sustainable Utilization of Plant Genetic Resources for Food and Agriculture, ITCPGR/96/ REP.

159. Melinda Chandler, *The Biodiversity Convention: Selected Issues of Interest to the International Lawyer*, 4 COLO. J. INT'L ENVTL. L. & POL'Y 141, 154 (1993).

160. *See* Ralph W. Johnson, *Fragile Gains: Two Centuries of Canadian and United States Policy Toward Indians*, 66 WASH. L. REV. 643, 686 (1991).

161. *See* Chandler, *supra* note 159, at 154.

162. For example, under the Treaty of Waitangi, entered into between the Maori people and Great Britain in the mid nineteenth century, the Maori retain "full exclusive and undisturbed possession of their Lands and Estates Forests Fisheries and other properties . . . so long as it is their wish and desire . . . . " Treaty of Waitangi 1990, NEW ZEALAND OFFICIAL YEARBOOK, (Department of Statistics), Art. 2 at 55.

elements have proved socially and environmentally disastrous for the local communities involved.[163]

Additionally, many countries do not have specific treaties or laws covering the national government's relationship with indigenous communities; in a number of countries indigenous communities have received minimal or no recognition as distinct populations.[164] Furthermore, various long-term occupant communities in the United States and elsewhere are not officially recognized as indigenous, although several of these communities claim that they are in fact indigenous.[165] Some of these groups also possess knowledge and maintain practices conducive to sustainable resource management. Yet the modifier "subject to national legislation" and the vague invocation calling upon states to "encourage" equitable sharing does not mandate any protection of their interests. This is a gap in the CBD's coverage.

The language in Article 8(j) also calls upon the Parties to promote the "wider application [of indigenous and local knowledge, innovations, and practices] with the approval and involvement of the holders of such knowledge, innovations and practices and encourage the equitable sharing of the benefits arising from the utilization of such knowledge, innovations and practices."[166] Although this subsection appears to address some of the major interests of local communities, particularly respect for their way of life and management of resources, it is also ambiguous on the issue of equitable sharing. A careful reading of the text of Article 8(j) does not say that the equitable sharing will necessarily include the local communities. The ambiguity becomes clearer when the relevant language in Article 8(j) is contrasted with Chapter 15[167] of Agenda 21.

ii. *Article 15 of the Convention on Biological Diversity*

Article 15 on "Access to Genetic Resources" spells out that the anticipated beneficiaries of the equitable sharing arising out

163. *See, e.g.,* Philip Shenon, *In Isolation, Papua New Guinea Falls Prey to Foreign Bulldozers*, N.Y. TIMES, June 5, 1994, at 1; Linda Rabbin, *Kayapo Choices: Short-Term Gains vs. Long-Term Damage*, 19 CULTURAL SURVIVAL Q. 11, (1995).

164. *See* A. COLOMBRES, LA COLONIZACION CULTURAL DE LA AMERICA INDIGENA, (tr. R. Stavenhagen 1987); R. Stavenhagen, The Status and Rights of the Indigenous Peoples in America; 57 (July 1991) (preliminary draft for Inter-American Commission on Human Rights).

165. Johnson, *supra* note 160, at 654.

166. Convention on Biodiversity, *supra* note 1, at art. 8(j).

167. *Conference on Environment*, *supra* note 6, at para. 15.4 (g).

of indigenous/local community knowledge and practices are indeed the state Parties to the treaty, and not the local communities who generated the useful materials or ideas: "Each Contracting Party shall take legislative, administrative or policy measures . . . with the aim of sharing in a fair and equitable way the results of research and development and the benefits arising from the commercial and other utilization of genetic resources with the Contracting Party providing such resources."[168]

iii. *Article 18 of the Convention on Biological Diversity*

Article 18 of the CBD states that the Parties shall "encourage and develop methods of cooperation for the development and use of technologies, including indigenous and traditional technologies, in pursuance of the objectives of this Convention." The text does not expressly refer to cooperation with the local communities themselves, which are in fact the source of such technologies. Rather the "cooperation" envisioned is between the state Parties to the Convention. Recognition of the rights and interests of affected communities in receiving benefits in exchange for appropriation of their knowledge and other information is also overlooked — intentionally or otherwise — throughout the other sections of the CBD.[169]

iv. *Future Developments under the CBD*

Like CITES and the other pre-UNCED conventions, the CBD fails to mandate mechanisms for protecting the interests of local communities, or for providing these communities with incentives for continuing to conserve biological resources. From the point of view of indigenous and local communities, the language of the CBD could be construed as legitimizing outsiders' access over the economic benefits from resources which these communities have traditionally controlled and/or nurtured. It offers these communities no identifiable opportunities to derive any benefit from sustainable resource management.

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168. *See* Convention on Biodiversity, *supra* note 1, Art. 15 para. 7; *see also id.*, prmbl., art. 20.

169. *See, e.g.,* Convention on Biodiversity, *supra* note 1, at art. 10: "Sustainable Use of Components of Biological Diversity", which encourages cooperation "between...[contracting Party] governmental authorities and...[the] private sector in developing methods for sustainable use of biological resources" without including the participation of indigenous and other local communities from which the biological resources may have been obtained."

However, the framework approach built into the CBD anticipates the creation of protocols to facilitate the realization of the convention's objectives. Supplementary agreements, may recognize and cover local community land tenure, resource access, and intellectual property rights.[170] Although the issues of benefits sharing with local communities and the recognition of community-based resource management have not been adequately addressed in the current text of the CBD, they were highlighted at the first COP to the CBD in December 1994. In his address at that meeting, the Philippine Secretary of the Environment and Natural Resources stated:

> We are . . . concerned that the rights of our indigenous peoples, farmers and local communities are being disregarded in the guise of intellectual property rights. We therefore consider it imperative for the conference of the Parties to find a mechanism, in the context of implementing the Biodiversity Convention, to recognize and respect the rights of these sectors. We emphasize particularly the need to ensure that indigenous and local communities give their prior informed consent to any biodiversity prospecting and the imperative that the benefits be shared not only with the state but with these communities.[171]

This statement reveals an awareness by some Parties of the legal inadequacy of the existing language in the CBD on the issue of local community rights and benefits in the management and utilization of resources of biological diversity. Perhaps future sessions of the COP will seek to rectify this situation through means of a protocol as suggested above. The third COP, held in November 1996, requested that Parties, in consultation with indigenous and other local communities, develop national legislation to implement Article 8(j). The COP also decided to hold an inter-

170. The "International Conference on the Convention on Biological Diversity: National Interests and Global Imperative", held in 1993, recommended that the Secretariat of the CBD create a working group to investigate extending existing instruments for protecting intellectual and cultural property to protection of indigenous peoples' knowledge and biological resources. It suggested the possibility of a protocol on this issue to be incorporated into the CBD. *See* Farhana Yamin & Darrell Posey, *Indigenous Peoples, Biotechnology and Intellectual Property Rights*, 2 REV. OF EUR. COMMUNITY AND INT'L ENVTL. L. 141, 146 (1993).

171. *See* PHILIPPINE SECRETARY OF ENVIRONMENT AND NATURAL RESOURCES, ENSURING THE DIVERSITY OF LIFE: A CALL FOR PARTNERSHIP BETWEEN STATES, PEOPLES AND COMMUNITIES. Text on File at World Resources Institute, Wash., D.C.

sessional implementation workshop involving governments and indigenous and other local communities.[172]

C. *Agenda 21*

Of the UNCED documents, Agenda 21 offers the most pragmatic suggestions for addressing the double crisis threatening the world's remaining biodiversity and the rights and interests of indigenous/long-term occupant communities over natural resources, especially in developing countries.

i. *Chapter 32 of Agenda 21*

Chapter 32, entitled "Strengthening the Role of Farmers,"[173] identifies some of the principal threats to local community integrity and the concomitant threat to biological resources at the local level, and suggests legal approaches for overcoming these insecurities. Among the key objectives are:

> (a) To encourage a decentralized decision-making process through the creation and strengthening of local and village organizations that would delegate power and responsibility to primary users of natural resources . . . ;
> (b) To support and enhance the legal capacity of women and vulnerable groups with regard to access, use and tenure of land . . . ; and
> (c) To develop a policy framework that provides incentives and motivation among farmers for sustainable and efficient farming practices.

Regarding responsibility of national governments for implementation, Section 15 of Chapter 32 states that national governments "should": " (a) [c]reate the institutional and legal mechanisms to give effective land tenure to farmers. The absence of legislation indicating land rights has been an obstacle in taking action against land degradation in many farming communities in developing countries . . . ."[174] Even with the use of the word "should" rather than the stronger term "shall," these are bold and far-

172. *See* EARTH NEGOTIATIONS BULLETIN, Nov. 18, 1996, at 7-8. Indigenous peoples' groups with observer status at the COP, opposed this decision which fell short of their calls for an open-ended full working group reporting directly to the COP.

173. According to Chapter 32, " 'farmers' and 'farming' include all rural people who derive their livelihood from activities such as farming, fishing and forest harvesting." *See* A/Conf. 151/4, Apr. 22, 1992, Sec. 32.1. This broad definitional criteria encompasses much of the activity of indigenous and other local communities *vis-À vis* natural resource utilization.

174. *See* A/CONF. 151/4, Apr. 22, 1992, Sec. 32.15(a).

reaching statements considering the emotional and political overtones connected with resource use, land tenure, and land redistribution in many developing countries.

The first sentence of the penultimate draft of this subsection reads as follows: " [c]reate the institutional and legal mechanisms to give effective land tenure to farmers [who demonstrate they are conserving and utilizing resources properly] or farmers [with a view to] conserving and utilizing resources properly or [to forest harvesting and fishing rights to those which are working towards sustainable management of resources]."[175] However, the main drafting committee of UNCED on 10 June 1992 decided to replace that text with the present language.[176] The previous wording would have opened the door for arbitrary decision-making at the national and local level regarding which groups were actually demonstrating that they were "properly" conserving and utilizing resources. This would have excluded large numbers of local resource users, particularly those communities for which land/resource use tenure recognition could be an important incentive for sustainable resource management.[177]

On the issue of incentives, a World Bank study found that incentive schemes promoting security of tenure over resources will not necessarily be effective in situations where: 1) community resource management never existed; 2) community resource management has been weakened by outside influences undermining traditional authority structures; or 3) the community simply does not desire to conserve resources.[178] In light of these findings, legal recognition of local community land tenure and resource use rights does not have to be tantamount to a license to destroy. As Lynch and Talbott suggest:

> [N]o property rights, including private ones are absolute; all rights are subject to regulation. The recognition or grant of private rights therefore, does not preclude governments from taking steps to ensure that the affected resources are managed or exploited sustain-

175. *See* A/CONF.151/L.3/Add. 32 (1992).

176. The text of this document, however, provides no explanation for the change in wording.

177. Lynch and Talbott indicate that the situation of tenurial/resource access instability itself acts to undermine interest in sustainable management of local resources. *See* Lynch and Talbott, *supra* note 71, at 688-89.

178. *See Pacific Island Economies: Building a Resilient Economic Base for the Twenty-First Century*, Country Department III, East Asia and Pacific Region, Report No. 13803-EAP, The World Bank, Feb. 1995, at 64-65.

> ably, and from intervening when they are not . . . and in some instances forest zoning laws and policies may be desirable.[179]

National governments still have the option of regulating land use patterns through zoning and other planning tools; long-term occupant communities should participate directly as "partners" with governments in this process.[180]

ii. *Chapter 26 of Agenda* 21

Chapter 26 of Agenda 21, entitled "Recognizing and Strengthening the Role of Indigenous People and their Communities," also suggests obligations imposed on national government behavior. On the issue of security of land rights and resource access, Chapter 26 states that governments "should," in full partnership with indigenous people and their communities, establish a process to empower indigenous people through the following: "(ii) [r]ecognition that the lands of indigenous people and their communities should be protected from activities that are environmentally unsound or that the indigenous people concerned consider to be socially and culturally inappropriate . . . ." It furthermore calls for establishing arrangements to strengthen the active participation of indigenous people/communities "in the national formulation of policies, laws and programmes relating to resource management and other development processes that may affect them."[181]

iii. *Chapter 15 of Agenda 21*

Chapter 15 of Agenda 21, entitled "Conservation of Biological Diversity," spells out that "participation," a term which is interspersed throughout the UNCED documents, refers to receipt by local communities of economic benefits arising out of their sustainable utilization of resources. Among the objectives is that governments in conjunction with international organizations and non-governmental organizations ("NGOs"), "[r]ecognize and foster traditional methods and the knowledge of indigenous communities . . . relevant to the conservation of biological diversity and the sustainable use of biological resources, and ensure the

179. *See* LYNCH *supra* note 12, at 4.

180. The issue of "partnership" is emphasized in the more recent Desertification Convention, as the means for effecting the participation of the relevant sectors of society for achieving sustainable development. Convention to Combat Desertification, *supra* note 50, at 1328.

181. *See* A/Conf. 151/4, Apr. 22, 1992, sec. 26.3(a), (b).

participation of those groups in the economic and cultural benefits derived from the use of such traditional methods and knowledge."[182] Chapter 15 also says that governments and international organizations, along with the support of indigenous communities, "should . . . promote the wider application of the knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles for the conservation [and sustainable use] of biological diversity . . . with a view to the fair and equitable sharing of the benefits arising." However, it also fails to spell out who actually shares equitably in the benefits.

VI.

POST-UNCED LEGAL INSTRUMENTS

A. *IUCN Draft Covenant on Environment and Development*

IUCN's Draft International Covenant on Environment and Development ("IUCN Covenant")[183] aims to codify existing international law and seeks to solidify legal principles on environment and development. It expressly addresses indigenous people/local communities in Articles 11(4), 12, and 42. Article 11(4) states that Parties shall "cooperate, in the implementation of this covenant . . . and shall provide . . . indigenous peoples with the appropriate opportunities to participate in decision-making processes." This is weak language, especially considering that Principle 22 of the Rio Declaration says that states should enable the "effective" participation of indigenous people and their communities.[184] Article 12 reads:

> Parties shall develop or improve mechanisms to facilitate the involvement of indigenous peoples and local communities in environmental decision-making at all levels and shall take measures to enable them to pursue sustainable traditional practices.

Article 42 states that "Parties shall provide for the fair and equitable sharing of benefits arising out of biotechnologies based upon genetic resources with States providing access to such genetic resources on mutually agreed terms."[185] This replicates the language in Articles 15 and 18 of the CBD; it does not stipulate

182. *Id.* para. 15.4 (g).

183. Draft International Covenant on Environment and Development, Commission on Environmental Law of IUCN, (Mar. 1995).

184. 11 I.L.M. 1416 (1972).

185. Art. 42, Draft International Covenant on Environment and Development, Commission on Environmental Law of IUCN, (Mar. 1995).

that local communities will derive any benefit under the convention from use of their knowledge by outside interests. Article 43 of the IUCN document auspiciously provides that "[s]tates shall require that access to indigenous knowledge be subject to the prior informed consent of the concerned communities and to specific regulations recognizing their rights to, and the appropriate economic value of such knowledge." This provision articulates clearly that indigenous communities have recognized rights to receive economic value for the use of their knowledge. From the perspective of indigenous and other long-term occupant communities, this is a major improvement over the vague wording of Article 8(j) of the CBD. It provides a possible legal standard and suggests the direction which the law could take to promote conservation.

In Article 43, the IUCN Covenant commendably seeks to codify and crystallize the law on economic rights of local communities over access to their biological resources. However, the document does not refer to issues of land tenure and resource access rights as a tool for promoting conservation. In light of the discussion presented throughout this article on the significance of these factors for conservation and sustainable development, this omission is a major weakness in the instrument. The document furthermore does not address the concerns articulated in Article 41 of the Charter of Indigenous-Tribal Peoples of the Tropical Forests or the similar provisions in the "Baguio Declaration" discussed earlier. The IUCN Covenant has been widely disseminated among the members of the international community and therefore has a potentially significant impact on shaping international law in this area.

B. *The Desertification Convention ("DC")*

Since the UNCED, the language in Agenda 21 concerning participation by local communities and the equitable sharing of benefits arising out of local knowledge and methods has been most effectively articulated in the Convention to Combat Desertification in Those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa ("DC").[186] It is the first instrument designed to be a legally binding treaty, as an anticipated follow-up to the UNCED process.[187]

186. Convention to Combat Desertification, *supra* note 50.

187. *See* UNCED, *supra* note 40, Agenda Item 21, Ch. 12, para. 12.40. Chapter 12 called for the establishment of an intergovernmental committee under U.N. Gen-

The following provisions in the DC develop and codify the objectives expressed in the Rio Declaration and Chapters 15, 26, and 32 of Agenda 21. They concern international recognition of participation and the rights and interests of local resource user communities as essential requirements for environmental protection and sustainable development:

> Article 5: [A]ffected country Parties[188] undertake to . . . (d) promote awareness and facilitate the participation of local populations...in efforts to combat desertification and mitigate the effects of drought;
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> Article 10(2): National action programmes shall specify the respective roles of government, local communities and land users and the resources available and needed. They shall, *inter alia*, . . . (f) provide for effective participation at the local, national and regional levels of . . . local populations, both women and men, particularly resource users, including farmers and pastoralists and their representative organizations, in policy planning, decision-making, and implementation and review of national action programmes;
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> Article 16: The Parties agree, according to their respective capabilities, to integrate and coordinate the collection, analysis and exchange of . . . data and information [regarding the processes and effects of drought and desertification] . . . To this end, they shall, as appropriate: . . . (g) subject to their respective national legislation and/or polices, exchange information on local and traditional knowledge, ensuring adequate protection for it and providing appropriate return from the benefits derived from it, on an equitable basis and on mutually agreed terms, to the local populations concerned.

Granted, these provisions contain the usual qualifiers evident in the UNCED documents, such as "subject to national legislation" and "where appropriate." Understandably, some commentators might see these insertions as an escape hatch for would-be non-complying Parties. However, the emphasis on the need to involve local communities in the implementation of the treaty through their direct participation, and the bold statement regarding equitable sharing with them of benefits arising out of their knowledge suggest emerging acceptance of a new normative standard in international law.

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eral Assembly auspices to negotiate a multilateral convention on the issue of drought and desertification.

188. Convention to Combat Desertification, *supra* not 50, at 1335. Affected countries are those countries whose lands include affected areas: "arid, semi-arid and/or dry sub-humid areas affected or threatened by desertification." *Id.*

The inclusion of these elements in the DC has broad implications for the development of international law concerning sustainable development and environmental protection generally. One can see parallels between the DC and the United Nations Convention on the Law of the Sea ("UNCLOS 1982").[189] The UNCLOS 1982 codified some existing principles of customary international law (e.g. regarding utilization of fisheries), crystallized certain emerging principles of customary law, such as the status of the EEZ,[190] and suggested the development of new rules of international law (the deep seabed mining regime, and procedures regarding the disposal/removal of abandoned oil rigs/structures)[191] prior to its coming into force many years later. Likewise, the DC represents the emergence of nascent legal principles that may emerge as customary international law relating to environmental protection and sustainable development. These include the acceptance in international law of:

> 1) the need to recognize the rights and interests of affected groups and local resource user communities, in particular as a prerequisite for achieving sustainable development in the national and international spheres;
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> 2) an express legal obligation for equitable sharing with local resource user communities, of the benefits arising out of utilization of their knowledge and methods. This signifies a major shift from prior conventions which did not even address the issue of benefits sharing or which like the CBD recognize the value of traditional knowledge, but are noncomittal whether equitable sharing will extend beyond the state Parties to the treaty; and
>
> 3) the need for the participation of affected groups at the local level in order to ensure the effective implementation of conventions concerned with sustainable development.

That many governments accepted the crucial significance of the participatory approach and in particular the involvement of local populations in the national implementation of the convention is one of the DC's major achievements.[192] The DC exceeds its predecessors such as the CBD in recognizing legal obligations for states regarding participation and equitable sharing by local

189. Dec. 19, 1982, 21 I.L.M. 1261.

190. *Id.* at 1280.

191. *Id.* art. 60; *See also* Rosalyn Higgins, *Abandonment of Energy Sites and Structures: Relevant International Law*, 11 J. ENERGY & NAT. RESOURCES L. 6, 9-10 (1993); ROSALYN HIGGINS, PROBLEMS and PROCESS: INTERNATIONAL LAW AND HOW WE USE IT 32 (1994).

192. *See* 4 EARTH NEGOTIATIONS BULL. 10 (1994).

communities. However, it does not address the crucial issues of land tenure and resource access rights by local communities, both of which have a marked impact on local community interest in conserving soil, water and vegetation. In light of documented research pointed out above,[193] on the importance of legitimizing land tenure and resource access rights by local communities as a means for protecting environmental quality and rehabilitating degraded ecosystems, inclusion of these matters is vital for promoting the objective of the DC.[194] It remains to be seen if the progressive developments outlined above will find their way into customary international law[195] or other international conventions as enforceable obligations.

VII.
CONCLUSION

The international development assistance institutions have already incorporated respect for resource use and land tenure rights of indigenous and other long-term occupant communities into their operational directives and officially into their financial and technical assistance relationships with "project" (recipient) countries.

For example, a U.S. Agency for International Development ("US AID")[196] loan agreement to the Peruvian Government for an agricultural assistance project included a condition precedent that all native community land claims had to be officially recognized and legally titled to the local indigenous communities before any loans were dispersed for the project. Also, the World Bank Forest Policy Paper includes among its commitments to: ". . . . safeguard the interests of forest dwellers in terms of access

193. *See, e.g.*, 20 N.Y.U. J. INT'L L. & POL. 679 (1988).

194. *See* Convention to Combat Desertification, *supra* note 50, at 1335.

195. "It is not unusual for norms first articulated in international agreements to develop into customary international law. While this process may take place more readily in the case of universal international agreements, agreements entered into among a limited number of states may also produce that result . . . . The articulation of normative standards in international agreements provides a critical starting point for the evolution of a rule of international law." Jonathan Charney, *The Antarctic System and Customary International Law*, *in* INTERNATIONAL LAW FOR ANTARCTICA 55, 84-85 (Francesco Francioni & Tullio Scovazzi eds., 1987).

196. Gary S. Hartshorn & William Pariona, *Ecologically Sustainable Forest Management in the Peruvian Amazon*, *in* PERSPECTIVES ON BIODIVERSITY: CASE STUDIES OF GENETIC RESOURCE CONSERVATION AND DEVELOPMENT 151, 152-153 (Christopher S. Potter et al. eds., 1993).

rights to designated forest areas . . . ."[197] Although there have been serious concerns about actual adherence[198] to the operational policies and other IBRD statements, these documents are legal instruments[199] of the multilateral institutions and indicate an official position on the issue of resource access security for promoting sustainable development. The provisions contained in these instruments suggest future approaches for the international treaty regimes concerned with biodiversity conservation and utilization.

With the exception of the DC, the multilateral treaty regimes concerned with conservation and sustainable development of resources of biological diversity either: a) do not address the legal rights of local community resource users over resources which they manage or utilize; b) suggest that traditional knowledge, processes and resources (such as folk crop varieties), should be protected, without expressly creating legal recognition for equitable sharing of the benefits derived from the use of this knowledge and resources; or c) recognize only subsistence harvesting rights of local resource user communities.

Much of the existing national legislation concerned with protection of various aspects of biodiversity has been ineffective. In many instances, parks and other reserves were established by central or provincial governments (or previously, colonial authorities) on lands held or utilized by local resource user communities, and in particular, traditional communities. In a large number of cases, the local resource user communities have been forcibly evicted from lands which they had occupied for long periods of time, or have been prohibited from harvesting floral and faunal resources they traditionally relied upon for subsistence and as a source of livelihood.[200]

This approach has not been an effective means for conserving or ensuring the sustainable utilization of resources of biological diversity. The coercive policies of public authorities have engendered significant resentment and hostility among local communities toward governmental entities and the legal measures

197. AGRICULTURE AND RURAL DEVELOPMENT DEPARTMENT, THE WORLD BANK, FOREST POLICY PAPER 37 (June 24, 1994).

198. *See generally*, Rich, *supra* note 63.

199. *See generally*, Ibrahim F.I. Shihata, *The World Bank and the Environment: Legal Instruments for Achieving Environmental Objectives, in* THE WORLD BANK IN A CHANGING WORLD 181 (1995).

200. *See generally*, COLIN TURNBULL, THE MOUNTAIN PEOPLE (1972).

taken.[201] One noticeable consequence of this has been non-compliance by local communities with the law and even destruction of protected species and habitats as a reprisal for state insensitivity to local community interests and needs. This includes burning of protected forest areas[202] by disenfranchised local communities and killing of protected wildlife species to protest government restrictions over their utilization of water and grazing resources.

Overall, national legislation and the international regimes have failed to capitalize on the potential advantages provided by already existing local community resource management schemes. In many of these cases, cultural, religious, and other sanctions linked local community welfare with the quality of the resource base. These institutions consequently facilitated local community sustainable utilization of biodiversity.

However, due to lack of official support and in some instances official discouragement of local community management of resources, and second, erosion of traditional socio-cultural and religious values and institutions by externally driven socio-cultural and economic factors, many of these local community resource management structures have dissolved or are breaking down. A key objective for both national and international legal regimes in this area should be to protect existing structures which facilitate biodiversity conservation and sustainable development at the local levels, and support and help resuscitate local community structures that have broken down or are under strain.

Current human population numbers and consumption patterns place unprecedented demands on remaining global resources.[203] Resources without accepted value, or which are under-valued, will be destroyed or converted to other uses. Many rare and fragile ecosystems, including tropical forest habitats and their component organisms, are under great threat. Sustainable development incorporates preservation and utilization as means for conserving resources by protecting ecosystem quality and di-

201. *See* David Western, *Ecosystem Conservation and Rural Development: The Case of Amboseli, in* NATURAL CONNECTIONS. PERSPECTIVES IN COMMUNITY-BASED CONSERVATION, 15, 15-52 (David Western & R. Michael Wright eds., 1994). *See also* Fred Hiatt, *Without a Trace, Siberian Rangers Vanish in Disputed Nature Area*, WASHINGTON POST, Nov. 16, 1994, at A19.

202. Interview with K. Talbott, *WRI* (Jan. 1996).

203. *For further discussion see* Herman E. Daly *Introduction to Essay Toward a Steady-state Economy, in* VALUING THE EARTH. ECONOMICS, ECOLOGY, ETHICS 11, 25-26 (Herman E. Daly & Kenneth N. Townsend eds., 1993); WORLD RESOURCES 1994-95: A GUIDE TO THE GLOBAL ENVIRONMENT 152, 15-21 (1994).

versity while concomitantly providing for human development needs. In particular, as suggested by recent international instruments,[204] sustainable development concerns the interests of long-term occupant and other local communities that inhabit biologically-rich areas and which utilize resources of biological diversity for basic needs as well as for livelihood. This article has attempted to demonstrate that existing national and international legal instruments must contain much stronger provisions for addressing the concerns of local resource user populations if much of the world's remaining biological diversity within and outside of protected areas is to survive into the future. Three objectives must be incorporated into international and domestic legal and other regulatory mechanisms both to secure the rights of long-term occupant resource user communities and to facilitate conservation and sustainable utilization of species, genetic, and ecosystem diversity.

The first of these objectives is mandating "equitable sharing" of benefits and other economic incentives with local populations, such as currently attempted under CAMPFIRE in Zimbabwe, to encourage them to protect and conserve resources. The second is providing for land tenure and resource access security[205] for affected local populations, to protect their rights and interests over resources against abuse and appropriation from outside forces. The third is requiring the effective participation[206] of local communities over resource management decisions and in the implementation of legal instruments for facilitating sustainable development.

204. *See* Convention on Biodiversity, *supra* note 1, at art. 8(g).

205. This includes harmonizing competing resource access claims of various user groups. See discussion on the need to recognize overlapping rights of transhumant and sedentary agricultural communities sharing floodplain lands when undertaking land tenure reform. LIVING WITH UNCERTAINTY. NEW DIRECTIONS IN PASTORAL DEVELOPMENT IN AFRICA, 122-28 (Intermediate Technology Publications, London 1994).

206. *See* generally A. Zazueta, *Policy Hits the Ground: Participation and Equity in Environmental Policy-making,* WRI, Wash., D.C., 1995; W.I. Partridge, *People's Participation in Environmental Assessment in Latin America: Best Practices,* Latin America Technical Department ("LATEN") Dissemination Note # 11, The World Bank, Wash., D.C., November 1994, p. 7.