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GROUP ON ARTICLE 8(j) AND RELATED  
PROVISIONS OF THE CONVENTION ON  
BIOLOGICAL DIVERSITY

Third meeting

Montreal, 8-12 December 2003

Item 4 of the provisional agenda\*

**COMPOSITE REPORT ON THE STATUS AND TRENDS REGARDING THE KNOWLEDGE,  
INNOVATIONS AND PRACTICES OF INDIGENOUS AND LOCAL COMMUNITIES**

*Regional report: Caribbean*

*Note by the Executive Secretary*

1. The Executive Secretary is circulating herewith, for the information of participants in the third meeting of the Ad Hoc Open-ended International Working Group on Article 8(j) and Related Provisions, the regional report for the Caribbean on the status and trends regarding the knowledge, innovations and practices of indigenous and local communities, which was used as input to the first phase of the composite report on the same subject (UNEP/CBD/WG8J/INF/1).
2. The report is being circulated in the form and language in which it was received by the Secretariat.

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\* UNEP/CBD/WG8J/3/1.



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Asociación de Comunidades Indígenas ACOIN (Argentina)

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Asociación Aymará Taypi Ceqe (Bolivia)

ANIPA – Nahua Organisation (México)

## 1 State of retention of traditional biodiversity-related knowledge

### 1.0 Overview – regional issues

In reading the present report, some consideration should be given to the following limitations.

First, as the core source should be the Second National Reports to the Convention of the just 5 available ones from 13 States-member of the Convention, they cannot be considered a comprehensive number and the information they contain may not necessarily be representative as a means by which the status of retention of traditional biodiversity-related knowledge can be regionally measured and generalized. In addition, the low priority given by most of the countries of this region is a despair sign toward the implementation of the Article 8 j) of the Convention, and an indicator of the restrictions of information about the status of the traditional biodiversity related knowledge.

**Table 1. Reported relevance of the governmental policies and actions in relation with Traditional Biodiversity-Related Knowledge**

NATION	Ratification Date	Reports	TBRK Relevance	
			LOW	HIGH
ANTIGUA & BARBUDA	09/03/1993	First National Report	-	
BAHAMAS	02/09/1993	National Biodiversity Strategy and Action Plan	-	
		Second National Report	X	
BARBADOS	10/12/1993	National Biodiversity Strategy and Action Plan	-	
		First National Report	-	
		Second National Report	X	
CUBA	08/03/1994	National Biodiversity Strategy and Action Plan		X
		First National Report		X
		Second National Report		X
DOMINICA	06/04/1994	National Biodiversity Strategy and Action Plan	-	-
		First National Report	-	-
DOMINICAN REPUBLIC	25/11/1996	First National Report	-	-
		Thematic Report on Alien and Invasive Species	-	-
		Thematic Report on Forest Ecosystems	-	-
GRENADA	11/08/1994	National Biodiversity Strategy and Action Plan	-	-
		Second National Report	X	
HAITI	25/09/1996	First National Report	-	-
JAMAICA	06/01/1995	First National Report	-	-
		Thematic Report on Alien and Invasive Species	-	-
SAINT KITTS AND NEVIS	07/01/1993	None report is registred		
SAINT LUCIA	28/07/1993	First National Report	-	-
		Second National Report		
		Thematic Report on Access and Benefit Sharing	-	-
SAINT VINCENT AND THE GRENADINES	03/06/1996	None report is registred	X	
TRINIDAD AND TOBAGO	01/08/1996	First National Report	-	-

Secondly, the lack of an articulate characterization of the related issues –such as the concept of traditional knowledge itself- hardly endows an adequate background to reveal the level of retention of the traditional knowledge, relative priority, addressed mustering or cataloging.

Thirdly, the lack of updated data for indigenous inhabitants and ethnic groups from official sources due, on one part, to the opening degree of the process of recovery of an ethnic identity that people descending from the original inhabitants are carrying out in some countries such as Saint Vicent & the Granadines and Trinidad & Tobago; and also to the low echelon of indigenous population that survive in the Caribbean Islands, over little more over 30 millions inhabitants it has been estimated they subsist not more than 30.000 natives. (I.G. UNAM 1999);

**Table 2. Population and Ethnic Groups of the Caribbean Region by Countries (Parties to the CBD)**

COUNTRY	POPULATION (TOTAL)	POPULATION (TOTAL)	ETHNIC GROUPS	RATE
<b>CARIBE</b>	<b>33.659.000</b>	<b>31.856.224</b>		
<b>ANTIGUA &amp; BARBUDA</b>	65.000	67.448	black, British, Portuguese, Lebanese, Syrian	N/R
<b>BAHAMAS</b>	312.000	300.529	black	85%
			white	12%
			Asian and Hispanic	3%
<b>BARBADOS</b>	269.000	276.607	black	90%
			white	4%
			Asian and <i>mestizo</i>	6%
<b>CUBA</b>	11.273.000	11.224.321	<i>mulato</i> (3)	51%
			white	37%
			black	11%
			Chinese	1%
<b>DOMINICA</b>	70.000	70.158	black, <i>mulato</i> and European, European, Syrian, Carib Amerindian	N/R
<b>DOMINICAN REPUBLIC</b>	8.677.000	8.721.594	white	16%
			black	11%
			<i>mestizo</i>	73%
<b>GRENADA</b>	94.000	89.211	black	82%
			<i>mulato</i> and European	13%
			European and East Indian (1)	5%
			trace of Arawak/Carib Amerindian	N/R
<b>HAITI</b>	8.668.000	7.063.722	black	95%
			<i>mulato</i> (3) and white	5%
<b>JAMAICA</b>	2.621.000	2.680.029	black	90.9%
			East Indian (1)	1.3%
			white	0.2%
			Chinese	0.2%
			<i>mestizo</i>	7.3%
			other	0.1%
<b>SAINT KITTS Y NEVIS</b>	38.000	38.736	black some British, Portuguese, and Lebanese	N/R
<b>SAINT LUCIA</b>	151.000	160.145	black	90%
			<i>mestizo</i>	6%
			East Indian (1)	3%
			white	1%
<b>SAINT VICENT AND THE GRENADINES</b>	115.000	116.394	black	66%
			<i>mestizo</i>	19%
			East Indian (1)	6%
			Carib Amerindian	2%
			other	7%

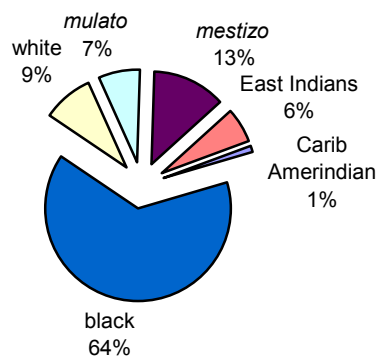
COUNTRY	POPULATION (TOTAL)	POPULATION (TOTAL)	ETHNIC GROUPS	RATE
TRINIDAD AND TOBAGO	1.306.000	1.163.724	black	39.5%
			East Indian (1)	40.3%
			<i>mestizo</i>	18.4%
			white	0.6%
			Chinese and other	1.2%
SOURCES:	ECLAC/CEPAL (2002)	WORLD FACT BOOK 2002 (U.S.A. Government) (*)		

(\*) This source gives an estimate from the US Bureau of the Census based on national statistics from population censuses, vital statistics registration systems, or sample surveys pertaining to the recent past and on assumptions about future trends. Demographic estimates for some countries have explicitly taken into account the effects of the growing impact of the HIV/AIDS epidemic.

- (1). *East Indian* a local term - primarily immigrants from northern India
- (2). *mestizo* mixed Amerindian and European
- (3). *mulato* mixed white and black

According to the available sources, the ethnic composition of the countries that are parties of the Convention may be globally estimated as it is shown in the following graphic.

**Graphic 1. Caribbean Ethnic Composition. (Parties TO the CBD)**



Taking into account the linguistic indicator to detect the indigenous presence and as a relevant criterium to assess the retention of traditional knowledge and cultures, it is very significative to point out that the **Taino** ethnic group now speak Spanish, or a Spanish-Taino mixed language, not understood by Spanish speakers. They estimate their present language is 55% Taino and 45% Spanish. They are also bilingual in English. Members of this group are now living in the United States, in Puerto Rico, in the Dominican Republic, and in Cuba. The original language is extinct. So it occurred with the **Carib Islands** language that, considering it is not inherently intelligible with **Garífuna**, it also has to be considered extinct; last speakers in Dominica and St. Vincent and the Grenadines died about 1920 (D. Taylor IJAL 1959:67). Formerly it was also spoken in Lesser Antilles, excluding Trinidad.

### 1.1 Plant genetic resources for food and agriculture and Animals and micro-organisms for food and other purposes

Only 11.3% of the Caribbean's primary vegetation remains. The Caribbean is home to 2.3% of the world's endemic plant species and 2.9% of endemic vertebrate species— enormously significant percentages considering that the Caribbean contributes to only 0.15% of the Earth's surface. These findings have prompted Conservation International to designate the Caribbean as one of 25 "hotspots" - relatively small regions containing high percentages of endemic species- across the globe. In fact, the Caribbean ranks among the top 8 of those "hotspots", requiring the highest priority for conservation. (Lovejoy, Th. et al.; 2001)

In general, seagrass diversity is fairly low, with two species endemic to the region. The diversity of seagrasses and corals is lower in the Caribbean region than it is in the Indo-Pacific, although the Caribbean has the highest number of regionally endemic genera in the world. This is due to the geographic isolation of the Caribbean Sea from other major coral areas. The region has a high diversity of molluscs and crustaceans, but a low diversity of seabirds, as is the case in many tropical regions. All species of marine turtle, except for the flatback *Natator depressus* breed in the region. The critically endangered Kemp's Ridley *Lepidochelys kempii* is confined to the region as a nesting species. Amongst sirenians, the West Indian Manatee *Trichechus manatus* is almost confined to the region, although its range extends into the northern part of the Southwest Atlantic Region.

**Table 3. Caribbean Regional Sea: biodiversity data**

SPECIES	ENDEMIC	total species richness in the region	species richness in the region as a percentage of the world species richness in each group of organism
Cetaceans	9	30	34 %
Coral genera	9	25	23 %
Lobsters	8	23	15 %
Molluscs	0	633	15 %
Pinnipeds	no data available or not applicable	0	no data available or not applicable
Seabirds	1	23	8 %
Seagrasses	2	7	15 %
Sharks	14	76	22 %
Shrimps	0	45	13 %
Sirenians	9	1	25 %

Source: UNEP- Caribbean Regional Co-ordinating Unit

## 1.2 Summary

The lack of a clear conceptualization of the issues involved in the subject matter attempts against a real and specific work on the preservation and maintenance of the traditional biodiversity-related knowledge and practices, and a deep clarification is required.



## **2 Identification and assessment of measures and initiatives to protect, promote and facilitate the use of traditional knowledge**

### **2.0 Overview – regional issues**

The Caribbean Sea is bordered by 36 nations, including island nations, and dependent territories. Some of these nations have large populations and industries while others are sparsely populated. At present, the responsibility for the region's natural resources is divided between these 36 nations. There is a need for regional cooperation in resource management, considering that many of the resources and the stresses that are impacting them are transboundary in nature (Fourth Congress on Conservation of Caribbean Biodiversity, 2002). Increasingly, ecosystems in the Wider Caribbean region are under heavy stress from human activities, and a number of unique ecosystems and habitats have been destroyed, and species exterminated. In the last 150 years, eight species of vertebrates have become extinct in Jamaica alone. More than 100 plant species, which are indigenous to Trinidad and Tobago may be threatened by extinction (Symposium on Caribbean Clades and their Distributions, 2001).

### **2.1 Regional and national land use practices**

Worldwide, human activities, directly and indirectly, are now the primary causes for changes in biodiversity. Approximately 50% of the human population lives in the coastal zone, and pressures exerted on the marine environment are increasing. Some of the main threats to biodiversity in the Wider Caribbean Region are habitat destruction due to coastal development and to the expansion in population and in tourism, pollution, overexploitation of living resources, including fisheries, sedimentation, and predation by introduced species. As a result, coral reefs, seagrasses and mangroves, among other coastal ecosystems, are under intense pressure, threatening biological diversity in the region. (Fourth Congress on Conservation of Caribbean Biodiversity, 2002).

### **2.2 Incentive measures**

The "Caribbean Hotspot" initiative will provide an assessment of the amount and distribution of Caribbean biodiversity and threatened species. Environmental policymakers from the region will speak to the challenges their respective countries face concerning threats to biodiversity and the often conflicting needs to sustain their economies. Finally, technical workshops will address challenges posed by the policymakers through a proposal for a long-term research and development strategy aimed at integrating science and policy in the context of using and conserving biodiversity. Participants include some of the most knowledgeable scientists, conservationists, and policymakers on biodiversity of the Caribbean region. It is organized by The New York Botanical Garden, The Center for Applied Biodiversity Science at Conservation International, Cornell Biodiversity Laboratory at Punta Cana, The Punta Cana Ecological Foundation, and the Ministry of Environment and Natural Resources of the Dominican Republic. However little consideration is shown towards the remaining traditional knowledge.

The Ministry of Agriculture of **Cuba** has rescued traditional practices and species netting of comunal gardens –organic and hydroorganic-. These productions is being commercialized in paralell with the documentation of the local communities' knowledge; the clasification –according to age and gender of the holders- is also accomplished (1st National Report March, 1994).

### **2.3 Capacity-building measures**

Then again, as it is shown in the following table, little consideration is paid en route for the retention and study of the traditional knowledge in the Caribbean islands. The main efforts address to preservation and documentation of the natural resources.

**Table 4. Selected Highlights of the Caribbean Biodiversity Program**

## Regional

- Continued assistance for a core group of persons involved in biodiversity conservation and management in target islands.
- Helped to coordinate a series of workshops exploring land stewardship issues and opportunities in the eastern Caribbean.
- Implemented a training workshop on Field Botany and Herbarium Establishment in support of initiatives to characterize and inventory vegetation.
- Established an electronic forum for the exchange of Caribbean biodiversity information.

## Antigua and Barbuda

- Ongoing participation in an international coalition to protect seabirds and an endemic snake.
- Assisted Government in an OAS-funded project to establish the Bird Island Marine Reserve and Wildlife Sanctuary; prepared the Management Plan for the proposed protected area.
- Surveyed the country's bat fauna and identified conservation status and priorities for seven species.
- Surveyed nine reef sites to establish baseline data, evaluate monitoring options, and provide recommendations for ongoing marine biodiversity management.
- Designed a project to preserve Barbuda's Codrington Lagoon, home to the Caribbean's largest colony of Magnificent Frigatebirds.
- Assisted Government in establishing the Wallings Reservoir as a major conservation area and ecotourism focus.
- Prepared a national vegetation classification system.
- Prepared a biodiversity profile that summarizes known information about the country's flora, fauna and habits.
- Assisting with the implementation of a UNDP/GEF-funded project to assess, classify and map Antigua's wetlands.

## Dominica

- Prepared a synthesis that identifies and compiles the numerous biological studies and reports on Dominica, and identifies what is known about the occurrence, population size and distribution of flora and fauna.

## Montserrat (non CBD's Party)

- Assisted in collaborative effort (Government, Montserrat National Trust, UWI, WWF-UK) to develop Fox's Bay as a nature reserve, the island's largest and biologically most important wetland.
- Assisted in forest conservation project funded by IITF, including tree plantings and development of a trail system traversing the southern third of the island (later destroyed by volcanic eruptions).
- Developed a protocol for a WWF-UK-funded biodiversity program targeting the UK's Caribbean Overseas Territories.

## St. Kitts and Nevis

- Inventoried flora and fauna of six Nevisian and five Kittitian sites representative of each island's ecosystems; sites serve as field classrooms for ongoing environmental education activities.
- Helped to establish a marine turtle monitoring program in St. Kitts.

<b>DONOR</b>	<b>total funding 1990-1999 US\$</b>
<b>The Moriah Fund</b>	238,829
<b>Interntl Inst Tropical Forestry</b>	118,000
<b>OAS</b>	90,000
<b>Jackson Hole Preserve</b>	50,000
<b>Island Resources Fndt</b>	38,256
<b>World Wildlife Fund-US</b>	33,285
<b>Biodiversity Support Prog</b>	29,860
<b>UNDP/GEF</b>	26,220
<b>The Nature Conservancy</b>	8,000
<b>Homeland Foundation</b>	7,800
<b>TOTAL</b>	<b>640,250</b>
<small>Source: Biodiversity Conservation Programme for the Eastern Caribbean. 1990-1999</small>	

- Assisting NGOs in St. Kitts and Nevis in carrying out research and field work for the development of island-specific vegetation classifications and for preparation of biodiversity profiles for each island.
- Assisting NGOs in St. Kitts and Nevis in the developed of herbaria and medicinal plant displays using live plants.

St. John, U.S. Virgin Islands

- Assisted investigators looking at the effects of natural and human disturbance on tropical forest regeneration within the Virgin Islands National Park; research has contributed to the longest-term data sets of this scale in the Caribbean region.

## 2.4 Legislative measures

**Barbados** on behalf of the Group of Latin American and Caribbean Countries (GRULAC), recalled the prominent role played reflecting the importance of the countries in the region attached to the issues concerned to the traditional knowledge and hoped that the Committee (WIPO) would be able to contribute to the work of other forums, such as the Working Group on the Draft Declaration on the Rights of Indigenous Peoples, funding the assistance of indigenous peoples and local communities to meetings and their inclusion in national delegations. Finally, it is important that the issue be addressed in a balanced and objective manner (Fourth Session. Intergovernmental committee on intellectual property and genetic resources, traditional knowledge and folklore December, 2002 WIPO/GRTKF/IC/4/15).

In **Cuba** special attention is given to the preservation and implemetation of the local biodiversity-related knowledge, innovations and practices; however this country stated that no indigenous people inhabit the island (1st National Report March, 1994).

**Haiti** stated the collective nature, and the extra territorial nature, of the traditional knowledge. This particularity meant that the issue of protection of traditional knowledge had to be considered on a regional basis and concluded by stressing the need for a flexible, autonomous system for the protection of traditional knowledge (Fourth Session. Intergovernmental committee on intellectual property and genetic resources, traditional knowledge and folklore December, 2002 WIPO/GRTKF/IC/4/15).

**St. Lucia** outlines the incorporation of traditional and indigenous knowledge to protect cultural, historic and natural heritage at a sub-regional level. St George's Declaration (Principle 12b). A National Environmental Management Strategy in response to the St Georges Declaration is in progress: (a) has initiated a programme for use of some indigenous plant species that are economically important for local community groups (e.g. *Coccoloba barbadensis*, used in broom making); (b) has made representation in regional fora on utilisation of medicinal plants and given preliminary consideration to policy regarding protection of plant resources and collection of documentation on use and local formulations (1st National Report July, 1993).

**Dominica's** Biodiversity Strategy and Action Plan includes: (...) the protection, enhancement and encouragement of traditional knowledge, culture and values (2nd National Report, January, 2002).

## 2.5 Summary

National biodiversity planning that is underway in several Caribbean nations does not get deep involved into the opportunity it could be to recover and encourage the retention and revitalization of the traditional biodiversity-related knowledge from their local communities. It should be aimed at highlighting issues that must be addressed by both the policy and scientific works.

### 3 Regional recommendations and targets

Conditions and incentives for effective conservation of traditional biodiversity-related knowledge by local communities need to be created. Biodiversity conservation cannot be successful unless local communities assume a greater role in managing local biological resources. The tools for conserving biological diversity must also strengthen local knowledge more broadly. However the natural fragmentation, the networks for conserving and using biodiversity and related local knowledge must be greatly built up through international cooperation and national planning.

In the Caribbean region, some of the key traditional biodiversity-related knowledge research must include:

- Estimation of native and local communities attached to their traditional cultural structures and to the ecosystem processes.
- Determination the consequences of anthropogenic and other environmental changes on the evolution of the native cultures.
- Research on endangered native knowledge and stop their decline.
- Develop native networks to enhance the ability on documentary techniques to register traditional biodiversity-related knowledge.
- Determine patterns and indicators of cultural responses to biodiversity resources in order to develop techniques to assess the status of retention of traditional biodiversity-related knowledge, and to monitor the recovery of traditional knowledge.
- Develop and test principles of restoration of traditional biodiversity-related knowledge.
- Long-term studies are needed in order to develop a full regional understanding of the importance of traditional biodiversity-related knowledge.

The initiatives address to protected areas, seed banks, botanic gardens, and others, must include the rescue and encouragement of the traditional practices. These initiatives must be consequently funded and staffed.

### 4 References (to Regional Report Caribbean)

- Biodiversity Conservation Programme for the Eastern Caribbean. 1990-1999. Island Resources Foundation. <http://www.irf.org/irbiodiv.html>
- CAR/RCU Environmental Issues in the Caribbean. <http://www.cep.unep.org/issues/biodiversity.html>
- Conferences and Workshops on Caribbean Biodiversity. <http://www.caribaea.org/>
- Symposium on Caribbean Clades and their Distributions. Washington, DC, United States, 27-28 March 2001
- Flora of the Greater Antilles Working Group Annual Meeting. Punta Cana, Dominican Republic, 24-25 July 2001
- Caribbean Biodiversity: An International Conference Integrating Science and Policy. Punta Cana, Dominican Republic, 26-30 July 2001
- Fourth Congress on Conservation of Caribbean Biodiversity. Santo Domingo, Dominican Republic, January 2002
- Fourth Session. Intergovernmental committee on intellectual property and genetic resources, traditional knowledge and folklore December, 2002 WIPO/GRTKF/IC/4/15
- Lovejoy, Thomas; Earle, Sylvia; Rodriguez, Eloy; De La Renta, Oscar and Kheel, Theodore W.; 2001. The Caribbean, Among The Most Critical Of "Hotspots" Across The Globe, Draws Scientists, Policymakers, And Environmentalists To Address Urgent Biodiversity Issues. <http://www.nybg.org/pr/caribbean.html>
- UNEP- Caribbean Regional Co-ordinating Unit. <http://www.cep.unep.org/issues/biodiversity.html>