



## Convention on Biological Diversity

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CAPACITY-DEVELOPMENT WORKSHOP FOR THE  
CARIBBEAN REGION ON NATIONAL  
BIODIVERSITY STRATEGIES AND ACTION PLANS  
AND MAINSTREAMING OF BIODIVERSITY AND  
INTEGRATION OF CLIMATE CHANGE  
Port-of-Spain, Trinidad and Tobago, 3 to 7 November 2008

### REPORT OF THE WORKSHOP

#### I. INTRODUCTION

1. Article 6 of the Convention on Biological Diversity (CBD) requires each Party to develop or adapt national strategies, plans or programmes for the conservation and sustainable use of biological diversity and to integrate, as far as possible and as appropriate, the conservation and sustainable use of biological diversity into relevant sectoral or cross-sectoral plans, programmes and policies. Noting the importance of national biodiversity strategies and action plans (NBSAPs) for the implementation of the Convention, the Conference of the Parties to the Convention, at its eighth meeting, called for an in-depth review of progress towards financial, human, scientific, technical, and technological capacity to implement the Convention (goal 2 of the Convention's Strategic Plan) and NBSAPs and the integration of biodiversity concerns into relevant sectors (Goal 3 of the Strategic Plan). The review process was used to recommend priority areas for capacity-building in relation to the implementation of the Convention and to provide inputs to the process of revising the Convention's Strategic Plan beyond 2010.
2. As part of this review process, the Conference of the Parties recommended that regional and/or sub-regional workshops be convened to discuss national experiences in implementing NBSAPs, and the integration of biodiversity concerns into relevant sectors, including consideration of obstacles and ways and means for overcoming the obstacles (paragraph 6 of Decision VIII/8). In its Recommendation 2/1, the second meeting of the Working Group on Review of Implementation of the Convention, which convened in Paris from July 9-13 2007, reemphasized the importance of organizing such regional workshops.
3. Following these requests, the Executive Secretary organized a global series of regional and sub-regional workshops on capacity development for NBSAPs during 2008. As the eighth of the series, the regional workshop for the Caribbean region was the first workshop to specifically address the integration of climate change into NBSAPs. The workshop was convened from 3 to 7 November 2008 in Port-of-Spain and was held in parallel with the Capacity-Development Workshop for the Caribbean Region on Communication, Education, and Public Awareness (CEPA) and Media Relations which took place from 3 to 6 November. The workshops were organized in collaboration with the Government of Trinidad and Tobago through its Environment Management Authority, the Cropper Foundation, the Caribbean

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Community Secretariat (CARICOM), and the Caribbean Natural Resources Institute (CANARI) with financial support provided by the Governments of Spain and Norway.

4. The purpose of the workshop was to:

(a) Strengthen national capacities for the development, implementation, reviewing, updating, and communication of NBSAPs, providing an opportunity for active learning for the Convention's national focal points or persons in charge of implementing NBSAPs in their country;

(b) Hold focused discussions on the integration of biodiversity considerations into relevant national policies, strategies and planning processes as well as cross-sectoral national strategies (such as those for sustainable development and the achievement of the Millennium Development Goals), including the identification of priorities, sharing information on approaches from across the region, and discussing ways and means for overcoming challenges;

(c) Provide training on the use of relevant tools and mechanisms that support effective mainstreaming;

(d) Build the capacity of participants to integrate climate change into NBSAPs and implementation of the CBD such that, by the end of the workshops participants are:

- i. aware of ongoing regional processes for climate change adaptation and the assessment of impacts and vulnerability;
- ii. trained in the application of some tools and methodologies that can be employed in order to better integrate climate change within NBSAP planning and implementation;
- iii. able to identify challenges and gaps.

(e) Build the capacity of participants to develop and implement strategic CEPA plans that will assist in enhancing the effective implementation of NBSAPs and increase awareness of linkages between biodiversity and climate change; and

(f) Identify steps forward in the development and implementation of NBSAPs that encourage biodiversity mainstreaming at national levels, integrate climate change considerations, and include strategic communication, education, and public awareness;

5. Communicating the importance of NBSAPs and enhancing public awareness of these strategies and action plans are very important for mobilizing public support for, and public participation in, their development, implementation, and updating. Communication and public awareness are also essential for mainstreaming biodiversity into relevant sectors. Accomplishing this requires certain capacities, and the assertion of a clear communication strategy. It is in this regard that the tools of communication, education and public awareness are central to implementation of the Convention. Therefore for the parallel workshop on CEPA and media relations, agenda items 1 through 4, in addition to the field study visit, were held jointly with the NBSAP workshop. Participants to the CEPA workshop were asked to identify the communication challenges involved in the mainstreaming and participated in an exercise to identify strategic communication tools that can be mobilized in support of NBSAPs and their implementation.

6. The workshop format featured a mix of presentations with question and answer sessions, discussions in small working groups, interactive sessions to introduce relevant tools and a field study visit. In combination with the other workshops in the series, the global series of workshops provides important input into the revision of the Strategic Plan for 2011 to 2020 and which will be considered at the tenth meeting of the Conference of the Parties in Nagoya, Japan from 18 to 29 October 2010.

7. The workshop was attended by government-nominated officials responsible for the development and/or implementation of NBSAPs from Antigua and Barbuda, Bahamas, Belize, Cuba, Dominica, Guyana, Haiti, Jamaica, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, and Trinidad and Tobago. Twenty-seven resource persons from the region contributed their expertise in

biodiversity conservation, biodiversity-based livelihoods, ecosystem assessment, mainstreaming biodiversity concerns into economic and development sectors, payments for environmental services, and climate change (including regional approaches to adaptation, adaptive management, and integrating climate change into NBSAPs). The workshop was conducted in English.

8. The following report provides an overview of the workshop agenda, sessions, and discussions, the conclusions of the meeting, and the wrap-up discussion on the way forward. Annexes to this report provide information on presentations made by participating countries on the status of the development, implementation and updating of NBSAPs, the mainstreaming of biodiversity, and the integration of climate change in NBSAPs in the region (Annex I), the detailed workshop agenda (Annex II), conclusions of the CEPA workshop (Annex III), and a list of meeting documents (Annex IV),

## **II. SUMMARY OF PROCEEDINGS**

### ***Item 1. Opening of the workshop***

9. The workshop was opened on Monday, 3 November 2008, by Mr. Winston Rudder, President of the Cropper Foundation, who welcomed the participants and introduced the speakers delivering opening statements. The Minister of Planning, Housing and the Environment of the Government of Trinidad and Tobago, Senator the Honourable Dr. Emily Gaynor Dick-Forde, made an opening address in which she reminded participants of the significant role of biodiversity for the Caribbean region and of the importance of regional cooperation on this agenda. Ms. Donna McRae-Smith made opening remarks on behalf of the Secretariat of the Caribbean Community (CARICOM) in which she highlighted the importance of mainstreaming biodiversity and integrating climate change into NBSAPs. Finally, Mr. David Cooper welcomed participants on behalf of the Executive Secretary of the CBD, thanking the Government for hosting the workshop and thanking the co-sponsors for their substantial support. He emphasized the role that NBSAPs play as corner stones for the implementation of the CBD, not only for significantly reducing biodiversity loss by 2010, but also as tools for integrating biodiversity into decision-making across all departments of government and all relevant sectors of society and the economy. He stressed that biodiversity and the ecosystems that it underpins are essential for achieving the Millennium Development Goals (MDGs). Turning to the issue of climate change, he stated that effective action to mitigate and adapt to climate change must become integrated with efforts to protect biodiversity. Finally he highlighted the importance for a greater emphasis to be placed on communication, education and public awareness (CEPA) in effectively implementing NBSAPs, in mainstreaming biodiversity concerns across sectors and national planning, and in integrating climate change into NBSAPs.

### ***Item 2. Overview of the objectives and programme of the workshop***

10. After the opening statements, Ms. Nicole Leotaud of CANARI, who acted as facilitator for the workshop, asked participants to discuss common learning objectives for the workshop. These objectives and expectations were recorded on index cards and presented to the entire group. This was followed by self-introductions. Mr. Cooper also presented some overall objectives for the workshop, which were consistent with those identified by the participants. Learning objectives and expected outcomes identified by participants were:

(a) Learn from experiences with NBSAPs from other countries, including how to prepare NBSAPs, “what works” and best practices in implementation on the ground, approaches to financing implementation, and solutions for addressing the root causes of unsatisfactory implementation of NBSAPs;

(b) Hear ideas on how to improve mainstreaming of biodiversity including how to better collaborate with other ministries, policy-makers, and institutions;

(c) Learn how other countries have integrated issues related to poverty alleviation into the implementation of their NBSAPs;

(d) Expand knowledge on the linkages between climate change and biodiversity, on how to integrate climate change into NBSAPs, on possible synergies in preparing national communications on climate change, and what experiences countries from the region have had in linking biodiversity and climate change issues;

(e) Identify ways to foster more integrated regional approaches to mitigate biodiversity loss and the effects of climate change;

(f) Expand knowledge on how to better present/share information on biodiversity and climate change with the public;

(g) Collect information on best practices in public awareness and education, on the integration of CEPA into NBSAPs, and on implementing CEPA strategies on limited budgets;

(h) Hearing best practices in media reporting on biodiversity issues and approaches to raising awareness of these issues within the public (including the linkages between climate change and biodiversity); and

(i) Receive information on the preparation of the fourth National Report for the CBD.

11. Mr. David Ainsworth provided details on the programme for the parallel CEPA workshop and highlighted the workshop's four overall objectives:

(a) Evaluate the capacity for activities related to communication, education and public awareness (CEPA) through an exchange of best practices and a series of evaluation exercises;

(b) Coordinate CEPA activities with NBSAPs planning and use the former as a tool for mainstreaming;

(c) Establish the foundation for national strategies for celebrating the International Year of Biodiversity (IYB) in 2010; and

(d) Learn ways to enhance relationships with the media.

***Item 3. Status of the development, implementation and updating of NBSAPs, the mainstreaming of biodiversity and the integration of climate change in NBSAPs in the region***

12. In this agenda item, country representatives made short presentations outlining:

(a) Status of implementation of their NBSAP and information on related strategies, programmes, and national legislation;

(b) Major Features of NBSAPs;

(c) Mechanisms identified for implementing NBSAPs;

(d) Obstacles encountered in the implementation of NBSAPs;

(e) Reviews or evaluations of the implementation of NBSAPs that have been undertaken nationally and assessments of the effectiveness of the strategy;

(f) How biodiversity considerations have been taken into account and mainstreamed into sectoral and cross-spectral plans, programmes, and policies, including those related to sustainable development, poverty reduction, and achieving the MDGs;

(g) Whether and how consideration of the impacts of climate change and climate change mitigation and adaptation activities on biodiversity have been incorporated into NBSAPs and their implementation; and

(h) The use of communication, education and public awareness activities in NBSAP implementation and the further needs and challenges in this regard.

Brief question and answer sessions followed each presentation, with the participants identifying case studies of good practice, tools and methodologies, elements of NBSAPs presented that made them strategic, examples of where implementation of the action plan led to concrete achievements and “made a difference,” and examples of assessments undertaken which reviewed effectiveness of a strategy. To facilitate interactive discussion, as well as small group exercises, participants sat at round tables. Summaries of country presentations are found in Annex 1 of this report. The original PowerPoint presentations from each country can be found on the CBD website at: <http://www.cbd.int/nbsap/workshops/caribbean.shtml>.

13. In a group exercise led by Nicole Leotaud, participants identified obstacles to NBSAP implementation and strategies for overcoming these challenges. The results are summarized in the table below.

Implementation barriers, challenges, or constraints	Strategies to overcome challenges
Lack of capacity <ul style="list-style-type: none"> <li>• need for integrating capacities of different agencies and stakeholders</li> </ul>	<ul style="list-style-type: none"> <li>○ involve community organisations</li> <li>○ recognize that we are small countries and have to share expertise within and between countries</li> <li>○ need to have a skills bank as part of the CHM</li> </ul>
Sectoral involvement <ul style="list-style-type: none"> <li>• how to encourage sectors to take on responsibility</li> </ul>	<ul style="list-style-type: none"> <li>○ creating partnerships among focal points of the environmental agencies and other agencies to help identify where biodiversity issues “fit” within a sector and help facilitate effective mainstreaming</li> <li>○ sharing information among sectors</li> <li>○ we have to do our own part in ensuring information flow</li> </ul>
Financial constraints	<ul style="list-style-type: none"> <li>○ get political buy-in</li> <li>○ long term solution is to focus on education</li> <li>○ taxation mechanism e.g. Trinidad and Tobago’s green fund which taxes private enterprises 0.1% of their revenue</li> <li>○ carbon credits e.g. Guyana</li> </ul>
Lack of interest and knowledge of biodiversity in political bodies	<ul style="list-style-type: none"> <li>○ demonstrate the financial and economic value of biodiversity</li> <li>○ increase public awareness and take an advocacy approach to encourage governments to take action</li> <li>○ form regional networks to package information</li> <li>○ draw on and make use of experience in the region</li> </ul>
Integration of biodiversity	<ul style="list-style-type: none"> <li>○ Put structures in place for interdisciplinary approach</li> <li>○ Joint communication between NBSAPs and CEPA workshops</li> </ul>
Putting biodiversity on top of politicians’ agenda	<ul style="list-style-type: none"> <li>○ focus on ecosystem services, natural disaster management, and the energy sector.</li> </ul>

***Item 4. Tools for Enhancing NBSAP Implementation and Integrating Biodiversity into Sectoral and Cross-Sectoral Plans, Programmes, Policies, and Local Planning Processes***

14. Agenda item 4 allowed the participants to focus on the issue of mainstreaming biodiversity concerns into relevant sectoral strategies, plans and programmes, as well as on the use of some tools and methodologies that support mainstreaming. The purpose of this session was to enable participants to:

(a) Identify some cases of the integration of biodiversity into broader national policies and planning processes, for example fisheries, tourism and land planning;

(b) Have an improved understanding of the ecosystem approach and tools for its application, including the framework of the Millennium Ecosystem Assessment linking biodiversity, ecosystem services and human well-being;

(c) Be trained in the application of some tools and methodologies that can be employed in order to better integrate biodiversity into broader national policies, programmes and planning processes and to use NBSAPs as strategic tools for this purpose (including strategic environmental assessment); and

(d) Have an increased awareness of some approaches and methodologies for the strategic communication of NBSAPs.

The original presentations are available on the CBD website at <http://www.cbd.int/nbsap/workshops/caribbean.shtml>.

*The Ecosystem Approach and Ecosystem Assessment*

15. Mr. David Cooper introduced the ecosystem approach and the conceptual framework of the Millennium Ecosystem Assessment (MA), highlighting how the consolidated guidance on NBSAPs has requested Parties to take both into account when revising and implementing their plans and strategies. Many ecosystem services are in decline triggered by a variety of direct and indirect drivers. Outlining examples of key provisioning and regulating ecosystem services provided by biodiversity, Mr. Cooper illustrated implications to human wellbeing (including market and non-market values for both local livelihoods as well as broader economies) and discussed the main drivers of change and related impacts. He provided an overview of the benefits from taking an ecosystem assessment approach to management and decision-making, focusing on how this can inform national and sub-national policies and plans, economic and fiscal incentives, sector policies and plans, and overall governance of biodiversity.

16. Professor John Agard of the University of West Indies presented the Caribbean Sea Assessment (CARSEA) case study, which illustrates the application of both a wide-ranging ecosystem assessment and the ecosystem approach at the regional scale. The Caribbean Sea provides many ecosystem services, for example through fisheries and tourism. However, the Caribbean Sea presents many management challenges because of its geopolitical diversity and the range of stakeholders from within and outside the region. Additionally, the Caribbean Sea is also particularly vulnerable to climate change. CARSEA is one of 33 sub-global assessments that was part of the global MA. The objectives of CARSEA were to

(a) Develop a holistic governance framework that would enable all stakeholders to contribute to managing the Caribbean Sea in a manner that would maintain its goods and services,

(b) Contribute to the implementation of Resolution 57/261 of the UN General Assembly (20 Dec. 2003) “Promoting an integrated management approach to the Caribbean Sea area in the context of sustainable development,” and

(c) To advance the case for the recognition of the Caribbean Sea by the international community as a “Special Area in the context of Sustainable Development.”

CARSEA documented the conditions and trends of the Caribbean Sea ecosystems, explored plausible scenarios about likely events, and considered a range of possible scenarios. One of the main findings was that only the “Quality over Quantity” Scenario benefits ecosystems through its explicit policies and institutions to address the environment and minimize negative impacts on ecosystems. Many

programmes, projects, and policies have been prepared as a response, but there is a lack of cooperation between the various programmes. Other challenges are ineffective legislation and poor commitment. He concluded by stressing that communication is central to overcoming such challenges.

17. Ms. Keisha Garcia, from the Cropper Foundation, presented the Trinidad Northern Ranges Assessment, which was conducted as a follow-up to the MA. The Northern Range represents 25% of Trinidad and provides many services (such as freshwater, food, flood regulation, timber, education, and recreation) for major urban centres that are located inside or near the range. However, ineffective management resulted in high levels of degradation. The assessment identified a number of recommended responses covering better implementation of policy, enforcement of regulations, integrated planning, governance arrangements, public education, financing management of natural resources, research and monitoring. Lessons learned from this project revealed that (i) taking a participatory approach and involving a wide range of stakeholders, (ii) linking to and transferring information from the MA and then adapting the conceptual framework to fit the local priorities, (iii) including a strong review process, and (iv) publishing the assessment as a public document on the national state of the environment were all key to the realization of the assessment.

*Regional and Sectoral Perspectives on Mainstreaming*

18. Ms. Donna McRae-Smith, representing the Caribbean Community Secretariat (CARICOM), made a presentation on regional and sectoral perspectives on mainstreaming in the Caribbean Community. She briefed the participants on activities supporting the mainstreaming of biodiversity within the fisheries, tourism and agriculture sectors. Examples included initiatives that establish institutional mechanisms for strategic planning, policies, and governance, as in the case with the formation of the Caribbean Sea Commission and the CARICOM Regional Fisheries Mechanism (CRFM). Additional examples include initiatives that focus on transboundary management issues, as in the case of the Caribbean Large Marine Ecosystem (LME) Project, and that address vulnerability and food security issues such as the Regional Transformation Programme for Agriculture. However, a central challenge is the lack of communication among players. She stressed that essential elements for effective mainstreaming include:

- (a) Establishing the institutional mechanism for mainstreaming;
- (b) Defining the strategic framework;
- (c) Identifying sectoral policies;
- (d) Assessing the negative impacts;
- (e) Defining potential positive contributions to attaining national development goals; and
- (f) Identifying policy options and action areas.

Specifically related to climate change, a number of regional projects have been undertaken, including the Caribbean Planning for Adaptation to Climate Change project (CPACC), the Adaptation to Climate Change in the Caribbean project (ACCC), the establishment of the Caribbean Community Climate Change Centre (CCCCC), the Mainstreaming Adaptation to Climate Change project (MACC), and the Special Pilot Adaptation to Climate Change project (SPACC). In concluding the presentation, she argued that moving forward on this agenda required a strong mechanism that would deliberately integrate biodiversity and climate change adaptation issues into the sustainable development agenda.

19. Mr. Bisessar Chakalall, representing the FAO Subregional Office for the Caribbean, focused his presentation on aspects related to mainstreaming biodiversity in the fisheries sector in the region. The Western Central Atlantic Fishery Commissions (WECAFC) is an FAO Regional Fishery Body that covers all living marine resources in an environmentally, geographically, and politically diverse region that includes the territories of 33 States, has straddling and migratory fish stocks, and has a range of scales and types of fisheries (ranging from small-scale to open access to aquaculture). The WECAFC Fishery Sector is of great social and economical importance for the region, but coral reefs and critical coastal habitats are in decline and biodiversity is under threat in the region through over-exploitation and impacts from land-

based activities. Turning to the 1995 FAO Code of Conduct for Responsible Fisheries, which is an authoritative digest of principles on sustainable fisheries, Mr. Chakalall outlined how both biodiversity and the ecosystem approach are integrated into this tool for managing fisheries. Mr. Chakalall introduced participants to key elements of the Ecosystem Approach to Fisheries, which strives to balance diverse societal objectives by taking into account the knowledge and uncertainties about biotic, abiotic, and human components of ecosystems and their interactions, and responding through an integrated approach to fisheries within ecologically meaningful boundaries. The approach takes into consideration conflicting objectives of different users and stakeholders and the equitable distribution of benefits. However there is great uncertainty as to how to put an effective ecosystem management system into practice. Implementing the Ecosystem Approach for Fisheries requires coordination between all sectors using or impacting on the marine ecosystem, including strengthened institutional arrangements that include non-fishery stakeholders.

20. Mr. Richard Huber, representing the Department of Sustainable Development (DSD) of the Organization of American States and the Inter-American Biodiversity Information Network, outlined the key conceptual elements of Payments for Ecological Services (PES) including carbon markets, water markets, biodiversity markets, and bundled payments. To illustrate, he drew on examples from DSD initiatives across OAS member states, with attention to sub-regional and transboundary cases as well as national examples. For the Caribbean, he highlighted the inter-coastal zone management ReefFix Coral Reef and Mangrove Restoration and Watershed Management Demonstration program implemented in Jamaica, Dominican Republic, Bahamas, and Haiti. Reflecting the earlier discussions on ecosystem services and ecosystem assessment, he showed how new PES models incorporate multiple stakeholders as well as multiple incentives.

21. Ms. Sarah McIntosh, representing the Caribbean Natural Resources Institute (CANARI), presented the findings of a recent CANARI/IIED project to prepare a User Guide to Effective Tools and Methods for Integrating Environment and Development. This was a global project that profiled the thirty most effective tools for environmental mainstreaming and provided supportive case studies. For the Caribbean, surveys and focus groups of government, civil society, and private sector actors were conducted in Jamaica, Barbados, and Trinidad and Tobago. The surveys revealed that the most popular tools and approaches for environmental mainstreaming included (i) involving key stakeholders in all aspects and at all stages, (ii) lobbying and advocacy, (iii) multi-agency collaboration, (iv) data sharing, (v) public education and awareness, (vi) impact and risk assessments, (vii) economic tools (such as budgeting, cost/benefit analysis, economic valuation of goods and services, and the use of economic incentives), (viii) impact assessments, (ix) risk assessments, (x) spatial tools and environmental modelling, (xi) environmental quality monitoring and standards, and (xii) legislative and policy tools. Lessons learned showed that the concept of mainstreaming is not internalized and that commitments often outstrip available resources for implementation and monitoring. Another closely related challenge is the lack of political will. There is a need for more effective processes, in particular consultative processes and stakeholder participation in planning, implementation, monitoring and enforcement. This was identified as the most important factor in determining the long-term success of mainstreaming initiatives. Another challenge is that relevant data and information is often not available in a format that can be understood by all stakeholders. For mainstreaming to become more effective, the following are necessary: (i) “making the case” to politicians, (ii) improving public education and awareness, (iii) improving institutional linkages, (iv) enhancing technical capacity, (v) improving access to information, and (vi) using a mix of approaches rather than a single tool.

*Group Exercise on Communication Strategies that Assist Mainstreaming of Biodiversity Concerns*

22. Under agenda item 4, communications expert Mr. Frits Hesselink facilitated a group exercise to explore the role of communication in assisting biodiversity mainstreaming. Participants were divided into groups and each group was assigned one of the following sectors: tourism, agriculture, finance, physical planning, fisheries, energy and mining, forestry, and poverty alleviation. For each sector, the group identified (i) which actors or key players should be involved in a communication strategy, (ii) the key

message that should be communicated, and (iii) the strategy that should be employed to communicate the message. A summary of results for each sector is found in the following table.

<p><i>Tourism:</i></p> <p><b>Key players:</b></p> <ul style="list-style-type: none"><li>• Ministry of tourism</li><li>• restaurants</li><li>• diving industry</li><li>• hotels, and churches</li></ul> <p><b>Message:</b> The loss of biodiversity negatively affects the tourism sector resulting in economic losses.</p> <p><b>Strategy:</b> Raise awareness of tourists.</p>
<p><i>Agriculture:</i></p> <p><b>Key players:</b></p> <ul style="list-style-type: none"><li>• policy makers and regulators</li><li>• NGOs</li><li>• farming groups</li></ul> <p><b>Message:</b> Some agricultural practices are negatively affecting biodiversity. For example, the loss of pollinators due to the use of pesticides may cause significant losses in agricultural revenues.</p> <p><b>Strategy:</b></p> <ul style="list-style-type: none"><li>• Create incentives.</li><li>• Use the language of the target group.</li></ul>
<p><i>Finance:</i></p> <p><b>Key players:</b></p> <ul style="list-style-type: none"><li>• Ministry of finance</li><li>• Director of finance</li><li>• Director of budget</li><li>• Banks</li><li>• insurance companies</li></ul> <p><b>Strategy:</b></p> <ul style="list-style-type: none"><li>• Acquire evidence that the loss of biodiversity has financial implications.</li><li>• Highlight the socio-economic benefits of biodiversity.</li><li>• Create a special fund for biodiversity conservation.</li></ul>
<p><i>Physical Planning:</i></p> <p><b>Strategy:</b></p> <ul style="list-style-type: none"><li>• Create centres of biodiversity conservation.</li><li>• Favour inter and intra-agency communication.</li><li>• Identify key players within ministries.</li></ul>

*Fisheries:***Key players:**

- fishers

**Message:** Use resources sustainably.

**Strategy:**

- Organize face-to-face meetings.
- Generate trust.
- Use a tool called “farmers field school” which incorporates local and scientific knowledge.

*Energy and mining:***Strategy:**

- Have EIA legislation.
- Rehabilitate area.
- Have consultations.
- Use the concept of corporate responsibility.

*Forestry:*

**Message:** Sustainable forestry has many benefits for the forestry sector.

**Strategy:** Identify stakeholders.

*Poverty alleviation:***Key Players:**

- government agencies and policy makers
- churches
- people both living above and below poverty level

**Message:** The sustainable use of biodiversity can improve human well-being.

**Strategy:**

- Establish strategies at the community level.
- Link biodiversity to health.
- Highlight how biodiversity conservation plays an important role in influencing standards of living.
- Identify immediate benefits.

*Field Study Visit*

23. On Wednesday 5 November, the group participated in a field study, visiting the Nariva Swamp Restoration and Carbon Sequestration project and Ramsar site. The project’s objectives are:

- Sequestration of carbon through forest restoration of areas cleared by illegal agriculture and mitigate methane through the restoration of surface hydrology at Nariva,
- Conservation of coastal wetland biodiversity through the restoration of the freshwater swamp forest, and
- Generation of income for local communities.

During the field trip, participants met with representatives from the Ministry of Agriculture, farmers’ associations, local communities, and the Community Forestry Officer involved in the project. With these stakeholders the participants examined the challenges of managing this area of high biodiversity

importance. Participants then visited the Manatee Conservation Trust, where a panel discussion took place on different aspects of the Trust and their management experience.

24. To illustrate some of the challenges and opportunities for mainstreaming biodiversity so that biodiversity and ecosystem services can contribute to human wellbeing and local livelihoods, participants were divided into groups and asked two questions. Each group was assigned a certain focus area and asked to prepare notes for reporting back to the larger group the next day. The questions and focus areas are outlined in the table below. Participants of the CEPA workshop were asked specifically to take the group's answers to the assigned questions as a starting point and work with the team members to identify target audiences (policy makers, local communities, the general public, etc), core messages, and the modes/methods of communication.

<b>Questions</b>
<p><i>1. Analysis of Ecosystem Services, Costs and Benefits.</i></p> <p>(a) Identify relevant ecosystem services* provided by the Nariva ESA. (this need not be an exhaustive list; you should focus on those most relevant to the focus of your group (See below))</p> <p>(b) For each, note:</p> <ul style="list-style-type: none"> <li>• Status and trends of the service – what factors are enhancing or diminishing these services.</li> <li>• Benefits – who benefits? (Qualitative valuation) How does the ecosystem service contribute to local livelihoods and to the benefits of others, nationally &amp; globally? Are the benefits equitably distributed among stakeholders?</li> </ul> <p><i>Costs:</i> Who pays for the protection of the ecosystem (qualitative valuation)? What role do local people have in safeguarding or preventing degradation of the ecosystem service?</p>
<p><i>2. Management Interventions</i></p> <p>What management interventions could contribute to the improvement of both livelihoods and the conservation of the Nariva ESA?</p> <p>Optional supplementary questions:</p> <ul style="list-style-type: none"> <li>• What are some recommended institutional arrangements?</li> <li>• What role should the various stakeholders hold?</li> <li>• What do you see as the main challenges to a participatory management approach? What strategies can be employed to overcome those challenges?</li> <li>• How should a monitoring and evaluation programme be structured to support adaptive management?</li> </ul>

<b>Focus Area</b>
<p><b><u>A. Climate Change Impacts</u></b></p> <p>In answering question 1, focus on the current and potential impacts of climate change on the biodiversity of the Nariva ESA, the ecosystem services provided, costs and benefits and implications for human wellbeing. Answer questions 2 in this context.</p> <p><b><u>B. Climate Change Responses</u></b></p> <p>In answering question 1, include any impacts of climate change responses. In answering question 2, focus on management interventions for climate change mitigation and/or adaptation, including mechanisms and institutions needed to ensure equitable distribution of costs and benefits among stakeholders at all levels?</p> <p><b><u>C. Local livelihoods perspective</u></b></p> <p>In answering question 1, focus on the contribution of the services to local livelihoods. In answering question 2, focus on management interventions for maximizing benefits to the local communities?</p>

**D. Biodiversity Conservation perspective**

In answering question 1, focus on those services that support the conservation of biodiversity and maintenance of ecosystem functioning. In answering question 2, focus on management interventions for maximizing the conservation of biodiversity.

25. On Thursday 6 November, Ms. Leotaud facilitated a discussion on de-briefing of the field trip. The following summarizes the information gathered by each group.

*Group 1. Livelihoods*

**Ecosystem services:** important ecosystem services related to agriculture and fisheries (food, income, etc.)

**Cost:** The use of pesticide has negative consequences for species. There are also risks of fires and overfishing.

**Management:** There is a need for an integrated approach, strengthened collaboration, and stronger relationships with the communities.

**Observation:** The community is not benefiting from tourism at the moment.

*Group 2: Social perspective*

**Observations:** The community can become dependant on hand outs. Interventions should focus on transfer of tools and knowledge. Diversification should be encouraged. The use of pesticides can have a significant impact on ecosystems.

*Group 3. Biodiversity conservation*

**Ecosystem services:** Habitat for wildlife

**Cost:** The status of many ecosystems is degraded.

**Benefits:** Some habitat trends were positive. There is awareness of the degradation of the swamp forest.

**Management:** There is a restoration plan.

**Observation:** There is a need for methodology for analysing trends in ecosystems and in human well-being (e.g. indicators of change).

*Group 4: Climate Change*

**Ecosystem services:** windbreakers, habitats, etc.

**Cost:** There are issues of traditional rights, introduction of cattle, and excess use of fertilizers. Sea level rise causes salt water intrusion. There is a need for salt tolerant varieties. Changes in rainfall patterns cause high sedimentation.

**Benefit:** Farmers and the Manatee Conservation Trust.

**Management:** Comprehensive plan for restoration exists. Climate change is being integrated. Cultural value is taken into account.

**Observation:** There is a need for mitigation plans.

**Item 5. Integrating Climate Change into NBSAPs**

26. The impacts of climate change on biodiversity and ecosystems already have been observed in the Caribbean, and these impacts are projected to increase. In addition, climate change response measures (both “mitigation” measures to reduce greenhouse gas emission and “adaptation” measures to respond to the impacts of climate change) may have positive or negative impacts on biodiversity and ecosystems. In light of this, the Conference of the Parties has called for the integration of climate change impacts and the impacts of climate change mitigation and adaptation activities on biodiversity within NBSAPs and their implementation (decision IX/16).

27. Under this agenda item, introductory presentations covered:

- (a) An overview of CBD decisions related to climate change and biodiversity;
- (b) An overview of the observed and projected impacts of climate change on biodiversity and biodiversity-based livelihoods in the region;
- (c) A description of on-going programmes and projects in the Caribbean towards (i) assessing impacts and vulnerability and (ii) adapting to climate change; and
- (d) An overview of tools and methodologies that can be applied to assess vulnerability and monitor impacts (including the impacts of climate change response activities).

The introductory sessions were followed by in-depth discussion and group exercises.

28. Ms. Annie Cung from the Secretariat of the CBD provided an overview of CBD decisions related to climate change and biodiversity and the related obligations by Parties, including requests to the Executive Secretary to hold capacity building workshops to integrate climate change into NBSAPs. Decision IX/16 also calls for Parties to identify vulnerable regions, sub-regions and ecosystem types and to assess the threats and impacts of climate change and climate change response activities. Moreover, the programme of work on island biodiversity includes climate change considerations, such as the need for vulnerability assessments for island biodiversity, the implementation of adaptation measures in land-use and coastal zone planning. Ms. Cung highlighted some of the main impacts on biodiversity in the Caribbean, including coral bleaching and loss of coastal habitats. Finally, she outlined that the mandate for this agenda item of the workshop was to build capacity among Parties for integrating climate change into NBSAPs and the implementation of the CBD, with the goal of becoming more familiar with both ongoing regional processes for climate change adaptation and assessment of impacts and vulnerability, as well as with the tools and methodologies to better integrate climate change.

29. Ms. Sarah McIntosh presented a video produced by the Bucco Reef Trust to introduce participants to the main impacts of climate change in the Caribbean region, such as changes in temperature, in the intensity and frequency of storms, and in rainfall patterns. One of the most evident effects of these changes is coral bleaching. The video also illustrated the consequences of climate change impacts on food security and livelihoods, highlighting (i) the need for adaptive options, (ii) the need to revisit how food is produced, and (iii) the need to improve management of watersheds through, *inter alia*, reforestation. Ms. McIntosh emphasised the need for more data on climate change for the region.

30. Mr. Winston Bennett, representing the Caribbean Community Climate Change Centre (CCCCC), presented a number of regional initiatives to address climate change, including CPACC (1997-2001), ACCC (2001-2004), MACC (2004-2008), the establishment of CCCCC (2004), and SPACC (2007-2010). These initiatives were designed to determine the vulnerability of the region’s natural and socioeconomic systems to climate change, identify regional responses to mitigate the impacts of climate change, and implement adaptation activities. His presentation focused primarily on the SPACC project, specifically addresses the issue of adaptation. Its goal is to support efforts of Small Island and Low Lying Coastal CARICOM States to implement specific pilot adaptation measures that address the impacts of climate change on biodiversity and land degradation. Among other activities, the project works with States in (i) the design of technical interventions, (ii) cost effectiveness analysis, (iii) monitoring and evaluation of project activities, (iv) reduction of water resources vulnerability, (v) conservation and

restoration of coastal ecosystems impacted by climate change, and (vi) reduction of the GCC impacts on coastal and marine resources. He ended the presentation with specific examples of the project implementation from across the region.

31. Ms. Donna McRae-Smith, representing CARICOM, briefly introduced participants to the concept of adaptive management and linked it to the issue of integrating climate change considerations into NBSAPs. Adaptive management is a form of management which facilitates responding to uncertainties and utilizes the method of “learning by doing” or research feedback. Measures may need to be taken even when some cause and effect relationships are not yet fully established scientifically. Implementation programmes should be designed to adjust to the unexpected. Recalling the earlier discussions and presentations on the Ecosystem Approach, she argued that the approach requires adaptive management to deal with the complex, dynamic, and variable nature of ecosystems as well as impacts from socio-cultural factors and drivers of change. Ms. McRae stressed that implementing adaptive management in relation to NBSAPs and climate change requires the active cooperation of all stakeholders.

*Group Exercise on Integrating Climate Change into NBSAPs*

32. A two-part discussion and group exercise was led by Nicole Leotaud, Sarah McIntosh, Winston Bennett, and Donna McRae-Smith. In plenary, participants identified some of the main impacts of climate change, the most vulnerable species, ecosystems and ecosystem services, and the possible response activities to address the impacts previously identified. The results of this group discussion are summarized below.

<p><i>Impacts of climate change:</i></p> <ul style="list-style-type: none"> <li>• Increased air and sea temperature</li> <li>• Sea level rise</li> <li>• Changes in rainfall patterns</li> <li>• Increased frequency and intensity of storms and other extreme climatic events</li> </ul>
<p><i>Vulnerable species or ecosystems:</i></p> <ul style="list-style-type: none"> <li>• Mangroves</li> <li>• Coral reefs</li> <li>• Sea grass</li> <li>• Forests</li> <li>• Wetlands</li> <li>• Sea turtles</li> <li>• Migratory species</li> <li>• Pollinators</li> </ul>
<p><i>Vulnerable ecosystem services:</i></p> <ul style="list-style-type: none"> <li>• Pollination</li> <li>• Water supply</li> <li>• Wind breaks</li> <li>• Water catchments</li> <li>• Sediment control</li> <li>• Nutrient cycling</li> <li>• Fishery nurseries</li> <li>• Flood protection</li> <li>• Production of white sand</li> </ul>
<p><i>Response measures:</i></p> <ul style="list-style-type: none"> <li>• Capacity-building</li> <li>• Reforestation of watersheds</li> <li>• Use of wind and solar energy</li> </ul>

- Ecosystem restoration

33. Participants were then divided into three groups. Each group was assigned one climate change impact (Group 1: Sea level rise, Group 2: Increased temperature and Group 3: Increased frequency and intensity of extreme climatic events). The groups were then asked to identify one threatened species, ecosystem or ecosystem service that is vulnerable to the assigned climate change impact. Following this, the groups identified possible response measures to address the negative impact, taking into account uncertainties. Finally, groups were asked to consider the potential impacts of the identified response measures on biodiversity. The results are summarized in the table below. Following this exercise, Ms. Nicole Leotaud facilitated a short wrap-up session in which participants discussed and identified points to be considered under the panel and group discussions on the workshop conclusions that would be held the following day.

*Group 1: Sea level rise*

**Vulnerable species and ecosystem:** coastal and marine biodiversity (including: coral reefs, wetlands, mangroves and seagrass beds)

**General responses:**

- Rehabilitation of mangroves
- Intervention to maintain function of ecosystem
- Relocation of people
- Where there are no mangrove, coral reefs, seagrasses, engineering (e.g. a wall) may be suitable to control coastal erosion
- Carry-out environmental Impact Assessments
- Construction/engineering solution to maintain function of ecosystem
- Plan to control coastal erosion

**Management strategies:**

Negative impacts:

- Hard structures have numerous negative impacts. (There must be context-specific analysis of engineering solutions.)

Positive impact:

- Plan to control coastal erosion
- Rehabilitation would increase numbers of species as well as the variety of species

**Integrating uncertainties to management plans:**

- Incorporate possible impacts and develop a contingency programme
- Infusion of uncertainty into development of sector-specific plans/programmes e.g. Integrated Coastal Zone Management

**Implications for NBSAPs:**

- Targets set need to be reviewed and redesigned
- Increased costs for implementation is a challenge

*Group 2: Increased temperature*

**Vulnerable species and ecosystem:** corals and coral reefs

**Impacts:**

- Coral bleaching
- Fish kills – eutrophication

- Loss of coral cover – leads to loss of shoreline protection
- Disease
- Loss of fish nurseries
- Influx of invasive alien species

**Management strategies:**

- Marine Protected Areas;
- Moratorium;
- Restoration programmes;
- Pest resistant strains in species;
- Coral adapted to temperature increases;
- Keep reefs healthy;
- Process of catch up – trade-offs with fishermen to ensure the loss of income is compensated from limited fishing;
- Public education and awareness;
- Coral reef monitoring / data collection; and
- Involving local communities in management.

*Group 3: Increased frequency and intensity of extreme climatic events*

**Vulnerable ecosystem:** forests

**Impact on biodiversity:**

- Increased winds lead to removal of forest cover;
- Loss of habitat and ecosystem;
- Direct loss of biodiversity example flora and fauna get destroyed;
- Indirect loss of species due to removal of other dependant species;
- Increase overland flow. This leads to flooding, sedimentation and soil loss;
- Loss of micro-organism embedded within the removed soil;
- Disruption of nutrient cycling as a result of soil removal;
- Loss of aquatic and marine species due to sedimentation;
- Invasive species growth;
- Sedimentation leads to poor quality water and reduced water quantity;
- Migration and displacement of species; and
- Mudslides could lead to entire loss of habitat and ecosystem.

**Economic effects and effects on livelihoods:**

- Mudslides can damage bridges, roadways, properties, crops and human lives;
- Increase flooding from storms could destroy agriculture down the watershed;
- Flooding and mudslides can cut-off communities and prohibit access to transportation;
- Governments must allocate funds for relief, restoration, etc.; and
- New drainage patterns and disruption to existing drainage result from sedimentation. This affects those dependent upon drainage/waterways.

**Management practices:**

- Perform an immediate assessment after the disaster to determine the damage or destruction of the species based upon the catalogue or inventory of the species that was achieved;
- Re-introduction of species through captive breeding;
- Mopping up trees (removing fallen trees that block waterways, roadways, etc.); and
- Promote rehabilitation through monitoring, reforestation and research.

**Impacts of management practices on biodiversity:**

- Reforestation, if not done properly, could introduce disease and pests, invasive species and general imbalance in the habitat and/or ecosystem.

**Uncertainties in management approaches and practices – this leads to:**

- Need for research and monitoring
- Responses and practices based upon flood-prone and storm sensitive areas of the country. This means the management approach is not the same for every area. In addition, there must be priority in response in the light of this.

*Item 6. Preparation of the Fourth National Reports*

34. Under this agenda item, the Secretariat introduced the guidelines for the Fourth National Report, which focuses on implementation of NBSAPs and progress towards the 2010 Biodiversity Target. The Secretariat also introduced a reference manual developed to assist with the preparation of the Fourth National Report, and reminded participants about technical support that is available from UNEP and UNDP in addition to financial assistance available from the GEF for eligible Parties. The Fourth National Report will provide an important opportunity to assess progress towards the 2010 target, drawing upon an analysis of the current status and trends in biodiversity and actions taken to implement the Convention at the national level. It also will assist Parties in evaluating and considering what further efforts are needed. The National Reports are used to provide guidance to the Conference of the Parties, and information contained in the Reports will also be used for the Global Biodiversity Outlook 3. There have been a number of changes made in the format of questions in the Fourth National Report, compared to the Third Report, which will allow more flexibility. The Reports are also of use to Parties for activities at the national level. In his introductory presentation, Mr. Cooper stressed the relationship between the preparation of the Fourth National Reports and the revision and updating of the NBSAPs and how these processes can be linked efficiently and effectively. Countries that had begun the process of developing their Fourth National Reports were invited to share their experience with other countries. The Secretariat also presented on the role of the Clearing-House Mechanism in supporting the exchange of information within and between countries.

35. Ms. Dalia Salabarría Fernández, representing the Government of Cuba, shared with participants Cuba's experience with the preparation of their Fourth National Report. In Cuba, the work was divided among working groups, each group being assigned one chapter. A clear framework and timetable was established early on, and a number of workshops on the preparation of the Report were scheduled. Ms. Salabarría Fernández emphasized the usefulness of the voluntary guidelines contained in decision VIII/8 and decision VIII/14 as well as the reference manual.

36. Ms. Andrea Donaldson, representing the Government of Jamaica, also briefed participants on Jamaica's experience with the preparation of their Fourth National Report. One of the first steps was the identification of stakeholders. Then working groups looked at the information currently available. She reported that in the next stage, small groups comprised of six individuals, will reduce the draft Report, and that this will be followed by two public consultations. The Report will then be placed on the Clearing House Mechanism (CHM) and be made public and shared with other stakeholders.

37. Ms. Anita James shared with participants Saint Lucia's experience with the CHM. The Ministry of Agriculture, Forestry and Fisheries of Saint Lucia hosts a website that mirrors the CBD CHM and where the country's first NBSAP is made available. A biodiversity information network website is attached to the CHM and includes information on species and country experience with regards to biodiversity ([www.slubiodiv.org](http://www.slubiodiv.org)).

38. Bradley Guye presented a poster representing the main points of Dominica's NBSAP and linkages to the 2010 Biodiversity Target. The poster was prepared using the online poster generation tool that has been developed jointly by Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) and the

CBD Secretariat and that enables users to easily create posters from their own computer. Additional information on this tool is available at: <http://www.cbd.int/meetings/wgri-02/poster-guidelines.shtml>.

### **III. THE WAY FORWARD: DISCUSSION ON NEXT STEPS IN IMPLEMENTING AND UPDATING NBSAPS, MAINSTREAMING OF BIODIVERSITY, AND INTEGRATION OF CLIMATE CHANGE**

39. Mr. David Cooper provided a brief overview of the roadmap to the tenth meeting of the Conference of the Parties in Nagoya, Japan in October 2010. Mr. David Ainsworth reminded participants about plans for the International Year of Biodiversity in 2010. As an introductory activity under agenda items 7 and 8, Ms. Nicole Leotaud led a Panel Discussion, posing two questions to each panellist:

1. What concrete actions to further the development, updating and implementation of NBSAPs will you commit to in your countries following this workshop?
2. What is a priority area where support is required from the international community?

Members of the panel consisted of Mr. Joseph Ronald Toussaint (Haiti), Ms. Robyn Cross (Trinidad and Tobago), Ms. Dominique Saheed (Guyana), and Ms. Anita James (St. Lucia). A plenary discussion followed.

40. The panel pointed out that some countries are behind in terms of developing and implementing their NBSAPs, but that the workshop was useful in providing examples of approaches and sharing experiences. The panellists appreciated the opportunity for face-to-face contact and exchanges on these issues. Furthermore, they found the elements of the workshop emphasizing the importance of strategic communication, and how this can be used to support effective mainstreaming of biodiversity concerns, very informative. The workshop also allowed the participants to explore a Caribbean Vision on biodiversity, realizing the importance of a common effort to implement the Convention. The group agreed that existing partnerships also need to be enforced, and highlighted the importance of working with the private sector and community-based groups to implement NBSAPs. It was suggested that a biodiversity centre for the Caribbean region be put in place in order to mainstream biodiversity projects and offer technical assistance. Finally, the group emphasized the role of the CARICOM Secretariat as the voice for the Caribbean region to carry messages at international meetings.

41. A number of concrete actions that panel members would commit to following the workshop were mentioned. Mr. Toussaint noted that mobilizing GEF funds to assist in completing the Fourth National Report and adopting a time schedule would be high priorities. He had noted with interest the approaches taken by Cuba and Jamaica. Ms. Saheed stressed that reinforcing partnerships would be particularly important, especially given the fact that human resources in her unit are stretched. Ms. James noted that the next crucial steps for St. Lucia were to finalise the draft of the country's second NBSAP and submit it to the Cabinet. Additionally, working with other ministries, as well as the private sector and NGOs, on the mainstreaming issue is a high priority.

42. Turning their attention to the regional and international arena, Mr. Toussaint noted that establishing greater ties with English-speaking Caribbean countries as well as Cuba and the Dominican Republic for the purpose of cooperation, exchange, and input into the regional agenda was a main priority. Ms. Saheed stated that training was a priority area that required support. At the regional level, she noted that building alliances with neighbouring countries, including to support biological corridors, is very important. Ms. James emphasized the importance of building a biodiversity centre, of developing sub-regional projects, and of offering technical assistance. Development of the CHM at the University of the West Indies would also play a significant role. She also noted the importance of a strong CARICOM position at CBD Conferences of the Parties. Finally, Ms. Cross stressed the importance of putting biodiversity mainstreaming on the regional agenda and vocalizing this recommendation to both CARICOM and other regional bodies. Supporting this message in the regional meetings on issues related to finance would be especially important.

43. After the panel discussion, Ms. Leotaud opened the floor to other workshop participants. Among a number of comments that reflected the panel discussion, participants also noted that biodiversity-related issues must be incorporated into the regional environment policy being developed by CARICOM. They stressed the importance of maintaining such exchanges of information on these topics, particularly within the context of Small Island States. Among other reasons, this cooperation and exchange would eliminate “reinventing the wheel.” They further agreed that regional organizations must have a primary role in facilitating the exchange of relevant information and experience, not only within the CARICOM region, but also with Central and South America. Finally, participants representing media reminded the others that Panos, with its 400 journalists, should be considered as a valuable resource in supporting communication and public awareness of biodiversity initiatives.

***Item 8. Consideration of the conclusions of the workshop***

44. Discussion focused initially on the two issues of strengthening the development, updating, and implementation of NBSAPs and encouraging effective sectoral and cross-sectoral mainstreaming of biodiversity concerns. The participants stressed that a NBSAP should contribute to broader a national vision of sustainable development, improving human well-being while conserving biodiversity. Furthermore, a NBSAP should give direction on how conservation and sustainable use of biodiversity contributes to these broader goals and provide the appropriate mechanisms and tools. Based on the discussion, the group noted a number of challenges. These are listed below:

- Capacity limited in most SIDS, but capacity exists collectively
- Lack of long-term vision
- Lack of integration in NBSAPs of CBD priorities (2010 Biodiversity Target)
- Lack of quantitative targets
- Lack of indicators
- Lack of monitoring and evaluation mechanisms
- Lack of stakeholder analyses, gap analyses, trade-off analyses
- Lack of innovative and sustainable funding mechanisms
- Lack of incentives
- Lack of “ownership” by various stakeholder groups
- Lack of translation of successful projects into opportunities for the creation of learning institutions, provision of technical tools, etc.
- Lack of identification of ecosystem goods and services
- Lack of joint sectoral annual work plans
- Inter-sectoral cooperation limited despite small size of most countries
- Little engagement of private sector
- Lack of outreach to private sector
- Lack of cooperation between Governments/national organizations and international organizations (the element of “competition” needs to be eliminated)
- Lack of cooperation with NGOs
- Lack of behaviour shift
- Lack of integrated coastal zone management plans
- Lack of adaptive management practices

- Lack of “infusion” of climate change considerations in NBSAP
- Lack of cohesion between climate change mitigation and adaptation measures and identification of measures for their simultaneous implementation
- Lack of identification of bandwagon opportunities available for biodiversity through current internationally-charged climate change agenda
- Lack of standardization of scientific criteria within Caribbean region
- Countries need more information, but much data exists in the region, many databases
- Lack of centralized access to information
- Lack of comprehensive integrated model biodiversity law
- Lack of identification of how the provisions of the Caribbean Court of Justice could be applied

45. The participants reflected on the presentations made during the workshop and identified some case studies that represented good practice. These included, but were not limited to:

Guyana:

- mainstreaming into planning cycles of different agencies
- REDD

St Lucia:

- multiple examples of mainstreaming
- the NBSAP revision (the document is still a draft, but is under adoption) incorporates targets, the Ecosystem Approach, recognition of private sector interests, and indicators for monitoring
- Additionally the country is investigating how trade liberalization affects biodiversity management
- The review of the first NBSAP is being used as a basis for development of the second revised NBSAP

St Kitts & Nevis:

- National physical plan

Bahamas:

- BEST Commission which as an advisory body to the Government, handles environmental policy review, and has designed EIA guidelines and procedures

Jamaica:

- CEPA activities including a public awareness campaign for the NBSAP

Jamaica:

- Several funds were established including a forest conservation fund and tourism enhancement fund that assists in financing the implementation of biodiversity conservation.
- Establishment of a National Biodiversity Secretariat and employing inter-sectoral committees and working groups to help mainstream biodiversity concerns

St Vincent & Grenadines:

- WTP study for tourism for protected areas and services rendered
- work being undertaken to develop integrated model Biodiversity Law

- work undertaken with farmers to transform areas previously used for marijuana cultivation into recreational sites

Cuba:

- implementation of the NBSAP, including terrestrial and marine protected areas
- biodiversity monitoring and assessment incorporated into revised NBSAP with priorities aligned with CBD priorities
- extensive development of CEPA materials
- Participation in UNEP Global Environmental Citizenship Programme
- National environment network includes stakeholders from NGOs and Universities

Haiti:

- repatriation of scientific information from US scientists that have extensively studied Haitian biodiversity
- biodiversity considered within the Poverty Reduction Strategy Paper (PRSP)
- engaged in first Caribbean Biological Corridor project (marine and terrestrial) with Cuba Dominican Republic, and possibly to also include Jamaica

Trinidad and Tobago:

- Nariva Swamp project
- Manatee Conservation Trust

Suriname:

- Communication strategy and CEPA

46. The panel discussion and subsequent plenary discussion made a number of recommendations related to improving NBSAPs, preparing Fourth National Reports, regional cooperation, international cooperation, and the integration of climate change: These are outlined in the table below:

**Recommendations for Improvements to NBSAPs**

- Clear understanding of implementation/mainstreaming *process* (may require training at highest levels)
- Strong leadership
- Be realistic, focused, persistent, performance-oriented
- Think strategically, act specifically (and opportunistically)
- Collaborate with the *right people* across sectors
- Involve all stakeholders needed for effective implementation
- Develop trust with stakeholder groups (use personal and informal approaches as appropriate)
- Work with representatives of local community associations
- Target appropriate intermediaries
- Develop/increase negotiating capacity
- Focus on strategy first, then identify necessary actions
- Use *existing* structures efficiently
- Must link CBD-related activities with national priorities (development, poverty reduction, sustainable livelihoods, etc.); development of joint annual workplans; merging of ministerial portfolios
- NBSAP could also link to CBD priorities
- Use champions

- Use economists (green accounting)
- Use communications specialists
- Use partnerships (e.g. NGOs, private sector), including for fundraising
- Clear understanding of services provided by ecosystem(s)
- Recognize the role of traditional knowledge in habitat rehabilitation, etc.
- Promote ecosystem approach and use of tools (e.g. SEA and Millennium Assessment methodology soon to be published)
- Translate successful projects (e.g., Nariva Swamp) into learning institutions where local communities could be beneficiaries
- Make use of GEF allocations and innovative funding mechanisms, with a view to establishing sustainable financing plans
- Ensure biodiversity is reflected in national budgets
- Make use of proposed voluntary guidelines adopted by the CBD Conference of the Parties
- Make use of assistance and guidance that can be provided by the CBD Secretariat
- Incorporate incentives
- Decentralize processes
- Incorporate NBSAP provisions in legislation
- Piggy-back on momentum to address climate change issues; use climate change issues as opportunity to make the case for biodiversity and ecosystem services
- “Infuse” climate change considerations in NBSAP

#### **Recommendations for the Preparation of the Fourth National Report**

- Make use of Reference Manual and other information and tools available on Fourth National Report Portal (see: <https://www.cbd.int/nr4/>)
- Establish a multi-stakeholder steering committee
- Link process to NBSAP updating
- Relate information to other relevant national strategies
- Wide consultation with small coordination group
- Report should be communicable to various audiences
- Get stakeholders to take “ownership” of report
- Dissemination of draft report through CHM for public consultation
- Public launch of final report, involving media

#### **Recommendations for Regional Cooperation**

- Expand cooperation among professionals responsible for NBSAP development and implementation (e.g. through a peer network).
- Examine need for a Caribbean centre on biodiversity to be modelled on the CCCCC.
- Note that the proposal to develop a UWI Caribbean centre on biodiversity could facilitate sharing of information on biodiversity skills and best practices (e.g. centralize databases and offer e-learning programmes) for NBSAPs. This should link with the CHM. Additionally, there should be a strong focus on education and training on biodiversity management, including at the post-graduate level. Finally this could also include a mechanism to facilitate an informal network.
- Integrate CBD implementation with UNEP CEP, regional fisheries bodies, etc.
- Explore the use of CABI’s knowledge management and knowledge for development networks and link with CHM.
- Put biodiversity on the agenda of CARICOM’s Council of Trade and Economic Development (COTED) to prepare Caribbean input to UNGA and COP-10 discussions on biodiversity.
- Promote regional analysis of success stories and “what works” in NBSAPs. (Who to lead?)
- Promote regional harmonization of indicators and measurements. (BIP?)

- Promote cooperation on issues best dealt with at regional level (e.g. fisheries, coral reefs, environmental education, and private sector).
- Promote transboundary conservation measures such as the first Caribbean Biological Corridor (Haiti, Cuba, Dominican Republic).
- Identify potential for joint work plans with the recently adopted IUCN Initiative for the Caribbean (Barcelona, October 2008).

#### **Recommendations for International Cooperation**

- Promote international linkages regarding the effects of climate change on biodiversity through the exchange of experiences with Pacific countries and institutions.

#### **Recommendations for Integration of Climate Change into NBSAPs**

- Caribbean islands are small countries. They can be considered as one big ecosystem. The impacts of climate change are felt in all sectors and across all ecosystem types, which are highly interconnected.
- The fact that the countries are small provides opportunities for communication, partnership and collaboration among the different agencies involved in climate change and biodiversity issues. Caribbean countries should also take advantage of existing regional organizations dealing with climate change and biodiversity issues.
- Taking into account financial limitations, climate change considerations should be integrated into existing biodiversity related projects and vice versa.
- There is a need to prepare management plans taking into account uncertainty in information on climate change impacts. Adaptive management should be promoted, including through increasing resilience of ecosystems and reducing other threats to ecosystems.
- Vulnerability assessments should be undertaken to identify the most vulnerable species, ecosystems and ecosystem services. The threats to local communities and livelihoods should also be assessed.
- When designing response activities, there is a need to take into account the potential positive and negative impacts of those response activities on biodiversity. Management plans should be designed with a view to promote both biodiversity conservation and adaptation to climate change.

#### ***Item 9. Closing of the workshop***

47. The expectations that had been outlined at the beginning of the workshop (paragraph 10) were briefly reviewed. Participants agreed that the workshop had partially met all the expectations, noting that continued efforts to share experience and information among the region are needed. In this respect, the group welcomed the proposal of Professor Andrew Lawrence to establish a Caribbean Biodiversity Centre.

48. Closing remarks were given by Mr. Winston Rudder on behalf of the Cropper Foundation, Mr. John Agard, and Ms. Robyn Cross on behalf of the Environmental Management Authority of Trinidad and Tobago. On behalf of the Executive Secretary of the CBD, Mr. David Cooper gave some closing remarks, thanked the countries for their active participation in the workshop, and once again thanked Trinidad and Tobago for its support in hosting the workshop. The workshop was closed on 7 November, 2008.

*Annex I***COUNTRY PRESENTATIONS ON THE STATUS OF THE DEVELOPMENT, IMPLEMENTATION, AND UPDATING OF NBSAPs, THE MAINSTREAMING OF BIODIVERSITY AND THE INTEGRATION OF CLIMATE CHANGE IN NBSAPs IN THE REGION*****Suriname (Ms. Ninotchka Tjin Kong Foek)***

The presentation outlined the main features and current status of Suriname's National Biodiversity Strategy (NBS). The complete NBSAP was done in two phases, with the Action Plan component not yet finalized prior to the workshop. For the preparation of the NBS, stakeholders were asked to prioritize actions and to pinpoint enabling activities. Examples of the main features of the NBS include baseline studies for the purposes of monitoring, conservation through revision and formulation of laws, nature reserves, protection against invasive alien species, sustainable use through integrated coastal zone management and environmental impact assessments, and equitable sharing through the revision of laws related to intellectual property rights and traditional knowledge. Suriname has established a clear link between the NBS and the National Forest Policy, with the NBS promoting the implementation of the National Forest Policy and vice versa. Climate change is not yet incorporated into the NBS, but rather is addressed in the National Climate Change Action Plan (NCCAP). Taking into account the potential impact of climate change on biodiversity, a link should be made between the NCCAP and the finalized NBSAP.

***Guyana (Ms. Dominique Saheed)***

The first NBSAP, which was prepared in 1999, is a product of national policy to elevate concerns for biodiversity to the level of planning and action. It is focused on the country's productive sectors of agriculture, fisheries, forestry and wildlife and covered a five-year implementation period. Additionally, the first NBSAP included an evaluation process that enabled the country to identify achievements as well as setbacks for the purpose of planning the second NBSAP. Consultations with relevant stakeholders on the extent of implementation of the first NBSAP were part of this review process. Among the challenges was the fact that the first NBSAP was very ambitious but lacked funding and cooperation with other ministries, which negatively impacted implementation. Guyana's recently approved second NBSAP focused on four thematic areas: forest, agriculture, coastal resources, and marine and freshwater resources. The second NBSAP also addresses climate change with the objective to reduce the threats and mitigate the impacts of threatening processes on forest biodiversity. A number of projects related to climate change, such as the Iwokrama project for carbon storage, are under progress. One of the programme areas of the NBSAP specifically addresses mainstreaming biodiversity and incorporates a project on integrating biodiversity issues and activities into strategic and operational planning of responsible government agencies. The goal to improve the mainstreaming of biodiversity issues and activities required by the CBD into the planning and operations of governmental agencies, NGOs, regulatory agencies, and private organizations. The next steps for Guyana are to establish a financing strategy for securing funds to implement the NBSAP and to establish the institutional arrangements for the implementation. In addressing current financial constraints, priority is placed on implementing actions that require little funding, such as mechanisms for enhanced coordination among sectors and institutions.

***Trinidad and Tobago (Ms. Robyn Cross)***

Features of the NBSAP include: education and public awareness, policy and commitment, legislation and enforcement, information and research, institutional capacity, and participation and coordination. Capacity is a constant constraint for the implementation of the NBSAP. Ms. Cross focused her discussion on the implementation of the NBSAP by highlighting the participatory approach taken in Trinidad and Tobago. This included consultations, capacity building, research, management planning, community

mobilization, and education activities. Ms. Cross presented, as an example of stakeholder participation, the case of the Matura National Park. Some of the key lessons from the projects were that capacity building requires the allocation of sufficient resources and that it is useful to meet and work with government agencies individually. The benefits from applying a participatory approach include goodwill and trust among stakeholders as well as building banks of information and local networks. She concluded with some highlights of current biodiversity mainstreaming efforts, including into ecosystem assessments, the country's Vision 2020, the draft agricultural policy, and the trade and industry policy.

***St. Lucia (Ms. Anita James)***

The NBSAP focuses on five programme areas, namely: planning and policy formulation, research and monitoring, conservation, sustainable use, and education and public awareness. The NBSAP is developed in accordance with CBD provisions. Implementation of the NBSAP is organized through a suite of 22 projects identified by stakeholders as being critical for biodiversity conservation in the country, ranging from the identification of tools for monitoring, to the review of the national plan for protected areas. At the time of the workshop, 19 of the 22 projects had been completed or were in implementation stage. The implementation of the NBSAP led to a number of concrete outcomes, such as the production of a draft biodiversity legislation, the design of institutional mechanisms for biodiversity, and the selection of methods, tools and indicators for monitoring. Compensation for environmental services is also under consideration in one watershed. A number of challenges were encountered, in particular limited human and technical resource capacity and the absence of a coordinating mechanism. On the mainstreaming agenda, Ms. James provided numerous examples of mainstreaming biodiversity concerns into other relevant national policies, including (but not limited to) including biodiversity conservation as a policy element in the National Environmental Policy, the Agriculture Sector Policy and Strategy, the Climate Change Policy and Action Plan, the Water Policy, the Land Policy, and the Tourism Policy. Biodiversity is also included in climate change vulnerability assessments. Additionally, incentives for private sector investments in biodiversity management have been developed. In reviewing the NBSAP, a number of challenges have been identified, including the need define in clearer terms the monitoring and evaluation component, enhance coordinating mechanisms, and better integrate biodiversity concerns into trade liberalization and other economic agreements.

A second NBSAP is being prepared and includes considerations of new and emerging issues such as climate change and invasive alien species. Traditional knowledge is also given more importance. The development of a concise new vision as well as new goals and targets for biodiversity management in St. Lucia for the period 2008-2018 is priority as is incorporating lessons learned from the review of the current NBSAP and greater attention to an integrated planning approach to facilitate mainstreaming into national sector planning.

***Dominica (Bradley Guye)***

The NBSAP is based on a series of sectoral studies and seven stakeholder consultations. Dominica's NBSAP highlights the vision, goals and objectives, and guiding principles that are to direct the implementation of specific strategies and actions for the conservation of the country's biodiversity. The goals include the conservation and sustainable management of Dominica's terrestrial and marine biodiversity, the promotion of sound and sustainable agricultural practices and technology, and the prevention of potential risks from the use of biotechnology and its by-products, while at the same time exploiting opportunities presented that are in keeping with Dominica's sustainable development agenda. On the ground implementation of the country's NBSAP has been minimal, however some key government agencies and private environmental entities have incorporated the NBSAP's goals and objectives as part of their adaptation strategies to global changes such as climate change. The next step for Dominica's National Biodiversity Strategy and Action plans will include greater emphasis on the implementation of the goals and objectives to meet part of the expectations of the 2010 targets as well as the post-2010 targets.

***St. Kitts and Nevis (Ashton Stanley)***

Mr. Ashton Stanley focused on an overview of the policy provisions for the protection of biodiversity in St. Kitts and Nevis. The recommendations of the NBSAP have been used as a guideline in the development of numerous policy and project documents for St. Kitts and Nevis. Of particular relevance is the OECS Protected Areas and Associated Livelihoods Project which covers an area of 12,500 acres in the central mountains. The National Environmental Strategy (NEMS) and the National Conservation and Environmental Protection Act also address issues of biodiversity conservation and protection. There is no inclusion of climate change in the NBSAP. The NBSAP is managed through the Department of Physical Planning and Environment.

***Bahamas (Ms. Stacy Lubin-Gray)***

The presentation focused primarily on reviewing the implementation of the NBSAP. At the national level there was a consultative process that included farmers, fishermen, residents, local government officials and other concerned and interested parties and in which a series of workshops were held in different locations throughout the country. A central objective was to ensure the public understood the importance of biodiversity for their livelihoods. Two actions preceded the consultative process: the formulation of the Bahamas Environment Science and Technology (BEST) Commission as well as a National Biodiversity Task Force. BEST is the central coordinating and advisory body for all environmental issues in The Bahamas. The Commission coordinates the work of the various Government and NGO groups with responsibilities and activities related to the environment, as well as being involved in conflict resolution to ensure the most effective use of resources. Additionally the Commission handles environmental policy review and has designed EIA guidelines and procedures. BEST may become a regulatory body. The National Biodiversity Committee is the task force that was formed to provide *inter alia* a forum for the exchange of information among those agencies with responsibilities for conservation and biodiversity. The committee was charged with the role of preparing and conducting the consultative process for the Action Plan. Furthermore, the committee serves as a mechanism for information disbursement on all issues related to biodiversity and the environment including matters related to the CBD.

Nine actions have been developed and designed specifically to conserve the biodiversity of the Bahamas. The actions are: 1) formulation of The BEST Commission, 2) establishment of the National Biodiversity Task Force (Biodiversity Committee) and preparation for the National Consultative Process, 3) National Consultative Process, 4) implementation of the recommendations of the Biodiversity Data Management project, 5) preparation of Bioregional Guidelines, 6) planning for a system of national parks and protected areas, 7) development of monitoring and evaluation methodologies, 8) protection and rehabilitation of threatened or degraded Ecosystems and of threatened species, and 9) improvement of the Botanic Gardens to enhance its capacity for *ex situ* conservation. A project has been completed on biodiversity data management, but the outputs now require operationalization as a CHM.

The NBSAP does not include climate change considerations. Ten years after the completion of the NBSAP, there is a need for an update of the Plan through a review process. Funding will be important to the success of such an initiative.

***Jamaica (Ms. Andrea Donaldson)***

Ms. Andrea Donaldson shared with participants a preliminary report on the implementation of the NBSAP in Jamaica. During the development of the NBSAP, a number of public awareness and education activities were conducted, including the development of a fact sheets and a brochure, a biodiversity video, media tours, and cartoon. Local consultations at the Parish level and national consultations were major components of the NBSAP development process. Cross-sectoral workshops were held with agriculture, social security, public utilities, mining and energy, marine and fisheries, tourism, the Ministry of Finance, and the Ministry of Foreign Affairs and Foreign Trade. Both these workshops and sector-specific reports

contributed to the development of the national biodiversity strategy. A National Biodiversity Secretariat was formed to support the implementation of the NBSAP and monitor progress. Over its one and a half years tenure, the Secretariat developed 15 projects, of which 6 were funded, and reviewed how to close gaps and challenges that were identified in the NBSAP. After reviewing implementation status and some challenges associated to different elements of the NBSAP, Ms. Donaldson outlined some on-going initiatives targeting mainstreaming. These include, but are not limited to, the establish of committees that share information between environment agencies and other sectors to ensure biodiversity issues are included in the relevant programmes and policies, increased collaboration in the review of legislation to ensure biodiversity considerations are included, and on-the-ground collaborations such as farmer training on biodiversity within the context of watershed management. Furthermore, Jamaica has developed inter-sectoral commissions and working groups with organizations and agencies that impact biodiversity (e.g. the Ocean and Coastal Zone Council with the Ministry of Finance and the Port Authority, and an Invasive Alien Species Working Group with the Port Authority, veterinary Services, and the Plant Quarantine Division. Finally, she presented a brief overview of two biodiversity funds: the forest conservation fund and a tourism enhancement fund.

Ms. Eva Thomlinson also presented the communication, education and public awareness (CEPA) related activities which have been conducted by various agencies and NGOs. Programs included: environmental education, lectures, seminars, posters, calendar, observance of the days and weeks related to environment, etc. Activities also focus on the International Day for Biological Diversity (IBD). However, there is currently no Focal Point for CEPA in Jamaica.

#### ***St Vincent and the Grenadines (Anthony Simon and Glenroy Gaymes)***

Inter-sectoral mainstreaming of biodiversity in St. Vincent and the Grenadines (SVG) is based on personal and informal relationships between agencies and employees rather than through established guidelines or defined roles and responsibilities. Work is underway to establish a centralized national database for natural resources, protected areas, and heritage sites management. This is designed to help agencies in accessing up-to-date information needed for effective decision-making. Two “willingness to pay” studies will be conducted to assess the willingness of tourists (international and regional), as well as residents, to pay to support effective management and conservation of parks and protected areas in St. Vincent and the Grenadines. In terms of implementation of the NBSAP, there is a need for increased public participation, education, and awareness. Additionally unsustainable development along coastal areas require integrated coastal zone management and the finalization of regulations on development that require EIAs. Increased attention also must be placed on the role of traditional knowledge. Some research on the impacts of climate change on the biodiversity of SVG is being undertaken.

#### ***Antigua and Barbuda (Mr. Orvin Paige)***

The first draft of the NBSAP was prepared in 2000. Multi-stakeholder consultations have been held for the purpose of incorporating feedback. A major threat to biodiversity is the lost of habitat due to the spread of housing, tourism, agriculture, and mining developments as well as sand dredging. Additional threats include fragmentation of natural communities, the introduction of non-native species, overgrazing, unregulated pollution and pesticide use, over-fishing, and impacts from natural disasters.

#### ***Cuba (Ms. Dalia Salabarría Fernández)***

The first NBSAP was published in 1999 and was elaborated on the basis of active multi-stakeholder participation, including workshops held at regional and national levels. The NBSAP was updated in 2005. The main objectives of Cuba’s NBSAP are: biodiversity conservation and sustainable use, social and economic developments and physical planning, environmental education and public awareness, biodiversity monitoring and assessment, institutional capacity building, and international cooperation. She also highlighted linkages to other strategies, including the National Environmental Strategy, the National Environmental Education Strategy, and the CITMA Communication Strategy. The CBD

voluntary guidelines for the review of NBSAPs (decision VII/8) were used. Some features of the NBSAP include a legal framework, an education strategy, a communications strategy, and economic instruments and incentives. All thematic areas of the CBD are being addressed by the NBSAP with the exception of Dry and Sub-humid Lands. All cross cutting issues are also being addressed with the exception of climate change and technology transfer. The NBSAP includes targets that are consistent with the framework for monitoring implementation of the Convention and achievement of the 2010 target. Some implementation results include, among other successes, (i) the identification of indicators for protected areas, (ii) elaboration of strategies for community seed banks supporting the conservation of local agricultural biodiversity, (iii) the establishment of criteria for sustainable forest management, (iv) courses on environmental law delivered via television, (v) courses for the business community, (vi) the release of educational material on traditional practices, (vii) the development of an environmental information network with NGOs, the Ministry of Education, and the Ministry of Public Health and Territories, (viii) the development of a tool box and manual for finance planning of protected areas, and (ix) the implementation of legal instruments for institutions that directly use biodiversity in order to ensure the preservation of biodiversity.

***Haiti (Mr. Joseph Ronald Toussaint)***

Mr. Joseph Ronald Toussaint informed participants that the process of NBSAP preparation was stopped due to funding constraints and political instability. The process was therefore never completed and currently only an outline exists. The main features of the NBSAP outline include the conservation and sustainable use of biodiversity, education, identification and monitoring, control of invasive alien species, and a legal regulatory and institutional framework. Biodiversity activities and strategies in Haiti must be correlated with poverty alleviation measures, and for this reason it is being considered in the Anti Poverty Strategy Paper Policy. Additionally, biodiversity is considered in the draft Integrated Coastal and Watersheds Management Plan as well as the National Environmental Action Plan. The development of alternative fuels to relieve pressure on remaining forests is extremely important. Additionally, linking the future NBSAP to decentralization processes will enable civil society and territorial bodies to manage biodiversity at regional and local levels. Even without the formal NBSAP, activities are being implemented, such as the creation of a National Agency of Protected Areas and Forest, and a National Environmental and Vulnerability Observatory. Technical and financial assistance will be essential to achieve the NBSAP process. Moreover, CEPA strategies will be very important, not only for building awareness of the economic value of biodiversity, but also for galvanizing community involvement. Lack of commitment to biodiversity conservation among NGOs working in Haiti is a challenge. The NBSAP will need to integrate the linkages between biodiversity, climate change, and natural disasters as well as incorporate post 2010 targets.

*Annex II*

**PROGRAMME OF WORK**

\*Note: Sessions marked with an asterisk will be held jointly with the Workshop on Communication Education and Public Awareness and Media Awareness

<b>MONDAY, 3 NOVEMBER</b>	
0900 – 0945*	<p><b><i>Item 1: Opening of the workshop</i></b></p> <ul style="list-style-type: none"> <li>• Welcoming remarks on behalf of host organizations (Winston Rudder, Cropper Foundation)</li> <li>• Opening remarks on behalf of the Secretariat of the Caribbean Community (CARICOM) (Donna McRae-Smith)</li> <li>• Opening remarks on behalf of the Executive Secretary of the Convention on Biological Diversity (David Cooper)</li> <li>• Opening address by the Minister of Planning, Housing and the Environment, Government of Trinidad and Tobago (Senator Hon. Dr. Emily Gaynor Dick-Forde)</li> </ul>
0945 – 1030*	<i>Coffee and Group Photo (Parallel Press Conference)</i>
1030 – 1130*	<p><b><i>Item 2: Overview of the objectives and programme for the workshops</i></b></p> <ul style="list-style-type: none"> <li>• Introduction and expectations of the participants (Nicole Leotaud, CANARI)</li> <li>• Introduction to the Workshops (David Cooper and David Ainsworth)</li> </ul> <p>Plenary Discussion</p>
1130 – 1230*	<p><b><i>Item 3: Status of the development, implementation and updating of National Biodiversity Strategies and Action Plans, the mainstreaming of biodiversity and the integration of climate change in NBSAPs in the region</i></b></p> <p>Country presentations:</p> <ul style="list-style-type: none"> <li>• Suriname (Ms. Ninotchka Tjin Kong Foek)</li> <li>• Guyana (Ms. Dominique Saheed)</li> <li>• Trinidad and Tobago</li> </ul> <p>Discussion and Group Exercises: Identification of good practices and obstacles to implementation</p>
1230 – 1330*	<i>Lunch</i>
1330 – 1515*	<p>Country presentations (continued):</p> <ul style="list-style-type: none"> <li>• Grenada</li> <li>• St Vincent and the Grenadines (Anthony Simon)</li> <li>• St Lucia (Ms. Anita James)</li> <li>• Barbados</li> </ul> <p>Discussion and Group Exercises: Identification of good practices and obstacles to implementation</p>
1515 – 1545*	<i>Tea</i>
1545 – 1730*	<p>Country presentations (continued):</p> <ul style="list-style-type: none"> <li>• Dominica (Bradley Guy)</li> </ul>

	<ul style="list-style-type: none"> <li>• St. Kitts and Nevis (Ashton Stanley)</li> <li>• Antigua and Barbuda (Orvin Paige)</li> <li>• Bahamas (Ms. Stacy Lubin-Gray)</li> </ul> <p>Discussion and Group Exercises: Identification of good practices and obstacles to implementation</p>
1830 1930*	– <i>Reception (courtesy of the Government of Trinidad and Tobago)</i>

<b>TUESDAY, 4 NOVEMBER</b>	
0830 0845*	– “Catch of the day”: Recap of the first day
0845 1030*	– Country presentations (continued): <ul style="list-style-type: none"> <li>• Jamaica (Ms. Andrea Donaldson)</li> <li>• Haiti (Mr. Joseph Ronald Toussaint)</li> <li>• Belize (Mr. Saul Cruz)</li> <li>• Cuba (Ms. Dalia Salabarría Fernández)</li> </ul> <p>Discussion and Group Exercises: Identification of good practices and obstacles to implementation</p>
1030 1100*	– <i>Coffee</i>
1100 1230*	– <b><i>Item 4: Tools for enhancing NBSAP implementation and integrating biodiversity into sectoral and cross-sectoral plans, programmes and policies and local planning processes</i></b> Brief Introductory presentations: <ul style="list-style-type: none"> <li>• Mainstreaming – the challenge (Nicole Leotaud and David Cooper)</li> <li>• Strategic communication for NBSAPs (Frits Hesselink, CEC, &amp; David Ainsworth)</li> </ul> <p>Exercise: Mainstreaming &amp; communication challenges</p>
1230 1330*	– <i>Lunch</i>
1330 – 1515	<p><b><i>Item 4, continued:</i></b> The Ecosystem Approach and Ecosystem Assessment</p> <ul style="list-style-type: none"> <li>• Introduction to the ecosystem approach (David Cooper)</li> <li>• Ecosystem Assessment: The Caribbean Sea Assessment (CARSEA) and the Trinidad Northern Ranges Assessment (John Agard &amp; Keisha Garcia)</li> </ul> <p>Discussion and Group Exercises</p>
	<p><b><u>Parallel Workshop on Communication, Education and Public Awareness</u></b></p> <p><b>Reporting on Biodiversity: Considerations for improved media relations</b></p> <ul style="list-style-type: none"> <li>• Presentation on framing environmental stories (representative of Panos Caribbean)</li> </ul> <p>Group discussion on environmental reporting.</p>
1515 1545*	– <i>Tea</i>
1545 – 1645	<p>Regional and Sectoral Perspectives on mainstreaming:</p>
	<p><b>Reporting on Biodiversity: considerations for improved media</b></p>

	<ul style="list-style-type: none"> <li>• Biodiversity, marine resources and climate change (Donna McRae-Smith, CARICOM)</li> <li>• Fisheries (Bisessar Chakalall, FAO)</li> <li>• Payment for Ecosystem Services (Richard Huber, OAS)</li> <li>• Tools and methods for mainstreaming (Sarah McIntosh, CANARI)</li> </ul> <p>Discussion and Group Exercises</p>	<p><b>relations (Continued)</b></p> <p>Group exercise on framing of environmental stories</p>
1645 – 1730*	Introduction to field study visit (John Agard and Mary Schorse)	
1830 – 1930*	Presentation and Performance by an applied drama group (Arts in Action)	

<b>WEDNESDAY, 5 NOVEMBER</b>	
0730*	Depart for Field Study Visit
All day*	<p>Field Study Visit (led by Mary Schorse)</p> <ul style="list-style-type: none"> <li>• Travel via southern flank of Northern Ranges</li> <li>• Visit to Plum Mitan &amp; Kernaham, communities of Nariva Swamp; Group exercises; Lunch</li> <li>• Visit to Manatee Conservation Trust; Presentations on challenges of managing forestry, fisheries and wildlife in the area.</li> <li>• Return to Port of Spain</li> </ul>

<b>THURSDAY, 6 NOVEMBER</b>			
0830 – 0900	“Catch of the day”: Recap of the second and third days		
0900 – 1030	<table border="0" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> <p><b><i>Item 5: Integrating Climate Change into National Biodiversity Strategies and Action Plans</i></b></p> <p>Introductory presentations:</p> <ul style="list-style-type: none"> <li>• Introduction (Annie Cung)</li> <li>• Climate change and biodiversity in the Caribbean: the knowns and unknowns (Sarah McIntosh)</li> <li>• Adaptive Management (Winston Bennett)</li> </ul> </td> <td style="width: 50%; vertical-align: top;"> <p><b><i>Parallel Workshop on Communication, Education and Public Awareness</i></b></p> <p><b><i>Communicating Biodiversity:</i></b> Discussions from field visit</p> <ul style="list-style-type: none"> <li>• Group Discussion on lessons learned from field visit.</li> </ul> <p><b><i>Capacity for CEPA:</i></b> Evaluating capacity and overcoming gaps</p> <ul style="list-style-type: none"> <li>• -Group exercise to make a capacity assessment for CEPA</li> </ul> </td> </tr> </table>	<p><b><i>Item 5: Integrating Climate Change into National Biodiversity Strategies and Action Plans</i></b></p> <p>Introductory presentations:</p> <ul style="list-style-type: none"> <li>• Introduction (Annie Cung)</li> <li>• Climate change and biodiversity in the Caribbean: the knowns and unknowns (Sarah McIntosh)</li> <li>• Adaptive Management (Winston Bennett)</li> </ul>	<p><b><i>Parallel Workshop on Communication, Education and Public Awareness</i></b></p> <p><b><i>Communicating Biodiversity:</i></b> Discussions from field visit</p> <ul style="list-style-type: none"> <li>• Group Discussion on lessons learned from field visit.</li> </ul> <p><b><i>Capacity for CEPA:</i></b> Evaluating capacity and overcoming gaps</p> <ul style="list-style-type: none"> <li>• -Group exercise to make a capacity assessment for CEPA</li> </ul>
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1030 – 1100	<i>Coffee</i>		
1100 – 1230	<table border="0" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> <p>Integrating Climate Change into NBSAPs – In-depth discussion and group exercise:</p> <p>Assessing vulnerability of biodiversity, ecosystem services and related livelihoods to climate change and response options (led by Sarah McIntosh, Winston Bennett &amp; Donna</p> </td> <td style="width: 50%; vertical-align: top;"> <p><b><i>Mainstreaming Biodiversity into Education:</i></b></p> <ul style="list-style-type: none"> <li>• Presentation on issues in Mainstreaming Biodiversity into Education (David Ainsworth/Frits Hesselink)</li> </ul> </td> </tr> </table>	<p>Integrating Climate Change into NBSAPs – In-depth discussion and group exercise:</p> <p>Assessing vulnerability of biodiversity, ecosystem services and related livelihoods to climate change and response options (led by Sarah McIntosh, Winston Bennett &amp; Donna</p>	<p><b><i>Mainstreaming Biodiversity into Education:</i></b></p> <ul style="list-style-type: none"> <li>• Presentation on issues in Mainstreaming Biodiversity into Education (David Ainsworth/Frits Hesselink)</li> </ul>
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	McRae-Smith)	<ul style="list-style-type: none"> <li>• Group exercise on strategies to engage educational ministries</li> </ul>
1230 – 1330	<i>Lunch</i>	
1330 – 1500	Integrating Climate Change into NBSAPs – In-depth discussion and group exercise: Adaptive Management (led by Sarah McIntosh , Winston Bennett & Donna McRae-Smith)	<p><b><i>Building national strategies for the International Year for Biodiversity (IYB):</i></b></p> <ul style="list-style-type: none"> <li>• Presentation on the IYB (David Ainsworth)</li> <li>• Group exercise on building national strategies</li> </ul>
1500 – 1530	<i>Tea</i>	
1530 – 1730	General discussion on updating and improving NBSAPs and integrating climate change; preparation of main conclusions of the workshop (led by Nicole Leotaud, Keisha Garcia & David Cooper)	<b><i>Wrap-up discussion &amp; conclusions</i></b> (to 1630)

<b>FRIDAY, 7 NOVEMBER</b>	
0830 – 0845	“Catch of the day”: Recap of the fourth day
0845 – 1030	<p><b><i>Item 6: Preparation of the Fourth National Reports</i></b></p> <ul style="list-style-type: none"> <li>• Introductory Presentation (David Cooper)</li> <li>• Preparation of the Fourth National Reports (Ms. Dalia Salabarría Fernández and other country examples)</li> <li>• The Clearing-House Mechanism (to be identified)</li> <li>• Preparation of NBSAP Posters (David Cooper)</li> </ul> <p>Discussion.</p>
1030 – 1100	<i>Coffee &amp; snacks</i>
1100 – 1400	<p><b><i>Item 7: The way forward: discussion on next steps in implementing and updating NBSAPs, mainstreaming of biodiversity and integration of climate change</i></b></p> <ul style="list-style-type: none"> <li>• The road to COP-10 and the International Year of Biodiversity (David Cooper)</li> <li>• Panel Discussion and consideration of open questions concerning the implementation and updating of NBSAPs (led by Keisha Garcia and Nicole Leotaud)</li> </ul>
	<b><i>Item 8: Consideration of the Conclusions of the Workshop</i></b> <i>Evaluation of the Workshop</i>
	<b><i>Item 9: Closing of the Workshop</i></b>

*Annex III*

**CONCLUSIONS OF WORKSHOP ON CAPACITY-DEVELOPMENT FOR THE CARIBBEAN REGION ON COMMUNICATION, EDUCATION, AND PUBLIC AWARENESS AND MEDIA RELATIONS**

***International Year of Biodiversity:***

IYB Goals are:

- Enhance public awareness of the importance of biodiversity.
- Raise awareness of the accomplishments to save biodiversity and promote the most innovative of solutions.
- Call upon individuals to take the steps needed to halt the loss.
- Start the dialogue among stakeholders for the steps in the post 2010 period.

The Secretariat is the focal point and will create branding, global messages, and will organise events at the international level such as a launch and events at IBD, SBSTTA, UNGA and COP.

National Governments have the primary responsibility, including creation of national committees to create national strategies, development of national messages, and organization of IYB events.

- Make these committees representative, but balance with need for efficiency.
- Organise events over the course of the year, including a launch at the beginning of the year for IBD in May, link with a high level segment at UNGA in September, and/or COP in October.
- Set a baseline of attitudes in 2009.

Link Awareness events with policy goals – implementation of the Convention in the post-2010 period, and setting plans and priorities post 2010.

- National reports
- NBSAPs
- Policy tables on
- Involve different stakeholders in the process.

GBO3 is a key part of IYB. It will highlight success stories and the evidence base for the future of the Convention.

***Strategic Communications:***

*Preconditions for transformational change are:*

- Sufficient dissatisfaction
- Clear and agreed goals
- Belief change is possible
- Awareness first steps
- Contact and support

*The role of strategic communication in mainstreaming biodiversity is:*

- Creating a shared need

- Shaping a vision
- Mobilising commitment
- Making change last
- Monitoring and learning.

*Basic principles of strategic communication to support the change process are:*

- Provide enough time to establish mutual trust and personal relationships.
- Segment the audience and explore what new knowledge, attitudes or skills they need.
- Deliver simple and personal messages in the language of the target group.
- Understand the psychology of resistance to change.
- Be positive, use 'we'-messages, not 'I'-messages.
- Use participatory approaches that guarantee meaningful involvement.
- Use credible intermediaries to send messages to decision makers
- Start with pioneers and small steps, like you do when introducing an innovation.
- Understand that communication is part of the instrument-mix of 'stick-carrot-drum'.

#### ***Media Relations:***

- Representatives from media appreciated the opportunity the workshop provided to learn about biodiversity issues, in particular the relationship with human beings and moving away from species concept.
- Those working on implementing activities related to the CBD should understand that media has specific deadlines and particularities. (work with your communications team for these)
  - Media needs access to experts who can speak to them. Make sure that you have identified people who can speak on topics and that they are able to speak directly.
  - Be sensitive to the work needs of the media.
    - Be ready to respond quickly if the story is timely.
    - Don't hound them when they are on deadline.
    - Plan for their needs with regard to press conferences and provide opportunities for photos, one on one interviews, etc.
    - Have ready made graphics and fact boxes.
  - Be transparent, and do not say that you are providing an exclusive if you send to a lot of agencies.
  - Understand that media is a business and responds to a changing panorama of stories. Depending on the news day, your stories may or may not be top of the list.
- Some interesting stories may have a longer shelf life. Do not be afraid to provide these to the media, but understand that they may not appear immediately.

*Annex IV*  
**LIST OF DOCUMENTS**

<b>Document Number</b>	<b>Document Title</b>
UNEP/CBD/NBSAP/CBW-CAR/1	Provisional agenda
UNEP/CBD/NBSAP/CBW-CAR/1/1/Add.1	Annotations to the Provisional Agenda
UNEP/CBD/NBSAP/CBW-CAR/1/2	Status and Implementation of National Biodiversity Strategies and Action Plans
UNEP/CBD/NBSAP/CBW-CAR/1/3	Updating NBSAPs, mainstreaming biodiversity, Communication and Reporting
UNEP/CBD/NBSAP/CBW-CAR/1/4	Compilation of Case-Studies on the Mainstreaming of Biodiversity and Integration of Climate Change in the Caribbean Region
UNEP/CBD/NBSAP/CBW-CAR/1/5	Fact Sheet on Climate Change and Biodiversity in the Caribbean Region
<b>Information and background documents (Previously available)</b>	
Decision IX/8	Review of Implementation of Goals 2 and 3 of the Strategic Plan

**BACKGROUND MATERIALS:**

- Global Biodiversity Outlook-2 (available at: <http://www.cbd.int/gbo2/>)
- Caribbean Sea Ecosystem Assessment, Executive Summary (available at: <http://www.thecropperfoundation.org/carsea.htm>)
- Millennium Ecosystem Assessment, Ecosystems and Human Well-Being: Biodiversity Synthesis (available at: <http://www.millenniumassessment.org/en/synthesis.aspx>)
- The Agenda for Action - Short list of Priority Activities for the Programme of Work for CEPA (available at: <http://www.cbd.int/doc/meetings/cop/cop-09/information/cop-09-inf-03-en.doc> )
- Draft report of the workshop on Biodiversity and Education (available at: <http://www.cbd.int/doc/meetings/cop/cop-09/information/cop-09-inf-23-en.doc> )
- International Year of Biodiversity - Action Plan (available at: <http://www.cbd.int/doc/?meeting=CEPACBW-CAR-01>)
- CEPA Toolkit (available at: <http://www.cbd.int/cepa/toolkit/2008/cepa/index.htm> )

**CBD Training modules (English Only): available at: <http://www.cbd.int/nbsap/training/>**

- A-1. Guide to the Convention on Biological Diversity
- A-2. Role of the CBD National Focal Point
- A-3. An Introduction to National Reporting
- B-1. An Introduction to National Biodiversity Strategies and Action Plans
- B-2. How to prepare and update a National Biodiversity Strategy and Action Plan
- B-3. Mainstreaming biodiversity into sectoral and cross-sectoral strategies, plans and programmes
- B-4. Setting national biodiversity targets, making use of the CBD framework for the 2010 biodiversity target
- B-5. Ensuring stakeholder engagement in the development, implementation and updating of NBSAPs
- B-6. Getting political support for the NBSAP and financing its implementation
- B-7. Communication Strategy for NBSAPs

**Other Resources:**

- Fourth National Reports Information Portal: <http://www.cbd.int/nr4/>