

FINAL REPORT

NATIONAL CAPACITY SELF ASSESSMENT (NCSA) REPORT

Prepared for National Environment
and Planning Agency The National Capacity
Self Assessment Project (NCSA) - Jamaica
10 Caledonia Avenue
Kingston 5 Jamaica, W.I.



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**National Environment and Planning Agency
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LIST OF ACRONYMS

ACCC	Adapting to Climate Change in the Caribbean
BCH	Biosafety Clearing House
CBD	Convention on Biological Diversity
CBOs	Community Based Organisations
CDM	Clean Development Mechanism
CHM	Clearing House Mechanism
CIDA	Canadian International Development Agency
CNA	Competent National Authority
COP	Conference of the Parties
COP-MOP	Conference of the Parties to the Convention on Biological Diversity (CBD) serving as the meeting of the Parties to the Cartagena Protocol on Biosafety
CPACC	Caribbean: Planning For Adaptation To Climate Change
CSGM	Climate Change Studies Group Mona
CWIP	Coastal Water Quality Improvement Project
ENACT	Environmental Action Programme
EU	European Union
GEF	Global Environment Facility
GOJ	Government of Jamaica
IDB	Inter-American Development Bank
IOJ	Institute of Jamaica
JaNEAP	Jamaica National Environmental Action Plan
LMOs	Living Modified Organisms
MACC	Mainstreaming Adaptation for Climate Change
MFAFT	Ministry of Foreign Affairs and Foreign Trade
MLE	Ministry of Land and Environment
MPAs	Marine Protected Areas
MS	Meteorological Services
MSP	Medium Sized Project
NAP	National Action Plan

NBSAP	National Biodiversity Strategy and Action Plan
NCCC	National Communication on Climate Change
NCSA	National Capacity Self Assessment
NCST	National Commission on Science and Technology
NEPA	National Environment and Planning Agency
NFP	National Focal Point
NGOs	Non Government Organisations
NISP	National Implementation Support Partnership
NHD/IOJ	Natural History Division/Institute of Jamaica
NOAA	National Oceanic and Atmospheric Administration
NRCA	Natural Resources Conservation Authority
PDF-A	Project Development Facility Block A
PIOJ	Planning Institute of Jamaica
PMU	Project Management Unit
PSC	Project Steering Committee
R2RW	Ridge to Reef Watershed Project
RADA	Rural Agricultural Development Authority
RAMSAR	Ramsar Convention on Wetlands
SIDs	Small Island Developing States
SML	Sustainable Land Management
TNC	The Nature Conservancy
TORs	Terms of Reference
UNCCD	United Nations Convention to Combat Desertification
UNDP	United Nations Development Programme
UNEP	United Nations Environmental Programme
UNFCCC	United Nations Framework Convention on Climate Change
USAID	United States Agency for International Development
USDA	US Department of Agriculture
UWI	University of the West Indies
WRA	Water Resources Authority

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We also wish to extend our appreciation to the many organisations and individuals who participated in the consultations. Their contributions were invaluable to the NCSA process.

Special thanks go to Mrs. Winsome Townsend, Director Strategic Planning Policy and Projects Division (NEPA) and chair of PSC, Miss Keina Montaque, Project Assistant (NCSA) and the Conventions Focal Points for their support.

Funding for the NCSA was provided by the Government of Jamaica, United Nations Development Programme and the Global Environment Facility.

1. INTRODUCTION AND BACKGROUND

In January 2000, the Global Environment Facility (GEF) and the United Nations Development Programme (UNDP) launched the Capacity Development Initiative, to identify priority issues and capacity development needs in a number of regions and countries. The capacity development initiative is intended to further assist countries to comply with the various obligations, under the three “Rio” Conventions separately, namely, the Convention on Biological Diversity (CBD), the United Nations Convention to Combat Desertification (UNCCD), and the United Nations Framework Convention on Climate Change (UNFCCC). Their implementation remains a major challenge for developing countries, particularly small island developing states (SIDS). Some findings were:

- capacity development needs at the overall systems levels;
- **the existence of synergies across Conventions in terms of capacity needs;** and
- the need for programmatic approaches to capacity development that are nationally driven and reflect country priorities.

As a result of the findings, in May 2001, the GEF approved the provision of funding for countries to undertake self assessment capacity building needs, with emphasis on cross-convention synergies in capacity building activities.

Jamaica as a party to each of these Conventions and has found it very challenging to implement the various decisions, programmes and or recommendations of these Conventions. The country had not yet examined its capacity needs across the three “Rio” Conventions and hence the National Capacity Self Assessment Project (NCSA) provided Jamaica with the opportunity to *“conduct a thorough self-assessment and analysis of national capacity needs, priorities and constraints with respect to meeting global environmental management objectives”*.

Several programs for capacity building in government and non-governmental organizations have been carried out in Jamaica since the Rio Summit, including projects supported by United Nations Development Programme (UNDP), United States Agency for International Development (USAID), Inter-American Development Bank (IDB), Canadian International Development Agency (CIDA), and the Commonwealth Secretariat. However, while these programs have contributed to developing capacity in specific areas of the environmental sector, none have been focused directly on capacity issues related to implementation of the three conventions, nor have any been designed to look at cross-cutting issues between the conventions. In addition, while numerous programs have examined individual and institutional capacity issues, none have assessed systemic capacity issues in Jamaica.

The NCSA process provided Jamaica with the opportunity to conduct a thorough self-assessment and analysis of national capacity needs, priorities and constraints to meet global environmental management objectives as set out in the Rio conventions and related international instruments. The process facilitated a cross-sectoral process of consultations, stocktaking, assessments, sequencing, and prioritization of capacity needs, particularly for identifying obstacles that impede the country from fully meeting its obligations under the Rio Conventions.

The project officially began in March 2004 and was expected to be completed over 15 a fifteen month period, ending date being June 30, 2005, however, this was extended to September 30, 2005. The official launch took place on June 30, 2004 by the Minister of Land and Environment, the Hon. Dean Peart. The list of attendees can be found in Appendix I.

The specific objectives to be accomplished through the project implementation are *inter alia*:

- identify, confirm and review priority issues for action within the thematic areas of Biodiversity, Climate Change and Desertification;
- explore related capacity needs within and across the three thematic areas;
- elaborate a national action plan that focuses on capacity building to address the global environmental commitments;
- provide a solid basis for the preparation of requests for future external funding and assistance;
- link country action to the broader national environmental management and sustainable development framework; and
- monitor and evaluate the implementation of the action plan as part of a process of continuous improvement.

The project was expected to produce the following outputs:

- build national capacity to take issues related to the three Conventions into account in general planning and strategy formulation;
- find ways to coordinate and harmonize overlapping activities among the three Conventions and to help to ensure effective national measures to protect the global environment;

- prepare a comprehensive national action plan focused on capacity building that will identify overall goals, specific objectives to be achieved, and courses of action;
- identify follow-up projects;
- support the transition from this enabling activity to the actual implementation of identified follow up measures addressing loss in biodiversity, losses in soil fertility and climate change;
- enhance general domestic awareness and knowledge about the three Conventions and their inter-relationship; and
- strengthen dialogue, information exchange and cooperation among all relevant stakeholders including governmental, non-governmental, academic and private sectors.

Appendix II contains a list of the reports produced from the project.

The National Action Plan details the short, medium and long term activities which should be undertaken to address the findings and recommendations of the NCSA. The Plan includes a number of project concepts,/notes which will need to be further developed in Phase II in order to obtain the required financial support for their execution. At the conclusion of the project a total of US one million dollars is available to begin to address some of the issues identified.

2. PROJECT INSTITUTIONAL ARRANGEMENTS

The National Environment and Planning Agency was the executing agency, the UNDP being the Implementing Agency.

2.1 The Project Management Unit

The Project Management Unit (PMU) was housed within the Strategic Planning: Policies and Projects Division of the National Environment and Planning Agency, (NEPA). Overall guidance on the execution of the project was provided by the Director of this unit. The PMU was staffed by a Project Manager (who also served as the Lead Consultant), a Natural Resource Management Specialist, and a Project Assistant.)

2.2 The Team

An early activity of the project was the contacting of persons to carry out the various tasks necessary to execute the project.

The team was comprised of:

- | | | |
|-----|--|---|
| (a) | Project Manager/Lead Consultant | <i>Ms Denise Forrest</i> |
| (b) | Natural Resource Management Specialist (Environmental Specialist) also Thematic Consultant, Biodiversity | <i>Dr. Elaine Fisher</i> |
| (c) | Project Assistant | <i>Ms. Keina Montaque</i> |
| (d) | Thematic Consultant – Land Degradation | <i>Ms. Marjorie Stair</i> |
| (e) | Thematic Consultant –Climate Change | <i>Mr. Clifford Malung</i> |
| (f) | Policy and Legal Consultants | <i>Mr. Hugh Hyman & Ms Rainee Oliphant</i> |
| (g) | Public Awareness and Education Specialists | <i>Mrs. Penelope Budhall & Mr. Aldin Bellinfantie</i> |

The National Focal Points for each Convention, technical experts, NGOs and CBOs, working on the implementation of the Conventions supported the work of the consultants.

2.3 The Project Steering Committee

A Project Steering Committee (PSC) was established with a balanced representation from key government ministries, academic institutions, and environmental non governmental organizations (NGOs) and community based organizations (CBOs). Its role was and is technical guidance to the execution of the project (first fifteen months) and support the respective Focal Points during the monitoring of the implementation of the Action Plan. The PSC has a total membership of twenty two persons from eighteen organizations whose work is related to the three conventions and sustainable development issues. The Committee has been chaired by Mrs. Winsome Townsend, Director of the Strategic Planning: Policies and Projects Division of NEPA. Its inaugural meeting was held on May 6th, 2004. The life of the PSC is expected to be twenty seven (27) months in the first instance. The Terms of Reference and the composition of the PSC can be seen in Appendices III and IV respectively.

2.4 Political Oversight Committee

The Natural Resources Sub Committee of the cabinet was identified to provide political oversight to the NCSA Project. A Cabinet note was sent through the Ministry of Land and Environment (MLE) to ensure that the Committee was kept abreast of the project.

3. PROCESS

Phase I of the NCSA process was conducted over 18 months, during which a number of activities including focus group discussions workshops, interviews and surveys were undertaken.

The process of conducting the NCSA was based on the following principles to ensure that it had wide-spread support:

- ensuring national ownership, leadership and policy commitment;
- utilising existing coordinating mechanisms and structures where appropriate;
- making use of provisions and obligations of the conventions;
- promoting comprehensive participation;
- adopting a holistic approach to capacity building; and
- adopting a long-term approach to capacity building within the broader sustainable development context.

Phase I was completed at the end of September 2005 and monitoring of the implementation of the Action Plan (Phase II) will take place over 12 months.

3.1 Approach to assessment

The project took into consideration policies, national reports to the three Convention and the various relevant environmental related initiatives/projects that have been carried out not only by the government but also by international aid agencies, CBOs and local NGOs. For example, analyses of the National Strategy and Action Plan for Biological Diversity, the National Communication on Climate Change (NCCC), and National Reports to the UNCCD formed an important part of the assessment.

A stocktaking exercise provided a baseline situation for each of the thematic areas of the three Conventions: biodiversity, climate change, desertification/land degradation; and formed the basis of the thematic assessments to follow. This was followed by thematic assessments of the three Conventions in which capacity constraints for priority areas were identified for each thematic area. With the input of the various stakeholders, priority areas for action were identified. These are reflected in the Action Plan.

3.2 Workshops

Throughout the processes consultations were held with the various stakeholders by way of Workshops or Focus Group meetings. Also there were presentations to the PSC of the findings during the executing phase of the project. A list of the Workshops and Focus Group meetings and the participants can be found in Appendix V.

4. FINDINGS

4.1 Thematic Assessments

4.1.1 Convention on Biological Biodiversity

Background

The Convention on Biological Diversity (CBD) is one of the so called three “Rio Conventions” which opened for signature on June 5, 1992 at the United Nations Conference on Environment and Development, held in Rio de Janeiro, Brazil. Jamaica was one of the many countries which signed the Convention at that time, indicating its commitment to the Convention’s objectives. The Convention entered into force in December 1993 and Jamaica ratified it in January 1995. Currently there are 188 Parties to the Convention and 108 to its Cartagena Protocol on Biosafety.

Purpose

The National Capacity Self-Assessment within the thematic area of Biodiversity sought to review Jamaica’s implementation of the CBD with a view to identifying priority areas for action to facilitate better implementation. In an earlier phase of the project a stocktaking exercise was conducted, providing a “baseline situation” of the country’s implementation of the Convention¹. Information was gathered from *inter alia*, the two National Reports, the National Biodiversity Strategy and Action Plan, (NBSAP), and existing capacity building related projects, such as the Ridge to Reef Watershed Project (R2RW), and the Environmental Action Programme (ENACT).

The objectives of the thematic profile are to identify:

- priority issues;
- capacity constraints for these issues at various levels (systemic, institutional and individual); and
- opportunities for capacity building to address the identified constraints.

National Implementation of the Convention

Since the entry into force of the Convention, the Conference of the Parties (COP) has held 7 meetings and adopted approximately 176 decisions on a number of thematic areas and cross-cutting issues related to implementation of the Articles of the Convention. Detailed work programmes have been developed for the seven thematic areas and periodic reviews of their implementation are provided for by the COP. The cross cutting issues relate to the Convention’s provisions in Articles 6-19. In addition to implementing the decisions relating to the various thematic areas and cross-cutting issues,

¹Draft Stocktaking Report prepared for the National Capacity Self Assessment Project (NCSA/UNDP/GEF/GOJ), June 2004.

Parties are obligated to submit national reports and develop National Biodiversity Strategies and Action Plans.

Since ratifying the Convention in 1995, Jamaica has implemented a number of the Convention's decisions. These include:

- submission of its first (interim report) and second National Reports to the CBD Secretariat;
- establishment of the National Clearing House Mechanism with connections to CBD Central Portal;
- establishment of an Alien Invasive Species Working Group;
- completion and distribution of a National Biodiversity Strategy and Action; and
- establishment of a "National Implementation Support Partnership" (primarily with the Nature Conservancy), to better implement the programme of work on protected areas.

The first National Report is a rather brief report which contains a number of CBD related activities taken from the first Jamaica National Environmental Plan (JaNEAP) which was prepared in 1995. The second National Report is a comprehensive report prepared in the required CBD format. A review of this report shows that while there has been some implementation for almost all of the Convention's substantive articles, (Articles 5-19), the degree of implementation has not been significant for most articles, with adequacy of resources being described as "severely limiting" for the majority of articles.

Recognising the broad scope of the Convention and the need for a "focused approach" for effective implementation, the COP adopted a Strategic Plan at its sixth meeting. Goal 3 of the plan places emphasis on the development of National Biodiversity Strategies and Action Plans, (NBSAPs), the integration of biodiversity concerns into relevant sectors, and active implementation of identified priorities in the NBSAPs as an effective framework for the implementation of the objectives of the Convention.

Jamaica's NBSAP, the *National Strategy and Action Plan on Biological Diversity in Jamaica*, was developed under the guidance of a multi-sectoral National Biodiversity Steering Committee with funding from the Global Environment Facility (GEF). It was implemented by United Nations Development Programme (UNDP) and executed by the National Environment Planning Agency (NEPA), and completed in July 2003. Its contents include:

- an assessment of Jamaica's Biodiversity;
- legal and policy framework for the conservation and sustainable use of biodiversity;
- the major gaps and challenges affecting the conservation and sustainable use of Jamaica's biodiversity;
- a national biodiversity strategy with defined goals; and
- an Action Plan in which there is a list of 37 suggested projects which relate to the goals outlined in the Strategy.

Priority issues have already been identified at the national level as the projects concepts have been ranked, 8 as highest priority and 10 as priority.

Implementation of the National Biodiversity Strategy and Action

In March 2003, the first of the highest priority project concepts was partially implemented, that is, the establishment of a National Biodiversity Secretariat, “as a supporting mechanism to implement and Monitor the NBSAP”. This was established at NEPA, within its Biodiversity Branch and funded by the NRCA. However, while the project concept called for a supporting mechanism for the duration of 3 years and a staff complement of 5, due to limited availability of funds, the Secretariat was established for a period of one year initially (which was later extended by the NRCA Board for an additional 6 months), and the staff complement was 2. During its period of existence, the Secretariat staff developed 12 project proposals from 7 of the of the project concepts of the action plan. Three are ranked priority, 4 highest priority and 2 other. (Some of the projects concepts were broken down into smaller projects). These proposals are in varying stages of preparation and some have already been submitted to various funding agencies and are awaiting responses. Part funding has been obtained for one project: the Expansion of the Clearing House Mechanism the focal point of which is the Natural History Department of the Institute of Jamaica (NHD/IOJ).

Also established, in keeping with project concept 1, was a Biodiversity Committee, a committee of the NRCA. The terms of reference (TORs) include *inter alia*: the monitoring of the implementation of the NBSAP in Jamaica and to evaluate and advise on the NBSAP.

The output of the Secretariat shows limited success in the implementation of the Action Plan. It is difficult to determine the reason(s) for the perceived low success rate of the Secretariat as there may be number factors involved which include:

- too early to assess the performance of the Secretariat as funding of projects can take 1-2 years and sometimes 3 years ; and
- inadequate staffing of the Secretariat - (the full staff complement was not in place).

If the Secretariat is to be re-established, these factors would have to be examined and addressed.

A review of a table prepared by the Secretariat on the status of the major gaps and challenges affecting the conservation and sustainable use of biological diversity as identified in the NBSAP, gives an alternate picture of its implementation. Of the 86 gaps and challenges identified, no action has been taken in 20 areas, in 14 areas no information was available and in many areas issues were only partially addressed. Many of these projects/activities can be viewed only as interventions as they do not address some of the challenges/gaps at the systemic level and others are pilot projects in selected parts of the island. In the area of national legislation a number of constraints have been identified. Most, if not all of these are expected to be addressed in the proposed NEPA Act which is still being developed. However, Regulations will have to be developed to implement the Act in these areas.

There have been a number of biodiversity related initiatives which have contributed in some measure towards implementation of the Convention in areas such as: Public Education and Awareness (Article 13), and Impact Assessment and Minimizing adverse impacts (Article 14). These include the Jamaica Coastal Water Quality Improvement Project (CWIP), Jamaica Ridge to Reef Watershed (R2RW) Project 2000-2005 the Environmental Action (ENACT) Programme. A more recent initiative which is intended to support a number of protected-areas-related projects identified in the NBSAP, is the National Implementation Support Partnership (NISP), a collaborative Partnership agreement with the Government of Jamaica, and the Nature Conservancy, the Jamaica Conservation Development Trust and Heritage Design, (an enterprise unit of the USDA).

Capacity Constraints

An assessment of the implementing Agency (NEPA) and partner institutions including the National Focal Point² showed that there was widespread awareness of the CBD and the NBSAP within the implementing agency and its partners. There is also a fair amount of institutionalisation of the CBD within these agencies; however, there was clear need in all agencies for human and financial resources to adequately implement the Convention.

Another concern cited by the national focal point is the perception that biodiversity issues per se, are not given high national priority, as the link with poverty reduction or development is not readily appreciated or understood at the national level.

In reviewing the implementation of the NBSAP capacity issues included:

- lack of human and financial resources
- insufficient biological information on flora and fauna
- insufficient coordination among and within the relevant agencies
- lack of appropriate skills in project writing;
- insufficient cooperation from partners in developing the projects; and
- lack of or insufficient skills in financial resource identification and negotiation.

4.1.1.1 The Cartagena Protocol on Biosafety

The Conference of the Parties to the Convention adopted a supplementary agreement to the Convention known as the Cartagena Protocol on Biosafety in 2000, which seeks to protect biological diversity from the potential risks posed by living modified organisms (LMOs) resulting from modern biotechnology. The Protocol entered into force in September 2003.

² This was done by way of questionnaires and interviews.

National Implementation

Although not a Party to the Protocol, Jamaica has signed it, indicating its commitment to the objectives of the Protocol. It has conducted a number of activities which will assist it in its preparations to ratify the Protocol. These include:

- establishment of a National Biosafety Committee;
- review by the Attorney General's Department of the legal requirements to implement the Protocol;
- implementation of a Public Education Programme on Biosafety;
- designation of a national Focal Point on Biosafety;
- designation of a National Focal Point for the Biosafety Clearing House (BCH);
- participation in the pilot phase of the BCH; and
- development of National Biosafety Frameworks, (a UNEP/GEF/GOJ Project).

Capacity Constraints

As with most Small Island Developing states (SIDs), there are many capacity constraints, particularly at the institutional and individual levels. While efforts are being made to address the issues of policy and legislation, including institutional arrangements, there needs to be capacity building at the institutional and individual level, particularly in the areas of risk assessment and risk management of LMOs.

Focus Group Discussions & National Workshop

Two Focus Group discussions were held along with a National Workshop to widen the participation in the assessment process. The main outcomes were:

- the NBSAP was perceived as the primary instrument to guide Jamaica's implementation of the CBD;
- there was a need for an implementation mechanism for the NBSAP and this should be in the form of a Secretariat as previously described in the Action Plan of the NBSAP and as was previously the case;
- the need to seek external sources of funding to implement the Action Plan; and
- the incorporation of the relevant projects/project concepts as identified in the NBSAP into the Corporate Plans of the lead and partner agencies.

Also, a number of steps were identified in the National Workshop to effectively implement the NBSAP. These include:

- identify and engage a Lead Agency (MLE);
- establish NBSAP as a policy priority;
- 'projectise' NBSAP with a view to it becoming a mainstream programme within NEPA's (the implementing agency) corporate and operational plans; and
- develop a monitoring mechanism for the three conventions (MLE).

It is clear for the assessment that while there is broad based knowledge of the Convention and an appreciation of its importance, Jamaica does not have the financial resources to adequately implement the Convention. A course of action to compensate for the lack of financial resources would be to aggressively seek funding to implement the Action Plan. This would suggest the need for a coordinating mechanism with a focus on the NBSAP, working with the various partner agencies, institutions and non government organisations.

4.1.2 United Nations Convention to Combat Desertification

The purpose of the Land Degradation Thematic Assessment was to analyse the nation's capacity needs, priorities and constraints with respect to Jamaica's efforts to meet its global environmental objectives with particular reference to the obligations of the United Nations Convention to Combat Desertification (UNCCD).

The National Capacity Self-Assessment was conducted at three levels:

- Individual
- Institutional
- Systemic

The Thematic assessment was conducted within the context of the commonly accepted definition of capacity building as the actions needed to enhance the ability of individuals, institutions and systems to make and implement decisions and perform functions in an effective, efficient and sustainable manner.

The United Nations Convention to Combat Desertification (UNCCD) was adopted in Paris on June 17 1994 and entered into force on December 26, 1996 ninety days after the fiftieth ratification was received. Jamaica became a Party of the UNCCD on March 10 1998 after its accession on November 22 1997. It is the only internationally recognized legally binding instrument that addresses the problem of land degradation in dryland rural areas. The UNCCD places human beings at the center of its effort to combat desertification and mitigate the effects of drought.

In May 2003 the council of the Global Environment Fund (GEF) introduced Operational Programme n.15 (OP15) as a specific framework for intervention on Sustainable Land Management (SLM). The main objective of OP15 is *“to mitigate the causes and negative impacts of land degradation on the structure and functional integrity of ecosystems through sustainable land management practices as a contribution to improving people's livelihoods and economic well-being.”*

The Ministry of Land and Environment (MLE) is now the Focal Point Ministry with the transfer of both the subject and the National Focal Point (NFP) from the Ministry of Water and Housing (MWH) in 2003. The UNCCD Working Committee, established in 2000, is currently inactive but there is a proposal to reactivate it.

Little progress has been made with respect to Jamaica meeting its obligations as a Party of the UNCCD but at the end of 2004 the Permanent Secretary of the Ministry of Land and Environment approved the proposal for the recruitment of a consultant who will work with the NFP to have a draft National Action Programme (NAP) prepared for submission to Cabinet by May 2005.

Capacity Constraints

The major issues and capacity constraints identified are as follows:

1. Need for proactive Working Committee or Secretariat with responsibility for the development of the National Action Programme and a Drought Management Policy and Plan.
2. The absence of a clear system of accountability within the system of Government with respect to the country meeting its obligations as a Party of the Convention
3. The low level of public awareness and knowledge about the UNCCD generally but specifically in key Implementing Agencies and Government Ministries
4. The enabling environment, with respect to appropriate policies, laws and programmes, exists for the implementation of the UNCCD and should enhance the development of the NAP and the Drought Management Policy and Plan.

4.1.3 United Nations Framework Convention on Climate Change

Jamaica is a Party to the UN Conventions on Climate Change, Combating Desertification, and on Biological Diversity. In some cases, the progress in implementing these conventions has not been optimal. The purpose of the National Capacity Self-Assessment Project (NCSA) is to provide Jamaica the opportunity to conduct a thorough self-assessment and analysis of national capacity needs, priorities and constraints with respect to its efforts at meeting global environmental management objectives. It will facilitate stakeholder consultation in a process of stocktaking, sequencing, identifying and prioritizing capacity needs.

The National Capacity Self-Assessment within the thematic area of Climate Change reviewed Jamaica's implementation of the UNFCCC with a view to identifying priority areas for action to facilitate better implementation.

The objectives of the thematic profile were to identify:

- priority issues;
- capacity constraints for these issues at various levels (systemic, institutional and individual); and
- opportunities for capacity building to address the identified constraints.

Jamaica became a Party to the UNFCCC in January of 1995. In conducting the assessment to evaluate the country's capacity to effectively implement the UNFCCC and

identify the capacity constraints, the consultant used questionnaires, interviews with the relevant stakeholders, obtained information provided on several websites, reviewed several publications and compact disks including the first national communication of Jamaica and as well as personal knowledge (having actively participated in the process for five years).

Since becoming a Party to the UNFCCC, Jamaica has implemented climate change activities at the regional and national levels. These are:

- participated in the Caribbean Planning for Adaptation to Climate Change (CPACC), regional project;
- submitted first national communication;
- participated in the Adapting to Climate Change in the Caribbean (ACCC) regional project;
- participate in the Mainstreaming Adaptation to Climate Change regional project; and
- executing Climate Change Enabling activities expedited funding in Priority Areas project.

Additionally, in August 2004 through the expedited financing for capacity building interim funds of US \$100,000 were obtained for maintaining and enhancing the capacity to prepare future National Communications. The project is being implemented by the Meteorological Service over twelve months and the main activities are:

- Identification and submission of technology needs;
- Capacity building to assess technology needs, modalities to acquire and absorb them, design, evaluate and host projects;
- Capacity building for participation in systematic observation networks; and
- Preparation of programs to address climate change.

However, despite some attempts Jamaica has since it signed the Convention thirteen years ago not achieved as much as could have been reasonably expected on the given time frame. The main reason for this may be the lack of sustained focus on climate change activities perhaps due in part to the absence of the Climate Change Committee to guide and focus the country's programmes. It must also be noted that the country has not fully articulated its climate change programme and there is not significant budgetary support for climate change programmes in Jamaica. This absence of clarity has perhaps resulted in missed opportunities to access funds to assist the country in its programmes. While admittedly there is significant competition for climate change funding- the funds that the country has received to date suggest that we have not fully exploited these funding mechanisms.

Findings

The following are the findings of this assessment:

- the Meteorological Service has never operated as the institution with sufficient authority with respect to the implementation of the convention. This function has been shared at various times between the GEF Focal Point, the Ministry of Foreign Affairs and Foreign Trade and whoever is the parent Ministry of the Meteorological Service (MS);
- there is a strong consensus for the development of a national climate model. This would be used for impact model studies whose outputs are needed for national planning;
- a national Climate Change Committee would be able to provide answers to these questions.
- activities are undertaken in several agencies without any synergy or coordination;
- institutions are unaware of climate change concerns and the fact that there is a role for them in the implementation of the Convention;
- some of the human resources that is require is present in the institutions, some skills are lacking. The problem is that these resources are not tailored to fit the needs for implementation of obligations. A quantum leap is required to transform these institutions to achieve the dual purposes of meeting their original requirements and the new ones that the UNFCCC brings. This will require both training and financial incentives as job descriptions are transformed; and
- a needs assessment of the human resources needs of each institution is required. Such an assessment is beyond the scope of this study.

In addition to these major findings on a number of bottle necks which have hindered Jamaica's Climate Change Programme. They are:

- no climate change secretariat established;
- no functioning National Climate Change committee;
- relocation of Meteorological Service from Ministry to Ministry;
- reduced capacity in the Meteorological Service from time to time due to extended periods of training and no additional personnel enlisted in temporary capacity to alleviate the loss; and
- the need for a mass based public awareness campaign. No public awareness/education program has been developed to address climate change. Some initiatives such as brochures produced by the Meteorological Service have been attempted. These are in short supply due to unavailability of funds to produce in meaningful quantities.

Capacity Constraints

The issues presented for priority attention are the outcomes of several consultations with some of the relevant stakeholders. Constraints at the individual level were: inadequate training particularly in the areas of vulnerability assessments, and adaptation measures. At the institutional level capacity constraints were:

- inadequate staff complement;
- lack of equipment;
- weak organisational structure; and
- insufficient funding.

At the systemic level the constraints were:

- low priority issue and unclear policy guidance; and
- insufficient funding.

4.2 Cross cutting Issues

4.2.1 Public Awareness Education and Training

The study assessed Jamaica's capacity to meet its obligations under the Convention on Biological Diversity and its Cartagena Protocol on Biosafety, the UNFCCC and the UNCCD. Public awareness, education and training have been identified as cross-cutting issues for all three Conventions.

The methodology used by the Consultants was a combination of:

- review of documents on the Conventions, environmental education in Jamaica, and successful methodologies used in other countries;
- consultation with persons involved in environmental education and projects with an environmental education component through interviews and questionnaires; and
- focus group discussions with persons who had been the beneficiary of environmental educational programmes and projects.

All three Conventions contain articles relating to obligations to carry out public awareness and education programmes and to implement training programmes where necessary. It is vital that personnel at the policy and administrative levels of agencies responsible for or supporting implementation of the Conventions are fully informed so that they can make informed decisions, and that the public also is aware of the role that they have to play. It is also important to ensure that the skills necessary for implementation exist in the relevant organizations.

In the thematic assessment reports which formed the platform for the cross-cutting review public awareness is cited as a key issue for implementation of Jamaica's obligations under the Conventions, and some initiatives have been taken in this regard. The efforts have, however, been sporadic and uncoordinated, and there is much more work to be done. Training needs have been identified for the CBD, the Cartagena Protocol on Biosafety and the UNFCCC.

Areas of need for public awareness and training have also been identified in the Policy and Legal Cross-Cutting Report, mainly in the areas of public empowerment for action through information and education, and continued sensitization of those involved in the enforcement, legal and judiciary process.

Environmental education has been taking place as a result of a number of initiatives throughout the island.

At the **community level**, NGOs and NEPA projects such as the Ridge to Reef Watershed and Coastal Water Improvement projects have impacted specific communities with educational programmes and improved environmental practices, but there is need for replication of these initiatives in more communities to increase the impact on the environment.

In the formal education system, environmental education for sustainable development has been infused into the curriculum from early childhood to grade nine, with complementary infusion into the curricula of teacher training colleges at the early childhood and secondary levels. Some support materials have been produced and some teachers have been trained, with pilot projects taking place in six primary schools and two teacher training colleges. The need is for the development and distribution of learning materials and system-wide teacher training in environmental education. The Schools Environment Programme has brought practical, hands-on environmental education to 350 schools, but the reach of the project has been limited, and the programme is in jeopardy due to imminent withdrawal of funding.

Through the ENACT supported **Greening of Government programme** and the introduction of **Environmental Management Systems** to Private Sector organizations, many employees have been exposed to environmental training which they have taken back to their organizations. The integration of the Holistic Governance programme into the offering of the Management Institute for National Development offers an opportunity for reaching government officials and private sector decision-makers with messages about the need to change how we make decisions that affect the environment and about the Conventions.

Many Government departments have environmental education programmes to support their portfolios, for example The Forestry Department and Fisheries to name a few. These could be better coordinated and synergies used to make more impact.

Focus group discussions were conducted with persons from across the island who had been involved in public education projects at the local or national level. Participants identified programmes related to the environment at community, parish and national levels.

In the main, government is seen as a facilitator for all projects and programmes both locally and nationally. Citizens should also play their part by taking responsibility for their own surroundings, and teaching others. NGOs are seen as watchdogs for the environment with a role to play in education of the community. In general, the Private Sector is contributing but could do more in the areas of funding, sponsorship and incentives.

Public Education and training has been identified in all the thematic assessments as a priority issue. However the execution of public education programmes to support the implementation of the Convention has failed to recognize the synergies which exist and had been stopped by lack of funding and a coordinated integrated approach to implementation.

Capacity issues were identified at the individual institutional and systemic levels. These constraints are summarized below.

From document reviews, interviews, focus groups and questionnaires completed, the following capacity constraints, gaps and weaknesses have been identified.

Individual:

- media and communications practitioners need to be engaged in the process and given environmental exposure;
- environmental experts need communications/media training to help them to make better use of media and communication techniques in getting their message across;
- ignorance of environmental issues;
- entrenched cultural practices and behaviour inhibit change; and
- there is attitudinal resistance to change.

Institutional:

- need for trainers for community learning;
- teachers in the school system need more environmental training; and
- projects and incentive schemes are needed for more communities to engage in environmental activities.

Systemic:

- need for clear policy initiatives for environmental education;
- Learning Resources – more to be produced along with a system for accessing and sharing information;
- poor coordination and sharing of resources between government agencies with similar objectives in environmental education;
- need for sustainable long term funding for environmental education – short programmes do not produce the behaviour change which is necessary to achieve impacts in environmental management at the community level; and
- local good practice projects are not being given national attention and are therefore not being replicated nationally – there is a focus on negative news which affects the national psyche.

4.2.2 Policy and Legal

The main objectives of the policy and legal cross cutting assessment were to:

- provide an outline of the existing capacity gaps in the legislative, non-regulatory and policy framework which relate to the implementation of Jamaica's responsibilities under the three Rio Conventions (United Nations Convention to Combat Desertification, the Convention on Biological Diversity and the United Nations Convention on Climate Change);
- highlight the opportunities that obtain for fulfilling these obligations; and
- identify actual and proposed programmes and project ideas which will facilitate this process.
- An in-depth analysis of relevant national policies, action plans and legislation was the main mechanism used to aid the development of this report. The work/output also benefited from direct consultations and meetings with other consultants, the representatives of various government agencies and stakeholders.

Policy considerations

The existing Policy framework in Jamaica when examined in light of the current obligations under the three UN Conventions was deemed in some respects sufficient to allow for the fulfillment of these responsibilities though in others it was found to be extremely lacking.

This divergence in the quality and relevance of the various policy documents that were reviewed resulted in the development of a priority needs matrix which sought to identify the gaps that currently obtain whilst simultaneously placing these in order of significance to the country. These gaps are as follows:

- lack of sufficiently qualified and dedicated human resources to craft complete and implementable Policy documents.
- weak policy formulation framework, from concept through to development and implementation.
- inadequate access to information by the agencies which could assist in meeting the targets established under the three Conventions pertaining to their potential role in the implementation process.
- insufficient formulation of enabling local legislation
- financing shortfall for implementation of obligations and lack of quantifiable and / or reliable information relating to the costs associated with effective implementation.

Legislative Considerations

The legislative framework was found generally to be facilitative of implementation of the Conventions' provisions.

Streamlining of areas of overlap among legislative provisions and jurisdiction among agencies are already being pursued in respect of the new Environment and Planning legislation, a new legal framework for protected areas and pending new water services legislation.

A major gap is the need to update the applicable penalties as in a number of instances, the penalties are so low that it would be virtually tantamount to wasting judicial time, to institute a prosecution. In addition a number of general problems as regards environmental legislation development and enforcement also need to be addressed and provide opportunities for project formulation and pursuit.

Otherwise, there are a number of areas of constraint, which have been indicated in respect of particular pieces of legislation and which need to be addressed. These areas, particularly those relating to:

- access to genetic resources;
- intellectual property protection; and
- land ownership by the Maroons.
- training of personnel from agencies which currently have a stake in the protection and conservation of the environment in the art of developing project proposals and identifying sources of funding for these.

4.2.3 Institutional and Funding

The National Capacity Self-Assessment was conducted at three levels within the context of the commonly accepted definition of capacity building as ‘the actions needed to enhance the ability of individuals, institutions and systems to make and implement decisions and perform functions in an effective, efficient and sustainable manner’. The three levels are further explained below.

- Individual capacity building refers to the process of changing attitudes and behaviours, usually through training activities which disseminate knowledge and develop skills.
- Institutional capacity building aims at the development of the institution as a total system and focuses on the overall performance of the organization, its functional capabilities as well as its ability to adapt to change.
- Systemic capacity building is concerned with the creation of ‘enabling environments’ i.e. the overall policy, economic, regulatory and accountability framework within which the individuals and institutions operate.

This report focused on analysing the capacity needs and constraints with respect to the institutional and funding concerns across the Rio Conventions. The findings of the report were built on the results from the three thematic assessments³ and are aimed at further evaluating the issues which were identified as priority areas of action in these reports.

³ Final Report **Thematic Assessment** Convention on Biological Diversity

³ Final Report **Thematic Assessment** United Nations Framework Convention on Climate Change

5. PRIORITY AREAS FOR ACTION

The NCSA process focused on priority issues, which were major barriers to effective implementation of the conventions. The consultants examined all the relevant issues across all the conventions and through a consultative and participatory process identified the priority areas for action. These are presented below.

5.1 Convention on Biological Diversity

While there is widespread knowledge of CBD and NBSAP and implementing the NBSAP is considered a priority, a number of obstacles to implementation were identified and in some cases ranked. Obstacles most frequently cited and with the highest ranking were:

- lack of human and financial resources;
- dissemination of information at the national level not efficient;
- loss of biodiversity and the corresponding goods and services it provides not properly understood and documented;
- existing scientific and traditional knowledge not fully utilized; and
- lack of public education and awareness at all levels.

The main outcomes of the focus Group discussions and the National Workshop were:

- the NBSAP was perceived as the primary instrument to guide Jamaica's implementation of the CBD;
- there was a need for an implementation mechanism for the NBSAP and this should be in the form of a Secretariat as previously described in the Action Plan of the NBSAP and as was previously the case;
- the need to seek external sources of funding to implement the Action Plan; and
- the incorporation of the relevant projects/project concepts as identified in the NBSAP into the Corporate Plans of the lead and partner agencies.

Following on the National Workshop, a number of meetings were held with personnel from the executing agency NEPA, and the MLE. It was agreed that in keeping with the proposal from the workshop that the NBSAP would be the primary instrument to guide the implementation of the CBD, the following projects concepts, taken in the main from the NBSAP, should receive immediate attention:

1. Preparation for the Declaration of the Lower Black River Morass under the NRCA Act (1991) with particular Reference to management of the Upper Morass;
2. National Strategy for Alien Invasive Species;
3. Coral Reef Rehabilitation; and

³ Final Report **Thematic Assessment** United Nations Convention to Combat Desertification

4. Institutional Strengthening NEPA and other implementing organisations. Elements include:
 - a. strengthening of legislative framework (alien species, access to genetic resources, intellectual property rights & land ownership in protected areas),
 - b. expansion of endemic and endangered flora and fauna database with linkages to national CHM; and
 - c. designing & implementing a comprehensive public education programme – targeting key institutions e.g. judiciary, customs, police and local government.

Additional information on these can be found in the National Action Plan⁴

5.1.1 The Cartagena Protocol on Biosafety

Adopted at the first Meeting of the Parties (COP-MOP) was an “Action Plan for Building Capacities for the Effective Implementation of the Cartagena Protocol on Biosafety”.

Key elements requiring concrete action for effective implementation have been identified and include:

1. Institutional capacity-building:
 - a. Legislative and regulatory framework;
 - b. Administrative framework;
 - c. Technical, scientific and telecommunications infrastructures;
 - d. Funding and resource management; and
 - e. Mechanisms for follow-up, monitoring and assessment.
2. Human-resources development and training.
3. Risk assessment, Risk management and other scientific and technical expertise.
4. Awareness, participation and education at all levels.
5. Information exchange and data management including full participation in the Biosafety Clearing-House.
6. Identification of living modified organisms.

While some progress has been made by Jamaica in addressing some of these issues much still needs to be done. In particular, there needs to be follow-up action to the Frameworks Project as the outputs (a draft Biosafety Policy, proposed administrative arrangements for implementation, and draft Drafting Instructions for a Biosafety Act) need to be finalized.

In addition to the above actions there needs to be some capacity building in the area of risk assessment and risk management. This is important if Jamaica is to have the capability to:

- Identity the risks to the environment and human health associated with LMOs entering the country; and
- Manage these risks should the need arise.

⁴ National Action Plan, National Capacity Self Assessment September 2005.

5.2 United Nations Convention to Combat Desertification

Areas for priority action identified in the Focus Groups and the National Workshop were:

- Develop a National Action Plan;
- constitute a National Coordinating Committee; and
- develop a project on Land Degradation. (A project proposal, (PDF A), was prepared and submitted through UNDP to the GEF for the development of a medium sized project. It has been approved).

5.3 United Nations Framework Convention on Climate Change

Priority areas for action are:

- completion of Phase II of the enabling activity project. Preparation of the second National Communication will include a National Action Plan;
- establishment of a National Climate Change Committee;
- Public Awareness & Public Education;
- assessment of Vulnerability of Coastal Zone;
- formulation of Adaptation Measures;
- assessment of vulnerability of Water Resources; and
- assessment of vulnerability of agricultural sector.

A number of project concepts identified in the Focus Groups and the National Workshop to help address the capacity constraints and put the country on a firmer footing with respect to responding to national priorities with respect to climate change and simultaneously meeting its international environmental obligations. Top priority concepts are:

1. the development of a national action plans for mitigation and adaptation; and
2. the development of regional climate models at the small scale of small islands to allow for better analysis and understanding of the climatic processes. The CSGM has started to address this issue through the MACC initiative. A Project Concept note has been prepared for the development of an impact model for Jamaica. Additional information on these can be found in the National Action Plan.

5.4 Public Awareness Education and Training

Priority areas for action here include:

- the need for Institutional Stability and Support for NFPs and implementing agencies
- all relevant government agencies to be aware of Conventions
- Conventions to be taken into account when corporate plans are being made by government agencies.
- the general public be made aware of the link between their present and future well being and environmental issues.

- trained personnel to implement the Convention
- access to learning materials/information on the Conventions
- trained personnel to conduct courses on the Conventions
- teachers across the education system to be trained in environmental education

5.5 Institutional and Funding

The priority areas for action identified from the thematic assessments are listed below in no particular order of significance.

1. National Action Programmes (NAPs) developed and implemented as a matter of priority for Climate Change and Land Degradation.
2. Implementation of the National Biodiversity Strategy and Action Plan (NBSAP) as Jamaica response to the Convention on Biodiversity (CDB).
3. Effective administrative mechanisms established to oversee the implementation of NAPs and NBSAP in areas of coordination, reporting, accountability and performance targets.
4. Incorporation of the NAPs and NBSAP into the corporate plans and work programmes of the executing and collaborating organisations.
5. Development of a harmonised policy and legal framework to support the programmes/activities of the Rio Conventions.
6. Implementation of a comprehensive integrated public awareness programme.
7. Effective coordinated fund raising.

Of greatest relevance to this report are priority areas 1, 2, 3, 4 and 7 which will be dealt with in this report. Items 5 and 6 are examined in the cross cutting legal and public education reports⁵.

Institutional Issues

An evaluation of the underlying issues related to the emergence of the priority areas of action which were identified in the thematic assessments pointed to the need for a more integrated approach to the management of the programmes developed to support the implementation of the Conventions. The weakness and in some cases absence of effective integration mechanisms among and within implementing organizations were regarded as significant capacity constraints which often resulted in bottlenecks in implementation of programmes and a failure to effectively built on the synergies which exist across the Conventions.

Additionally, within the context of the management of each Convention the effectiveness, role, and influence of 'the Convention Committee' was brought into question. The absence of Climate Change and Land Degradation Committees to guide the country's programmes was identified as another capacity constraint which in the case of the

⁵ Jamaica, Policy and Legal Cross Report, September 2005
 Jamaica, Cross Cutting Issues of Public Awareness, Education and Training, May 2005

Framework Convention on Climate Change and the Convention to Combat Desertification (Land Degradation) has resulted in bottlenecks as it relates to the development of NAPs. It was the view of the stakeholders and the finding of the thematic assessments that where such Committees were not in place they should be established as clearly such groups could play a major role in the implementation of the Convention.

In the case where a 'Convention Committee' existed, that is for the Biodiversity Convention, the issues of the degree of influence and authority of the Committee to effectively monitor the implementation of the NBSAP and to direct and guide inter agency collaboration and coordination were questionable.

The essential and critical question then with respect to an effective institutional framework was not the absence of or effectiveness of 'Convention Committees' (although this has clearly been identified as a capacity issue) but the challenge of making these committees as effective as possible given that their composition which by necessity is multi-sectoral and the operation which by and large is conducted not under any legal mandate or even policy framework but out of a spirit of interagency collaboration. While in essence this is a good thing the issues of the authority, accountability, and performance of the Committees need to be addressed.

In light of this evaluation, the absence of effective mechanisms for coordination of the work to support the implementation of the Conventions was thought to be a significant capacity constraint. At the highest level of decision-making the need for national coordination of the activities undertaken for the three Conventions was identified as a matter of the utmost priority. Institutional coordination is required in order to establish priorities and direct action in areas which are cross cutting and where the lines of authority may be blurred. Correction of this capacity gap was considered as a priority areas of action in order to have more effective and efficient management of the work of the Rio Conventions.

Additionally, the development of strong institutions requires not only that capacity issues be addressed but also that also the presence of strong and committed accountable leadership at all levels of the institutional framework. Solutions to those issues perhaps strictly lie outside of an assessment of capacity issues but must be borne in mind as the country strives to improve its performance in this area.

The following issues must be addressed in order to strengthen the institutional capacity:

- establishment of effective mechanisms for coordination of the work across the Rio Conventions, to provide guidance at the highest decision making level on cross cutting technical issues and major funding efforts;
- establishment of functional and effective Convention Committees;
- strengthening of major executing organizations and identification of these organisations for Climate Change and Land Degradation; and
- strengthening of mechanisms for monitoring and reporting as a strategy to improve accountability.

Funding Issues

The absence of sufficient funding was a recurring finding of all the NCSA reports. The inadequacy of funding was identified as a capacity constraint. By and large this gap is due to a combination of factors which include insufficiency of skills and experience in fundraising as well as the absence of a coordinated approach to seeking funding to support the work across all three Conventions.

It must be noted that although all the issues related to Jamaica's meeting its environmental obligations are not related to the issue of funding, the ability of the country to seriously address the implementation of NBSAP of any NAP which may be developed lies in finding additional funding outside of the current levels of funding provided by the government.

The Global Environment Facility (GEF) is the major source of funding for the conventions and while Jamaica has received some support the country has not placed itself in a position to fully take advantages of the opportunities for funding available through the Facility.

In June 2005 the GEF Council met to discuss and elaborate on initial proposals for programming directions and tools for GEF-4. The GEF Council wants to ensure that it is responsive to the evolving perspectives of the international community with respect to the global environment and sustainable development. The third Overall Performance Study of the GEF has made some policy recommendations for replenishment of the fund which has been endorsed by the Council. These recommendations need to be considered by Jamaica in light of the findings of NCSA which has identified funding as a major capacity constraint.

The following are proposed for the GEF 4 programme:

- (a) move towards more integrated approaches to the natural resource management challenges that span the global environmental agreements; and
- (b) enhancing the potential for sustainable project outcomes, pay even greater attention to integration of global environmental challenges into natural sustainable development policies and programmes.

Pursuing integration across focal areas will allow the GEF to fulfill its role as catalyst and facilitator of global environmental sustainability and Jamaica must be aware of this policy approach within the GEF and focus its fundraising strategy towards the integration of the cross cutting issues across the Conventions.

Funding beyond the contributions from the GOJ is required to address the implementation of programmes which will support Jamaica's efforts at meeting its environmental obligations with regard to the Rio Conventions. However, to access funding available through the GEF, non-traditional and bilateral sources, there needs to be an integrated strategically coordinated approach guided by the MLE. Additionally,

The GOJ needs to re-examine its current allocation to the environmental sector. The MLE however, faces capacity constraints at the level of staffing and expertise and the organisation must be strengthened to effectively perform that role.

6. RECOMMENDATIONS

6.1 Convention on Biological Diversity

The following are the recommendations:

- NBSAP is the country's primary response to its obligations under UNCBD;
- NEPA must be strengthened to more effectively implement the NBSAP;
- aggressive funding programme must be launched taking into consideration all the available sources both internal and external;
- the NISP opportunities should be integrated into any projects/programmes which are developed to implement the NBSAP. Administrative mechanism should be put in place to ensure that there is integration of these efforts and avoidance of duplication;
- the Clearing House Mechanism should be strengthened;
- the current legal framework requires strengthening particularly with regard to access to biological resources and benefit sharing; and
- public education efforts must continue and mechanisms found to ensure its sustainability and coordination and integration with the other Rio Conventions. Special emphasis to be placed on the judiciary, police, local government organizations and communities in protected areas.

6.1.1 Cartagena Protocol on Biosafety

The following are the recommendations:

- funds be found to continue work commenced under the UNEP Biosafety Framework Project;
- the country determine the best organization to be DNA and a programme to strengthen the organization be put in place as a matter of priority; and
- the legislative framework be established as a matter of priority.

6.2 United Nations Convention to Combat Desertification

The following are the recommendations.

Institutional

1. The development of an appropriate system of accountability for the Convention within the system of government. This Unit would be responsible for ensuring that the country not only meets its obligations as a party of the UNCCD, but benefits fairly from its participation as a Party.
2. The name of a government organization responsible for supporting the Focal Point Institution in driving the implementation of the NAP (once in place).

3. The expeditious and timely dissemination of relevant information, such as reports of COP and other activities associated with the UNCCD to the key implementation agencies.
4. A comprehensive assessment of the factors that cause drought and the mapping of drought areas as the basis for the expeditious development of and the periodic review of the NAP for the country. This should also facilitate the development of more effective drought monitoring programmes especially in the southern St Elizabeth and Clarendon plains, the areas most vulnerable to drought in Jamaica.
5. The development of methods to measure and collect data related to the water requirements of the different crops, and the water demands at the different stages of crop growth and development.
6. The introduction of and implementation of effective systems for the forecasting of drought and the development of effective early warning and forecasting systems, which will include the development of drought indices.
7. The acquisition of appropriate technology which will allow more effective management and distribution of the country's water resources and adequate financing for existing projects and programmes. This will include the acquisition of equipment to reduce dependence on manual meteorological data collection.
8. Public and private sector investment in water storage systems to increase reliable yield of water.
9. Provision of capital funds to allow the implementation of critical projects and to facilitate needed research whilst at the same time allowing organizations such as the Water Resources Authority and the Meteorological Department to not only attract suitable qualified professional staff but to effectively use their skills and knowledge.
10. Action to be taken to recover lost capacity such as that identified by SIRI with respect to underutilized pump sources and abandonment of irrigation infrastructure and systems in some sugar cane producing areas.

Public Education

11. The development of an effective and comprehensive public education programme which targets not only the wider public but which will ensure that personnel in key implementing agencies are informed of the country's obligations in the UNCCD and the role that they are expected to play in meeting these obligations.

Legal, Regulatory & Policy

12. The legislative and regulatory framework for the successful development of the NAP and which allows the country to meet its obligations as a Party of the UNCCD exists but there is need for enforcement of existing laws and the development of appropriate legislation to prevent the growing conversion of agricultural lands to residential and other commercial uses.

13. The development of effective and comprehensive agricultural and land use policies including crop zoning laws and the restriction of the allocation of crop production incentives to farmers producing crops and recommended for zoned areas.
14. Enforcement and strengthening of laws related to illicit mining of sand and the restoration of mined out bauxite lands, activities which can contribute significantly to land degradation as well as the destruction of aquifers.

6.3 United Nations Framework Convention on Climate Change

.Below are recommendations for future implementation efforts.

Institutional:

- establish a climate change secretariat in the Ministry of Land & Environment or the Meteorological Service;
- strengthen Focal Point Institution;
- establish National Climate Change Committee (Chaired by high level person preferably Minister MLE);
- establish Climate Change Unit/Secretariat/Department;
- integrate climate change consideration in national development policy;
- private sectors, non- government and community-based organizations must be brought into the process and given meaningful roles to fulfill;
- institutions will require additional equipment including high-speed computers and other specialized technical equipment. An initial needs assessment will be required of all relevant institutions;
- the legal and policy instruments will require review and amendment by legal persons with some exposure to environmental issues in particular climate change (Attorney General Department); and
- there will also be a need to identify and examine the possibility of developing indigenous insurance schemes to address specific local needs. Persons in insurance field would need to be exposed to climate change impacts and assessments

Training:

- provision of training in the areas of vulnerability and adaptation technologies;
- training of persons to use and further improve these vulnerability and adaptation tools. (UNFCCC Secretariat to advise on training areas);
- the training and development of storm surge models and maps (Meteorological Service, NEPA, UWI, and ODPEM should be responsible agencies);
- scientific training institutions (UWI, UTECH) will require additional technical expertise in climate change and its related fields. This will enable them to provide training as well as research capabilities for Jamaica to tackle a changing climate; and
- the need to enhance the technical skills required for the building of coastal protection structures to include climate change concerns. (Roselle in St.

Thomas). This knowledge and training must be dissipated to the widest cross-section of relevant institutions and individuals across the island.

Public Education:

- Design and implement a public awareness program targeting audiences at several levels of the society. Target groups should be:
 - policy makers;
 - different age groups;
 - lecturers;
 - teachers;
 - Teacher Trainers;
 - general public; and
 - groups in vulnerable areas.

Technical Capability:

develop national action plans for mitigation and adaptation. (Technical group selected by NCC);

1. establish formal climate research program. (Meteorological Service should lead but must include UWI, UWI cannot access funding from the Convention MS can);
2. establish GHG database, (Energy Division MCS&T);
3. the development of regional climate models at a small scale of small islands to allow for better analysis and understanding of the climatic processes. The CSGM has started to address this issue through the MACC initiative;
4. the development of a climate change model which will facilitate impact assessment models to examine the issues that the major sectors of agriculture, water resources and the coastal zone will be required to minimize or adapt to. These must include fundamental issues such as food security, the effects of saline intrusion and the social and economic impacts that activities in the coastal zone will undergo in the different climate change scenarios;
5. the development and updating of hazard maps for floods, land-slippages and other hazards, (Meteorological Service, NEPA, UWI and ODPEM should be responsible);
6. review the design criteria and building codes to include climate change concerns, (NEPA, NWA, Parish Councils, Engineering Society, Master Builders Association, MLE); and
7. there is a need for the formal collection and archiving of baseline data to inform the specific studies and analysis that will be required for the vulnerability assessments, (MS, NEPA, WRA, MOA, UWI).

A number of project concepts have been identified to help address the capacity constraints and put the country on a firmer footing with respect to responding to national priorities with respect to climate change and simultaneously meeting its international environmental obligations. The next twelve months of monitoring and implementing the Action Plan which is one of the outcomes of the NCSA will be very

important with regard to establishing effective mechanisms to address the issues which have been identified in this report.

6.4 Public Awareness Education and Training

Recommendations for strengthening capacity in environmental education are:

- establish Leadership at the Policy Level;
- assign a home for the Public Awareness & Education Function;
- establishment of a Resource Centre for EE;
- identify Desirable Knowledge, Attitudes and Behaviour (KAB;)
- develop System of Surveying;
- develop an Awareness Plan; and
- develop a Training Plan.

Public Education at all levels and in several sectors is necessary for the successful implementation of the Conventions. Education on the Conventions should not, however, be done in isolation, but in conjunction with a more generalized education programme geared at educating about environmental education for sustainable development.

Several initiatives in the public and NGO sectors which have been undertaken can be built on in the development and implementation of a comprehensive public education programme on the three Conventions. The strengths of previous programmes lie in the development of strategies that have made those impacted by them aware of environmental issues. The weaknesses lie in the fact that such programmes have been scattered in time and space and were not sustained. Another weakness is the lack of scientific data on the impact of these programmes. The lessons learnt from such programmes can be used to inform a more long-term, sustained educational programme based on the objectives of the Conventions on Biodiversity/Biosafety, Climate Change and Desertification.

Organizations with similar educational objectives will be more effective in their mission of environmental education if they seek opportunities for synergy and collaboration and work together in implementing a comprehensive integrated educational programme on the Conventions under the National Environmental Education Action Plan for Sustainable Development.

6.5 Policy and Legal

6.5.1 Legislation

A number of general problems as regards environmental legislation development and enforcement need to be addressed. It is recommended that the following be done towards ensuring a more facilitative setting for implementation of the Conventions:

- educate citizens as to their rights re the environment and explore having private citizens and environmental non-governmental organizations (NGOs) more empowered to bring “public interest” court actions where their interest in the due conservation of the environment is breached and make the requisite legislative changes to address technical legal impediments to bringing such actions;
- carry out a periodic review and updating of penalties for breaches of environmental laws;
- periodically, consult with and sensitize the judiciary as to the full implications and/or gravity of particular environmental breaches;
- have environmental law breaches and their implications feature prominently in the training of members of the police force;
- enhance capacity to develop and adhere to appropriate action time tables towards speedy implementation of Regulations needed to give efficacy to enacted primary legislation;
- have legislation indicate timeframe for passage of particular Regulations, after primary legislation comes into force;
- enhance capacity to enact timely legislation necessary to incorporate international treaties to which Jamaica becomes a party;
- empower citizens to take action to have relevant government agencies act without undue delay (having regard to all relevant circumstances);
- explore how best protection is to be provided for the rights of private citizens as regards the environment under the Jamaican Constitution (bearing in mind that discussions appear imminent to advance the proposed new Charter of Rights and Freedoms, to create “the right, compatible with sustainable development, to enjoy a healthy and productive environment”;⁶ and
- amend **The Criminal Justice (Reform) Act, 1978** (which sets out sentencing options for the courts) or otherwise make provision for increasing the sentencing options as regards breaches of environmental law.

Additionally, there are a number of areas of constraint, which have been indicated in respect of particular pieces of legislation and which need to be addressed. These areas, particularly those relating to genetic resources, intellectual property protection and the Maroons may be addressed by appropriate projects. In this regard, the following Acts should be strengthened and legislation developed:

1. **The Town and Country Planning Act, 1958** be amended to clearly address marine areas beyond Jamaica’s land area;
2. **The Country Fires Act, 1942** be repealed and modern legislation put in place to address the setting of or dealing with fires throughout all of Jamaica with appropriate deterrent sanctions for offenders;
3. comprehensive legislative measures be introduced to specifically address the issue of control of alien species;
4. legislation be enacted to address the preservation and utilization of traditional knowledge;

⁶ See: *Bill – The Charter of Rights (Constitutional Amendment) Act, 1999, Section 13(2)(o)*.

5. a clear comprehensive policy be developed as to how to treat with the Maroons, their lands, knowledge and the utilization of and development of maroon areas; and
6. legislation be put in place to protect genetic resources and to provide for intellectual property protection for breeders of and accessing new plant varieties.

6.5.2 Policy

The existing Policy framework in Jamaica when examined in light of the current obligations under the three UN Conventions was deemed in some respects sufficient to allow for the fulfillment of these responsibilities though in others it was found to be extremely lacking.

Though there is a plethora of Policy documents in existence which relate to the protection and sustainable use of the environment this has had limited impact on the resources which they were formulated to conserve / manage. Though some are poorly constructed, the majority requires the employment of viable implementation strategies. A thorough assessment of the shortfall needs to be carried out to quantify the impact that non-implementation of these Policies are having on the environment. This it is felt will propel sufficient attention to this matter thereby increasing the ranking of the environment

Recommendations in the area of policy are:

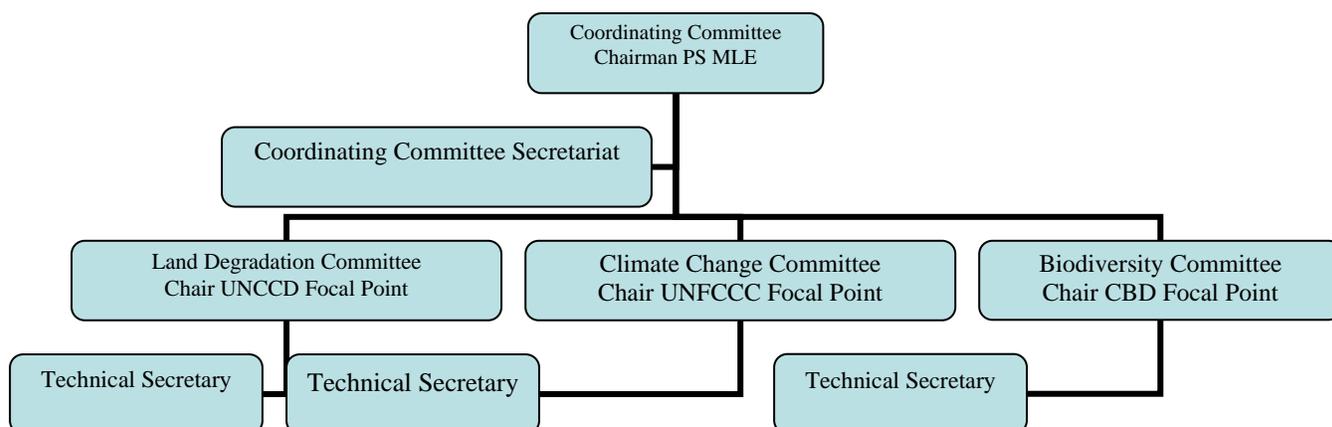
- refer specifically to the Conventions and by extension address the Country's responsibilities for implementation, and outline strategies to achieve this that is what is to be done, by who, with what allocated resources and utilising which methodology; and
- ensure that there are the appropriate linkages between policy and legislation to ensure implementation of the programmes and activities of the Conventions.

6.6 Institutional and Funding

Recommendations

The major recommendation addresses the need to strengthen the institutional coordination mechanisms which should result in more effective programme implementation in the medium to long term. Effective coordination mechanisms will result in more effective technical programmes and funding raising efforts both of which will contribute significantly to building stronger institutions which are critical to the country successfully and sustainably addressing its environmental obligations with regard to the Rio Conventions.

It is recommended that Jamaica establish a 'Conventions Coordinating Committee'. The proposed coordination structure is shown in the below and is fully described in Chapter 5 of the *"Institutional and Funding Report"*.



Proposed Organisational Chart Rio Conventions Coordination

Additionally the following actions should be taken:

- strengthening of the Convention administrative capability within each of the main executing organizations;
- selection of an executing organization for Land Degradation;
- formation of ‘Convention Committees’ for Land Degradation and Climate Change;
- introduction of stronger mechanisms of accountability, reporting and performance parameters for the ‘Convention Committees’; and
- centralization of cross cutting fund raising efforts with direction through the ‘Conventions Coordinating Committee’.

6.7 Opportunities for synergistic and cross cutting capacity building

The NCSA process provided an opportunity to discuss and elucidate the linkages among the thematic areas through a greater understanding of the commonalities and overlaps among the conventions and facilitated an integrated approach to their implementation at the local, national and international levels.

A number of opportunities for synergistic and cross cutting capacity building have been identified. These are in the areas of:

- Institutional Strengthening in the area Public Awareness Education and Training;

- Institutional Strengthening and Governance; and
- Institutional Strengthening through Reforestation and Sustainable Land Management in Watersheds.

Further information on these opportunities is to be found in Appendix VI. One of these **Institutional Strengthening and Governance**, has been developed for submission to UNDP for GEF NCSA Expedited Funding.

7. MONITORING AND EVALUATION

Monitoring and evaluating the implementation of the national Action Plan is an important part of the NCSA project once it has been approved. It will involve the continuous monitoring of progress in implementing activities against the planned schedules for various activities. The initial monitoring program will take place over a period of twelve months and will be undertaken by a Monitoring Committee which includes the National Focal Points for each convention, executing agencies, the Ministry of Foreign Affairs and Foreign Trade (MFAFT), the Planning Institute of Jamaica, (PIOJ) and MLE among others. It is expected that the National Focal Points will play an important part in the monitoring process. An independent evaluation is expected to be done after the 12 month period, and two critical outputs should be (i) an action plan for the next 12 months and (ii) a report. The Committee is expected to start its work at the end of October 2005, at the end of Phase I.

Although the monitoring period for the project has been designated for a period of 12 months, at the end of Phase II of the project, that is, at the end of the 12 month monitoring period, this process needs to become institutionalised, and it is proposed that the Convention Coordinating Committee, chaired by the Permanent Secretary in the Ministry of Land and Environment, (as proposed in the Institutional and Funding cross cutting report) should perform this monitoring role.

APPENDICES

APPENDIX I. List of Participants -National Capacity Self Assessment Project Launch

Hon. Dean Peart	Ministry of Land and Environment
Elecia Myers	Environmental Foundation of Jamaica
Joy Alexander	NEPA
Gillian Lindsay- Norton	United Nations Development Programme
Winsome Townsend	NEPA
David Barret	Petroleum Corporation of Jamaica
Richard Thompson	Tourism Product Development Company
Jose Gerhartz	UWICED
Sue Ann Chung	Cabinet Office
Carla Gordon	NEPA
Geneva Hibbert	Ministry of Water and Housing
Maurice Swaby	ENACT
Nilsia Johnson	Ministry of Health
Karlene Mckenzie	Ministry of Local Government
Aleatia Kerr	Ministry of Local Government
Raneque White	Ministry of Local Government
Elisabeth Emanuel	ENACT
Marjorie Stair	Land Degradation Thematic Consultant
Errol Morris	NEPA
Evan Cautetano	InterAmerican Development Bank
Yvette Beckford Davis	Meteorological Service
Anthony Chen	University of the West Indies
Devon Blake	NEST
Rachel Allen	Urban Development Corporation
Agostinho Pinnock	NEPA
Donna Blake	Ministry of Land and Environment
Michelle Watts	Water Resources Authority
Marcia Cleary	UWICED
Glynnis Ford	Ministry of Agriculture
Dale Rankine	Meteorological Service
David Smith	UNDP
Clifford Mahlung	Climate Change Consultant
Andrea Donaldson	NEPA
Patricia Sinclair McCalla	NEPA
Rainee Oliphant	Policy and Legal Consultant
Elaine Fisher	Natural Resource Management Specialist
Ayisha Richards	Attorney General's Department
Leonie Barnaby	Ministry of Land and Environment
Trevor Shaw	National Land Agency
Joan Jackson	Ministry of Commerce Science and Technology
Jo Bellamy	ENACT
Karen McDonald Gayle	USAID

Philbert Brown
Luc St. Pierre
Hugh Hyman
Thomas Burton
Amasale Maryan
Joy Scott
Penelope Budhlall
Peter Vogel
Novlette Douglas

Ministry of Land and Environment
United Nations Environment Programme
Policy and Legal Specialist
RADA
Association of Developmental Agencies
Office of the Prime Minister
A.V. Plus Ltd
University of the West Indies, Life Science
ENACT

APPENDIX II. List of Reports

1. Inception Report
2. Stocktaking Report
3. Biodiversity Thematic Report
4. Climate Change Thematic Report
5. Land Degradation Thematic Report
6. Public Education and Awareness and Training - Cross Cutting Report
7. Policy and Legal - Cross Cutting. Report
8. Institutional and Funding Cross Cutting Report
9. National Action Plan
10. NCSA Report.

APPENDIX III. Terms of Reference – Project Steering Committee

1. Guide the work of the Project Manager/Lead Consultant throughout the NCSA Project.
2. Review and approve the work plan developed by the Project Manager/Lead Consultant.
3. Participate in the selection process and approve the appointment of the National Consultants.
4. Receive and review bi-monthly project reports from the Project Manager/Lead Consultant including a financial report.
5. Review, comment on and approve the reports generated from the project as required.
6. Monitor milestones and the timeliness of project deliverables.
7. Provide input for the planning and execution of national workshops.
8. Ensure that extensive consultation with all relevant stakeholders government and non-government takes place during the development of the NCSA document and the Action Plan.
9. Recommend persons/organisations to be involved in the consultative process.
10. Act as resource persons at national workshops.
11. Provide information to the Minister of Land and Environment on the progress of the NCSA project.
12. Review in a timely manner and approve the NSCA Report and Action Plan.
13. Support the three Convention Focal Points in the monitoring of the implementation of the Action Plan.

APPENDIX IV. National Capacity Self Assessment Project Steering Committee Members

Mrs. Winsome Townsend

Chairperson Steering Committee
Director-Policies, Programmes & Projects Coordination Division
National Environment and Planning Agency
10-11 Caledonia Avenue,
Kingston 5

Forestry Department
Ministry of Agriculture
Representative: **Mr. Keith Porter**
173 Constant Spring Road
Kingston 8

Ministry of Land and Environment
Representatives: **Miss Leonie Barnaby**
Senior Director,
Mrs. Donna Blake, CBD Focal Point
Mr. Philbert Brown, UNCCD Focal Point
16A Half Way Tree Road
Kingston 5

Office of Disaster Preparedness and Emergency Management
Representative: **Ms. Karema Aikens**
12 Camp Road
Kingston 4

Planning Institute of Jamaica
Representatives: **Mr. Hopeton Peterson**
& Miss Simone Norton
10 -16 Grenada Way
Kingston 5

Meteorological Services
65 1/4 Half Way Tree Road
Kingston 5

Water Resources Authority
Representative: **Mrs. Michelle Watts**
Hope Gardens
Kingston 7

Ministry of Transport and Works
Representative: **Ms. Dorteia Clarke**
1c-1f Pawsey Road, Kingston 5

Ministry of Finance and Planning
Representative: **Miss Jacqueline Logan**
30 National Heroes Circle
Kingston 4

Attorney General's Chambers
Representative: **Miss Ayisha Richards**
2nd Floor – North Tower
NCB Towers, 2 Oxford Road, Kingston 5

National Environment and Planning Agency
Representative: **Miss Yvette Strong**
10-11 Caledonia Avenue, Kingston 5

Ministry of Agriculture
Representative: **Ms. Glynnis Ford**
191 Hope Road, Kingston 6

United Nations Development Programme
Representative: **Dr. David Smith**
1 Lady Musgrave Road
Kingston 5

Prof. Neville Duncan
Sir Arthur Lewis Institute of Social and Economic Studies
University of the West Indies, Mona, Kingston 7

Mrs. Susan Outokon
Executive Director
Jamaica Conservation and Development Trust
29 Dumbarton Avenue, Kingston 10

Mr. Devon Blake
National Environmental Societies Trust
173 Constant Spring Road, Kingston 8

Miss Amasale Maryan
Executive Director
Association of Developmental Agencies
12 Easton Avenue, Kingston 6

APPENDIX V. List of participants at the various focus groups/workshops

A. National Capacity Self Assessment Project Biodiversity Focus Group Discussion

Sylvia Mitchell	Biotechnology Centre, UWI
Donna Blake	Ministry of Land and Environment
Bethune Morgan	National Solid Waste Management Agency
Keith Porter	Forestry Department
Florence Young	Ministry of Agriculture
Sylvia McGill	Meteorological Office
Yvette Strong	NEPA
Winsome Townsend	NEPA
Luc St. Pierre	United Nations Environmental Programme
Ivan Goodbody	University of the West Indies
Derrick Gayle	Environment Foundation of Jamaica
Dayne Buddho	Institute of Jamaica
Terry Williams	The Nature Conservancy
Basil Jones	Wallenford Coffee Company
Hugh Hyman	Attorney at Law
Patricia Sinclair McCalla	NEPA
Penelope Budhlall	A.V. Plus Ltd
Timon Waugh	Coffee Board
Jacqueline Spence	Meteorological Offices
Audia Barnett	Scientific Research Council
Leonie Barnaby	Ministry of Land and Environment
Marjorie Stair	National Capacity Self- Assessment Project
Elaine Fisher	Natural Resource Management Specialist
Denise Forrest	Forrest and Associates
Keina Montaque	National Capacity Self Assessment Project

B. National Capacity Self Assessment Project Climate Change and Land Degradation Focus Group Discussion

Glynnis Ford	Ministry of Agriculture
Winston Simpson	RADA
Anthony McKenzie	NEPA
Tannecia Stephenson	University of the West Indies
Maurice Harrison	National Irrigation Commission
Anthony Freckleton	St. Elizabeth Environment Protection association
Hugh Hyman	Policy and Legal Consultant
Rainee Oliphant	Policy and Legal Consultant
Owen Evelyn	Forestry Department
Michael Taylor	University of the West Indies
Donald Sergeon	National Irrigation Commission
Sylvia McGill	Meteorological Service

David Barrett	Petroleum Corporation of Jamaica
Natalie Morgan-Ferguson	Water Resources Authority
Winsome Townsend	NEPA
Elaine Fisher	Natural Resource Management Specialist
Denise Forrest	Forrest and Associates
Clifford Mahlung	Climate Change Consultant
Marjorie Stair	Land Degradation Consultant
Keina Montaque	National Capacity Self Assessment Project

C. National Capacity Self Assessment Project Public Education and Awareness

Focus Group Discussion

Christine Sutherland	NEPA
Maurice Harrison	National Irrigation Commission
Llwelyn Meggs	Institute of Jamaica
Gina Sanguinetti	NEPA
Sherrone Lobban	MIND
Claudene Clarke	Ministry of Local Government
Dorothea Clarke	Ministry of Transport and Works
Florence Young	Ministry of Agriculture
Nadene Newsome	Office of Disaster Preparedness and Emergency Management
Winsome Russell	University of Technology
Onyije Chigozili	NEPA
Grace Turner	NEPA
Jacqueline Spence	Meteorological Office
Maxine Hinds	Forestry Department
Bethune Morgan	National Solid Waste Management Agency
Yvette Strong	NEPA
Thera Edwards	Coastal Water Quality Improvement Project
Leonie Barnaby	Ministry of Land and Environment
Janice Holung	UNESCO
Winsome Townsend	NEPA
Mr. Peter Wilson- Kelly	NEPA
Hopeton Peterson	Planning Institute of Jamaica
Simone Norton	Planning Institute of Jamaica
Bryan Bambury	Meteorological Service
Philbert Brown	Ministry of Land and Environment
Winston Forrest	Ministry of Education and Culture
Dane Buddho	Institute of Jamaica
Sonja Harris	Ridge to Reef Project
Kareen Binns	Irwin High School
Elaine Fisher	Natural Resource Management Specialist
Denise Forrest	Forrest and Associates
Keina Montaque	National Capacity Self Assessment Project

D. National Capacity Self Assessment Project Policy and Legal Cross Cutting Issues Focus Group Discussion

Trudi Johnson	Scientific Research Council
Sylvia Mitchell	Biotechnology Centre, UWI
Donna Blake	Ministry of Land and Environment
Bethune Morgan	National Solid Waste Management Agency
Michelle Watts	Water Resources Authority
Ayisha Richards	Attorney General's Department
David Smith	United Nations Development Programme
Conroy Watson	Ministry of Commerce Science and Technology
Brian Bambury	Meteorological Office
Glynnis Ford	Rural and Physical Planning Division
Kareen Binns	Irwin High School
Andrea Donaldson	NEPA
Carla Gordon	NEPA
Luc St. Pierre	United Nations Environmental Programme
Andrea Dubidad	Ministry of Foreign Affairs and Foreign Trade
Maurice Harrison	National Irrigation Commission
Dorothea Clarke	Ministry of Transport and Works
Keith Porter	Forestry Department
Florence Young	Ministry of Agriculture
Donovan Walker	RADA
Anastasia Calnick	Ministry of Land and Environment
Winsome Townsend	NEPA
Elaine Fisher	Natural Resource Management Specialist
Denise Forrest	Forrest and Associates
Keina Montaque	National Capacity Self Assessment Project

E. National Capacity Self Assessment Project Second National Workshop

Andrea Donaldson	NEPA
Curline Beckford	CIDA
Maurice Harrison	National Irrigation Commission
Dayne Buddoo	Institute of Jamaica
Hugh Hyman	Policy and Legal Consultant
Karyll Johnston	USAID
Ivan Goodbody	University of the West Indies
Marjorie Stair	Land Degradation Thematic Consultant
Tannecia Stephenson	University of the West Indies
Marcus Gordon	NEPA
Ricardo Clarke	Meteorological Service
Bryan Bambury	Meteorological Service

Penelope Budhlall	Public Education and Awareness Specialist
Glynnis Ford	Ministry of Agriculture
Keith Porter	Forestry Department
Andrea Jones	NEPA
David Martin	Wallenford Coffee Company
Monifa Blake	Ministry of Transport and Works
Florence Young	Ministry of Agriculture
Michelle Curlingford	National Water Commission
Ayisha Richards	Attorney Generals Department
Trevor Shaw	National Land Agency
Natalie Morgan- Ferguson	Water Resources Authority
Andrea Dubidad	Ministry of Foreign Affairs and Foreign Trade
Michael Taylor	University of the West Indies
Jacqueline Logan	Ministry of Finance and Planning
Dwight Edghill	Bureau of Standards
Rohan Richards	Ministry of Land and Environment
Gervaise McLeod	NEPA
Kathlene Arnold	Ministry of Justice
Devon Blake	NEST
Leonard Francis	NEPA
Elaine Fisher	Natural Resource Management Specialist
Denise Forrest	Forrest and Associates
Keina Montaque	National Capacity Self Assessment Project

**F. National Capacity Self Assessment Project
Final National Workshop**

Winsome Townsend	NEPA
Dr. Sylvia Mitchell	Biotechnology Centre UWI
Ms Maxine Brown	Natural Irrigation Commission
Mr. Trevor Shaw	National Land Agency
Dr. Cheryl Gopaul	CIDA
Miss Glynnis Ford	Rural Planning Division
Miss Andrea Dubidad	Ministry of Foreign Affairs and Foreign Trade
Mr. Luc St. Pierre	United Nations Environment Programme
Mrs. Tracy Commock	Institute of Jamaica
Mrs Susan Otuokon	Jamaica Conservation Development Trust
Mr. Dayne Buddo	Institute of Jamaica
Ms. Karema Aikens	Office of Disaster Preparedness and Emergency Management
Mr. Andre Kong	Fisheries Division
Ms. Dorothea Clarke	Ministry of Transport and Works
Dr. Audia Barnett	Scientific Research Council
Mr. Dale Rankine	Climate Change Consultant
Mrs. Marjorie Stair	Land Degradation Consultant

Ms. Penelope Budhlall	Public Education and Awareness consultant
Ms. Rainee Oliphant	Policy and Legal Specialist
Mr. Terry Williams	The Nature Conservancy
Mr. Anthony Freckleton	St. Elizabeth Environment Protection Association
Mr. Hugh Hyman	Policy and Legal Specialist
Mr. Clifford Mahlung	Meteorological Services
Mrs. Sylvia Mitchell	Meteorological Services
Mr. Brian Bambury	Meteorological Services
Ms. Bethune Morgan	National Solid Waste Management Authority
Elaine Fisher	Natural Resource Management Specialist
Denise Forrest	Forrest and Associates
Keina Montaque	National Capacity Self Assessment Project

APPENDIX VI. Opportunities for synergistic capacity building

1. Institutional Strengthening in the Area Public Awareness Education and Training

Jamaica's National Capacity Self Assessment identified the following as key areas of capacity constraints across all three Conventions:

- lack of adequate funding for education and awareness;
- lack of understanding by decision makers of the incorporation of sound environmental practices into the economic and development decision-making process;
- lack of coordination, (which does not make the best use of the relatively limited available resources);
- the need for a central collection of resource materials, (print and electronic) for environmental education materials which is easily accessible, e.g. through the CHM;
- the need for creative, environmentally sound awareness programmes across the three conventions. These programmes need to move beyond awareness to behavioural change;
- need for technical skills in some areas, e.g. economic evaluation of biological resources, hydro-geologists, climatologists and meteorologists;
- need for training of teacher educators in the area of environment and sustainable use of natural resources; and
- insufficient resource materials to implement the teaching of environmental education at the primary school.

The project will seek to develop a clear policy on environmental education, strengthen the capacity of key agencies and institutions to deliver environmental programmes, develop resource materials, establish central resource center, sensitize and provide relevant information for decision-makers, and support the training in areas of scarce technical skills.

2. Institutional Strengthening and Governance

Jamaica's National Capacity Self Assessment identified the issue of governance as a key area to be addressed in strengthening the institutional framework for effective implementation of the three Conventions. Some important findings were:

- lack of understanding by decision makers of the incorporation of sound environmental practices into the economic and development decision-making process;
- the need for economic valuation of environmental resources as a tool for decision making;
- problems in the area of environmental legislation development and enforcement (including the area of environmental impact assessment);

- lack of coordinated policy development and weak implementation; and
- the need for a thorough assessment of the impact of the implementation and non-implementation of the various environmental policies the environment.

The Environmental Impact Assessment process is one of the cross-cutting tools under the CBD and the UNCCD. Effective use of this tool is a strong indicator of good governance in the area of environmental protection and sustainable use of natural resources. Additionally, economic evaluation is a valuable tool for decision makers. Jamaica's natural forests are an extremely valuable resource and no economic evaluations of this resource have been done. The will project will use these two tools in the strengthening of the framework for good governance.

This will be done through a pilot project, using a particular geographic area such as the Cockpit country (protected area slated for bauxite mining) whereby the economic valuation tool will be used to provide information to the decision makers and a conceptual EIA will be conducted, including a social impact assessment. The project will involve the various stakeholders, the development of procedures, training and lessons learnt which will be used as the basis of mainstreaming the findings at the end of the pilot.

A project proposal, for a PDF-A, has been developed for submission through UNDP to the GEF for the development of a GEF medium sized project.⁷

3. Institutional Strengthening Through Reforestation and Sustainable Land Management in Watersheds.

Jamaica's NCSA found that while the country has the ability to identify many of its problems related to the loss and degradation of the country's biodiversity, its weakness lies in implementing sustainable programmes to address these problems. While this weakness is in part due to the lack of financial resources there is also the need to strengthen the capacity of the relevant technical support agencies and communities to implement these programmes.

Conservation of forests and sustainable use of the forest biological resources are essential to achieving the objectives of the CBD. Jamaica was once covered with forests, but they are now restricted to areas least suitable for agriculture and human settlements, such as at high altitudes on steep rocky slopes and in rugged limestone areas. The major causes of deforestation are agricultural expansion from both large and small scale farming operations and unsustainable harvesting of trees for charcoal production. The loss of forest cover through these unsustainable practices has resulted in land degradation. There are also implications for climate change.

⁷ "Strengthening and Developing of Environmental Management Tools for Effective Governance and to Address Institutional Strengthening in Jamaica in Response to Priority Areas of Action in the NCSA"

The project will:

- strengthen the capacity of the relevant agencies such as the WRA, RADA to provide the technical support to farmers and communities in appropriate farming practices;
- to reforest thousands of hectares of public and private lands;
- to contribute to the building of a portfolio of CDM projects within the portfolio ministry; and
- to utilize the earnings from the CDM project to support the community and similar projects.