



BARBADOS NATIONAL ASSESSMENT REPORT:

**for
The Third International Conference on
Small Island Developing States**

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**Government of Barbados
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Acronyms

BPOA	Barbados Programme of Action for the Sustainable Development of Small Island Developing States
CARICOM	Caribbean Community
CARISEC	CARICOM Secretariat
CBO	Community Based Organisations
CCCCC	Caribbean Community Climate Change Centre
COTED	Council for Trade and Economic Development
CSME	CARICOM Single Market and Economy
ECLAC	Economic Commission for Latin America and the Caribbean
ECOSOC	Economic and Social Council
EPA	Economic Partnership Agreement
GCCA	Global Climate Change Alliance
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
GEF	Global Environment Facility
GESS	Green Economy Scoping Study
GETSC	Green Economy Technical Steering Committee
GOB	Government of Barbados
ICT	Information and Communications Technology
ICZM	Integrated Coastal Zone Management
ILAC	Latin America and the Caribbean Initiative on Sustainable Development
IUU	Illegal, Unreported and Unregulated Fishing
LAC	Latin America and the Caribbean
MDGs	Millennium Development Goals
MEAs	Multilateral Environmental Agreements
MSI	Mauritius Strategy for the Further Implementation of the Programme of Action for the Sustainable Development of Small Island Developing States
NCDs	Non-communicable Diseases
NCSD	National Commission on Sustainable Development
NGO	Non-Governmental Organisations
NIS	National Insurance Scheme
ODA	Overseas Development Assistance
OECD	Organisation for Economic Cooperation and Development
OWG-SDGs	Open Working Group on Sustainable Development Goals
PAGE	Programme of Action for a Green Economy
POPs	Persistent Organic Pollutants
PV	Photovoltaic
RCM	Regional Coordination Mechanism
RETIC	Resource Efficiency and Technology Innovation Centre
SCP	Sustainable Consumption and Production
SDGs	Sustainable Development Goals
SEFB	Support for Sustainable Energy Framework for Barbados
SIDS	Small Island Developing States
SIDS-TAP	Small Island Developing States Technical Assistance Programme

UNCED	United Nations Conference on Environment and Development
UNCSD	United Nations Commission on Sustainable Development
UNCTAD	United Nations Conference on Trade and Development
UNDESA	United Nations Department of Economic and Social Affairs
UNESCO/IOC	International Oceanographic Commission of the United Nations Educational, Scientific and Cultural Organisation
UNGA	United Nations General Assembly
UNIDO	United Nations Industrial Development Organisation
UWI	University of the West Indies
VAT	Value Added Tax

1. Introduction

At the United Nations Conference on Sustainable Development (Rio + 20) held in June 2012, it was agreed that the Third Global Conference on the Sustainable Development of Small Island Developing States (SIDS) will be held in Apia, Samoa in 2014.

The proposed Third Global Conference on SIDS will mark the twenty year anniversary of the Global Conference on the Sustainable Development of Small Island Developing States held in Barbados, from April 25th to May 6th 1994. That Conference was established under the United Nations General Assembly Resolution 47/189. The convening of the first Global Conference was as a result of the recognition of the special vulnerabilities of SIDS which were sequentially acknowledged by the international community. Firstly, the 44th session of the UNGA in 1989 passed Resolution 44/206 on the possible adverse effects of sea-level rise on islands and coastal areas. Secondly in Chapter 17 of Agenda 21 the outcome of the 1992 United Nations Conference on Environment and Development (UNCED) (the first Rio Conference), included a programme area on the sustainable development of small islands and called for the convening of the first Global Conference of the Sustainable Development of SIDS.

This First Global Conference acknowledged that there were common issues affecting all SIDS and a Programme of Action was prepared in Barbados outlining actions in the areas of climate change and sea level rise, natural and environmental disasters, management of wastes, coastal and marine resources, freshwater resources, land resources, energy resources, tourism resources, biodiversity resources, national institutions and administrative capacity, regional institutions and technical cooperation, transport and communication, science and technology, human resource development, implementation, monitoring and review.

Following the 1994 First Global Conference on the Sustainable Development of SIDS, the issues of particular concern to SIDS were discussed again at the World Summit on Sustainable Development in Johannesburg in 2002 and at the International Meeting on the Sustainable Development of Small Island Developing States held in January 2005 in Mauritius. In addition the sustainable development of SIDS was kept under review at successive sessions of the UNGA.

In paragraphs 178-180 of the Outcome Document to the 2012 Rio + 20 Conference, , the International community reaffirmed that small island developing States remain a special case for sustainable development in view of their unique and particular vulnerabilities, including their small size, remoteness, narrow resource and export base,

and exposure to global environmental challenges and external economic shocks. These shocks included a large range of impacts from climate change and potentially more frequent and intense natural disasters.

It was noted with concern that the five-year review of the Mauritius Strategy in 2010, concluded that small island developing States have made less progress than most other groupings, or even regressed, in economic terms, especially in terms of poverty reduction and debt sustainability. Sea-level rise and other adverse impacts of climate change continued to pose a significant risk to sustainable development of small island developing States and overall progress towards achieving internationally agreed goals including the Millennium Development Goals, among SIDS was uneven.

It is expected that as a major UN Conference on SIDS issues, the 2014 Samoa Conference, like the 1994 Barbados Conference will focus the world's attention on the unique vulnerabilities of SIDS, building on the outcomes of the Rio+ 20 Conference and make a lasting concrete contribution to the advancement of sustainable development with special attention on SIDS by:

- Assessing progress and gaps;
- Seeking a renewed political commitment;
- Identifying new and emerging challenges and opportunities;
- Identifying priorities for the Sustainable Development for SIDS for consideration in the post 2015-UN development agenda.

The First Edition of the Barbados National Assessment Report benefitted from the completion of the Draft Latin America and Caribbean Initiative for Sustainable Development (ILAC) Monitoring Indicators Report: Barbados 2012, the Green Economy Scoping Study for Barbados (2012) and the Barbados National Assessment Report of Progress made in addressing vulnerabilities of SIDS through implementation of the Mauritius Strategy for Further Implementation (MSI) of the Barbados Programme of Action (BPOA) (2010). The preparation of each of these reports involved the inclusion of a governance structure that ensured consultation and collaboration with the major sustainable development stakeholders. These stakeholders were again called upon to provide input into the First Edition Report.

The First Edition Report was circulated to a broad spectrum of agencies, organisations and individuals for review. A National Validation Workshop for the Barbados National Assessment Report was held on July 24th 2013. Over fifty-five persons drawn from government, private sector and civil society gathered to provide detailed input and feedback into the report. The Report of the National Validation Workshop was used to finalise the Barbados National Assessment Report.

2. Taking Stock: Assessing Progress and Gaps in the Implementation of the MSI

In charting a path to Sustainable Development, the Government of Barbados designs and incorporates policies and programmes that take into account special defining characteristics of a Small Island Developing State that makes this country especially vulnerable to external shocks. These vulnerabilities include:

- i. Natural disasters
- ii. Small domestic size
- iii. Limited resource base
- iv. Narrowness of output and exports
- v. Openness to trade
- vi. Remoteness
- vii. Dependence on the well being of other global economies

The country is also faced with an ageing population and a population growth rate of almost zero, is characterised as a Net Food Importing Developing country and is experiencing a loss of competitiveness in the manufacturing and agricultural sectors.

These characteristics impact structurally on the country's economic growth and level of employment, constrain its ability to compete and limits capacity and speed in undertaking adjustment and transformation of the economy.

More recently, since the onset of the global financial and economic crisis in late 2007, Barbados' vulnerabilities have been further brought into focus and even exacerbated in some cases. While it is recognised that the crisis has and continues to impact Barbados' inherently vulnerable economy, the crisis has the potential to erode the gains made socially and environmentally in the Post-independence era.

In this regard, the crisis has presented increasing challenges to Barbados' sustainable development including, *inter alia*:

1. Tourism Competitiveness: As Barbados' main economic sector and leading foreign exchange earner, tourism has been one of the main economic casualties of the crisis. Barbados' major source markets have been in a protracted decline which has dampened growth in tourism and related activities such as construction. The Air Passenger Duty (APD) remains a major concern for Barbados and the region as it has the potential to impact the region's competitive advantage as a choice destination. The issue of carbon taxes as a means to internalise the negative effects of climate change is one that Barbados and other SIDS must remain vigilant in relation to

potential increased cost in the International Transport and Travel sector (Air and Sea).

2. Official Development Assistance (ODA): In the past, Barbados benefitted from this type of assistance towards pursuit of its sustainable development goals for some time. However, the protracted global crisis coupled with the fact that Barbados is considered a high-income developed country by both the World Bank and the OECD has resulted in Barbados experiencing declining ODA over recent years. The prevailing development and differentiation policy of donors, which is based on per capita income indices, favours lower income countries and disadvantages middle and higher income countries. This is a concern for Barbados and the Latin America and the Caribbean (LAC) region. There is ongoing debate over the suitability of using per capita income as the main criterion for ODA allocation as it discounts other important distributional indicators of development like equity. The LAC region has been lobbying the international community for a re-think of this policy.
3. Energy and Food Prices: The global crisis has resulted in increasingly unpredictable fluctuations in the prices of energy and food commodities. Such fluctuations present a major challenge to the management of the external current account, particularly for small states like Barbados with small, open economies. The trickledown effect of these fluctuations results in higher prices of goods and services in an already stressed domestic economy.
4. HIV/AIDS, chronic non-communicable diseases, rising crime and drug abuse: These pose a serious challenge to the development of social capital, the linchpin of further economic growth. HIV/AIDS is undoubtedly the most critical health issue facing Barbados. This pandemic poses a serious threat to our youth, to the most productive elements of our labour force, and to our established social capital formation. HIV/AIDS can reduce productivity, national savings and investment. It can also negatively impact on foreign investment, tourist arrivals and foreign exchange earnings.

Taken together, these challenges among others put a massive strain on the public purse and therefore the ability of Government to finance further implementation of its sustainable development agenda in the face of declining economic activity and employment pressure, among other things, in the context of a period of prolonged global recession

Against this background, successive political directorates have embraced the concept of sustainable development and its importance in the growth and stability of the country.

2.1 National Sustainable Development Governance: The National Institutional Framework, Sectoral Coordination and Integration of the Three Pillars of Sustainable Development

The policy framework for sustainable development encompasses a multi-layered and multi-sectoral approach driven by several key institutions across government, private sector and civil society.

2.1.1 Macroeconomic Policy Framework and the Joint Economic Group

Barbados' macroeconomic progress over the years has been driven by a series of long-term development plans articulated under the aegis of the Ministry of Finance and Economic Affairs which has the pivotal role for the implementation of the policies outlined in these documents. Those plans utilised since the 1994 Conference include:

- The 1993-2000 Development Plan
- The National Strategic Plan 2006-2025
- The Medium Term Strategic Plan 2010-2014

In 2010, the long-term strategic development plan was buttressed by medium-term development and fiscal strategy documents which articulated intermediate targets for key economic objectives including:

- Real GDP growth of at least 3 per cent per annum,
- Debt to GDP ratio of 70 per cent by 2017/2018, and
- A balanced budget by 2014/15.

Currently, macroeconomic planning is supported by the Joint Economic Group which is comprised of the planning units drawn from across the public sector.

2.1.2 Macroeconomic Policy: the Barbados Sustainable Development Policy and National Commission on Sustainable Development

The Cabinet-appointed National Commission on Sustainable Development (NCSD) was one of the most visible and successful structures put in place for the co-ordination of national sustainable development activities. Appointed in 1994 following the Global Conference on the Sustainable Development of Small Island Developing States, the NCSD comprised 30 members representing Government and all major groups including Non-Governmental Organisations (NGOs), Community-Based Organisations (CBOs), Trade Unions, Women Organisations, the Academic Community and Private Sector entities.

The role of the Commission was to:

1. Advise Government on measures required to integrate environmental and economic considerations into the decision-making process and on global issues of sustainable development;
2. Facilitate national level co-ordination mechanisms on sustainable development;
3. Promote greater understanding and public awareness of cultural, social, economic and policy opportunities to attaining sustainable development in Barbados; and
4. Receive and review the annual report of actions in pursuit of sustainable development, prior to its submission to Cabinet and to the UN Commission on Sustainable Development (UNCSD).

The NCSO became fully formalized in 1996 and established 8 Steering Committees to consult on and provide recommendations on the following cross-sectoral themes of sustainable development:

1. indicators of sustainable development;
2. implementation mechanism, assessing progress made and steps required to go forward;
3. science and technology, assessing research and development of alternative renewable energy sources;
4. natural resources;
5. man-made resources and the built environment;
6. waste management and pollution control;
7. human resource development; and
8. public awareness and education.

The work of these Steering Committees combined with the results of 5 national dialogues held in 1997 on Sustainable Water Management, Energy, Youth and Community, Solid Waste Management and Agriculture were used to draft a Barbados Sustainable Development Policy (BSDP) which identified strategies for achieving sustainability in various sectors.

The Ministry responsible for the Environment, the Government's policy-making arm for environment and sustainable development issues, facilitated the work of the NCSO by acting as the Secretariat.

The BSDP was approved and made one of the documents of Parliament in 2004 and has as an overarching goal *"to ensure the optimization of the quality of life for every person by ensuring that economic growth and development does not occur to the detriment of our ecological capital."* The major objectives of the Policy are:

1. to formulate a national definition of sustainable development;
2. to provide a national framework for decision-making based on our principles of sustainable development;
3. to promote principles of sustainable development and encourage all persons to adopt and apply these principles in every aspect of decision-making; and
4. to sensitize and educate all persons in Barbados about key issues and conflicts between development and environment and the need to make wise consumption and production choices.

The Policy defined for Barbados overarching principles of sustainable development namely: conservation of resources, economic efficiency, quality of life, equity and participation. The BSDP is divided into two main parts. The first section of the document centres on the policy aims and objectives, in addition to placing the principles of sustainable development within a Barbadian context.

The second part of the BSDP focuses on presenting an Action Plan. It articulates detailed sector focused policy recommendations supporting sustainable development and a further shift towards more sustainable consumption and production patterns. These sectors include:

Fresh Water Resources	Waste Management
Transportation	Regional Cooperation
Agriculture	Concessions and Incentives
Terrestrial Biodiversity Including Forestry	Human Health, Well Being and Poverty
Fisheries	Gender
Energy	Population
Biotechnology	Disaster Management
Research and Development	Coastal and Marine Preservation
The Built Environment	Consumption Patterns
Land Resources	Implementation and Legislation
Natural Resources;	Indicators for Sustainable Development
Education and Training	Sustainable Tourism Development.

The National Commission on Sustainable Development went into abeyance after the production of the Barbados Sustainable Development Policy however there has been agreement at the level of Cabinet to reconstitute the Commission with a revised mandate relevant to current national circumstances.

2.1.3 The Social Partnership

The Barbados Social Partnership emerged during a serious economic crisis, between 1990 and 1992, when real gross domestic product fell by 4 percent per annum, foreign exchange holdings dropped to record low levels, local currency was threatened with

devaluation, there was a dramatic rise in unemployment and the country was facing a high fiscal deficit. There was a national recognition that a cohesive national plan was required to enable all parties to work closely together to implement strategies to face the economic challenge.

As such, three distinctive groups, Government, Private Sector and Trade Union Representatives agreed to a joint collaborative approach via the establishment of what was called a Prices and Incomes Protocol to address the volatile economic situation at that time.

This approach converged with the areas for action emerging from the 1992 United Nations Conference on Environment and Development, which called for Civil Society, Trade Unions and Businesses, and other major groups to take an active role in the pursuit of sustainable development.

Important to the success of the Partnership has been that, since its inception, a total of six Protocols, highlighting areas for cooperation, has bound the partners to specific actions. The adoption of successive Protocols has been successful since it allowed the partnership to develop dynamic responses to issues affecting, both national development as well as the daily lives of the average citizen.

Following the operationalization of the first four protocols between 1993 to 2005 which addressed economic stabilization and labour issues, Protocol Five was pivotal in committing Business, Government and the Trade Unions to a broader sustainable development mandate and was specifically expanded to integrate the following critical issues:

- Occupational Health and Safety
- Issues affecting the disabled Community
- Environmental Matters and
- Disaster Preparedness

The Partners recognized

"that in the pursuit of sustainable development a balance must be struck so that any improvement in the quality of life will not take place through the over exploitation of natural and environmental assets thereby jeopardising the social and economic development of future generations."

The Social Partners also expressed full support for policies which inculcate agreed criteria for sustainability and which sought to implement those principles and practices, specifically designed to ensure that economic growth and development do not occur to the detriment of ecological capital. On May 2nd 2011, the Social Partnership signed its

sixth protocol which built on the foundation of its predecessors, but paid particular attention to:

- Human development and the management of health issues, especially chronic non-communicable diseases, recognizing the link between good health and human and economic development,
- Environmental protection and the Green Economy
- The development of a knowledge driven economy to encourage a culture of information sharing within and across all sectors

The protocols committed the partners to improved productivity and increased efficiency, thereby reducing wastage and enhancing national performance so as to attract investment and create employment opportunities. The achievement of these objectives was based on the mutual commitment of the parties to clearly defined initiatives, including the establishment of a framework for workers' security of employment and a reduction in labor disputes. The fact that there is an institutional framework and mechanism for cooperation also makes the sustainability of this partnership feasible. The Barbados Social Partnership, has been used to incorporate consensus building, meaningful partnerships and stakeholder engagement in national policy formulation and decision-making

2.1.4 The Green Economy Technical Steering Committee and the GOB-UNEP Partnership for a Resource-Efficient Green Economy in Barbados

Following a Scoping Mission in 2010 by UNEP at the request of the Minister of Environment and Drainage, the Cabinet approved the Government of Barbados-United Nations Environment Programme Partnership for a Resource-Efficient Green Economy in Barbados. The Green Economy Technical Steering Committee (GETSC) was established thereafter by the Government of Barbados to support the implementation of the Partnership and particularly for the execution a Green Economy Scoping Study (GESS). The GESS was completed in 2012.

The GETSC is chaired by the Permanent Secretary of the Ministry of the Environment and Drainage, and consist of the following agencies:

- Ministry of Agriculture, Food, Fisheries, Industry and Small Business Development;
- Ministry of Finance and Economic Affairs;
- Ministry of the Environment, Water Resource Management and Drainage;
- Ministry of Housing and Lands, Urban and Rural Development;
- Ministry of Transport and Works;
- Ministry of Tourism;
- The Energy Division, Prime Minister's Office;

- Barbados Industrial Development Corporation;
- Town and Country Development Planning Office;
- The Barbados Chamber of Commerce and Industry; and
- The University of the West Indies.

2.1.5 The Physical Development Plan

Since 1970, Barbados has produced Physical Development Plans that seek to identify land use practices, community facilities and physical infrastructure that would support the island's development goals. The concept of sustainable development is explicitly woven into the most recent Physical Development Plan (GOB, 2003). This places emphasis on the protection of the natural environment and cultural heritage, establishes procedures and criteria for Environmental Impact Assessments, attempts to focus new growth into a defined urban corridor, protects agricultural lands from incompatible urban development, seeks to maintain Bridgetown as the primary location for doing business, and promotes tourism by promoting the modernisation of older beach front properties and by enhancing opportunities for developments that uplift visitor experiences through the creation of national parks.

2.1.6 Sustainable Energy Policy- National Sustainable Energy Framework

In relation to energy efficiency, the National Sustainable Energy Framework, prepared by the Government of Barbados in collaboration with the Inter-American Development Bank has identified a number of strategies to encourage investments in renewable energy and energy efficiency to reduce energy costs, improve energy security and enhance environmental sustainability. The document recommends building a sustainable policy framework on five core principles:

1. Adopt a win-win approach – measures that increase sustainability and reduce the cost of energy
2. Place reliance on cost-benefit analyses – a measure will only be pursued if the sustainability benefits exceed the economic costs
3. Pursue international support – the government should work to secure concessional finance, grants and carbon credits
4. Adopt a stance of technology neutrality – promote policies that increase sustainability and reduce costs rather than favouring a particular technology
5. Build on existing strengths – those elements of the country's energy system that work should be supported and developed.

2.2 Progress and Gaps in National Implementation of the Mauritius Strategy for Further Implementation (MSI) of the Barbados Programme of Action (BPOA)

A comprehensive analysis was carried out by the Government of Barbados in 2010 in the document entitled “**Barbados National Assessment Report of Progress made in addressing vulnerabilities of SIDS through implementation of the Mauritius Strategy for Further Implementation (MSI) of the Barbados Programme of Action (BPOA)**”. This Report provided a detailed stocktaking of the Government of Barbados’ progress with the implementation of the BPOA and MSI up to 2010. It also highlighted several lessons learned and best practices.

In the table below the major achievements as it relates to sustainable development and the accompanying gaps to implementation, in the period 2010-2013 are summarized.

Table 1: Major Achievements and Gaps in Implementation for 2010-2013

CHAPTER BPOA/MSI	Para	ACTIONS	GAPS/CHALLENGES IN IMPLEMENTATION
Climate Change and Sea level Rise	17	<ul style="list-style-type: none"> The Draft Barbados Second National Communications Report is being finalized and will soon be submitted for approval by Cabinet Barbados represents SIDS on the Board of the Green Climate Fund A Draft Climate Change Policy Framework has been prepared and is awaiting Cabinet Approval <p>See actions below under “Coastal and Marine Resources”</p>	<ul style="list-style-type: none"> Data and information to support vulnerability assessments and resilience. Further mainstreaming climate change considerations into the EIA and other risk management and planning processes for example in Public Investment Programming. Access to financial resources The need for wider uptake of mitigation and adaptation challenges by the private sector.
	18 (g)	<ul style="list-style-type: none"> The CCCCC has entered into a Grant Contract Agreement with the European Union (EU) to perform the role of Implementing Agency for the execution of the Support to the Global Climate Change Alliance (GCCA) Project. The project has among its major objectives, enhancing national and regional institutional capacity in areas such as climate monitoring, data retrieval and the application of space-based 	

CHAPTER BPOA/MSI	Para	ACTIONS	GAPS/CHALLENGES IN IMPLEMENTATION
		tools for disaster risk reduction.	
Natural and Environmental Disasters	21(a) (b) (c)	<ul style="list-style-type: none"> The CCCCC is currently executing a Risk Management Project for the Caribbean, funded but the Climate and Development Knowledge Network, to prioritise the use of risk management tools and processes in decision-making. Barbados is participating in the pilot project 	
		<ul style="list-style-type: none"> Established a Caribbean Tsunami Information Centre (CTIC) through the support of the UNESCO/ IOC, to coordinate capacity building activities for the entire Caribbean region in developing and operating interoperable end-to end tsunami warning and mitigation systems Established the institutional mechanism for the supervision of the emergency management system of Barbados- the Emergency Management Advisory Council which is chaired by the Minister of Home Affairs and recommends policies, programmes and activities to enhance the emergency management programme. Completed education and awareness material and programmes including the new Disaster Management Challenge game utilized across schools in Barbados, the climate smart community disaster management training handbooks and audio - visual, and public education campaigns for the tsunami and hurricane hazards. Furthermore, the DEM improved response arrangements for the hurricane, tsunami and bio hazards supported by shelter assessments, review meetings of the subcommittees of the emergency management system and exercises. The following are in progress: Legislative review of the Emergency Management Act, institutional 	<ul style="list-style-type: none"> The requisite organisational structure and physical facility of the DEM to support the implementation of the expanded mandate of comprehensive disaster management (CDM) has been a challenge. Furthermore the spatial definition of the responsibility of each District Emergency Organisation along the political constituency boundaries has limited the involvement of a wider cross-section of citizens in the national community disaster management programme. Disaster management initiatives are implemented in a fragmented manner. Furthermore financing for disaster risk reduction as a development priority is not adequate. Moreover available funds for response and recovery are never enough to meet the costs of major impacts. By far, a significant percentage of the funding is associated with coastal hazards whereas other hazards such as flooding, earthquakes and technological hazards can create a significant impediment to the country's

CHAPTER BPOA/MSI	Para	ACTIONS	GAPS/CHALLENGES IN IMPLEMENTATION
		<p>review of the DEM and reform of the community preparedness programme</p>	<p>sustainable development</p> <ul style="list-style-type: none"> • At the physical planning stage, considerable vulnerability still exists with respect to residential and commercial development. There is the accumulation of high cost investments and personal assets in vulnerable areas with the potential for high losses and potential fiscal gaps. This can result in cumulative microeconomic effects over time with sever implications for long-term economic and fiscal resilience. • Limited hazard and risk information to inform comprehensive disaster management. Additionally the capacity of regulatory agencies to address and enforce the key outcomes of national risk assessments must be enhanced.
		<ul style="list-style-type: none"> • With respect to the National Oil Spill Contingency Plan, it was updated to improve its usefulness as an emergency response tool and was approved by Cabinet in January 2013 along with the Dispersant Use Policy. The Plan establishes a national preparedness and response system for oil spills at sea and on land and aims to prevent, mitigate or minimize adverse environmental impacts of oil pollution. In addition to the plan, the National Oil Spill Response team has had several training sessions and Environmental Sensitivity Maps have been developed for the island. These activities have been achieved due to the strong partnership between government regulatory agencies and oil industry stakeholders. 	<ul style="list-style-type: none"> • The need to strengthen the governance mechanism for preparedness and response to hazardous materials incidents. In particular the mechanism should address continuous training for first responders and regulators and clarify the regulatory roles of the multiple stake holders.

CHAPTER BPOA/MSI	Para	ACTIONS	GAPS/CHALLENGES IN IMPLEMENTATION
		<ul style="list-style-type: none"> • In keeping with national obligations under the Chemical Weapons Convention, first responders from the Fire Service Department are being trained on an intermittent basis through technical cooperation to respond to incidents with hazardous substances. • Review and upgrading of the Hazardous Materials Emergency Response Plan to a draft Chemical, Biological, Radiological and Nuclear Response Plan. 	
Management of Wastes	23 (a) (b)	<p>Improved the management of chemicals in Barbados in the following areas:</p> <ul style="list-style-type: none"> • Development of the National Implementation Strategy (NIS) for the implementation of the Globally Harmonized System (GHS) of Classification and Labelling of Chemicals in Barbados. The NIS outlines actions to improve the identification and communication of hazards relating to chemicals in Barbados and is an important tool that will be used to minimize the risk posed to human health and the environment from the import, production, use and disposal of chemicals. A component of the project was to train representatives from industry, government, civil society and academia in hazard communication and physical, health and environmental hazard classification. These persons are now tasked with raising awareness about and training persons within their organizations in the use of the GHS • Improved capacity to assess the levels of chemicals in the environment and other media through a project to build laboratory capacity to analyse POPs chemicals 	<ul style="list-style-type: none"> •

CHAPTER BPOA/MSI	Para	ACTIONS	GAPS/CHALLENGES IN IMPLEMENTATION
	23 (c)	<ul style="list-style-type: none"> • Continued development and improvement of existing facilities such as Cell 4 at the Mangrove Pond Landfill • Increased diversion of waste away from the landfill due to increased recycling activities. <p>The gaps and challenges in this sector has benefitted recently with the drafting of the following pieces of legislation:</p> <ul style="list-style-type: none"> • Draft Waste Management Act • Draft Revised Sanitation Services Authority Act (Collection and Disposal of Solid Waste) Regulations • Draft Waste Management Licensing Regulations • Draft Revised Sanitation Service Authority Act (Fees) (Amendment) Regulations • Draft Solid Waste Management Act Tipping Fee Regulations. 	<p>In general:</p> <ul style="list-style-type: none"> • The need for regulation and registration of waste brokers and waste haulers • The need for adequate financing and investment <p>With respect to solid waste management legislation:</p> <ul style="list-style-type: none"> • Drafting and enactment of legislation is often a time consuming process • Enforcement of the Tipping Fee Regulations can be problematic given existing waste disposal culture • There is the need for different relevant acts to function synergistically
Coastal and Marine Resources	28 29 30	<ol style="list-style-type: none"> i. Regular meeting of the Caribbean Regional Fisheries Mechanism’s Ministerial Council (Ministers responsibility for fisheries) to deal with regional fisheries policy - including fishery sustainability matters. ii. Ministers responsibility for fisheries in the CARICOM region have: <ul style="list-style-type: none"> • Approved the Caribbean Community Fisheries Policy (awaiting final approval by the Cabinet of Barbados and Heads of Government of CARICOM. • Agreed to the Castries Declaration on illegal, unreported and unregulated (IUU) fishing by the Ministers responsibility for fisheries. <ul style="list-style-type: none"> • Drafting of a regional flyingfish 	<p>As it relates specifically to the issue of Fisheries</p> <ol style="list-style-type: none"> i) Limited human capacity, human capability and financial resources. ii) Slow rates of implementation due to limited human and financial resources, and at times need for prioritisation of critical actions. iii) Inadequate stakeholder consultation and participation. iv) Ineffective communication among stakeholders v) Poor and non-productive linkages. vi) Fragmented approach to the management and

CHAPTER BPOA/MSI	Para	ACTIONS	GAPS/CHALLENGES IN IMPLEMENTATION
		<p>management plan. The plan is presently undergoing in country stakeholders consultations and discussions.</p> <ul style="list-style-type: none"> • The CARICOM Ministers with responsibility for Fisheries are currently addressing the issue of Lionfish invasion through the Caribbean Community Fisheries Resources Mechanism. • Updating of the Fisheries Act and Fisheries Management Regulations (being finalised by the Chief Parliamentary Council for final presentation to Cabinet). • A draft Fisheries Sector Management and Development Policy is awaiting Cabinet approved. • First draft of the Strategic Action Plan for Fisheries has been completed (to be circulated for inputs from stakeholders). • The Fisheries Management Plan is being revised. • Draft Fisheries Resource Management Plan are being prepared for: <ul style="list-style-type: none"> • Conch • Flyingfish • Large Pelagic • The Coastal Zone Management Unit is undertaking a US \$30 million Coastal Risk Assessment and Management Programme (2012-2018). <p>The project has three components:</p> <ol style="list-style-type: none"> i) Coastal Risk Assessment, Monitoring and Management which provided both qualitative and quantitative information on key coast risk zones ii) Coastal Infrastructure which involves the construction of various coastal defenses, enhance water 	<p>development of fisheries.</p> <ol style="list-style-type: none"> vii) The need for Capacity building viii) Credit facilities for fishermen ix) Post harvest losses <p>As it relates to Marine Resources in general:</p> <ul style="list-style-type: none"> • A multi-stakeholder ocean governance and policy framework is required in support of the sustainable management and utilisation of the resources within Exclusive Economic Zone.

CHAPTER BPOA/MSI	Para	ACTIONS	GAPS/CHALLENGES IN IMPLEMENTATION
		<p>quality, improve fish landing sites and demonstration projects that use an ecosystem based approach to climate change adaptation.</p> <p>iii) Institutional strengthening for ICZM involving an updated ICZM plan, stakeholder engagement, communication, and education in disaster risk management, conservation and coastal zone management.</p>	
	32	<ul style="list-style-type: none"> • The EPD has continued its routine monitoring programmes for groundwater, marine water and wastewater. Through specialised projects and partnerships the EPD has also sought to; ascertain the incidence of antibiotic resistant bacteria in select water sources; assess the contributing sources to nitrate concentrations in Barbados to improve understanding regarding the impact of agriculture and residential development on ground water; assess the emissions from industrial stacks and assess the levels of POPs in mother's milk and other select media. The EPD is also conducting noise and ambient air quality assessment project in Bridgetown and is commencing projects in other select locations. • Continued to conduct regulatory and compliance inspections of different sectors under the Marine Pollution Control Act 1998 and developed Best Management Guidelines for the Construction Sector and Recyclers 	
Freshwater Resources	33	<ul style="list-style-type: none"> • The GOB- IDB Water and Sanitation System upgrade Project for US \$ 53 million. The goal of the Project is to improve water resources management in Barbados and sustainable water and wastewater service provision by the Barbados Water Authority (BWA). 	

CHAPTER BPOA/MSI	Para	ACTIONS	GAPS/CHALLENGES IN IMPLEMENTATION
		<p>Specifically, the Project will support the GOB's efforts to modernize the institutional setting of the water and sanitation sector; improve water production infrastructure and the efficiency of the operations of the BWA by reducing unaccounted-for-water and implementing adequate cost recovery mechanism. The Project will also prepare a wastewater treatment action plan.</p> <ul style="list-style-type: none"> • An Integrated Watershed and Coastal Area Management Information System has been developed. 	
Land Resources	41-45	<ul style="list-style-type: none"> • The Cane Industry Restructuring Programme is currently underway. • Agricultural Health and Food Control Programme (US\$28 million), • The Physical Development Plan (Amended 2003) promulgated in 2008, is currently being updated as called for in law. • The Barbados National Park and System of Open Spaces was formally established in the context of the Physical Development Plan in 2008. • Designation of the City of Bridgetown as a World Heritage Site • An Integrated Watershed and Coastal Area Management information system has been developed. This will enhance the national planning system. 	<p>As it relates to the Agricultural sector:</p> <ul style="list-style-type: none"> • The need for increased government support through policies and extension services, • Lack of training for practitioners • Lack of access to capital • Inadequate use of technology • Low returns on investment • Low productivity • Inefficient marketing systems • Poor crop scheduling • Praedial larceny • Inability to attract talented and trained youth • Minimal focus on production of value-added products • Need for an updated agricultural census <p>As it relates to land management in general:</p> <ul style="list-style-type: none"> • The need for more coherence across sectors and agencies responsible for land management to reduce

CHAPTER BPOA/MSI	Para	ACTIONS	GAPS/CHALLENGES IN IMPLEMENTATION
			<p>duplication of effort and resource wastage.</p>
<p>Energy Resources</p>	<p>47</p>	<ul style="list-style-type: none"> • In 2011 the Government of Barbados and the IADB signed a US \$70 million Energy Policy Based Loan entitled “Support for Sustainable Energy Framework for Barbados (SEFB) II”. The objective of this facility is to reduce Barbados’ fossil fuel dependence and to help Barbados diversify its energy matrix and promote sustainable energy options. • Sustainable Energy Investment Programme (US\$10 million). • A framework for an Energy Information System has been developed. • GOB plans to build a multi-purpose sugar plant which will also generate electricity. • GOB is pursuing a partnership with the Government of Trinidad and Tobago for a trans-national pipeline for natural gas which will reduce Barbados’ dependence on oil. • Since 2011 there has been significant expansion of the fiscal incentives 	<ul style="list-style-type: none"> • There is need for increased public education especially as it relates to available incentives and grant facilities. • Access to affordable technologies • The need for a coherent approach to energy conservation by the major sectors involved in energy consumption. • The need to address disposal of wastes generated from renewable energy technologies.

CHAPTER BPOA/MSI	Para	ACTIONS	GAPS/CHALLENGES IN IMPLEMENTATION
		available for renewable energy technology uptake <ul style="list-style-type: none"> • Legislation has been drafted to address the issue of independent power production • Legislation for offshore oil and gas exploration has been amended 	
Tourism Resources	51-52	<ul style="list-style-type: none"> • The announcement of a BDS \$150 million Hotel Refurbishment, Energy Efficiency and Food Production Fund. • The White Paper on Tourism Development in Barbados has been prepared • A Tourism Master Planning process is underway. • A BDS \$ 15 million Tourism Investment Relief Fund was created in 2009. • The Tourism Development Act was amended and approved to allow for expansion of the suite of incentives and investments available for sustainable tourism practices. • Development of a tourism satellite accounting system in collaboration with the UNDP and Caribbean Tourism Organisation. This system will enhance policy development. • There has been new market emphasis such as Brazil and creation of deeper linkages with other sectors such as health, eco-tourism and heritage. 	<ul style="list-style-type: none"> • Cost of achieving green certification • Heavy dependence on imports • Impacts of global climate change • External environment • The need to obtain and maintain airlift and the expenses associated with this. • Low occupancy rates • Domestic transportation system • Crime and safety issues • Inconsistent supply of local inputs • Cost of inputs • Emerging markets competition • Potential loss of economic benefit as a result of the perception of an emphasis being placed on villa as opposed to traditional accommodation.
Biodiversity Resources	54	<ul style="list-style-type: none"> • The updated Fisheries Management Plan (2014-2016) has been drafted and is awaiting approval • The Barbados National Park has been established through the Physical Development Plan [Amended 2008] • An Agricultural Health and Food Control Programme (US\$28 million), 	<ul style="list-style-type: none"> • The loss of biodiversity e.g. the disappearance of fruit trees such as guava, soursop, grapefruit. • The impact of genetically modified organisms on biodiversity resources

CHAPTER BPOA/MSI	Para	ACTIONS	GAPS/CHALLENGES IN IMPLEMENTATION
Transport and Communication	56	<ul style="list-style-type: none"> • The Government of Barbados is participating in the UN Decade for Road Safety 2011-2020. • Draft Road Traffic Act prepared • The Ministry of Transport has deployed solar PV panels on the roof of its administrative building as part of its Alternative Energy Initiative 	<ul style="list-style-type: none"> • Traffic congestion • On-street parking • Bus scheduling • Public attitudes to green initiatives • Air pollution • Cost of water <i>vis a vis</i> road maintenance and construction • Finance for investment in transitioning to more sustainable options • Human resource capacity
	57-59	<ul style="list-style-type: none"> • The Barbados Entrepreneurship Foundation Inc. which was launched in 2010, had as one of its major objectives, ensuring free Wi-Fi internet access throughout Barbados. This initiative has been progressing steadily • Computers Risk Use Act introduced • Electronic Regulations Act introduced. Data Protection Act Drafted • A Draft of the Regional Digital Development Strategy has been prepared. It is designed to ensure, that the Region benefits socially and economically from judicious application of digital technologies. 	<ul style="list-style-type: none"> • Urgent need to upgrade legislation as it pertains to e-commerce security, facilitated by police enforcement and prosecution of perpetrators.
Science and Technology	61-63	<ul style="list-style-type: none"> • Establishment of the Ministry of Education, Science, Technology and Innovation (METI) • The National Innovation Award 	<ul style="list-style-type: none"> • Need for greater public and private investment, and strengthened institutions including the National Council for Science and Technology, and the Corporate Affairs and Intellectual Property Office. Patenting systems need to be streamlined • Special facilities are required to support (i) research and development; and (ii) commercialisation of local technologies.

CHAPTER BPOA/MSI	Para	ACTIONS	GAPS/CHALLENGES IN IMPLEMENTATION
			<ul style="list-style-type: none"> A dedicated National Fund to support Research and Development is required. Innovative financing mechanism should be considered including fiscal rebates- Nurse, K. 2007 notes that R&D expenditures are estimated at 0.13% of GDP, well under the 3% recommended by the Caribbean Council on Science and technology
<p>Trade: Globalization and trade Liberalisation</p>	<p>66-69</p>	<ul style="list-style-type: none"> Barbados Competitiveness Programme (US\$11.8 million), Modernisation of the Barbados National Standards System (US\$7.29 million) Agricultural Health and Food Control Programme (US\$28 million), In 2008 the GOB signed onto the CARIFORUM- EU Economic Partnership Agreement (EPA). Chapter 4 ENVIRONMENT, Article 183 included objectives and sustainable development context, namely: <ol style="list-style-type: none"> The Parties reaffirm that the principles of sustainable management of natural resources and the environment are to be applied and integrated at every level of their partnership, as part of their overriding commitment to sustainable development as set out in Articles 1 and 2 of the Cotonou Agreement. The Parties recall that Article 32 of the Cotonou Agreement includes environment and natural resources as thematic and cross-cutting issues, and that the fundamental principles of ownership, participation, dialogue and differentiation set 	<ul style="list-style-type: none"> Barbados negotiates trade agreements as a part of the Caribbean Community (CARICOM). This presents major challenges as it relates to the timeliness in arriving at a regional consensus position. The successful penetration of new markets requires a large capital outlay which can often be matched and exceeded by larger players in the international sector. Donor partners continue to be challenged by the existing economic climate. This has an impact on the quantum of development assistance and the criteria to access. The process is unilateral in nature. Barbados has no control over the speed at which other countries respond to our concerns. In addition, the prolonged financial crisis has caused many countries to look inwardly and protect domestic trade. The Doha Round of negotiations has not been advancing at the pace which was originally anticipated. The challenge facing the

CHAPTER BPOA/MSI	Para	ACTIONS	GAPS/CHALLENGES IN IMPLEMENTATION
		<p>out in Article 2 of the Cotonou Agreement are therefore particularly relevant.</p> <p>iii. The Parties and the Signatory CARIFORUM States are resolved to conserve, protect and improve the environment, including through multilateral and regional environmental agreements to which they are parties.</p> <p>iv. The Parties reaffirm their commitment to promoting the development of international trade in such a way as to ensure sustainable and sound management of the environment, in accordance with their undertakings in this area including the international conventions to which they are party and with due regard to their respective level of development.</p> <p>v. The Parties and the Signatory CARIFORUM States are resolved to make efforts to facilitate trade in goods and services which the Parties consider to be beneficial to the environment. Such products may include environmental technologies, renewable- and energy-efficient products and services and eco-labelled goods.</p> <ul style="list-style-type: none"> • In 2010, the Government of Barbados established an EPA Implementation Unit • A tripartite council called the Council for Investment, Exports and Foreign Exchange (CIEX) was established by Government in 2010 to facilitate building export trade and investment opportunities through the involvement of the 	<p>Small Vulnerable Economies is the maintenance of the level of accommodation achieved thus far.</p> <ul style="list-style-type: none"> • The time of the private sector and civil society has a value attached. Since these entities are important stakeholders in trade dialogue, sessions must be focused in order to derive the desired outcomes. <p>From the perspective of Civil Society:</p> <ul style="list-style-type: none"> • There is the need to include persons from civil society into the negotiation of trade agreements • There is need Civil Society to monitor trade negotiations to ensure national laws and principles are given full credence • Some trade agreements create strain on the welfare system and can lead to public and private sector job losses. • There is need for feedback and evaluation on the effectiveness of the trade agreements to which Barbados is signatory.

CHAPTER BPOA/MSI	Para	ACTIONS	GAPS/CHALLENGES IN IMPLEMENTATION
		<p>Barbadian Diaspora which is viewed as an important aspect of the national social and economic policy machinery in Barbadian and Caribbean Development.</p> <ul style="list-style-type: none"> The Barbados Human Resource Development Project which is being part funded by EU total project cost is BDS \$583,000,000 over the next 5 years 	
<p>Sustainable Capacity Development and Education for Sustainable Development</p>	<p>70-72</p>	<ul style="list-style-type: none"> The Barbados Human Resource Development Strategy 2011-2016: National, Institutional and Human Capacity for Sustainable Growth The Ministry of Environment is collaborating with the Erdiston Teachers' Training College in supporting regional efforts in awareness building under the Decade for Education for Sustainable Development. To this end, the practical mainstreaming of Sustainable Living into the secondary schools' curriculum is being promoted across disciplines, as part of that institution's Teachers' certification programme (Certificate and Diploma levels). The Erdiston Teacher's Training college has also introduced an education for sustainable development module to the curriculum in the Diploma for Education Since 2011, the Bellairs Research Institute has partnered with the Government of Barbados to host a Bellairs Research Festival. Additionally, experts from the Government of Barbados also act as mentors to visiting McGill University students. Experts from agencies such as the Barbados Water 	<ul style="list-style-type: none"> Additional capacity is required to drive Environmental Education programmes at the national level. There can be overlap in responsibilities in the various entities involved in community development. There is an urgent need for enhanced planning and rationalization. The need for increased information-sharing across agencies Lack of an institutionalized UN System Capacity Building Programme in the Caribbean

CHAPTER BPOA/MSI	Para	ACTIONS	GAPS/CHALLENGES IN IMPLEMENTATION
		<p>Authority, the Energy Division and the Coastal Zone Management Unit have acted as mentors.</p> <ul style="list-style-type: none"> • The establishment of Constituency councils and Government's Community Development programmes, have created opportunities to train and empower persons to become entrepreneurs and to increase their earning power. • Various civil society organisations have taken on the responsibility to increase public awareness in areas such as climate change and the green economy. 	
<p>Sustainable Consumption and Production</p>		<ul style="list-style-type: none"> • The Barbados Sustainable Development Policy remains the overarching framework for mainstreaming sustainable consumption and production in Barbados. • The 2012 Green Economy Synthesis Report also outlines a number of actions to promote Sustainable Consumption and Production. • The Ministry of Environment and Drainage received approval for the United Nations Environment Programme Regional Office for Latin America and the Caribbean to project, entitled "Strengthening National Capacities for Sustainable Resource Management in Latin America and the Caribbean". • A National Agriculture strategy at this time being prepared by the Ministry of Agriculture with Funding from Inter-American Development bank • A large suite of fiscal incentives have been made available to small and medium enterprises to enable them to become involved in greener production. 	<ul style="list-style-type: none"> • A National Resource Efficiency and Cleaner Production Programme is required. • The development of a Resource Efficiency and Technology Innovation Centre (RETIC) was proposed to bolster production efficiency, reducing the operational costs in the areas of water, energy and waste, while at the same time meeting the country's multilateral environmental obligations. It was devised as a viable option to assist SME's in pursuing a greener business model and effecting implementing principles of sustainable consumption and production. • There is need for a coherent approach by the manufacturing sector in accessing training and green financing. • There is the need to establish industrial

CHAPTER BPOA/MSI	Para	ACTIONS	GAPS/CHALLENGES IN IMPLEMENTATION
			<p>benchmarks and standards.</p> <ul style="list-style-type: none"> • Sustainable consumption practices, especially as it relates to sustainable lifestyles is required in the education system.
<p>National and Regional Enabling Environment</p>	<p>74</p>	<ul style="list-style-type: none"> • Protocol VI in 2011 under the Social Partnership- Integrates the Green Economy and a commitment to implement the Barbados Programme of Action • The Green Economy Technical Steering Committee was established in 2010 to drive consultation in support of Barbados' development Agenda • The Joint Economic Group • The proposed establishment of a Regional Board at the 7th Meeting of regional Council of Government Experts on Sustainable Consumption and production • The Ministry of Environment is collaborating with the Erdiston Teachers' Training College in supporting regional efforts in awareness building under the Decade for Education for Sustainable Development. To this end, the practical mainstreaming of Sustainable Living into the secondary schools' curriculum is being promoted across disciplines, as part of that institution's Teachers' certification programme. The Ministry has provided resource personnel in this regard. • Agricultural Health and Food Control Programme (US \$20Million). • The Belliards Research Institute has committed to engage in research in support of the slow food movement. Programmes have been developed on sustainable agriculture, alternative energy and backyard gardening. 	<ul style="list-style-type: none"> • Need for a coordinated institutional platform of regional technical agencies to support national and regional efforts in pursuit of sustainable regional • An upgraded Capacity 21 (Capacity 2015) to support the development of National Councils on Sustainable Development • There is an urgent need to design a Cost-Benefit Analysis Model specific to Caribbean SIDS with respect to evaluating the projected implementation impact of MEAs over the short, medium and long-term. That tool should be able to inform policy makers of technical and financial requirements related to the implementation MEAs prior to accession/ratification. It should also be able to value social, economic, environmental and governance requirements and impacts.

CHAPTER BPOA/MSI	Para	ACTIONS	GAPS/CHALLENGES IN IMPLEMENTATION
			Absence of comprehensive environmental management legislation and the supporting enforcement framework. The Draft Environmental Management Act and supporting regulations, standards and permitting systems should be finalised and proclaimed as a matter of urgency
Health	75-78	<ul style="list-style-type: none"> • Funds were received via the 10th EDF the build capacity and enhance service delivery within the Polyclinic system • Community-based infrastructure to support the delivery of local health care services- Major refurbishment and upgrade of the Polyclinic in the rural parish of St. John was undertaken • The Chronic Disease Research Centre has indicated that mother to child transmission of HIV has been eradicated 	<ul style="list-style-type: none"> • Increase investment in early warning systems; • Support to address prevention and management of incidence of NCDs • Incidence of obesity is growing • Drug use and drug addiction continues to be problematic.
Culture	82	<ul style="list-style-type: none"> • A Draft Cultural Policy Paper was prepared in 2012. • The designation of the Garrison and Historic Bridgetown as a World Heritage Site in 2011. • There has been increase cultural consciousness in Barbados due in part to the work of the Pan African Movement, the National Cultural Foundation and the Reparations Committee • The work carried out as a result of the National Reconciliation Committee has resulted in more attention being paid to the value of culture to the economy. 	<ul style="list-style-type: none"> • Lack of evolution and innovation in cultural products • Impacts of cultural penetration

3. Areas for Renewed Political Commitment and Concrete Actions Needed to Further Support Implementation of the BPOA and MSI

Although the Government of Barbados has made significant strides in its sustainable development agenda, systemic challenges remain. To enhance the implementation of the BPOA and MSI, there are key areas that require the continued commitment of national stakeholders, Small Island Developing States, the UN System, regional organisations, and the international community at large.

3.1 Governance and Institutional Framework for Sustainable Development

At the national level, a more focused, coordinated and strategic approach is required to oversee matters pertaining to participation in regional and international sustainable development governance processes. Some of the governance challenges that persist include the need for enhanced:

- Stakeholder engagement and buy-in
- Responsiveness of government institutions
- Institutional cohesion and collaboration
- Policy prioritization
- Policy impact analysis capacity
- Harmonisation of government reporting systems
- Timely reporting and feedback systems
- Public information and accountability mechanisms
- Public-private sector trust and cooperation

To this end, a **national sustainable development coordinating mechanism is required**. The re-establishment of the National Commission on Sustainable Development agreed to by the Cabinet in 2008 and further reaffirmed in 2010 can be operationalized as the mechanism to drive the consultative multi-stakeholder sustainable development agenda.

Importantly, that mechanism can be tasked with monitoring the follow-up of all major international sustainable development meetings and summits including the Rio+20 outcomes and MSI.

It should also be noted that in conducting the Barbados Green Economy Scoping Study, the Social Partnership was identified as having a major role in overseeing the implementation of Barbados' Green Economy agenda. As such The Social Partnership and the proposed National Council on Sustainable Development should be integrated

into any proposed national governance mechanism.

It is also proposed that a National Major Groups Forum be established as a means to ensure inputs from all relevant stakeholders into the national planning processes. The UN System should provide support for the establishment of such mechanisms in Caribbean SIDS. The UNEP National Committees model could provide a starting point in this regard.

UNEP National Committees (NATCOMs) have been set up under Governing Council Decision 13/33 of 1985 which authorized the establishment of national environmental committees worldwide in order to support the activities of UNEP. UNEP National Committees are multistakeholder support organizations set up under practices and norms existing in different countries on the operation of NGOs. They may include in their constituent members and representatives of environmental and development NGOs, UN Associations, news media, industry and labour, the scientific community, academia, women, youth, indigenous peoples, community groups as well as prominent individuals. In some cases observers and supporters from relevant government agencies may take part as ex-officio members.

At the regional level the Government of Barbados is concerned about the level of implementation of regional commitments associated with the BPOA/MSI. The Government of Barbados acknowledges the efforts of ECLAC and CARICOM in supporting the Regional Coordination Mechanism (RCM) originally designed for this purpose, but is of the opinion that there is an urgent need to revisit the functioning of the RCM and that the Region has to engage in dialogue to prepare possible options prior to the Samoa 2014 Conference.

In addition, a UN Institutional Platform for Caribbean SIDS is required to deliver coordinated and coherent UN support towards the focused implementation of the MSI/BPOA. That mechanism should be built on the three UN Agencies responsible for the pillars of sustainable development (environment, social and economic) as focal agencies. Regional Inter-governmental Organisations and Regional Major Group Focal Points in Caribbean should be integrated into that support platform. Those agencies should meet on a biannual basis and report annually to Caribbean SIDS Political Forum. Reports should also be forwarded to the proposed High level Political Forum.

With the formalisation of the CARICOM COTED [Environment] the region has realised enhanced coordination in our approach to major international negotiations such as the Climate Change COP and the United Nations Conference on Sustainable Development (Rio + 20).

Of particular note, in response to a call from CARICOM Ministers of Environment, and in line with Article 58 of the Revised Treaty of Chaguaramas, the CARICOM Secretariat has undertaken to prepare a CARICOM Environment and Natural Resource Management Policy Framework and Action programme. This will go a long way towards establishing a platform for harmonising environmental practices across the region. This will be an asset as the region seeks to trade as a block with partners who often require a minimum set of environmental standards as part of trade and development agreements (e.g. CARICOM-Canada Trade Agreement).

Since 2008 CARICOM COTED [Environment] Meetings have been held on a fairly regular basis, allowing Member States to take active part in the regional environmental governance process. Over the past five years the agenda of the COTED [Environment] has been increasingly regularised to come more in line with the Region's combined interest and international negotiating agenda. As a result of this the COTED Ministers of Environment decisions have been used to guide regional negotiators stationed in the major capitals including New York, Brussels and Geneva.

Additionally, Member States have been taking increased responsibility for Agenda Items e.g. Barbados for Green Economy, the Caribbean Sea Resolution and Sustainable Consumption and Production; Jamaica for the Biodiversity Convention and St. Lucia for Oceans Governance.

The following actions are however required to support implementation:

- i. The Sustainable Development Unit of the CARICOM Secretariat is under-resourced and thereby challenged in many instances to support the implementation of the COTED (Environment) decisions. The Sustainable Development Unit's mandate should be revisited and resources should be allocated to fulfil such. There is also the need to further mainstream environmental and sustainable development principles in the overall structure of the CARICOM Secretariat (CARISEC).**
- ii. The COTED Environment Bureau established in 2008 as an interim governance mechanism to support the follow-up to decisions of the COTED has not functioned as planned. There is a need for clear guidelines, operational framework and budget support to ensure the proper functioning of the Bureau.**
- iii. Beyond the work of the Bureau, there is need for regular, inter-sessional reporting to Member States by the CARISEC on decisions taken by the COTED Environment.**

- iv. **There is a need to ensure budget implications relative to COTED Environment decisions are discussed and integrated into the meetings of Ministers of Environment. Relatedly, resource mobilisation strategies to enable such decisions should also be considered.**
- v. **The emerging issue of Ocean Governance is at present peripheral to the operations of the CARICOM Secretariat. Whereas CARICOM has established the Caribbean Regional Fisheries Mechanism to support a coordinated approach to the management of the region's fisheries resources, a multi-sector and integrated community framework is required to promote communication, cooperation and coherence in the development and governance of the region's marine resources.**
- vi. **A systematic environmental statistics and information system is needed to monitor, evaluate and report the status of the Community's shared resources on a timely and consistent manner. A Biennial State of the Community's Natural Resources based on the DPSIR (Driving Forces-Pressure-State-Impacts-Responses) methodology is proposed. A synthesis report should be presented to the Conference on a biennial basis.**
- vii. **The issue of sustainable consumption and production should underpin the CSME Environmental and Natural Resources Policy Framework.**
- viii. **CARICOM Civil Society institutions are critical to good regional sustainable development governance. Effort is required to assist in strengthening those organisations and in developing a support platform within the CARISEC.**

3.2 Legal and Regulatory Framework

There is insufficient legal authority and institutional capacity needed for implementation and enforcement. While a significant amount of legislation exists for the management of natural resources, there is a need for the legislation to be reviewed and when necessary, updated to fit with and reflect current national goals and circumstances. A number of agencies including the Town and Country Development Planning Office, the Environmental Health Department, the Environmental Protection Department and the Ministry of Agriculture (including the Fisheries Division), play an important regulatory role but there is still room for improvement especially with respect to coordination. Additionally, current resource constraints mean that environmental enforcement is not a major priority for the Barbados Police Force or other relevant legal entities.

With specific reference to the issue of legislation, the absence of comprehensive Environmental Management Legislation and supporting regulations and standards and

the absence of Statutory Rules and Orders necessary to effect the purposes of the Act, e.g. Regulations to Marine Pollution Act 1998, continue to remain problematic. This is coupled with a backlog of legislation within the Attorney General's Office for drafting and updating.

What remains evident however is that provision of the legislation and supporting regulations can provide clarity to businesses and improve their ability to make decisions in keeping with legal requirements, which would make doing business in Barbados easier.

Inherent among the possible solutions would be:

- i. Additional capacity in government with respect to legislative drafting in all aspects of sustainable development;
- ii. Conducting institutional and legislative assessments of existing institutions and statutes;
- iii. Training and involvement of legal personnel in sustainable development and environmental management, to inculcate a holistic understanding of the role natural resources and related legislation in the national development framework;
- iv. Training for law enforcement officials on the national importance of enforcement of environmental legal provisions; and
- v. Development of programmes and projects to encourage compliance to work in tandem with legislative penalties for breach of law.

3.3 Development, Access to and Transfer of Clean Technology

The Government of Barbados has noted that access to new technologies that enhance resource efficiency can provide numerous social, environmental and economic benefits to the island. The major impediment to technology transfer is related to intellectual property and this is an issue that will have to be confronted on an on-going basis. The Inter-Governmental Panel on Climate Change has noted that one of the major requirements for successful technology transfer is the existence and enforcement of intellectual property rights which encourage firms to transfer their technology via trade, foreign direct investment, technology licensing and/or joint ventures. While the Government of Barbados has a comprehensive legislative framework in place to protect intellectual property, this area requires additional attention.

It may be recalled that Barbados is an internationally recognised best practice in the deployment of small-scale renewable energy solutions, integrated into the energy mix. There remains much scope for demonstration of incorporating various green technologies into the Public Investment Programme such as in the housing, public transport and agricultural sectors.

3.3.1 Need for Affordable and Appropriate Technologies to support Production Efficiency and Innovation in Micro-small and Medium Sized Enterprises

Access to, development and transfer of environmentally sound technologies remain critical to Barbados especially as it relates to new technologies that can be applied to micro, small and medium size enterprises in the fishing, agriculture (and agro-processing), tourism, transport (including ICTs), building and construction, water, waste, energy and the manufacturing sectors, to improve resource efficiency and overall worker safety.

Eco-innovation is “any innovation that reduces the use of natural resources and decreases the release of harmful substances across the whole life-cycle.”¹ Eco-innovation offers opportunity for SIDS to further focus research and development programmes towards designing and developing SIDS-grown solutions towards their sustainable development challenges.

Specific actions required for the further implementation of the MSI/BPOA at the national, regional and UN System include:

- i. Assisting in the development of, and participation of Barbados and other SIDS in, regional and international clean technology initiatives, including the identification of investment opportunities in environmentally sound technologies and environmental management practices. Regional intergovernmental and scientific institutions involved in R&D and Science and Technology Innovation (STI) need to be resourced to provide support to national efforts;
- ii. Promoting the access of all SIDS to information on the availability of environmentally sound technologies and terms of their transfer, in particular, in areas identified for priority action- SIDSNET is considered a critical element of such an information platform. National intellectual property audits through National Councils on Science and Technology and Intellectual Property Offices should be undertaken regularly as the basis for providing information to SIDSNET. The Caribbean Council on Science and Technology and regional academic institutions should be integrated in the effort;
- iii. Building the capacities of all SIDS for science and technology needs assessment. There is need to strengthen the capacities of national intellectual property offices and other technology enabling institutions with the aim of streamlining patent management and commercialisation support systems;
- iv. Designing national and regional dedicated research and development financial mechanisms to support national science, technology and innovation programmes. Feasibility studies should be undertaken on the design of National Research and Development Funds in SIDS. Fiscal policies can play a critical role

¹ <http://www.eco-innovation.eu>

- including enabling private venture capitalists to support development, commercialisation and deployment of Environmentally Sound Technology (EST). Additionally regional development financial institutions/banks should assess, and where applicable, enable the development and management of R&D financial mechanisms. With respect to economic mechanisms to support financing of pollution control technologies, an example could be development of a revolving fund for financing wastewater treatment plants;
- v. Developing new design-based curriculum (including product/industrial design, digital architecture, systems design, material science, interactive design, fashion design) and educational infrastructure at the post secondary and tertiary levels. South-South and North-South Capacity Building programmes should be established to target island youth;
 - vi. Establishing a network of resource efficiency and cleaner production programmes to support micro, small and medium sized enterprises in Caribbean SIDS should be considered. Technical colleges, universities, national chambers of commerce and regional industry bodies should be engaged in this endeavour.

As mentioned previously, the Government of Barbados has successfully partnered with the United Nations Environment Programme and the University of the West Indies in mobilising resources to give effect to the Partnership for a Resource-Efficient Green Economy in Barbados.

The UNEP further engaged the Government of Barbados at the Rio + 20 Conference in the establishment of the Programme of Action for a Green Economy (PAGE) during the Ministerial Roundtable on June 21, 2012. The Government of Barbados requested that consideration be given to incorporating a SIDS Platform in the design of the PAGE. The PAGE was officially launched at the UNEP Governing Council in February 2013.

The Ten Year Framework of Programmes on Sustainable Consumption and Production endorsed by Heads of Government at Rio + 20 provides an opportunity to establish a Caribbean SIDS specific partnership platform. Barbados also called for a Caribbean SWITCH programme during the 2013 UNEP Governing Council based on the SWITCH-Asia model that focuses on promoting resource efficiency in small and medium sized enterprises. The Caribbean SWITCH programme could be designed and integrated into a wider Caribbean –SIDS SCP programme.

Importantly, the Rio+20 approved 10 Year Framework of Programmes on Sustainable Consumption and Production, the Climate Technology Centre and Network established by UNEP, and the PAGE should be considered in delivering dedicated support to SIDS regarding the proposals.

3.4 Finance and Investment for Caribbean SIDS Sustainable Development Priorities

Twenty years since the first SIDS Conference, there is still the need for market based investing and lending schemes that explicitly take the all three pillars of sustainable development into account. In the recently completed Barbados Green Economy Scoping Study Synthesis Report, a number of areas were highlighted including carbon credits, certified emissions reduction certificates, and venture capital for alternative energy projects. Along with the identification of instruments, the need to build capacity in the private sector and with civil society institutions was highlighted.

The Government of Barbados also considers the following areas of priority:

- i. The current CARICOM COTED approved *“Advancing Caribbean States’ Sustainable Development Agenda through Green Economic Policy Interventions”* Project should be requested to undertake feasibility studies for establishing regional financial mechanisms in support for Green Economy initiatives.
- ii. The mainstreaming of environment and social risks in private banking lending policies. That work started in Barbados in 2008 as a collaboration between the UNEP Finance Initiative and the Ministry of the Environment. That effort should be scaled up to a sub-regional programme and be opened to private financial institutions in Caribbean SIDS. Other regional development finance institutions should be integrated.
- iii. Access procedures to existing multilateral grant mechanisms such as the Adaptation Fund and the GEF should be further streamlined and simplified for SIDS. Further there is a need for the design of new criteria for SIDS to access to grant and concessional financing. This concern is also applicable to forms of financing such as is available from bilateral and private sources.
- iv. The UNDP GEF Small Grants Programme has been significantly upgraded as a national programme which provides an enhanced opportunity for NGOs/CBOs to engage with and contribute to the national sustainable development agenda. A critical issue for the execution of the programme in Barbados is the further enabling of the sub-regional and national coordination mechanisms and human resource support. At the project level, the capacity of CBOs and NGOs continue to be a challenge. One measure that should be considered is an increase in the allocation of resources to support administrative functions towards project delivery in selected CBOs and NGOs.

- v. The 7th Latin and American and Caribbean Regional Meeting on Sustainable Consumption and Production held in Peru identified finance and investment for Sustainable Tourism as a major priority for the region. It is proposed that work started on the Sustainable Investment and Finance in Tourism Network and piloted jointly by UNEP during the Marrakech process should continue. Further participation should be extended to regional development finance institutions.

- vi. Climate Finance should continue to be prioritised at the highest level by Caribbean SIDS particularly in relation to mobilisation, institutionalisation, governance and access to financial resources to support national adaptation efforts in relation the continued and growing threat of climate change and sea level rise. The CCCCC, CARISEC Sustainable Development Unit and the Caribbean Development Bank should also play a more integral role in supporting the establishment of an Electronic Caribbean Climate Finance Clearing House. The mechanism should include:
 - Existing and Programme Climate Finance Resources
 - Access Guidelines
 - Programming Cycles
 - Technical Support resources for national access
 - Annual Reporting of Donor and International Commitments and Disbursement,
 - Relevant UNFCCC and Donor Decisions, and
 - Impact Analysis Case Studies of Climate Finance.

3.5 Government Procurement

Although Barbados is a developing country, it has a high standard of living, with its primary economic and social indicators follow those exhibited by developed countries. This brings with it waste management, health and conservation problems which tax the limited resources of finance and physical space needed for adequate management of associated issues. In response to this dilemma, government procurement of goods and service is a possible solution.

Barbados, as with most countries, the public sector is the single largest purchaser of goods and services. In 2010, net government expenditure was US \$ 834 million or approximately 20% of GDP. Government is therefore viewed as a possible major catalyst for production and consumption of environmentally preferable products by shifting purchasing policy. A potential hurdle in greening procurement policy is the relatively high cost of such goods. A regional approach, where applicable should be considered in this regard. Establishing and strengthening information hubs at the nation and regional level will be critical for such an exercise.

3.6 Education, Training and Capacity Enhancement

Communicating sustainable development to the general population is a challenge. For effective education, a variety of messages have to be transmitted to a number of different publics in differing formats. The resources required to adequately provide the volume of information required in the appropriate format have been *ad hoc* and information is usually provided in response to various situations. The approach to public education and information require streamlining and coordination and will be bolstered by the requisite information for decision-making.

Additionally, while significant strides have been made in this area with the work of the Green Economy Technical Steering Committee, there is still the need to **sensitise decision makers** many who operate on the premise that economic development can only be achieved through increases in economic growth which results in significant funding being allocated primarily to economic development sometimes to the detriment of the proper management of finite natural resources.

Some possible solutions to addressing communicating sustainable development include:

- i. The establishment of a tool for monitoring changes in public perception relative to environment. This can be done in partnership with research institutions and civil society organizations;
- ii. Using existing attitudinal information to inform the development of the National Environmental Education Strategic Plan;

As it relates to capacity building, there are continued issues with inadequate human, financial and technical resources dedicated to sustained implementation and evaluation activities related to sustainable development. Particular attention is required in areas such as research, public education, further policy development, lobbying and advocacy and demonstration projects.

It has been proposed that a dedicated staff, comprising administrative and technical personnel, is needed to facilitate the work of the NCSD which is envisaged would have 'ownership' for monitoring implementation of the BSDP in particular. During its tenure (1996-2004), the NCSD operated as a voluntary entity and without an allocated budget or independent secretariat. The creation of such a Secretariat would enhance the ability of the NCSD to fully implement and institutionalize the Barbados Sustainable Development Policy and any other relevant policies and programmes.

At the regional level, the Capacity 21 model established in the 1990s should be reviewed and re-established to support the development of national sustainable development mechanisms in Caribbean SIDS.

At the regional and the interregional levels, there is need for a dedicated SIDS Intensive Training for Sustainable Development Programme. That training programme should be located in the Consortium of Universities in SIDS. More substantively, it should be tailored to address common-priority thematic capacity constraints identified in the preparatory process to the 3rd International Conference on SIDS. In addition, there is need at the regional level for an Annual Training Course on the UN Systems with emphasis on SIDS issues. The Commonwealth Secretariat and United Nations Institute for Training and Research (UNITAR) should be approached in that regard.

Urgent attention and support is also needed to design a Cost-Benefit Analysis Model specific to Caribbean SIDS with respect to evaluating the projected implementation impact of MEAs over the short, medium and long-term. That tool should be able to inform policy makers of the technical and financial requirements related to the implementation MEAs (and related instruments) prior to accession/ratification. It should also be able to value social, economic, environmental and governance requirements and impacts.

During the preparation of the Barbados Green Economy Scoping Study, the national stakeholders called for the development of a capacity-building programme in partnership with professions such as architects, engineers and planners to ensure practitioners (technicians, workers, and the business community) are equipped with the necessary skills to advance the green economy and sustainable development. It was envisaged that a professional accreditation scheme could be developed for those trained in utilisation of renewable technologies, wastewater treatment, rainwater harvesting and other resource efficient technologies.

It is proposed that attention be given to the three pillars of sustainable development in the implementation of the Barbados Human Resource Development Strategy 2011-2016: Developing national, Institutional and Human Capacity for Sustainable Growth.

3.7 Strengthening National and Regional Statistical and Data Analysis Capabilities and Mainstreaming Environment Dimension in Designing Monitoring and Evaluation and Information for Decision-making Systems

The inherent problem that environment data is not readily available impacts Sustainable Development reporting. Where data is available it exists in differing formats and in different locations, which makes it problematic for decision-makers to

get information on a sustained basis and at opportune moments. This scenario also has an added impact on the effectiveness of regulation and enforcement practices. Additionally, there is inadequate opportunity for timely reviews and evaluation of the planning process. **This issue will impact Barbados and Caribbean SIDS in the monitoring and reporting of the proposed Sustainable Development Goals as well as the Post 2015 Development Framework.**

The Government of Barbados has been working assiduously to develop a coordinated approach to statistics and data collection at the national level as well as at the regional and international level in calling for adequate resources and attention to be paid to the issue of information for decision-making. The Government of Barbados was heavily involved in the pilot testing process which commenced in 1996 and was co-ordinated by the United Nations Department of Economic and Social Affairs (UNDESA) to develop a core set of indicators for Sustainable Development as called for in Chapter 40 of Agenda 21.

Participation in this testing programme and the development of national indicators of sustainable development was coordinated through the National Steering Committee on Indicators of Sustainable Development comprising of the following agencies:

- i. Barbados Statistical Service (BSS)
- ii. Town and Country Department Planning Office
- iii. Bureau of Women's Affairs
- iv. The Welfare Department
- v. Caribbean Development Bank
- vi. Sir Arthur Lewis Institute of Social and Economic Affairs, UWI
- vii. Ministry of Health
- viii. Future Centre Trust
- ix. Coastal Zone Management Unit
- x. Sewerage and Waste Project Unit
- xi. Central Bank of Barbados
- xii. Ministry of Housing and Lands
- xiii. The National Council of Science and Technology
- xiv. The Environmental Unit, Ministry of Environment (Secretariat)

When the Government of Barbados produced the Barbados Sustainable Development Policy in 2004 it fully supported the development and use of appropriate indicators to demonstrate the country's progress along the road of sustainability and, more specifically, to monitor and evaluate the implementation of the policy recommendations articulated within the document.

In 2005, UNDESA decided to review and update the current set of indicators. The review was timely, because countries and organizations had by then increased their

knowledge of and experiences with indicators of sustainable development and because of the increasing emphasis on measuring development progress, as evidenced for example by the Millennium Development Goals. As part of the review process, two global Expert Group Meetings, one in 2005 and one in 2006, were convened. The objectives of these meetings were to review, update and finalise the existing list of indicators developed by the Commission of Sustainable Development and to consider future areas of work on indicators. The Government of Barbados was an active participant at these *fora*.

In addition to the work that took place at the international level on monitoring and evaluation for sustainable development, several important national and regional initiatives also took place including:

- *The IADB/GOB Project for the Modernization of the Barbados Statistical System*
- *Key Statistics and Indicators Required under the CARICOM CSME Environment Component*
- *UN Statistics Division /UNEP Questionnaire 2004 on Environment Statistics*
- *Monitoring Goal 7 of the MDGs: Ensure Environmental Sustainability*
- *National State of the Environment Reporting /Global Environment Outlook*
- *Forum of Minister of the Environment of Latin America and the Caribbean, held in Venezuela from October 31st to November 4th, 2005, Decision 11 focused on Environmental Indicators.*
- *Multilateral Environmental Agreements (MEAs)*

It should be recalled that a major discussion thread throughout the Rio + 20 was the **need to strengthen the monitoring of sustainable development, through improved data collection and the establishment of indicators** for monitoring progress in meeting targets, goals or other commitments such as the Rio Conventions and the Millennium Development Goals. Of the three pillars of sustainable development, monitoring the advancement towards environmental sustainability is the weakest. Therefore, due to the importance of assessing progress in environmental sustainability and to target the achievements in green economy, the availability and quality of statistics; in particular environment statistics is of the utmost importance. Particular areas of concern highlighted included the dearth of tourism related environmental data that also take economic implications into account and indicators on water and linking water to agriculture.

At present, the Ministry of Environment and Drainage is collaborating with UNEP and the University of the West Indies Cave Hill Campus in preparing sustainable development indicators for Barbados. That initiative, noted by the Cabinet on March 8, 2012, will provide a snapshot of Barbados' progress in pursuing regionally agreed

sustainable development targets.

This short-term measure should be built on with the aim of strengthening the environmental sustainability statistical infrastructure within the national statistical system. Capacity, technology and human resources will be needed to address the issue in the long run. This step is also critical to instituting Rio Principle 10 and the further call by Heads at the Rio +20 Conference to *“promote access to information, public participation and access to justice in environmental matters, as appropriate”*.

In the short to medium term, the Ministry of Environment and Drainage will be called upon to approach relevant regional and international agencies, where feasible, to address various aspects of the country’s capacity gaps. It has also been proposed that the Attorney General’s Office be consulted on further operationalizing Rio Principle 10.

The Government of Barbados has recognized that **integrated social, economic and environmental data and information**, as well as effective analysis and assessment of implementation, is important in decision-making processes, and, will continue to encourage action at the regional, national, sub-national and local levels to promote access to information, public participation and access to justice in environmental matters, as appropriate.

Of note is the fact that the United Nations Statistical Commission was called on to launch a programme of work on broader **measures to complement gross domestic product**. There are limitations of GDP as a measure of well-being and sustainable growth. As a complement to GDP, there is a need to further develop science-based and rigorous methods of measuring sustainability and well-being, including the identification of appropriate economic, social and environmental indicators for measuring sustainable development. This requires a strengthening of the underlying statistics that form the basis of indicators, with a particular emphasis on environment statistics, which is currently the most difficult of these statistical domains to measure. The Government of Barbados via the Barbados Statistical Service, as a current member of the UN Statistical Division will continue to engage and lobby in this area.

Given the above the following actions are recommended for consideration:

- i. **Utilise the GOB-UNEP-UWI sustainable development indicators (ILAC Report) initiative to inform the development of a national environmental statistical system in the context of the National Statistical System;**
- ii. **Establish a Caribbean SIDS Environmental Statistics and Information Programme with emphasis on Upgrading National Statistical Systems and Mainstreaming Environment Data Collection and Analysis;**
- iii. **Strengthen Caribbean SIDS participation in the Environmental Indicators Working Group (under the Forum of Ministers of Environment in LAC) with a view to incorporate Caribbean development priorities in designing new metrics in the context of the ILAC. Those metrics should be based on SIDS priorities in the SDGs and Post 2015 Development Framework;**

- iv. **Call for UN System support to audit the existing legislative regime in Caribbean SIDS at the National Level in relation to the provisions of Principle 10. Those audits should form the basis for an institutional strengthening programme for Caribbean SIDS in relation to mainstreaming Principle 10;**
- v. **Call for dedicated support by UNEP to produce a dedicated Caribbean SIDS GEO Report within the context of future GEO Reports; and**
- vi. **Establish and enable regional and national technology platforms and information dissemination hubs in the context of further operationalizing SIDSNET.**

3.8 Trade Policy for Sustainable Development

Barbados as with most SIDS is a small open economy, where trade contributes more than 96% of GDP. Research has indicated that trade policy can be used to address environmental problems by eliciting behavioural change in the local marketplace. Trade policy can also increase access to international markets for sustainably-produced products.

Over the years Barbados has applied duty-free access and reduced tariffs for goods used in environmental management systems. For example in 2006, reduced customs tariffs at the rate of 5 % were applied to compact fluorescent lamps, house and attic fans, ceramic coatings for roof and window tint. Additionally, full customs waivers for photovoltaic systems, solar thermal systems, biofuel systems, hydropower systems, wave and tidal power systems, fuel cell systems and geothermal heat pumps were also applied.

The Government of Barbados recognizes the need for further research on the liberalization of environmental goods and services. At the regional level, further emphasis has to be placed on identifying regional opportunities for developing the environmental services industry, on investigating the climate change implications on trade in environmental goods and services and developing an environmental goods and services index to monitor trade flows. Collaboration with regional academic institutions would be critical in this regard.

It should be recalled, that the COTED Environment and Sustainable development in 2012 decided, *inter alia*:

- i. Recognised that the challenges in addressing trade, climate change and environmental issues and the inter-linkages with other sectors were complex and posed enormous problems for Member States and that the Region needed to establish institutional arrangements to address those challenges;
- ii. Requested the CARICOM Secretariat and CCCCC to mobilise the required resources to assist Member States in building their knowledge base and

- capacities (trade and climate change negotiators, diplomatic officials and other sectoral specialists) to address these challenges;
- iii. Acknowledged the support of the UNDP Barbados in offering assistance in capacity building on trade and environmental issues;
 - iv. Also requested the UNDP Barbados to further support these capacity building efforts in the Caribbean;
 - v. Noted the presentation by the Secretariat representative which provided an update on the outcome of regional consultations facilitated by the Office of Trade Negotiations (OTN) of the CARICOM Secretariat in Barbados, 21-22 March 2012 to address the Doha Development Agenda and the issue of Trade and Climate Change which has emerged in the context of the United Nations Framework Convention on Climate Change (UNFCCC) negotiations. The consultations took stock of the trade implications of UNFCCC negotiations and focused on developing a coherent regional approach towards CARICOM multilateral negotiations on trade and climate change;
 - vi. Also noted that there was growing interest by OECD countries for the application of border tax adjustments on imports from countries with lower carbon prices as a major approach to addressing the global challenges of climate change;
 - vii. Further noted the significant challenges this would present to Caribbean countries which depend on trade for their development and were already affected by sea level rise and climate change;
 - viii. Urged Member States to monitor and participate in the deliberations at the WTO and UNFCCC fora on trade and climate change with a view to representing the interest of the Region and developing a coherent regional approach.
1. Those recommendations should be implemented as a matter of urgency.
 2. It is further recommended that ECLAC, UNEP and UNDP collaborate with Regional Organisations and academic institutions towards establishing and Caribbean SIDS Trade, Sustainable Development and Environment Programme that incorporates integrated research and capacity building. While the programme should focus on climate change as a core element, all trade related MEA issues should be included. The OAS and Commonwealth Secretariat also have expertise in this regard and should be consulted in the design of such a programme.

3.9 Fiscal Policy to support Sustainable Development including Greening the Economy and Promoting Sustainable Consumption and Production

Since 1974, the fiscal regime of Barbados has focused largely on environmental taxes and green subsidies. Two important pieces of legislation were the Fiscal Incentives Act (1974) which granted import benefits and tax exemptions to solar water heater producers and the Income Tax Amendment Act (1984) which allows taxpayers to directly and fully deduct the cost of solar water systems from personal income taxes payable. As a result of these measures the penetration rate for solar water heaters now exceeds 50 %.

More recently, the 2011 Financial Statement and Budgetary Proposals proposed a number of initiatives with respect to renewable energy and energy efficiency, including:

- An increase in the energy conservation and renewable energy deduction from \$5,000 to \$10,000 for individuals, and \$25,000 for registered small business;
- An extension of the energy conservation and renewable energy deduction to lessees once it is proven that approval was granted by the owner of the property;
- The write-off of 150 per cent of costs associated with the conversion to alternative energy over a five year period for businesses whose filings with the Inland Revenue Department and VAT Division and whose compliance with NIS and Land Tax are up to date or who have in place arrangements to settle their arrears;
- A rebate of up to \$5,000 to farmers who retrofit structures to house livestock with solar energy;

While a measure of success has been realised, there is a need to develop new incentives supportive of the preferred development pathways in agriculture, fisheries, transportation, and manufacturing, tourism and the built environment such that compliance or the adoption of new practices and technology do not become an additional burden. There are already measures in place that allow for tax rebates on capital investments of up to 150 per cent on environmentally friendly investments. It may be necessary to expand the definition such that services and other forms of support come within the ambit of the tax rebates. Also provision can be made to include technical and management support that would result in resource savings or increased levels of resource use efficiency, with the proviso that such savings have to be materially demonstrated by an audit.

The institutional mechanism to monitor compliance and impact of such measures will be required.

In order to encourage the re-use and refurbishment of existing buildings, especially those of some historic, cultural or aesthetic value, it is suggested that a revolving fund be set up to encourage such practices rather than developing green field sites. This can be coupled with the development of a greenfield tax to act as a disincentive and to provide a funding mechanism for supporting the revolving fund. Alongside this, more innovative ways need to be developed to provide incentives for actions that improve

the environment, such as expanding the definition under current income tax legislation to include activities or actions that would qualify for favourable taxation treatment.

A programmatic regional fiscal policy assessment and reform initiative should be considered to support targeted innovative and resource efficient and cleaner production activities in micro, small and medium-sized enterprises. In implementation support should articulated through a dedicated Caribbean SIDS support platform should be established in the context of the UNEP supported Programme of Action on Green Economy (PAGE) and the 10 Year Framework of Programmes on Sustainable Consumption and Production. A SWITCH Caribbean SIDS/SWITCH SIDS Programme (based on the SWITCH-Asia Model), again, should be considered in this instance.

3.10 Enabling Technical Cooperation (SIDS-SIDS and SIDS-South Cooperation)

The Government of Barbados has indicated that the Small Island Developing States Technical Assistance Programme (SIDS-TAP) originally proposed in 1994, still holds significant potential for assisting Barbados and other Caribbean SIDS through the provision and accessing South-South Cooperation. SIDS-TAP should be revisited and integrated in the follow-up to the 2014 Conference as the basis for SIDS-South and SIDS- Cooperation.

Strategically, an action-oriented Caribbean SIDS Intra- Regional Cooperation Platform is required. Likewise Cooperation Platforms should be established in other SIDS regions to facilitate Inter-regional Cooperation. The inter-regional framework will require the identification of regional institutions based on the issues/areas prioritised for action post 2014. These elements should be integrated in SIDS-TAP.

SIDS –TAP should be SIDS-driven and will require an ICT Platform to support such. Regional and National nodes will be essential in this respect. The original feasibility study (by UNDP) should be revisited and upgraded. The associated programme of work should be initiated and completed ahead of the Samoa 2014 Conference. At that time, SIDS-TAP should be launched. The IACG should be requested to support this effort. Regional Commissions should be called on facilitate regional expert meetings.

SIDSTAP (extracted from <http://www.iisd.ca/vol08/0829008e.html>)

The Programme of Action also requested UNDP to prepare a feasibility study on a technical assistance programme for SIDS in order to promote inter- and intraregional cooperation. The feasibility study is contained in document A/49/459. UNDP held extensive consultations with SIDS, relevant subregional institutions, DPCSD and within UNDP to develop the content and orientation of SIDS/TAP. In essence, SIDS/TAP is seen as providing the framework for technical cooperation among the SIDS and as a mechanism for operationalizing the Programme of Action.

It was agreed that SIDS/TAP: should be managed by the SIDS themselves; should not duplicate existing technical assistance programmes but should build upon such programmes; and should not result in the creation of new institutions. The amount required to assist the SIDS in setting up SIDS/TAP is US\$915,000 for its main activities: identification and designation of national/ subregional focal points; convening of a SIDS/TAP national focal points meeting; completion of a directory of institutions and experts/scholars; determination of specific technical cooperation requirements to implement the Programme of Action; assessment of the capacities of SIDS; assessment of the management and reporting arrangements for the SIDS/TAP Fund; and monitoring and evaluation. The cost of implementing the SIDS/TAP substantive activities is US\$5.6 million.

3.11 Re-Affirming and Renewing International Commitments for Catalyzing Actions towards the Sustainable Development of Small Island Developing States

The Government of Barbados also calls for a re-affirmation to the following previously agreed commitments, programmes and actions, and moreover for specific focussed attention on Small Island Developing States:

- i. The Rio Principles and Agenda 21;
- ii. The Programme of Action for the Sustainable Development of Small Island Developing States;
- iii. The Johannesburg Plan of Implementation
- iv. The Mauritius Strategy for the Further Implementation of the Programme of Action for the Sustainable Development of Small Island Developing States with particular attention to Chapter XX including
 - Climate Change Adaptation and Sea-Level Rise;
 - Energy
 - Intellectual Property Rights and Development;
 - Biodiversity
 - Culture and Development
 - Natural and Environmental Disasters
 - Marine Resources
 - Agriculture and Rural Development
 - Health (including HIV/AIDS)

- Transport and Security
 - Sustainable Production and Consumption
 - Information and Communication Technology
 - Means of Implementation (Access to and the provision of financial resources, Science and Development and Transfer of Technology, Capacity Development, National and International Governance, Monitoring and Evaluation, Role for the United Nations; and Role of SIDS Regional Institutions)
- v. Five Year review of The Mauritius Strategy for the Further Implementation of the Programme of Action for the Sustainable Development of Small Island Developing States; and the
- vi. Rio+20 Outcomes including the Green Economy in the Context of Sustainable Development and Poverty Eradication and the Institutional Framework for Sustainable development;

In addition a reaffirmation and upscaling of financial, technical and capacity support are proposed in the context of SIDS regarding:

- i. The 10-Year Framework of Programmes on Sustainable Consumption and Production;
- ii. The United Nations Framework Convention on Climate Change including the Cancun Adaptation Framework; the Nairobi Work programme; and the Buenos Aires Accord;
- iii. The UN Convention on Biological Diversity including the Aichi Biodiversity Targets and the Island Biodiversity Work programme;
- iv. The Cartagena Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region, and the UN GA Resolution “Towards the sustainable development of the Caribbean Sea for present and future generations”;
- v. Implementation of (Rio) Principle 10
- vi. The Small Island Developing States and Marine programme within the Convention concerning the Protection of the World Cultural and Natural Heritage adopted by the General Conference of the United Nations Educational, Scientific and Cultural Organisation (UNESCO);
- vii. The UN Secretary General Sustainable Energy For All Initiative;

4. New and Emerging Challenges and Opportunities

Many of the challenges and issues identified at Rio, Barbados, Johannesburg and Mauritius remain relevant today and addressing them is now more critical given in part, the failure of the international community to honour commitments. The following emerging issues are envisaged to impact Barbados' development goals and objectives.

4.1 Non-Communicable Diseases (NCDs)

The enormous economic burdens of the NCDs on countries are increasing exponentially with the spiraling mortality and morbidity rates. There is need to place emphasis on support for NCD prevention, care and treatment, with special reference to behaviour change, throughout the population.

Special attention is required among certain groups such as the establishment of protocols within the schools curricula and in community programmes, which target both in and out of school youth and the poor. The elements of such a programme may include attention to healthy meals, incorporating physical exercise or sport as a compulsory activity in schools, and the promotion of involvement in a variety of sports at both the complete and recreational levels. There has to be collaboration of both the public and private sector in facilitating healthy work place practices as well as the widening the spread of corporate engagement with the public and civil society organizations in all aspects of the accelerated response to NCDs

The responsibility of governments in honouring international commitments among which are the relevant elements of the MDGs and the UN Convention on Tobacco Control -- is an important catalyst for a new international approach. These combined with advocacy for support to increase access of those affected to more affordable drugs and for increasing levels of development resources in support of relevant programmes are prerequisites for a sustainable responses toward reducing the burdens of NCDs.

Given the scope of this threat other Ministries are getting involved for example the Ministry of Agriculture has been working with the Food and Agriculture Organisation (FAO) to develop a Food and Nutrition Security Policy, which is currently in the final phase and will try to address the issue of NCDs.

In response to this challenge there is the need for:

- i. Continued education and research for manufacturers and consumers.
- ii. National labelling standards /programmes for local products and other targeted imports particularly for ingredients such as salt, sugar and fat.

4.2 Sustainable Exploitation and Management of the Exclusive Economic Zone (Blue Economy): Need for National Ocean Governance Mechanisms

On the subject of **Oceans**, Barbados, traditionally, has championed matters particular to the SIDS and the Caribbean Sea within the wider UN system. During the Rio+20 preparatory, the Prime Minister articulated special circumstances with respect to the management of coastal ecosystems and fisheries in SIDS. The case for an integrated approach to ocean management and governance as a means of capitalising on resources within Economic Exclusive Zones was also presented by Barbados during the UNCSD. Given the outcomes of the Rio+20 pertaining to Oceans, it has been proposed that the Government of Barbados establish a national coordinative mechanism to pursue the development of an Integrated Ocean Governance Policy Framework over the medium term.

The Prime Minister of Barbados, during the UNCSD, continued to indicate the importance of establishing the Caribbean Sea as a Special Area in the Sustainable Development and that Barbados presented the case for an integrated approach to ocean management and governance as a means of capitalising on resources within Economic Exclusive Zones during the Oceans Day event at Rio+20. Support for Barbados' concern could be drawn from the fact that the Wider Caribbean region including the Gulf of Mexico and the Caribbean Sea was designated as a Special Area under Annex V of the MARPOL convention. This entered into force on April 4, 1993 and took effect from May 1, 2011.

Over-fishing, over capacity and habitat degradation

As it relates to the Fisheries Sector, experience has shown that during difficult economic time Barbadians turn to the fishing industry for a livelihood. Therefore, in the present local economic conditions Barbadians are expected to gravitate to the fishing industry. When this occurs pressure will be placed on the fisheries resources. This could lead to over-fishing, over-capacity, use of inappropriate gear and degradation of the habitats.

Possible ways and means to address over-fishing and other negative impacts.

- i. Adopt a Fisheries Sector Development and Management Policy,
- ii. Develop and implement Fisheries Management Plans.
- iii. Develop monitoring, control, surveillance and enforcement capabilities.
- iv. Update fisheries management regulations.

- v. Collaborate and cooperate with stakeholders (regional and international) in the management of shared fisheries resources and to prevent, deter and eliminate IUU fishing.

In general the following actions will become important in addressing this challenge:

- i. Identifying the national, regional and international stakeholders exploiting the EEZ
- ii. Development of marine spatial plans to identify users and designate areas for specific activities e.g. offshore energy exploitations, delimitation of boundaries (this has only been completed with Trinidad and Tobago and Guadeloupe via France)
- iii. Developing a mechanism for cooperation that is inclusive, based on good governance and armed with necessary legislative support.

4.3 Impact of Global Economic Crisis on Resource Mobilization and Financial Flows to developing countries including SIDS

Openness to financial flows is significantly important for small developing economies like Barbados. These flows include investment flows (portfolio and foreign direct investment (FDI), trade credits and flows of remittances. All of these have been affected negatively during the current economic crisis. Barbados is faced with the fact that private investment flows will decline as more risk averse investors move their funds to perceived 'safer' havens. This includes both portfolio and FDI. Reduced portfolio flows will affect government borrowing. The costs of sovereign bonds and commercial debt are both important sources of finance for developing-country governments and have risen sharply. Similarly, FDI is declining, adding to their balance-of-payments constraints.

With respect to remittances there are already indications that remittance flows are declining and the important economic sectors such as tourism are being severely impacted.

The emergence over the past decade or so of an international political order based on unilateralism and use of war has resulted in an international climate of uncertainty and a scenario where the international development agenda is being overshadowed by the international security agenda focussed on terrorism.

To address these challenges facing this small vulnerable economies, access to adequate financial resources at all levels remain crucial to the continued implementation of the BPOA as well as availability of, and access to, appropriate and current technology and improved baseline information and environmental data to address technical issues are also crucial.

The continued implementation of the BPOA require the provision of effective means, including adequate, predictable, new and additional financial resources, in accordance with Chapter 33 of Agenda 21, paragraphs 91 to 95 of the BPOA and paragraphs 76 to 87 of the programme for the further implementation of Agenda 21. The mobilization of resources will also be necessary for the transfer of environmentally sound technology, (on mutually agreed terms/as set forth in the BPOA) and science and technology, and capacity building including education, awareness raising and institutional development;

Barbados is finding it increasingly difficult to access concessional development finance, due to the application of criteria based solely on GDP without reference to their actual level of development, vulnerabilities or standard of living in real terms. Financial requirements and technical support remain as critical as ever if the implementation of the BPOA, MSI and the MDGs are to progress further. Implementation of the commitments related to these development frameworks will depend ultimately on the resources that can be mobilized from both internal and external sources to meet the great challenges of sustainable development in general, and capacity building in particular.

Overall access to and responsiveness from the multilateral finance institutions including the GEF need much improvement through among other things improving effectiveness of bilateral and multilateral development assistance, including by streamlining and harmonizing procedures, indicators and reporting methods, and by promoting coordination among donors.

Some of the recommendations put forward by national stakeholders include:

- i. Establishing a clearing house for recipients and donors to share information.
- ii. Lobby for the harmonisation of donor rules and increased ease of access to funds.
- iii. Lobbying the international community to honour previous commitments under the BPOA/MSI, Agenda 21 etc.
- iv. At the national level the Government of Barbados has to address the collection of outstanding revenue as well as pricing policies for services it provides.

4.4 Impact of Globalisation, Trade Liberalisation and International Tax Regulation on the Competiveness of SIDS

In order to face new challenges and opportunities from globalization and trade liberalization, capacity to adapt requires technical assistance to address internationalization of business that may benefit from the work being done in UNCTAD and WTO.

Addressing these challenges, there is need for:

- i. Support efforts to continue the necessary diversification into alternative goods and services exports with possible international support;
- ii. Collaboration with UNCTAD and UNIDO to undertake comprehensive examination of the impact of trade liberalization; improvement of trade efficiency, the use of economic instruments for sustainable development; building the capacity of Barbados and other SIDS to facilitate the increasing coherence at the national level between trade and environment policies and the development of industrial policies.
- iii. There is an opportunity to influence policy direction, investigate aid for trade financing and lobby the OECD and other groups. One avenue would be to lobby as the AOSIS grouping to G8 and bilaterally with major trading partners such as China.

4.4.1 Impact of Cyber Crime on Information Driven Economic and Social Sectors

Given the complexity and importance of ICT and particularly the Internet to conduct business and communicate in a rapidly globalizing environment, there is a great and growing potential for cyber crime and terrorism. The developed world had been the target for such attacks to devastating effect, whether it is matters of national security, financial transactions or communication infrastructure. The developing world including the Caribbean is equally if not more vulnerable to threats of this nature.

Accordingly, Barbados is concerned with its vulnerability to the potential impact of cyber crime on its financial sector. Barbados is in a particularly precarious position because of very strong presence of international banks in the local market. Any attack on the headquarters of locally domiciled institutions or the connectivity infrastructure to Barbados has the potential to significantly affect the functioning and efficiency of the banking sector and damage its hard-earned reputation as a safe and secure jurisdiction.

The threat is equally problematic for our other key economic sectors, tourism and international business, also given their high dependence on ICT. It will be important for Barbados to take serious note of this emerging threat and begin to develop a national cyber security framework for action and to support efforts at the regional level to reduce the risks of cyber crime and terrorism.

4.4.2 Tax Reform impacts on the International Business Sector

In the last four years, commencing with the onset of the global economic crisis, there has been a concerted effort by the OECD driven in particular by its G8 members to take action on corporate tax avoidance in general and in particular problems related to double-taxation agreements, transfer pricing and the exchange of information between tax jurisdictions, which present opportunities for international companies to shift profits around the world to cut their tax bills.

In an era of austerity among many OECD member states, the loss of tax revenue from highly profitable companies is a cause for great concern for finance ministers. More recently, pressure intensified when the European Union was called on at the 2013 G8 summit in Ireland, to organize coordinated international action to crack down on tax evasion and avoidance.

These recent developments have resulted in a rush by many international financial centres in the Caribbean and elsewhere to conclude Tax Information Exchange Agreements (TIEAs) in order to meet the OECD standard on information exchange. Barbados' stated policy to address these challenges has been the expansion of its network of Double Taxation Agreements (DTAs) and, more recently, a wider use of TIEAs as another approach to comply with the OECD. Going forward it will be important for Barbados and the Region to continue to closely follow developments in this area and to work together to ensure that a statement of collective response is put to the OECD. There is also opportunity here for the AOSIS grouping to use its voice in raising concerns.

4.5 Impact of Global Cultural Penetration on National Traditions and lifestyles and the weakening of National Social Capital formation

This threat has been identified as a threat to Barbados' development in that social capital is weakened, national identity is undermined and there is the inculcation of undesirable social behaviours including rising consumerism, crime and reduction in healthy lifestyles. In terms of addressing this challenge there will be an urgent need to examine the causes for fractures within local communities. Also on the positive side it might be useful to highlight any benefits associated with some aspects of cultural penetration.

4.6 Pursuit of a Resource –Efficient Green Economy an opportunity for advancing sustainable development

The pursuit of green economy objectives in Barbados were crystallised in the National Strategic Plan (2006-2025) and the Budget Speech of 2007. The process was given further credence in 2009 when the then prime minister articulated a vision for Barbados to become the *“most environmentally advanced green country in Latin America and the Caribbean”*. Against this backdrop the Government engaged the United Nations Environment Programme (UNEP) in the establishment of a partnership for a resource-efficient green economy for Barbados.

After an initial scoping mission in 2010, the Government and UNEP commissioned a Green Economy Scoping Study (GESS) in 2011, conducted in partnership with the University of the West Indies, Cave Hill Campus. The project was formally launched by the current Prime Minister of Barbados in 2011 and focussed on five industries (agriculture, fisheries, building/housing, transportation and tourism) and four cross-cutting issues (waste, water, energy and land).

The previously mentioned Green Economy Technical Steering Committee (GETSC), which was established to provide technical oversight for the study. The Committee consisted of members of the technical team, Government, NGOs and business. The data gathering for the report involved meetings with key government agencies and stakeholders in the industries listed as well as for the crosscutting themes. In addition, a series of technical seminars were held to facilitate the articulation of the requisite enabling environment.

The pursuit of a resource –efficient green economy was seen as a plausible development path for Barbados, in light of its challenges in relation to size and dependence on fossil fuels.. The Green Economy approach gives consideration to the level of available natural resources and ensures that they are used in a sustainable manner as well as contribute to the maintenance and rehabilitation of important environments.

In summary, the Green Economy Scoping Study has proposed the following prescriptions for the sectors and cross –cutting themes considered:

- While the island is a very small net contributor to global greenhouse gas emissions, the utilization of renewable energy and the promotion of energy efficiency would address vulnerabilities in relation to energy supplies and price.
- As it relates to land policies would seek to prioritise uses that contribute to the maintenance of natural resources and ecosystem services. This approach would be complemented by a green approach to the built environment and the adoption of alternative means of ground transportation.
- The Barbados Green Economy model will also complement the several international conventions and Multilateral Environmental Agreements (MEAs) that the island has ratified. It should be noted that the Barbados Programme of Action (BPOA) integrates some of the ideas at the heart of the Green Economy concept such as energy resources, tourism resources and management of wastes as well as coastal and marine resources.
- It is envisioned that green policies to support agriculture would be characterised by increasing use of farming practices and technologies that simultaneously enhance farm productivity, reduce negative externalities, and rebuild ecological resources such as soil, water, air, and biodiversity
- Greening fisheries in the Barbadian model will require ecosystem-based management of coastal, marine and social ecological systems that enhances livelihoods and well-being within the fishing industry and related marine

economic sectors, while allowing individuals and communities to maintain their social and cultural heritage.

- Green policies to support building offer the possibility of improving resource efficiency, reducing waste and the use of toxic substances, and enhancing water efficiency and sustainable site development. It also offers the possibility of raising the consciousness of practitioners in the construction industry and house owners so that they become more discriminating in their selection of green materials when building, as well as experiencing general meliorations in indoor environmental quality.
- Greening the transport industry can address existing issues in relation to emissions without harming economic activity. Green policies to support transportation should integrate sustainable transportation policy into the overall planning process for the industry. Sustainable transportation systems attempt to reduce the role of private vehicles as the main mode of transport; promote and improve existing public transit; introduce mode switching; utilise existing vehicular infrastructure; build comprehensive infrastructure for pedestrians and cyclists; seek to reduce vehicle emissions through enforcement of standards and by facilitating the switch to greener vehicles; and contribute to the development of guidelines for the recycling, recovery and reuse of old vehicles and their components
- Greening of tourism has been identified as one of the key strategies used in the future to ensure the future sustainability of the industry. Identified opportunities in this area include marketing Barbados as a green destination, development of heritage tourism sites, building relationships between the tourism industry and firms providing inputs, development of agro-tourism products and the creation of marine protected areas. In relation to heritage tourism, the Barbados Sugar Trail Tour and the Defence of Barbados Tour are products that can be easily marketed and that can yield significant growth benefits. In addition to the island's heritage potential, its rugged coastline, spectacular views and unique plant and wildlife hold some potential for further nature-based tourism development through the development of hiking trails around these resources. The country also needs to ensure that its already existing nature-based tourism products (Harrison's Cave, Graeme Hall Nature Sanctuary and the Folkestone Park and Marine Reserve) are maintained and enhanced. The opportunities for hotels to improve their resource use efficiency are well articulated and many of the strategies have proven to be cost-effective with short payback periods and this should be encouraged and enhanced.

During the completion of the Green Economy Scoping Study a Barbadian definition of a Green Economy that integrates many of the special challenges faced by small island developing states, was proposed:

“an integrated production, distribution, consumption and waste assimilation system that, at its core, reflects the fragility of our small island ecosystems as the basis for natural resource protection policy intervention, business and investment choice, human development programming, and for the facilitation of export market development strategies”.

Notwithstanding, while the efficient management of our natural resources should remain a fundamental goal, the Green Economy can address some of the difficulties faced by small island developing states. In March 2012, upon formally receiving the Green Economy Scoping Study Synthesis Report, the Prime Minister of Barbados noted

“...as the world searches for new approaches for achieving sustainability, the adoption of green economic policies presents us with an integrated approach for pursuing Sustainable Development in SIDS.

Greening the Economy, once crafted as a policy to address our structural vulnerabilities like small market size, limited resource base, openness to trade, and vulnerability to natural disasters and external economic shock, can present a viable development model for reshaping and re-invigorating our factors of production, towards the pursuit of sustainability.”

4.7 Other Emerging Issues potentially affecting Barbados and suggested responses

New and Emerging Issue	Suggested Responses
Increasing Costs of Food and Agri-Inputs	<ul style="list-style-type: none"> • Enforcement of laws for praedial larceny • Enhanced and expanded educational programmes e.g. making agricultural science compulsory in schools up to Fifth Form • Stimulating growth in local agricultural products, supported by reducing cost of inputs and relief in energy costs
Increasing Energy Costs	<p>There is the need to:</p> <ul style="list-style-type: none"> • Expand the suite of incentives to reduce the cost of energy as is currently the case with renewable energy and energy efficiency • Conduct further research and enhanced public awareness around the issue of energy efficiency
Long-term Debt Sustainability	<ul style="list-style-type: none"> • The lack of knowledge of “real debt” poses difficulty in debt management. It is therefore important to understand the country’s debt profile and its growth rate i.e. the rate at which debt is accumulating. • Debt re-scheduling can be utilised in the short –term to ease some sectors and to give a fair indication of the true extent of the debt.

New and Emerging Issue	Suggested Responses
Impact of Carbon Tax and Border Tax Adjustment of Caribbean Trade in Goods and Services	<ul style="list-style-type: none"> • There is need to incorporate the principle of Special and Differentiated Treatment. • There will be the need for market studies as different countries have different economies of scale.
Antimicrobial Resistance	<ul style="list-style-type: none"> • There is the need to focus on educating those involved in the livestock industry as well as human patients. • There has to be increased understanding in society at large about the use and misuse of pharmaceutical products • There is a need to focus on fundamental causes of disease as opposed to only treating symptoms
Rising Unemployment	<p>While this is not necessarily a new issue, it has re-emerged with the economic downturn facing the country. Some areas for development in response to this challenge include:</p> <ul style="list-style-type: none"> • Affording e-commuting opportunities • Developing an open border policy • Reviewing the role, impact and effectiveness of the CARICOM Single Market and Economy.
Invasive Species	<p>The fisheries sector has been affected by the invasive species such as:</p> <ul style="list-style-type: none"> • <i>Streptococcus iniae</i>; • Lionfish; and • <i>Sargassum</i> seaweed <p><u>Possible ways and means to address invasive species</u></p> <ul style="list-style-type: none"> • Build capacity and capability to conduct the appropriate research on, monitor and conduct surveillance of invasive species. • Develop integrated (local and regional) approaches and national adaptation strategies to address the issue of invasive species and their impact

5. National Priorities for Sustainable Development Goals and the Post 2015 Development Framework

The United Nations Conference on Sustainable Development (Rio +20) stated in Paragraph 247 of the Outcome Document:

“We also underscore that sustainable development goals should be action oriented, concise and easy to communicate, limited in number, aspirational, global in nature and universally applicable to all countries while taking into account different national realities, capacities and levels of development and respecting national policies and priorities. We also recognize that the goals should address and be focused on priority areas for the achievement of sustainable development, being guided by the present outcome document. Governments should drive implementation with the active involvement of all relevant stakeholders, as appropriate.”

Pursuant to that Rio +20 Outcome captured in resolution 66/288, the United Nations General Assembly by its decision 67/555 of January 22nd, 2013, was called upon to and so established the Intergovernmental Open Working Group on Sustainable Development Goals (OWG-SDGs).

The OWG-SDGs comprises 30 representatives, nominated by Member States from the five United Nations regional groups, with the aim of achieving fair, equitable and balanced geographic representation. The expectation is that at the outset, the OWG would decide on its methods of work, including developing modalities to ensure the full involvement of relevant stakeholders and expertise from civil society, the scientific community and the United Nations system in its work, in order to provide a diversity of perspectives and experience.

The OWG-SDGs has been tasked with submitting a report to the 68th session of the General Assembly, containing a proposal for the sustainable development goals for its consideration and appropriate development of action. Of significance, the work of the OWG-SDGs is expected to be coordinated and coherent with the processes to consider the post-2015 development agenda. Reports on the progress of work within the OWG-SDGs, will be made regularly to the General Assembly.

It is instructive to note that the international community has recognised that progress towards the achievement of the goals would need to be assessed and accompanied by targets and indicators, while taking into account different national circumstances, capacities and levels of development. This is in line with the Barbadian vision for the pursuit of a green economy where at the March 2012 handing over of the Green

Economy Scoping Study Synthesis Report, Prime Minister, the Honourable Freundel J. Stuart Q.C, M.P. in his address stated that:

“...as an immediate follow-on, attention must be directed towards the production of a set of metrics that can support monitoring of the Green Economy Roadmap.”

It should be noted that a Green Economy in the Barbadian context is defined as:

“an integrated production, distribution, consumption and waste assimilation system that, at its core, reflects the fragility of our small island ecosystems as the basis for natural resource protection policy intervention, business and investment choice, human development programming and the facilitation of export market development strategies.”

Further, in his address to the Rio+20 Conference, the Prime Minister sent a strong signal of the Government of Barbados’ interest in contributing to the Working Group Process. He stated:

“I am pleased that we have decided to launch a process on developing a set of global sustainable development goals as tools for pursuing focused and coherent action on sustainable development. These goals must be science-driven and evidence-based and Barbados supports a robust technical process to define and develop them.

We also believe that it is essential that this new framework builds on the successes and lessons learnt from the implementation of the Millennium Development Goals (MDGs) and incorporates areas such as oceans, food security, social inclusion and energy. Barbados intends to play an active role in this new phase of work on the SDGs to ensure the perspective of SIDS is incorporated in this emerging global framework.”

Based on this statement by the Prime Minister, the following issues form the basis for Barbados’ priorities in the design of Sustainable Development Goals and the post 2015 Development Framework:

- **Oceans**
- **Food Security**
- **Social Inclusion**
- **Energy**

In the follow-up to the Rio + 20 Conference the Governments of Bahamas and Barbados were nominated to share one seat on the 30 member OWG.

It should be noted that at the first meeting of the Working Group the common thread in possible sustainable development goals, highlighted by delegates included:

- i) Eradication of poverty and hunger;
- ii) Employment and decent jobs;
- iii) Sustainable production and consumption;
- iv) Gender equality and empowerment;
- v) Access to and good management of essentials of human well-being including food, water, health, energy; and
- vi) Means of implementation.

Also coming out of the Rio + 20 Conference was an assignment given to the United Nations Statistical Commission to launch a programme of work on broader measures to complement gross domestic product. The Government of Barbados is at present a member of that body via the Barbados Statistical Service. Given the operational relationship between this effort, SDGs and Sustainable Development Indicators, the Ministries responsible for Environment, Economic Affairs and Foreign Affairs have been advised to liaise with the Barbados Statistical Service to ensure synchrony in approach to these data and information related UN processes and especially in the ongoing discussion on the post 2015 development agenda.

Having said this, the Government of Barbados Throne Speech 2013 has called for a Barbados that is “*socially balanced, economically viable, environmentally sound and characterised by good governance*”. As such the priorities for the Government of Barbados are as follows:

i. Socially balanced development.

Among the elements included here would be an *education* system that produces graduates with a spirit of enterprise and entrepreneurship and furnished with the skills and knowledge for wealth creation leading to the production of a highly competitive job market. The education plant will continue to be adapted to fully accommodate students who are “at risk” or differently-able. Government continues to prioritise the pursuit of tertiary education and training for Barbadian nationals through appropriate loans, incentives and subsidisation of costs.

As it relates to *health* the Government has committed to implement programmes to strengthen the quality and delivery of primary health care and emphasise preventative health care. Accordingly, the link between healthy lifestyles and *sporting activities* will receive special focussed attention in the short to medium term. Appropriate economic incentives will be applied to facilitate *families* engaging in physical fitness programmes. Tax relief has been designated for persons who are diabetic, have

hypertension or other chronic non-communicable diseases. Persons with physical disabilities will also have taxes removed on aids and equipment.

Special attention will be paid to ensuring the safety of the *elderly*. The Government has also stressed its commitment to creating employment opportunities for *youth* through appropriate entrepreneurship and empowerment strategies.

The Government of Barbados has identified the development of *cultural industries* as an important element in its economic growth and diversification strategy. Special attention has been accorded to the designation of additional cultural and natural heritage sites as UNESCO World Heritage Sites.

The Government of Barbados will continue to pursue policies for *the uplift of women and men at risk, the development of communities* and community structures and *ensuring workers are treated with respect*.

In summary, the social development priorities for Barbados are:

1. **Access to Education for All (including at risk populations) that promote enterprise, entrepreneur and competitiveness**
2. **Quality and Delivery of Primary Healthcare including preventative health care, focus on NCDs, and the promotion of health lifestyles**
3. **Cultural Industries development;**
4. **Heritage protection (natural and cultural);**
5. **Gender equality including the continued empowerment of women and supporting men at risk;**
6. **Community development; and**
7. **Decent work**

ii. Economic Viability

The envisaged focus will be on a disciplined macro-economic framework, reducing the fiscal deficit and diversifying the economy. A crucial element of Barbados' economic strategy is the further *enhancement and development of the Renewable Energy Sector*, through reducing energy costs, reducing the fuel import bill and creating new jobs. A Renewable Energy Bill is being prepared as well as a Fund to provide equity financing for investments related to energy efficiency, especially electricity generation from renewable energy sources, in the agricultural, manufacturing and tourism sectors.

The Government's aim is to achieve a productivity growth of 2-3 % per year and sustainably reduce the fiscal deficit and national debt. Among the prioritised actions are:

- Reduction in transfers and subsidies
- Extensive programme of tax reform

- Wage policy addressing performance-based pay
- Extensive renewable energy programme to reduce operational costs of government departments and statutory corporations
- Operations audits at government departments with a view to improving use and deployment of technology
- Upgrade of Government Procurement systems to improve efficiency and reduce costs.

As it relates to *access to technology*, the Government has prioritised access to internet communication for households through appropriate tax benefits. Businesses will also benefit from tax relief for the establishment and operation of e-Commerce websites.

As it relates to *Agriculture and food security*, Government has prioritised increased local food production and a 25% reduction in the food import bill. Improved use of technology in the agricultural sector is also identified as a priority especially as it relates to augmenting production and higher yield in agricultural production for the domestic and export markets. Attention will be paid to modern praedial larceny legislation as well as a crop insurance scheme. The sustainability of the sugar cane industry will also receive attention.

As it relates to Energy and Energy Security, the Government of Barbados has prioritised the issue of fast track financing for homeowners seeking to install renewable energy electricity generation systems. The Government has committed to working closely with the Government of Trinidad and Tobago on the construction of a natural gas pipeline linking Trinidad and Tobago to Barbados.

As it relates to the *Tourism sector* Government has committed to the provision of an investment fund for the hotel sector to retrofit air conditioning and lighting systems as a means of reducing costs. Specific attention will be paid to improved *business facilitation* and expanding the network of double taxation and bilateral investment treaties. *Research and Development* geared towards increased innovation in manufacturing is also of immediate concern.

In summary, the economic development priorities for Barbados are:

1. **Growth, Fiscal sustainability and Debt sustainability**
2. **Access to ICTs at the household level and E-Commerce facilitation;**
3. **Agriculture and Food Security with emphasis on increasing local food production and reduction of food imports, deployment of appropriate technologies, praedial larceny, crop insurance and sugar industry restructuring**
4. **Energy Security including Energy Efficient and Renewable Energy (Enhancement and Development) , and Access to Affordable and Sustainable Energy**
5. **Tourism Competiveness including Financing for Tourism Development;**
6. **Business Facilitation; and**
7. **Research and Development for Increased innovation in Manufacturing**

iii. Sound Environmental Practices.

The issues of water resource management, housing and transportation have all received specific attention in the recently completed Green Economy Scoping Study as areas that could benefit from green approaches or could contribute to economic growth through the inculcation of green policies. The priorities for these sectors include:

- Upgraded and extended water resources infrastructure
- Completion of the West Coast Sewerage Project
- Promotion of Building Societies
- Maximisation of land use through the construction of additional high rise apartments
- Sourcing of electric and hybrid buses powered from renewable sources
- Implementation of monitoring technology for speedy detection of traffic violators
- Legislation to manage noise levels emanating from private vehicles.

In summary, the environmental priorities for Barbados are:

1. **Greening the Economy**
2. **Upgrading National Water Resources Infrastructure including Municipal Sewerage Treatment Systems**
3. **Efficient Land Use**
4. **Alternative Energy Transport Systems**
5. **Regulation Noise Pollution from Traffic**

iv. Good Governance

The issue of security remains critical for the Government of Barbados. Specific attention will be paid to the Coast Guard and its role in enforcement of law and

regulations pertaining to *fisheries, territorial waters and the exclusive economic zone, drug interdiction, safety at sea, quarantine and prevention of breaches of revenue and customs legislation*. For the entire security service the issue of replacing aging equipment, provision of additional electronic communications equipment, construction and maintenance of facilities, equipment and vehicles all remain of high importance. The Government of Barbados has committed to continue to work closely with its regional neighbours to strengthen cooperation in security through the *Regional Security System*.

With respect to regional cooperation and diplomacy the Government has prioritised participation in Caribbean enterprises, strengthening of relationships with Latin America, completion of the *delimitation of maritime boundaries*, advancing the cause of the *Caribbean Regional Fisheries Mechanism*, bilateral arrangement with the Government of Trinidad and Tobago vis a vis fishing rights, access to natural gas and ferry transport services and deepening of relations with the Organisation of Eastern Caribbean States (OECS).

The formation of a Law Reform Commission empowered to consider on its own initiative or at the request of the Attorney General, areas of law that appear to be in need of reform has been targeted for special attention. The Government has also committed to:

- The Establishment of an Integrity Commission to facilitate the implementation of the Prevention of Corruption Act;
- Pass a Freedom of Information Act
- Reform the Management of Public Expenditure.

In summary, the governance priorities for Barbados are:

1. **Citizen Security**
2. **Maritime Security and Safety including regional cooperation**
3. **Regional Cooperation and Diplomacy;**
4. **Sustainable Management and Exploitation of the EEZ including Delimitation of Maritime Boundaries, Agreements on Fishing Rights, Energy Infrastructure and Intra-regional maritime transport**
5. **Legal reform and legislative development with respect to Prevention of Corruption, Freedom of Information and Management of Public Expenditure**

6. Conclusion

The Government of Barbados has always been and still remains committed to the process to advance the Sustainable Development of Small Island Developing States. At the national level work continues apace and progress is continuously being made in the areas of sustainable development given prominence in the Barbados Programme of Action and the Mauritius Strategy for the Further Implementation of the Sustainable Development of Small Island Developing States. That being the case however there are structural and institutional issues that impede progress of Barbados and other SIDS at the local, regional and international levels. As the international community prepares for the 2014 Third International Conference on Small Island Developing States, continued and renewed commitment to action is called along with enhanced and meaningful cooperation.

In summary the Government of Barbados would wish to highlight the following:

1. SIDS have inherent vulnerabilities that constrain their ability to compete and limit capacity and speed in undertaking adjustment and transformation of their economies.
2. Participatory mechanisms have been successfully utilised in mainstreaming and integrating the concepts of sustainable development across various sectors.
3. National implementation has progressed apace however there continue to be gaps and challenges as it relates to the legislative framework and enforcement, the need for capacity building, resource efficiency and the need for enhanced regional coordination.
4. In light of the gaps and challenges identified, renewed political commitment is required in the following areas:
 - a. **Governance and Institutional Framework for Sustainable Development:** There is need for formalisation of a governance structure to spearhead implementation at the local level of sustainable development goals. There is also urgent need for the Regional Coordinating Mechanism for Caribbean SIDS to be enhanced and adequately resourced.
 - b. **Legal and Regulatory Framework :** Inherent deficiencies in the legislative framework for sustainable development and required enforcement activities mean that implementation at the national level is not as effective as it could be and therefore needs to be addressed.

- c. **Development, access to and transfer of clean technology:** This remains one of the areas post Barbados 1994 since insufficient progress has been achieved and has not seen much traction at the international level. Specific dedicated attention is required to this issue.
- d. **Finance and Investment for Caribbean SIDS Sustainable Development Priorities:** There is a need for sustainable development activities to be prioritised in the country strategies prepared by regional and international development partners.
- e. **Government Procurement:** In Barbados's path to a green economy this has been flagged as a key element in advancing the use of clean and resource-efficient technologies.
- f. **Education, Training and Capacity Enhancement:** As it relates to capacity building, there are continued issues with inadequate human, financial and technical resources dedicated to sustained implementation and evaluation activities related to sustainable development. Particular attention is required in areas such as research, public education, further policy development, lobbying and advocacy and demonstration projects.
- g. **Strengthening National and Regional Statistical and Data Analysis Capabilities and Mainstreaming Environment Dimension in Designing Monitoring and Evaluation and Information for Decision-making Systems:** The international community has acknowledged the importance of sound, verifiable, reliable data in making informed decisions and effective policies on sustainable development. Twenty years since the BPOA and twenty-two years following the first Rio Conference, this area continues to remain problematic for many SIDS. If not addressed effectively the ability of SIDS to participate in the SDGs process as well as the Beyond GDP dialogue and the post-2015 development agenda will be significantly impacted.
- h. **Tariffs, Trade Policy and Sustainable Development Challenges:** There is the need for regional work on developing the environmental services industry, on investigating the climate change implications on trade in environmental goods and services and on developing an environmental goods and services index to monitor trade flows.
- i. **Taxation, fiscal incentives and fiscal reform to support Greening the Economy and Promoting Sustainable Consumption and Production:** Additional research is required to devise fiscal measures supportive of alternative development pathways.
- j. **Enabling Technical Cooperation.** The Small Island Developing States Technical Assistance Programme (SIDS-TAP) originally proposed in 1994 still holds significant potential for facilitating access to and provision of South-South cooperation for Barbados and other Caribbean SIDS.
- k. **Re-affirming International Commitments for Catalyzing Actions towards the Sustainable Development of Small Island Developing States:** The Government of Barbados has called for a reaffirmation of the major

internationally agreed commitments which have specific importance to SIDS including *inter alia* Agenda 21, the Barbados Programme of Action, the Doha Development Agenda, the Monterrey Consensus, the Johannesburg Plan of Implementation, the Mauritius Strategy, the Five-year Review of the Mauritius Strategy and the Rio +20 Outcomes including the Green Economy in the Context of Sustainable Development and Poverty Eradication and the Institutional Framework for Sustainable Development.

5. As it relates to the new and emerging challenges that could possibly affect the development of SIDS, the Government of Barbados has highlighted the following issues:
 - a. Non-communicable diseases;
 - b. Sustainable Exploitation and Management of the Exclusive Economic Zone (Blue Economy): Need for National Ocean Governance Mechanisms;
 - c. Impact of Global Economic Crisis on Resource mobilisation and financial flows to developing countries including SIDS;
 - d. Impact of Globalisation, Trade Liberalisation and International Tax Regulation on the Competitiveness of SIDS;
 - e. Impact of Global Cultural Penetration on National Traditions and lifestyles and the weakening of National Social Capital formation.
 - f. The utilisation of a resource-efficient green economy is viewed as both an opportunity and a plausible model to frame Barbados' sustainable development goals and objectives and to respond to some of the persistent challenges.

6. The priorities for the Government of Barbados include the issues of oceans, food security, social inclusion and energy. At the national level these have been incorporated under the following four captioned areas:
 - a. Socially balanced development;
 - b. Economic viability;
 - c. Sound environmental practices; and
 - d. Good governance

7.

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1. Chief Fisheries Officer. Fisheries Division, Ministry of Agriculture, Food, Fisheries and Water Resource Management.
2. Chief Transport Planner, Ministry of Transport and Works
3. Director, Coastal Zone Management Unit
4. Director, Environmental Protection Department
5. Director, Department of Emergency Management
6. Director of Foreign Trade, Ministry of Foreign Affairs and Foreign Trade
7. Director, Natural Heritage Department
8. Project Manager, Project Development and Coordination Unit, Ministry of Environment and Drainage
9. Project Manager, Solid Waste Project Unit
10. Permanent Secretary,, Economic Affairs Division, Ministry of Finance and Economic Affairs
11. Representative, Agricultural Planning Unit, Ministry of Agriculture, Food, Fisheries and Water Resource Management.
12. Mr. Gordon Bispham, Caribbean Policy Development Centre
13. Representative, National Council on Science and Technology