Belize National Sustainable Development Report

Ministry of Forestry, Fisheries, and Sustainable Development, Belize
United Nations Department of Social and Economic Affairs (UNDESA)
United Nations Development Program (UNDP)

INSTITUTIONAL DEVELOPMENT CONSULTANTS – www.idcbz.net

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List of Acronyms

CARICOM - Caribbean Community
CBD - Convention on Biological Diversity
CDB - Caribbean Development Bank
CHM - Clearing House Mechanism
CI - Conservation International
CoP - Conference of the Parties (to the CBD)
DOE – Department of the Environment
EEZ - Exclusive Economic Zoning
EIA - Environmental Impact Assessment
GEF- Global Environment Facility
GMO - Genetically Modified Organisms
GOB – Government of Belize
IDB - Inter-American Development Bank
LMO - Living Modified Organisms
MEAs - Multilateral Environmental Agreements
MNR&E - Ministry of Natural Resources and Environment
MoU - Memorandum of Understanding
NCSA - National Capacity Self Assessment
NEAP - National Environmental Action Plan
NEAC - National Environmental Appraisal Committee
NGO - Non-Governmental Organization
NPAS - National Protected Areas System
PAHO - Pan American Health Organization
UNCBD - United Nations Convention on Biological Diversity
UNCCD - United Nations Convention to Combat Desertification
UNCED - United Nations Conference on Environment and Development
UNDESA - United Nations Department of Economic and Social Affairs
UNDP - United Nations Development Programme
UNEP - United Nations Environment Programme
UNFCCC - United Nations Framework Convention on Climate Change
WWF - World Wildlife Fund

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1.0 Belize Context

1.1 Geographical Location

Belize is situated on the Caribbean coast of the Central American peninsula with Mexico and Guatemala bordering on the landward side to the north, west and south, respectively. Belize forms a portion of the Yucatan Peninsula lying between 15°45'and 18°30'north latitude, and 87°30' and 89°15' west longitude. The total land area of Belize is 22,960 km^2 (8,867 square miles) country, 95% of which is registered mainland and the remaining 5 % distributed among more than 1,060 islands coastal cayes. Belize's coast extends for 280 km (168 miles) and is host to the Belize Barrier Reef Complex - the second largest in the world and the largest in the northern hemisphere. The total national territory, including the territorial sea is 46,620 km^2 (approximately 18,000 square miles).

The country's total land mass is divided into six (6) administrative districts, namely Corozal and Orange Walk (North), Belize (East and Central) and Cayo (West and Central) and Stann Creek and Toledo (South). Topographical features divide the Belizean landscape into two main physiographic regions. The most visually striking of these regions is distinguished by the Maya Mountains, dominating the central and western parts of the country rising to 1,124 m above sea level (3688 ft) at its highest point), and the associated basins and plateaus that dominate all but the narrow coastal plain in the southern half of the country. The second region comprises the northern lowlands, along with the southern coastal plain. Approximately 69 % of the country remains under natural vegetation cover with 39.1% of its terrestrial area is protected forest (much of it incorporated into the Mesoamerican Biological Corridor).

1.2 Climate

Despite its subtropical location, Belize's climate is classified as being tropical to extra-tropical. This is attributable to the intrusion of cooler continental air from the north during winter months facilitated by the large landmass of neighboring Mexico. Belize's climate is characterized by marked wet and dry seasons separated by a cool transitional period and temperatures ranging from 21 to 32 degrees Celsius. The annual mean humidity is 81.1%.Northern Belize supports and average annual of about 60 inches, rainfall rises to 150 inches in southern Belize. This dramatic increase is the result of the orographic effect of warm moist tropical air moving in from the east and rising over the Maya Mountains that increases the intensity of the rainfall. Approximately 60% of the annual rainfall occurs in the rainy season which begins in Toledo in mid May and moves northward to Corozal by mid June.

The average temperature in Belize is approximately 80 degrees Fahrenheit with average highs of 85° and a mean low of 73°. On average, 12 cold fronts cross the country each year lowering temperatures into the 40s.

Belize's climate is influenced by three large global/ regional climatic systems inclusive of the Atlantic Ocean Climatic System, the Pacific Ocean Climatic system and also periodically by changes in the North American weather systems.

The global average surface temperature has increased by 1.4 degrees Fahrenheit from 1850 to 2005 and the rate of rise is increasing. In the last 30 years this warming has been widespread across the globe but it has been greatest at the higher northern latitudes. Initial studies for Belize have uncovered an alarming find in that the temperature in Belize is rising faster than the global average. The Intergovernmental Panel on Climate Change (IPCC) estimates the rate of global temperature rise per decade has been 0.23 degrees Fahrenheit for the past 50 years and 0.32 degrees for the past 25 years. The rate of increase in Belize for the past 40 years has been 0.40 per decade along the coast and 0.45 in the interior, exceeding both the global 50-year and 25-year trends. Belize is the 8th ranked country from 167 for climate risk, according to the World Bank.

1.3 Hydrology

Belize has a total of 18 major river catchments with another 16 sub-catchments, which drain the Maya Mountains and discharge into the Caribbean Sea. Boles (1999) identifies 16 principal watersheds which he roughly grouped into six main watershed regions based on general characteristics of topography, geology, soils, rainfall and land use. These watershed regions include: the Northern Watershed Region, the Northeastern, the Central, the Southeastern, the Southwestern and the Southern Watershed Region.

The renewable internal freshwater resources per capita (cubic meters) in Belize were 48.02 thousand cubic meters in 2009, according to a World Bank report, published in 2010. This is down 3.2% from the 49.6 thousand cubic meters reported in 2008. In additions to the countries rivers, numerous freshwater and brackish water lakes or lagoons are across the country's low lying coast.

Groundwater is a vital source for freshwater in rural Belize, where almost 95 % of the freshwater supply comes from groundwater (Rural Water Unit, Ministry of Rural Development). It is important to note however that the existing groundwater aquifers and their annual recharge rate have not been adequately quantified. Belize's actual use of total renewable water sources in 1%.

1.4 Population

Belize is characterized by both ethnic and cultural diversity. The 2010 population census indicates a national population size of 312,698. The annual average growth rate of the Belizean population between 2000 and 2010 is stated as being 2.65%. Approximately 44% of Belize's population is classified as urban, 49.5 % women, 41.3% poor (15.8% indigent) and 35.6% as being under the age of 15. Children and adolescents comprised 43.86% of the total population.

A substantial proportion of residents live in Belize District (29.99%) followed by Cayo (23.91%), and Orange Walk (15%); Toledo is least populated district with a reported 30,100 residents (9.34%). Belize's long, low-lying coastline accommodates approximately 35% of this total in densely populated urban areas.

The physical and socio-cultural geography of the country is thus something of a patchwork, which is reflected in the complex ethnic group and language relationships that form the cultural fabric of Belize.

1.5 Political Context

Belize is a practicing democracy which attained constitutional independence from the United Kingdom in 1981. Its constitution and political system is that of a parliamentary democracy, a variant of the British or 'Westminster' model of constitutional monarchy, with the queen of the British Commonwealth as the titular head of state. The National assembly is a bicameral legislature with an elected House of Representatives and an appointed Senate. Ministers of Government are appointed from among the members of the House and the Senate. The Cabinet, which consists of the Prime Minister and the Ministers, directs the policy of the Government and is collectively responsible to the National Assembly.

The 2008 survey study of political values and attitudes in Latin America, carried out by Americas Barometer, explored support for democracy, reflected in a number of issues such as support for the right of public contestation, extent of political tolerance, and the political legitimacy of core regime institutions. In two of the three above mentioned study areas Belize measured within the top third of the Americas and in most cases topped its neighbours in Central America. With respect to the political legitimacy of core institutions, a key value in democracy support, Belize scored the highest of all 23 countries in the Americas, with 55.9%.

1.6 Economy

Belize is a small open economy supported primarily by its natural resource base. Belize's GDP per capita grew by 36% over the past 10 years, 1999 (USD $3,045.6) to 2010 (USD $4,153), However, it remains one of the less developed of the Caribbean nations" (IDB 2010).Exports account for 60 percent of GDP (estimated in 2010 US$ 1,401 millions). The tertiary sector, or service industry, provides almost two thirds of all jobs in Belize and the retail sector provides a fifth of all jobs (CPA). Debt service represents almost 10% of exports and the total public debt burden remaining at close to 80 percent of GDP by the end of 2010. Poverty level for Belizeans in 2009 was 41.3%, a burden that falls unequally on children, who experience a poverty rate of 50% (UNICEF 2011).

While prospects for growth are challenging to predict due to externalities, the IDB has noted that "long-term development performance has, on balance, been impressive". Baseline Scenario projections of real GDP is "to grow at around 2.25% annually through 2020".

2.0 Background and Approach

Belize launched a national preparatory process in advance of the United Nations Conference on Sustainable Development (UNCSD) scheduled for Rio de Janeiro in June 2012, with financial support from the United Nations Department of Economic and Social Affairs (UNDESA) through the United Nations Development Programme (UNDP). The national preparation process

consisted of three phases: the preparation of a national stocktaking report based on sector-specific reports. Information for sector reports and national report was obtained from literature review and interviews. Key documents reviewed included national strategies, action plans and policy documents from all economic sectors of key relevance to sustainable development and the UNCSD.

It is recognized that there is no standard template or format for the preparation of the National Sustainable Development Report. The National Stocktaking Report is therefore the basis for the preparation of the National Sustainable Development Report, which was presented in a National Consultation Workshop to stakeholders from a broad cross section of Belizean society. Recommendations and observations made during the said workshop were incorporated into the draft report to produce the final version of the National Sustainable Development Report.

The conceptual framework for the analysis was based on the questions provided by UNDESA (See annexes 1 & 2).

3.0 Policy and Institutional Framework for Sustainable Development

3.1 National Level

In 1999, with the assistance of ALIDES and CIDA, Belize drafted legislation for the establishment of National Sustainable Development Council. Despite these early efforts to set a national sustainable development framework in place, the country continues to advance without the benefit of an elaborated comprehensive policy and strategy to guide its sustainable development.

Belize has identified its development priorities in a number of planning instruments developed through national consultative processes. Among these are the Horizon 2030 Development Strategy, the 2009-2013 National Poverty Elimination Strategy and Action Plans (NPESAP); and the National Medium-Term Development Strategy (MTDS) (2010-2013).These planning instruments identify those sectors critical for long term policy actions and investments and in varying degrees serve to focus sector specific strategies and plans. Although Horizon 2030 was presented shortly after the Government's Medium Term Development Strategy, national planning institutions indicate that Horizon 2030 now serve to inform adjustments to the MTDS. The Horizon 2030 Strategy provides a new sustainable development context of the country, with a clear strategic focus on social and economic development.

Sector specific plans, strategies and policies such as those listed here provide the operational direction and the framework for national sustainable development action. They include the Agriculture Development Management and Operational Strategy (ADMOS), the Belize Rural Area Development Strategy (BRADS), the National Sustainable Tourism Master Plan (NSTMP), the National Land Use Policy and Planning Framework (NLUPP), the National Environmental Action Plan (NEAP), the National Environmental Policy and Strategy, the Sustainable Chemical Management Action Plan, the National Protected Areas Policy and Systems Plan (NPAPSP), the National Health Plan and Policy, the National Plan of Action for Children and Adolescents,

the National Plan Toward Eradicating Child Malnutrition in Belize, the Food and Security National Policy, and the Land Suitability Mapping System for Belize. In the specific case of the energy sector, Belize has recently adopted a National Energy Policy (NEP).

It is noteworthy that the country has also initiated processes to develop a National Water Master Plan to guide the regulatory actions on the 2011 Integrated Water Resource Management Act as well as a Comprehensive Climate Change Adaptation Policy. There is also expressed interest from the Government to explore a pathway to green development.

3.2 Multi-Lateral Agreements

Belize has signed on to a series of multi-lateral agreements associated with the sustainable development agenda as it relates to the primary economic sectors. In terms of energy, Belize is part of the Caribbean Renewable Energy Development Project (CREDP) and the Caribbean Energy Information System (CEIS). It has joined the Latin America Energy Organization (OLADE) thus benefiting from the tools and training available to Member States; and has been involved with activities undertaken by the Energy and Climate partnership of The Americas (ECPA), which is supported by the United States Department of Energy.

In 2011 at the Climate Change Negotiations in Durban, South Africa it was agreed by Member States that Belize will host SIDS DOCK. It is an initiative among member countries of the Alliance of Small Island States (AOSIS) to provide the Small Island Developing States (SIDS) with a collective institutional mechanism to assist them transform their national energy sectors into a catalyst for sustainable economic development and help generate financial resources to address adaptation to climate change. This offers an exceptional strategic fit to Belize with the eminent start-up of this initiative.

In terms of the transport sector, Belize is a party to the Vienna Convention on Road Traffic, an international treaty designed to facilitate international road traffic and to increase road safety by standardizing the uniform traffic rules among the contracting parties. Belize's signed on to Protocol VI (Regional Transport Policy), amending the Treaty establishing the Caribbean Community. Concept Papers on Air and Maritime Transport have been formulated for the purpose of giving effect to the provisions of this Protocol.

As it relates to specific Multi-lateral Environmental Agreements (MEAs), Belize is party to over 25 global and regional Multilateral Environmental Agreements, which were described in detail in the national stocktaking report. MEAs, whether global or regional, make obligations of participating states and require the taking of specific measures for compliance. Among these requirements may be those for:

a. enactment of implementing legislation;
b. establishment of specific enabling administrative/institutional arrangements;
c. public awareness and education;
d. environmental management measures;
e. regulation and enforcement.

4.0 Progress to Date in Sustainable Development

Since its Adoption of the Barbados Plan of Action, as well as other plans and programmes geared towards achieving sustainable development, Belize has initiated a set of comprehensive national plans and strategies, as well as participated in various regional and international initiatives with sustainable development as the focus. The list of international and regional accessions and ratifications above bears testimony to Belize's long term commitment to the sustainable development agenda. At the national level, substantial progress has been made and the following bullets summarize progress to date:

- **Climate Change**: Belize hosts the Caribbean Community Climate Change Center which has assisted greatly in addressing challenges posed by climate change. National vulnerability studies at the community level and for the coastal, marine and agriculture sectors have also been completed. These reports are being utilized by the various government and local NGOs to better plan adaptive and mitigation strategies for climate change in Belize. Belize has also participated in several national and sub-regional projects related to the UNFCCC and the Kyoto Protocol, including the Central American Climate Change Vulnerability Analysis in 1995. From 1997 to 2001 Belize, along with other member states of CARICOM, participated in the CPACC project. This was a Global Environmental Facility Stage I adaptation project implemented by the World Bank and executed by the Organization of American States. Belize participated in four regional components:

    - Establishment of a network of tide gauges and climate monitoring stations;
    - Establishment of a database;
    - Compiling of an inventory of coastal resources;
    - Drafting of a national policy framework on adaptation to climate change; and
    - One pilot component: - coral reef monitoring.

- The recent accreditation of the Protected Areas Conservation Trust by the Adaptation Fund as the National Implementing Entity (NIE) for Belize has strategically positioned the institution to directly access Climate Adaptation Funds and manage projects for the country. This should strengthen the country's role in the financing of climate change initiatives both at the national and regional levels.

- In 2011, the Belize National Climate Change Committee (BNCCC) was established as a broad-based multi-stakeholder committee comprised of *non- state* public and private sector members, to coordinate the implementation of policies and measures designed to mitigate the adverse effects of climate change on the environment and to adapt to such changes. It is expected that the BNCCC will facilitate the mainstreaming of climate change policies in the various sectors and address the gaps highlighted in the National Communication to the UNFCCC.

The following thirteen points summarize Belize's progress to date in addressing climate change, as presented by the Caribbean Community Climate Change Centre (CCCCC):

1. The Ministry of Forestry, Fisheries and Sustainable Development has been designated as the government agency responsible for the coordination and implementation of climate change policies in Belize. To assist the Ministry in carrying out its responsibilities, the *Belize* National Climate Change Committee (BNCCC) was established as a broad-based multi-stakeholder committee comprised of *non- state* public and private sector members. Its task is to advise the government on its responsibilities under the UNFCCC and to implement appropriate policies and strategies to ensure continued economic growth given the impact of climate change on Belize. The BNCCC was endorsed by Cabinet in November 2010.

2. In 2008, the National Integrated Water Resources Policy was finalized. The water resource was the only sector that mainstream Climate Change into its policy. As a follow up to the Policy, Belize adopted the National Integrated Water Resources Management Act in April 2011. The Act calls for the establishment of a National Integrated Water Resources Authority and the elaboration of enabling regulations to operationalize the Act.
3. The Global Climate Change Alliance (GCCA) initiated by the European Commission has contributed 2.9 million Euros to the Government of Belize to address climate change. The GCCA project will support the institutionalization of the National Integrated Water Resources Authority and will strengthen institutional capacities through the establishment of a Climate change office in the MNRE to coordinate the country's response to climate change.
4. The Government of Belize hosted its first United Nations Framework Convention on Climate Change (UNFCCC) workshop on May 5th -7th 2010 in Belize City. The UNFCCC Latin America and Caribbean regional workshop objective was to enhance the capacity of project developers in preparing project proposals that will meet the standards of international financial providers. Participants were trained in preparing project proposals for financing, in particular project proposals related to environmentally sound technologies to mitigate and/or adapt to climate change.

5. The Government of Belize participated in the Seventeenth Conference of Parties in Durban, South Africa. A key concern for Belize was the level of ambition of existing commitments and actions to limit global temperature increase to below 2 degrees Celsius or 1.5 degrees Celsius.

6. The Government of Belize signed a collaborative agreement with UNEP RISO Center in May 2010, to participate in a Clean Development Mechanism (CDM) Capacity Building Project. Under the Clean Development Mechanism countries that need to reduce emissions under the Kyoto Protocol are encouraged to invest in emission reduction projects in developing countries. A requirement of such projects is a contribution to long-term sustainable development. This would be accomplished through job creation, technology transfer and climate sensitive low carbon development paths.

7. The Designated National Authority (DNA) to approve CDM projects was established in June 2011 in the Ministry of Natural Resources and the Environment. The DNA now resides in the Ministry of Forestry, Fisheries and Sustainable Development.

8. The Government of Belize has nominated the Protected Areas Conservation Trust for accreditation to the Adaptation Fund Board as a National Implementing Entity.

9. In June 2010, the GOB in collaboration with CCAD-GTZ hosted a REDD planning workshop in Belize. A draft national plan was formulated, and a basic organization structure for the REDD programme implementation was established and concrete steps for follow-up were defined.

10. Belize participated in a number of regional initiatives. The Heads of CARICOM countries approved "A Regional Framework for Achieving Development Resilient to Climate Change" (the Framework) prepared by the Caribbean Community Climate Change Centre (CCCCC). The Framework clearly articulates the strategic direction for the region's response to climate change risks. This strategy represents a long-term vision on climate issues and reflects the political will of the region. It is one of the first regional strategies drafted in developing nations, joined by a common purpose to face the climate challenge.
11. The Framework provides a roadmap for action over the period 2009 to 2015 and builds on other initiatives pursued by the CCCCC. Now that the priorities have been established in the Framework, a detailed Implementation Plan (IP) and accompanying monitoring and evaluation plan is to be developed in consultation with a range of regional, national and international stakeholders.
12. The Implementation Plan (IP) of the Regional Framework for Achieving Development Resilience to Climate Change prepared by Caribbean Community Climate Change Centre was endorsed by COTED.
13. Belize also signed the Regional Strategy on Climate Change prepared by CCAD and participated in the Economics of Climate Change in Central America project spearheaded by ECLAC.

- **Natural and Environmental Disasters**: Belize's national framework for disaster management is a comprehensive one that deals with all the various levels of the disaster cycle. All sectors play a vital role in the process, each participating in emergency management. The National Emergency Management Organization (NEMO) Secretariat has:
- Developed and instituted a National Mitigation Policy and Plan.
- Undergone instructional strengthening, through the development of its headquarters and the strengthening of its human resources. It now has a larger team of specialists that attend on-going training in the fields of disaster management.

- Moved away from the traditional limited response to hurricanes and has now developed the capability to deal with a wider range of natural and technological hazard emergencies;
- Developed a modern national communication network and a new emergency early warning system using a broadcast band compatible to both T.V and radio;
- Completed a comprehensive national plan, which focuses on disaster preparedness training across all sectors; and
- Developed ten operational committees that reflect the various government ministries, which develop plans of action for times of emergency, although planning development with regular refinement is an on-going process.
- Strengthening Disaster Preparedness Project is a five year comprehensive disaster management initiative with the UNDP focusing on the strengthening of national capacity for preparedness and response to disaster.

- Development of a policy for safer building practices, which focuses on safer building construction training and certifications and the development and institutionalization of the Building Code, which is being developed in collaboration with The Caribbean Disaster and Emergency Response Agency (CDERA) and the Caribbean Development Bank (CDB).

- The Central American Center for Disaster Coordination (CEPREDENAC) has offered training in vulnerability reduction, risk management, and support to development planning and the strengthening of institutional response. Belize attends the training sessions; however, only on an observer status.

- Belize has conducted several studies pertaining to vulnerability assessment in the areas of national storm surges and wind with the assistance of the Caribbean Disaster Mitigation Project (CDMP). Another area of recent study in terms of vulnerability was an inland and coastal flooding assessment map conducted by the Inter-Development Bank through the Hurricane Reconstruction and Rehabilitation Project in Belize.

- **Coastal and Marine Resources**: Fisheries Resources are the third largest foreign exchange earner of the country, benefitting over 2,000 families. When considered within its broader context, marine resources are the primary attraction to Belize by tourists, making tourism the number income earner and employing one out of every four persons in the labour force. The Development of the National Protected Areas Policy and Systems Plan has created the framework for the establishment of a functional and representative network of marine protected areas which is geared towards species conservation as well as maintaining the integrity of certain critical habitats of the country; The establishment of a Coastal Zone Management Authority for more comprehensive and integrated planning and management of the Coastal Zone of Belize and the declaration of the Belize Barrier Reef System in 1996 as a World Heritage Site under the

UNESCO World Heritage Site Convention are major examples of direct achievements in the management of its coastal and marine resources.

- The Belize World Heritage Site Committee was established with its main purpose to shall serve as an advisory committee to provide technical advice and input on outstanding and current issues related to the Belize World Heritage Site. This committee is also charged to review, revise and make recommendations as necessary on the decisions made by the World Heritage Committee pertaining to the Belize World Heritage Site. The recent listing of the Marine Protected Areas Cluster within the Belize Barrier Reef as a World Heritage Site on the list of World Heritage in Danger has resulted in a number of policy decisions in regards to procedures for development in these areas and the strengthening of monitoring and coordination by regulatory agencies.

- Belize is been a party to the Convention on International Trade of Endangered Species of Wild Fauna and Flora (CITES) since 1981. It has established both a National Scientific and Management Authorities for the Convention with the Focal point being the Forest Department in the Ministry of Natural Resources. Both the Forest and Fisheries Department has shared responsibilities in the implementation of the regulations and policies of the convention and the monitoring of those species currently under the purview of the convention. Draft legislations to further strengthen the work of the National Authorities have been finalized and are currently being processed for passage into law.

- The implementation of the National Biodiversity Strategy and Action Plan for Belize has also played an instrumental role in the sustainable development of Belize's coastal and marine resources. This document has been used as a reference and has influenced the policy and direction of the various programs implemented by the government and both the International and local NGOs working in Belize. The government of Belize's also developed legislation to monitor and control the discharge of pollutants (Environmental Protection Act 1992); The recent revision and production of a new draft Fisheries Bill has demonstrated Belize's commitment to a modernize and robust legal framework for the sustainable development and conservation of its coastal and marine resources.

- Belize is an active member of the Caribbean Regional Fisheries Mechanism is a regional initiative to sustainable manage fishery resources in the Caribbean, in particular, straddling stocks of pelagic fish, funded by the CARICOM. In Central America it also is a member of *Organization for the Fishing and Aquaculture Sector of the Central American Isthmus* (OSPESCA) whose main objective is to manage and promote the development of fisheries and aquaculture in Central America.

- Belize also participates in implementing the Strategic Action Plan for the Gulf of Honduras aimed at reducing pollution from maritime transport in the gulf. A draft Maritime Pollution Bill has also been prepared for Belize and is currently under review.

- **Land Resources & Terrestrial Biodiversity**: Belize has implemented several national projects and initiatives to help to achieve sustainable use and proper management of land resources.

- The Southern Development Project funded by the Inter-American Development Bank (IDB), was designed to support economic, social, and physical planning activities. Investments were also be made in rural enterprise and sustainable farming techniques aimed at enhancing economic opportunity and social development in the region. The phasing out of those traditional farming methods which causes increased pressure on the land was also none of the priorities of this project.

- In 2006 the Belize National Biodiversity Policy was articulated to provide a frame work for specific actions and measures to be taken at the national, regional and international levels in support of the various issues connected with the sustainable use and conservation of biodiversity.

- The Land Management Program (LMP), funded by an IDB loan and counterpart funding from the Government of Belize intends to improve land management in Belize by completing four components – national cadastre and property rights registration, the expansion of land administration, land use planning and development review and land policy reform and ministry-wide strengthening.

- The Forest Department, the Government of Belize is spearheading the 'Mainstreaming and Capacity Building for Sustainable Land Management (SLM)' project to establish 'an enabling environment for sustainable land management enhanced through mainstreaming, capacity building and improvement in policy, legislative and institutional framework'. This project was developed through a consultative process and in line with the findings of Belize's completed NCSA initiative and the recommendations of the National Awareness Seminar of the UNCCD.

- In 2011 the Sustainable Land Use policy was completed and submitted for review by the official authorities and Cabinet. The vision for the land use policy was articulated as an environmentally and socially responsible use of land resources that enables national development.

- In 2006, Belize completed its National Implementation Plan on Persistent Organic Pollutants (POPS). The main objectives of this study were the identification, characterization and quantification of POPs in use, POPs stored, and POPs unintentionally produced or released to the environment.

- **Integrated Water Resources Administration**: In 2011, the National Integrated Water Resources Act came into effect to provide for the management, controlled allocation and

the sustainable use and protection of the water resources of Belize, water quality control, and for the establishment of a National Integrated Water Resources Authority (NIWRA).

- Also in 2011, with the assistance of the UNDP, the country developed its MDG Acceleration Framework for Water & Sanitation, producing an action plan with specific interventions to achieve the MDG 7 Targets, identifying priorities, levels of investments, and potential partners for implementation.

- As a member of the Central American Integration System (SICA), Belize participates actively in regional efforts to coordinate the management of the region's water resources. Some of these initiatives include the: "Vision on Water, Life and the Environment for the 21st Century", conducted in 2000 by the Water Center for the Humid Tropics of Latin America and the Caribbean (CATHALAC); Workshops and seminars on groundwater related issues and water legislations; Commission for Hydrology of the World Meteorological Organizations regional and international meetings and workshops; the Water Quality Standard Project for Belize conducted by PAHO, Red Cross and the Belize Public Health Bureau, and CDERA initiatives in disaster management and flood mitigation.

- **Waste Management**: In 1997, an agreement for a Technical Assistance Project funded by the Japanese Government was signed, between the Government of Belize (GOB) and the Inter-American Development Bank (IDB) for the preparation of a National Solid Waste Management Plan (NSWMP). The National Solid Waste Management Project, under which the NSWMP was developed to contribute to improving the environment and protecting the public health. In addition, it will enhance the image of Belize in the eco-tourism market and strengthen the Solid Waste Management Authority of Belize as the entity responsible for improving solid waste management in the country.

- The project has now phased into the pre-implementation stage. Initially, funds will need to be allocated for commencement of the construction and design of a sanitary landfill at Mile 24 on the Western Highway. One of the principal activities of priority at this point, for which financing is currently being discussed between the Authority, the Central Government and the IDB, is the construction and operation of this Central Sanitary Landfill.

- **Energy**: Energy is by far the highest cost of any activity in Belize, and especially in industrial production and costs associated to the transport of agricultural commodities. This automatically places Belize in a difficult position for sustainable development in terms of production efficiencies and competitiveness with respect to neighboring countries. The National Energy Policy was recently adopted and has as its Goals the following: Consistently upgrade Belize's competitiveness in regional (and global) energy markets; keeping a keen eye on our cost of energy; Mitigate the impacts of uncontrollable events such as external market price and supply shocks and natural

disasters on the cost of energy and on the reliability of energy supply; Create an energy-efficiency and conservation culture, not just the uptake of appropriate energy- efficient technologies; but a whole mindset extending across the public and private continuum on the rational use of energy; Foster the sustainable production, distribution and use of energy as a critical factor necessary to achieve overarching national goals of economic growth and long-term prosperity, energy security, poverty reduction and social equity.

- Hydroelectricity and biomass are the principal renewable energy technologies installed and operated as captured in the Energy Balance for Belize. Assessments have been conducted to determine Belize's potential to develop bio-diesel from Jatropha and fuel-ethanol from cellulosic feedstock, both showing an attractive potential. Opportunities for additional hydro-electric power generation have also been identified in Western and Southern Belize. Similarly, the potential and wind and solar power generation has been determined as part of the Solar and Wind Energy Resource Assessment (SWERA) Project.

- **Transport**: In 2008, a new regulatory body was formed to improve Belize's growing transportation industry. The new agency, called Belize Land Transportation Authority (BLTA), has legal powers under the Belize Land Transportation Authority Act of 2007. This autonomous body does not depend on government revenue and sustains itself. The BLTA generates its revenue from road permits, operation of the various bus terminals across the country and revenues generated from ticket fines among other things. It may issue road permits with no ministerial interference. The Belize Port Authority governs maritime transport and the Belize Airports Authority and the Department of Civil Aviation govern air transportation.

- **Tourism**: In 2011 the National Sustainable Tourism Master Plan (NSTMP) was developed through an exhaustive stakeholder consultation process. The NSTMP aims to achieve a set of quanti- and qualitative targets by 2030 through seven strategically defined outputs based on competitiveness and Belize's unique tourism assets:
  - Western Belize as a demand driver, with a state-of-the-art welcome center, National Archeological Museum, charming villages, numerous nature/heritage trails, & attractive Caracol and cave systems.
  - South Eastern Coast Belize hosting a chain of mid to low density sun & beach resorts, charming villages (Placencia, Hopkins), pristine and attractive beaches, marine life, rainforest excursions, and a main hub for nautical tourism and a pocket cruise market.
  - Belize Reef with unique chain of reef islands will be renowned internationally for its world heritage status and regarded by visitors as a pristine and well-preserved destination, catering mainly to day visitors, niche markets hosting exclusive sun & beach low density resorts and nautical tourism.
  - Northern Islands with Ambergris Caye, Cay Caulker, and other caye as charming and attractive destinations, i.e. vibrant town, attractive waterfront experience and unobstructed water scenery.

- Central Coast Belize as a vibrant, urban tourism based in Belize City with preserved colonial-heritage architecture and modern entertainment; brand-name hotels and traditional boutique hotels, for a growing overnight tourism market and facilities for cruisers, yachts and sailing clubs.
- Northern Belize with access to prosperous Corozal Town, mid-high end leisure & entertainment center, Shipstern Nature Reserve, Corozal Bay, Sarteneja and manatees; Orange Walk with rural tourism, Mayan Heritage sites, living traditions and nature based eco-tourism products.
- Southern Belize with highly attractive to hard adventure travelers and eco-travelers for its unspoiled nature allure, conceptualized adventure travel sports, community and cultural tourism, & sun & beach and nautical tourism destination for those attracted to more secluded area.

- **Agriculture**: Agriculture is one of the pillars of the Belizean economy and is the individual sector that generates the most employment in rural Belize. In addition to the national framework described above which captures progress in agriculture, the Horizon 2030 development strategy has identified ten strategic interventions for the sustainability of the agriculture sector in rural Belize:
  - Teach in schools about the importance of agriculture, promote the growing of crops in school and at home and invest more in agricultural schools.
  - Increase access to finance for farmers by creating a proper bank for farmers to provide access to low interest loans and providing subsidies and other support for local agricultural producers.
  - Develop an agricultural insurance option to cover crop losses.
  - Support communal farming operations, including co-operative farming where machines are shared.
  - Increase public investment in technology, irrigation, development of seeds and green pesticides and provide technical support to farmers through demonstration plots and on-site training.
  - Improve access to land for farmers.
  - Improve management of domestic market for agricultural produce
  - Control contraband imports
  - Provide support for the establishment of farmers market and publication of market information
  - Implement a new tax regime for agriculture including a re-definition of ‘zero rated” food items

- **Environmental Research**: The Environmental Research Institute was established in 2010 at the University of Belize (UB), to address a large gap in local capacity for research and monitoring that exists within Belize. Belize has a wealth of natural resources, including the longest barrier reef in the Western Hemisphere, which supports the country's most important industries, including tourism and agriculture. ERI is focused on producing results directly relevant and applicable to the sustainable

management of Belize's natural resources and building local capacity. ERI is a semi–autonomous department of UB, with transparent and efficient management of projects at its core, to provide a much needed mechanism for research within the University and for sustainable development research at the national level.

- **Social Sector**: Key progress in this sector is presented from the perspective of the country's achievements in the Millennium Development Goals (MDGs).

  - ***Poverty***

In Belize, the MDG target has been set at halving, between 1990 and 2015, the proportion of people living below the Belize indigence line and halving the proportion of the people with less than minimum consumption. Belize's Country Poverty Assessment of 2009 reveals that 41.3% or a third of the Belizean population was poor, and 15.8% indigent. 14% were classified as vulnerable to poverty and around 43% were not poor. Belize shows the highest levels of poverty in the Caribbean. The CPA concluded that the groups particularly vulnerable to poverty were large families, children, rural households in general, and the indigenous Maya of southern Belize.

While 10% of poor households demonstrated a lack of sufficient food, the CPA study indicated that the vast majority of households were able to obtain an adequate food supply and widespread hunger is not a major facet of poverty. The immediate causes of poverty are linked to low incomes, insecure livelihoods, unemployment, and deficiencies in the capabilities and assets of the poor to respond to changing economic opportunities.

Through its Restore Belize Program, Belize has tackled poverty at the level of under-privileged youths, engaging them in capacity building, generation of employment, and social inclusion. The Government's Public Sector Investment Programme (PSIP) as of April 2012 , had seventy one programs under execution in conjunction with bi-lateral and multilateral partners, focusing on a broad spectrum of sustainable development investments including disaster and risk mitigation, the Basic Needs Trust Fund, implementation of the National Poverty Alleviation Strategy and Action Plan, Children's Health and Nutrition in Rural Communities, rural financing to farmers, rural water and sanitation, etc.

  - ***Education***

Primary education, for all children 5-14, is compulsory in Belize. While the primary school population rose, the net enrolment fell, suggesting "investment to increase access to education has not been able to keep pace with the growing population" (BSO 2010). The MDGs scorecard report identified a number of factors explaining declining attendance, including "*inadequacies in the processes to sustain quality education (particularly at the primary level), the high proportion of untrained teachers, especially in*

the early grades, and the absence of role-models who can motivate young boys to stay in school."

A second indicator with respect to the MDG goals is the rate for pupils completing primary school, a statistic in Belize which has been steadily rising in the last years, from 87.2% in 2002 to 91.9% in 2009. It is notable that as the overall rate continues to rise, the completion rate for girls is almost fully on track for this indicator. The third indicator linked to the MDGs relates to the literacy rate of 15 to 24 year-olds. Belize has met the literacy targets, which was 90.6% for 2009. The literacy rate has shown a consistently upward trend, from 70.3% in 1991, to 94.7% in the 2000.

The situation in terms of secondary and tertiary education, however, is not as positive. As reported in the Education Sector Strategy 2011-2016 published in March 2012, the much needed increase in enrolment in secondary education has not taken place, being 49% in 2010 compared to 44% in 2004. Participation in tertiary education remains low compared to regional averages, and despite significant investment in technical and vocational education, participation rates there remain very low. Although there is little hard evidence regarding educational quality, there is a commonly held view that it is low: performance in national examinations at the end of the secondary cycle has reached a plateau over the past decade, with small annual variations. The teaching force is largely untrained and there is much room for improvement in its management; the church -state system of management and delivery of education fails to reach its full potential and makes a common approach to establishing standards and raising quality difficult to achieve. Despite a healthy level of investment in the sector that compares favourably with countries in the region, the overall outcomes are disappointing. The Education Sector Strategy 2011-2016 seeks to address this situation by focusing at improving access, quality and governance of education in Belize. This education strategy is consistent with the human capacity objectives of the Horizon 2030 Strategy and will play a key role in delivering broader national sustainable development objectives within the context of the MDGs as well.

- ***Gender Equality and Equity***

In 2010, Belize was ranked 89 of 134 countries in the overall gender gap index. The *Belize 2010 Millennium Scorecard Report* noted "gender parity in education is linked to poverty reduction and should be given great attention. The fact that girls are doing well is a cause for celebration. At the same time, however, it cannot be emphasized enough that it is gender parity that is important, not the success of one sex or the other".

The share of women employed outside the agricultural sector has progressed 3 points from 38.7% to 41.7%. While it is expected that overtime the situation of women's employment will change with increasing education, this is a slow-moving process. Within the Belizean context there exists a deficit in the share of women in politics, particularly at the national level.

- ***Health***

Belize is undergoing the epidemiological transition from communicable diseases (CDs) to non-communicable diseases (NCDs) as 62% of the main causes of death in 2010 were associated to NCDs. In general, health indicators show improved life expectancy and survival, but improvements in quality of life and decreases in some preventable causes of death and illness remain major health challenges (PAHO/WHO-Belize estimates in 2011). Life expectancy at birth in 2010 is estimated at 76.9 years (males 74.9 and females 78.8).

- ***Access to Safe Drinking Water and Basic Sanitation***

The Statistical Institute of Belize (SIB) reported that the proportion of the population with improved access to water ascended from 43.6% in 1995 to 76.4% in 2006. The 2006 MICS data report even higher degrees of access, showing 98.8% of urban dweller with access to safe drinking water, and 95.4% in rural areas. This puts Belize well on track to achieve their 2015 target of 100%.

Some progress has been made in sanitation, especially in the rural areas, but the current pace still leaves the country off track in its MDG plus goal of 100% access to improved sanitation services by 2015. In 2001, 54.8% of all households had access to sewer systems or septic tanks while 39.7% used pit latrines, 10% shared toilet facilities, and 3.5% had no toilet facilities. Adequate sanitation coverage at a national level in 2001 was 68.1% for urban areas and 25.8% in rural communities. By 2007, 64.5% of households had adequate sanitation connected to a sewer system or to septic tanks. By 2008, as many as 30% of Belizeans, largely rural, still relied on systems classified as inadequate.

- **Financing for Sustainable Development**: The Government of Belize via its Departments and Institutions supports the implementation of programs and activities related to the Sustainable Development through its annual budget. This support is primarily in the form of employees' salaries, infrastructure and equipment purchases and the logistic support necessary execution of extension and field activities. Most project and capital programs are supported by various donors namely, WWF Belize, WCS, TNC, MARFUND, Oak Foundation, Summit Foundation, Government of Netherland, UNDP/GEF, EU, FAO, JICA/JOCV, World Bank etc. Significant funding is also secured by the local NGOs and are directly applied to conservation programs and activities in their various areas of focus. Collectively, investments for sustainable development are captured under the Public Sector Investmest Programme (PSIP) mentioned elsewhere in this report.

- The Protected Areas Conservation Trust provides funding to various conservation programs in protected areas management, research, capacity building in institutions and

organizations with mandates in natural resource management and conservation and education and advocacy programs.

- Belize has also forged strong partnership arrangements with institutions such as the Smithsonian, WCS, Oceanic Society and Earth Watch who have maintained permanent research stations and programs in Belize with focus on biodiversity and conservation.

- Belize also benefits from financing provided through bi-lateral assistance. The governments of the United States of America, the United Kingdom, Cuba and the Republic of China provide the most resources for projects aimed at sustainable development. These range from the construction of school facilities to the provision of rudimentary water systems

- **Capacity Building & Coordination**: The education institutions at the primary, secondary and tertiary levels have included formal training in biodiversity conservation in their curricula. Nationally, conservation and natural resources-related topics have been integrated into formal curricula and are dedicated subjects especially in the Primary School System. All tertiary institutions have formal courses, with two having an associate degree course in natural resources management and environmental science.
- Most schools at the primary secondary and tertiary levels include formal or informal training in biodiversity use and conservation. Most secondary schools include courses, lectures, and field biology courses in their program. All tertiary institution have formal natural resources management courses in their curricula, while some have associate degree levels in either Environmental Sciences, or Natural Resources Management.
- The civil society partners engaged in biodiversity conservation and management have prioritize public education and awareness as part of their programs and have been involved in capacity building in the delivery of educational information to schools. At the same time, most NGOs and CBOs undertake a certain level of informal and occasionally formal educational programs. Research and training is of high priority to these institutions. The Fisheries Department, the Forest Department and the Protected Areas Conservation Trust (PACT) have also been active in outreach and education efforts.

- **Political Commitment and Governance**: In March 2012 the Government of Belize demonstrated strong political commitment to sustainable development and to the cross sector integration required for sustainable development initiatives to be successful. For the first time a ministry with specific responsibility for sustainable development was created, in addition to incorporating under said ministry all key sectors critical to sustainable development: forestry, fisheries, environment, and protected areas. Sustainable development progress has been hampered for way too long by fragmented and sector-specific policies between key economic sectors and the environment. This new ministry creates the perfect opportunity for integrated planning, policy and exemplary governance for sustainable development. Additionally, the Government of Belize also created a ministry with responsibility for science and technology, to address

the human capacity needs of the country and to ensure innovation and competitiveness in the country's sustainable development future.

5.0 Challenges to Sustainable Development

5.1 Environmental and Social Vulnerabilities

The country's environmental capital demonstrates real potential in driving the country's development agenda, there is a clear need to mainstream adequate environmental protection and sustainable development policies and strategies into the various sector national plans and programmes to protect the integrity of the resource base. Belize's current macroeconomic situation generates important concerns for the future of the environment in Belize. It is feared that the need for the country to recover from recent economic downturns will force an intensive and unsustainable use of its natural resources. Belize's environmental vulnerabilities are tied to development processes impacting the sustainability of biodiversity, land, minerals, water, and energy resources.

5.2 Natural Disasters

Natural disasters have not only disrupted lives and national economic processes in the Belizean context, but have also been responsible for major alteration of the natural environment and significant resource degradation. In 2010 Hurricane Richard damaged some 410,000 acres (11%) of Belize's forests. Based on analysis of satellite metrics of canopy greenness, 140,000 acres were estimated to have suffered low levels of damage, while 215,000 suffered moderate levels of damage and 54,000acres suffered high levels of damage.

In 1998, Hurricane Mitch caused significant damage to the Belize Barrier Reef Complex, reducing coral recruitment by as much as 80% in exposed areas. Climate change is predicted to increase country's exposure to natural hazards.

The potential impact of natural disasters on Belize's development is great as the country's economic growth is tied to the resource base at risk. For instance, it is estimated that some US$150 million per year is generated directly through resource-based activities in the coastal zone, like tourism and fisheries, the integrity of the coastal natural resource system is crucial in maintaining its productivity.

5.3 Climate Change

Belize is identified as one of those countries most vulnerable to the adverse impacts of climate change. A 2009 UNDP Development Studies paper analyzed the costs of inaction on climate change for Belize, characterizing the vulnerability of three economic sectors in Belize to the effects of climate change: agriculture and fisheries, energy and tourism. The results alluded to significant adverse impacts to the national economy should national and sector planning bodies not immediately include considerations of climate change/ climate variability adaptation and mitigation in planning deliberations and processes.

5.4 Economic Vulnerability

Belize is a small open economy highly dependent on external trade and vulnerable to internal and external factors that influence the economy's macroeconomic aggregates, sectors, and the individual microeconomic units within the society. Sugar, banana, citrus products, and marine products comprise a significant percent of total exports of goods. These industries and the tourism sector also play a crucial role in the domestic economy.

Belize's economy is highly vulnerable to a wide range of different types of shocks. This vulnerability stems from the economy's exposure to natural disasters, as well as its economic structure. In addition, vulnerabilities have been by high levels of debt and debt service. Hurricanes and floods have inflicted repeated and significant damage on both infrastructure and productive sectors. Regional competition, the lack of significant diversification beyond agricultural production and tourism, and an over dependence on external trade, coupled with the loss of preferential market access to Europe, reinforces Belize's vulnerability to economic shocks.

5.5 Policy & Institutional Challenges

Despite early efforts to set a national sustainable development framework in place, the country continues to advance without the benefit of an elaborated comprehensive policy and strategy to guide its sustainable development. This has resulted in some fragmentation and some inefficiency in national responses and a level of disconnect between planning for economic and social wellbeing and environmental wellbeing. In the absence of a formalized national framework for sustainable development, many national partners have adopted the long term vision for the country as prescribed in the Horizon 2030 as the basis for national development planning.

At present there exists no single visible structure for the co-ordination of national sustainable development. To allow for effective management within an environment void of a comprehensive sustainable development framework, national sectors have set in place a number of interrelated, theme specific coordination mechanisms. These include the National Human Development Advisory Council (NHDAC), which is a multi-sector advisory body to the Government of Belize, established primarily to advance national efforts relating to poverty eradication; the Natural Resource and Environmental Sub- committee (NREPS) established to increase the national understanding and acceptance of the linkages between natural resource and environmental protection and socio-economic development; the National Protected Areas Committee (NPAC) established to advise the government of Belize on issues concerning the national protected area system; the National Climate Change Committee (NCCC) established to advise government on issues regarding climate change; the National Fisheries Advisory Board (NFAB) established to provide guidance on fisheries commodities extraction strategies and policies; and the National Environmental Appraisal Committee (NEAC) establish to review development projects in the context of the national environment. National structures in many cases are supported by non state networks such as the Association of Protected Areas Management Organizations (APAMO) and the Belize Chamber of Commerce and Industry (BCCI).

Individual sectors have compensated for the absence of a national sustainable development policy by elaborating sector specific policies which make strong linkages between the country's natural resource base and the potential for national growth. When considered together, these sector policies and development frameworks provide a strong basis for the future elaboration of an overarching sustainable development plan. There is, however, the need to synchronize these existing sector policies in order to remove overlap inefficiencies and to address areas where policies may not be in full alignment.

Whilst progress has been made in the national sector planning for sustainable development, a number of policy-related factors are outstanding which significantly influence the country's potential for realizing true sustainable development. These include:

- Absence of a clear long-term policy and strategy for Sustainable Development;
- The challenge of harmonizing/ synchronizing individual sector plans and strategies;
- Overlaps in sector plans resulting in potential overlaps in legal mandates;
- Lack of timely reviews and evaluation of the planning process, resulting in an inadequate feedback loop; and
- Insufficient financial and human resources to support national sustainable development processes

The following bullets below outline a series of challenges and constraints to sustainable development, which seem to be common across all primary sectors:

- Lack of information/ understanding of the issues
- Shortage of capital and lack of access to acceptable financing
- Aversion to the risk involved in adopting new technologies
- Higher cost of abatement technologies
- Lack of public and political support for the implementation of abatement measures
- Inadequate institutional agreements.
- Lack of educational materials to aid in public awareness, education and training
- Lack of Disaster Management Legislation, to ensure coordination in mitigation across the various sectors
- Lack of critical mass for effective implementation of national policies, strategies and action plans, especially in regulatory agencies
- Need for trained and skilled personnel
- Lack of strategies to change the public's attitude toward sustainable natural resource use and conservation
- Not enough promotion of Public Private Partnerships
- Limited funding for training, particularly for personnel within Government Departments

6.0 Opportunities for Sustainable Development

6.1 Green Economy

There is no national consensus among policy makers in Belize on the meaning of the green economy. The United Nations Environment Programme (UNEP) defines 'Green Economy' as an economy which results in "improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities", suggesting an economy that embraces economic, social and environmental sustainability. Said differently, a Green Economy is a low-carbon, resource efficient and socially inclusive economy.

The Belize Horizon 2030 captures the essence of a Green Economy and provides an enabling framework for the country's future along this path. The goals of the Horizon 2030 substantiate this fact:

- Proper management, allocation and utilization of the country's natural resources guided by the principles of sustainable development.
- Planning is integrated and focused on the symbiotic relationship between natural resource management and social and economic development.
- Adequate and sustained protection of marine and coastal areas is a part of larger strategy to mitigate the effects of climate change.
- "Green" technology is being utilized by households, the private sector and across society.
- Solid waste is effectively managed in a manner that is harmonious with sustainable development

It is a fact that the principles of a 'Green Economy' have been in practice for quite some time now, even though not called as such. The approach of "greening" development is embedded in most of the country's strategies and plans developed over the past twenty years, but have suffered from a lack of visible metrics packaged in a manner easily understood by stakeholders and policy makers.

For the purpose of illustrating 'Green Economy metrics' the energy sector has been selected. As part of greening the energy sector, policies and strategies must be developed to promote the use of a mix of electricity, oil products and traditional biomass to carry out lighting, heating, cooking, drive power, and cooling & refrigeration processes. Heating processes can be handled by reusing waste heat, shifted to solar thermal technologies, or switch to biomass-fired utensils and equipment. Efficient lighting, efficient motors and drives, installing energy management systems, are some of the options that can be implemented. In the case of buildings, controlling moisture and humidity, regulating temperature, and controlling air pressure changes affect ventilation and energy use within the building. In hot, humid climates like Belize it means keeping heat out by using cool roofs, glazed windows, and landscaping, while reducing heat sources using day (natural) lighting, installing efficient lighting, etc. These principles of energy

efficiency would have to be formally adopted in building codes on a national level to achieve the desired objectives.

It is clear that a green economy is subordinate to a larger sustainable development agenda, but both are mutually dependent. It must be borne in mind that the pace and manner in which a green economy is incorporated into national development agendas will be country specific, and will require a gradual cultural shift, institutional reform, and the definition of new paradigms for integrated planning as opposed to sector-specific planning.

Belize fully embraces CARICOM submission to the United Nations Conference on Sustainable Development (Rio + 20) on green economy, within the context of sustainable development and poverty alleviation. That submission highlighted fundamental sustainable development challenges in primary economic sectors that must be addressed in CARICOM countries in order to achieve a green economy. Challenges identified include those related to:

• Agriculture and food security
• Natural Resources Management including fisheries management and oceans governance
• Water resources management
• Energy including renewable energy and energy efficiency
• Climate change and sea level rise
• Sustainable Consumption and Production including adopt a 10year framework of programmes on sustainable consumption and production based on the text adopted at CSD19
• Biodiversity
• Sustainable land management
• Waste management and chemicals management
• Provision of the means of Implementation - Finance, technology transfer and capacity building

In addition CARICOM believes that the Green Economy must reflect the Principles of Sustainable Development enshrined in the Rio Declaration, particularly Principle 61

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- The pursuit of sustainable development and the green economy applies to all countries.
- Ensuring an enabling environment at the international level must be central to the international discourse on the Green Economy. In this context, clear commitments related to the provision of financing, capacity building and technology transfer must be given and met by developed countries to ensure implementation by developing countries.
- The Green Economy should be defined and applied by each country based on its specific circumstances, especially in the context of whether it is a paradigm, a tool or an alternative path to sustainable development.
- The risks, challenges, and opportunities, presented by the Green Economy must be carefully studied in the SIDS context given the narrow margin for error in development planning in SIDS. In this connection, for SIDS, cost-benefit analyses to ascertain the transition costs (e.g for the energy sector and tourism sector) versus the costs of doing business as usual, should be undertaken.

- Green economy initiatives should not be used as green protectionism
- Stakeholder buy-in will be critical in advancing the Green Economy
- The Green Economy should not become a market driven concept that only benefits developed countries

6.2 Integration of Sector Policies

There is a baseline already in existence which provides an enabling environment to achieve the required integrated planning across key economic sectors. In 2011 the NREPS was established as a multi-sector body, mandated to provide informed advice to policy makers, the general public, and specifically the GOB on natural resource based policy development, with special emphasis on sustainable development and integration of policies across other affected ministries. Its main objective is to serve by providing inclusiveness, transparency, legitimacy and accountability of the natural resource and environment-based policies to all its relevant stakeholders. NREPS would also serve to monitor and analyze the effectiveness of policy interventions (programs, plans and projects) that have a direct bearing on the implementation of the MEAs and sustainable development. Its membership comprises the Ministries responsible for Natural Resources, Environment, Economic Development, Foreign Affairs, Agriculture, Fisheries, Tourism, Aviation, Culture, Labour, Local Government, Rural Development, Works, Public Utilities, National Emergency, Transport and Communications, and National Security.

Building on this participatory and all-inclusive concept, the Ministry of Forestry, Fisheries and Sustainable Development can institutionalize integrated planning as a national priority with a view to develop a National Sustainable Development Policy. Such a policy would be consistent with the goals of the Horizon 2030 and principles of a green economy as described above, and will address the sustainability challenges and opportunities that affect the key economic sectors of the country. . This should not be a difficult task since a practice of including 'sustainability' already exists in all of the country's strategic planning efforts.

7.0 Conclusion

It is clear that Belize has made substantial progress in promoting and implementing the sustainable development agenda, as is visible evident in its policies both national and foreign. It is also very evident however, that achieving sustainable development is not a simple matter, but is rather a long-term process, that demands broad social participation, education, cultural shifts, policy reform, institutional capacity, financial resources, and political will. In a small and fragile economy such as that of Belize, sustainable development and greening of the economy must occur at a pace that is consistent with the country's ability to meet social needs, with a full and complete understanding that Belize is a natural resource based economy and that some resources are non-renewable.

The country must continue to embrace the pillars of sustainable development: social, economic and environmental. Institutions which respond to sustainable development needs, such as the new Ministry of Forestry, Fisheries and Sustainable Development, need to continue to evolve to

be able to take on the challenges of successfully harmonizing a green economy with the broader sustainable development agenda.

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Annex 1

Guiding questions for the Stocktaking Report

The stocktaking report could describe the context of green economy and national institutional framework for sustainable development based on the following questions:

-Has your country supported any of the Multilateral Environmental Agreements? Please list and provide details on responsible institution/Ministry, effect on policies and planning.
-What actions have been introduced in your country to strengthen political support for sustainable development? E.g. has the support to MEAs lead to sustainable development to be mainstreamed into development policies and planning?
-Has your country introduced or promoted integrated planning and decision making for sustainable development? If so, under what title (NSDS, PRSP, Five Year Plan, NCS or NEAP, other)? What are the from this experience?
-Are there specific industry sectors or resource areas (e.g., water, energy, biodiversity, transport, other) where national commitment to achieve sustainable development goals has been especially strong? If factors that commitment?
-Has your government (national and local) been actively involved in developing and/or implementing local agendas 21? If so, where? What have the achievements been so far?
-What institutions have been developed for sustainable development in your country? Have changes been made to existing institutions in this context?
-Have the Ministry of Finance/Ministry of Planning or important line ministries been engaged in public policy and planning for sustainable development? Is there for instance coordination across Planning, Health, Environment, and Transport, Energy agencies on transport and land use?
-What new and emerging challenges are likely to affect the prospects for sustainable development in the coming decade? What mechanisms have been put in place in your country to address these challenges: At the local level? At the national level?
-Is there a consensus among policy makers in your country on the meaning of the term green economy in the context of sustainable development and poverty eradication? If so, how is it defined?
-What would green economy mean in your country? Are there studies for your country that identify success factors, challenges or risks associated with green economy policies identified? Have green economy actions been taken so far in your country? These questions as well as any reporting on the CSD themes (Agriculture, Transport, Energy, Climate Change, Biodiversity, Land degradation, Water) could be used to draft the stocktaking report.

Annex 2

Guiding questions for the Synthesis Report

In addition to responding to the questions that were already addressed in the stocktaking exercise, a set of questions on the institutional framework and on the potential for green economy to enhance sustainable development are suggested here. Sessions regarding the institutional framework could address the following questions:

-Has your country or parts of your country introduced or promoted integrated planning and decision making for sustainable development? If so, under what title (National Sustainable Development Strategies, PRSP, Five Year Plan, NCS or NEAP, Other)? What are the lessons from this experience? -What factors explain progress in implementation (economic growth, investment in technical and institutional capacity, other)?

-Is the technical assistance from UN system entities a key factor in explaining success? If so, in what areas or sectors (e.g., MDGs, water, energy, transport, health, agriculture, biodiversity, forests, climate change, jobs, other)?

-How can international cooperation strengthen support for sustainable development? What are your expectations for UNCSD in this regard?

-What are the main difficulties experienced in promoting integrated planning and decision-making?

-Looking forward to ~2030, what are your government's organization's highest priorities for accelerating progress towards sustainable development?

-What new and emerging challenges are likely to affect the prospects for sustainable development in the coming decade? Do the new and emerging challenges pose a fundamental risk to the prospects of economic growth and development in your country? What new and emerging challenges should the UNCSD enact upon?

-What mechanisms have been put in place in your country to address these challenges: At the local level? At the national level? Sessions regarding green economy in the context of sustainable development and poverty eradication could address the following questions:

-Are the Millennium Development Goals established in Johannesburg and sustainable development themes going back to Rio in 1992 adequately addressing national needs?

-Is there a consensus among policy makers in your country on the meaning of the term green economy in the context of sustainable development and poverty eradication? If so, how is it defined?

-What are the main perceived benefits of implementing a national/regional green economy strategy? Are these benefits being tracked, measured and reported?

-Based on all of the above, what is (are) the key outcome(s) you think could emerge from the UN Conference on Sustainable Development in 2012 with respect to a 'green economy in the context of sustainable development and poverty eradication'?