

GUYANA'S ASSESSMENT REPORT

ON THE

BARBADOS PROGRAMME OF ACTION

PLUS 10



2004

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Acronyms

ACP	African, Caribbean, Pacific
AIDS	Acquired Immune Deficiency Syndrome
AOSIS	Alliance of Small Island States
APCU	Agriculture Project Cycle Unit
BEAMS	Basic Education Access Management Support
BPOA	Barbados Programme of Action
CAFRA	Caribbean Association for Feminist Research and Action
CAREC	Caribbean Epidemiological Centre
CARICOM	Caribbean Community
CBI	Caribbean Basin Initiative
CCCCC	Caribbean Communities Climate Change Centre
CDB	Caribbean Development Bank
CDC	Civil Defence Commission
CDERA	Caribbean Disaster Emergency Response Agency
CDM	Comprehensive Disaster Management
CH & PA	Central Housing and Planning Authority
CIG	Conservation International- Guyana
CIDA	Canadian International Development Agency
CPACC	Caribbean Planning for Adaptation to Climate Change
CXC	Caribbean Examination Council
DCU	Difficult Circumstances Unit
DEC	Di-ethyl Carbamazine
DFID	Department for International Development
EEZ	Exclusive Economic Zone
EIA	Environmental Impact Assessment
EPA	Environmental Protection Agency
ERP	Economic Recovery Programme

EU	European Union
FAO	Food and Agriculture Organisation
FDI	Foreign Direct Investment
FFI	Fauna and Flora International
FPA	Forest Partnership Agreements
FTAA	Free Trade Area of the Americas
GCE	General Certificate of Education
GDP	Gross Domestic Product
GEF	Global Environment Facility
GENCAPD	Guyana Environmental Capacity Development
GEA	Guyana Energy Agency
GEO	Guyana Economic Opportunities
GFC	Guyana Forestry Commission
GGMC	Guyana Geology and Mines Commission
GMA	Guyana Manufacturers Association
GNIFC	Guyana National Initiative on Forest Certification
GOG	Government of Guyana
GOINVEST	Guyana Office for Investment
GPAS	Guyana Protected Areas System
GS & WC	Guyana Sewerage and Water Commission
GTZ	German Technical Cooperation
GUYWA	Guyana Water Authority
GWI	Guyana Water Incorporated
GWLI	Guyana Women's Leadership Institute
GY	Guyana
HIES	Household Income and Expenditure Survey
HIPC	Heavily Indebted Poor Countries
IDB	Inter-American Development Bank

IMCI	Integrated Management of Childhood Illnesses
ITTO	International Tropical Timber Organisation
KAP	Knowledge, Attitudes & Practices Survey
LCS	Living Conditions Survey
MDG'S	Millennium Development Goals
MTIC	Ministry of Tourism, Industry and Commerce
MOU	Memorandum of Understanding
NACEN	National Advisory Committee on External Negotiations
NBAC	National Biodiversity Advisory Committee
NCC	National Climate Committee
NDCs	Neighbourhood Democratic Councils
NDIB	National Drainage and Irrigation Board
NDS	National Development Strategy
NEAP	National Environmental Action Plan
NEP	National Energy Policy
NFPs	National Forest Programmes
NGO	Non-Governmental Organisation
NPAS	National Protected Areas System
NPV	Net Present Value
NRDC	National Resource and Documentation Centre
NRDDB	North Rupununi District Development Board
NREAC	Natural Resources and Environment Advisory Committee
NSCBD	National Strategy for the Conservation of Biological Diversity
NTBs	Non Trade Barriers
OAS	Organisation of American States
ODA	Overseas Development Agency
PAHO	Pan American Health Organisation
PHC	Primary Health Care

EP	Primary School Improvement Project
PROFOR	Programme for Forests
PRSP	Poverty Reduction Strategy Paper
RAP	Rapid Appraisals Programme
RDCs	Regional Democratic Councils
RNM	Regional Negotiating Machinery
SD	Sustainable Development
SFM	Sustainable Forest Management
SFPs	State Forest Permissions
SIDS	Small Island Developing States
SIMAP	Social Impact Amélioration Programme
SMP	Shore Zone Management Programme
SSEE	Secondary School Entrance Examination
TB	Tuberculosis
TSA	Timber Sales Agreement
UG	University of Guyana
UNCED	United Nations Conference on Environment and Development
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
USAID	United States Agency for International Development
UNEP	United Nations Environment Programme
UNESCO	United Nation Educational, Scientific and Cultural Organisation
UNGA	United Nations General Assembly
UNICEF	United Nations Children Fund
VAT	Value Added Tax
WHO	World Health Organisation
WSSD	World Summit on Sustainable Development
WTO	World Trade Organisation

INTRODUCTION

by Navin Chandarpal
Presidential Adviser on Sustainable Development

The United Nations Global Conference on the Sustainable Development of Small Island Developing States in Barbados in 1994 helped these states to better understand their common issues and to sensitise the international community to the particular difficulties faced by small island and low lying coastal developing states.

The Barbados Declaration and the SIDS Programme of Action which emerged from the conference provided a positive framework to guide these states in their efforts to develop with a promise of meaningful support from the developed countries.

Guyana was greatly encouraged by the efforts of the Caribbean group of SIDS to develop a coordinated approach to the implementation of the SIDS-POA which reached a high point at the Caribbean Ministerial meeting in November 1997.

At the National level, the Government of Guyana is fully committed to a path of Sustainable Development and our National Development Strategy includes key elements of Agenda 21 and the SIDS-POA.

The Economic and Social programmes focus heavily on reducing the incidence of poverty and un-employment and on expanding the delivery of social services to all communities.

The Governance programmes pursued since the restoration of democracy in 1992 have resulted in the broadening of democracy at the national and local levels, greater inclusiveness in state institutions, the strengthening of the Parliamentary process, independence of the judiciary and other constitutional bodies, greater transparency and respect for human rights and civil liberties.

Guyana is richly endowed with natural resources and the programmes for the conservation and sustainable utilization of natural resources have led to massive improvements in environmental considerations in the forestry, mining, agricultural and industrial sectors.

As a developing nation, Guyana has taken seriously its commitments to international conventions and processes. We are seeking to create a better standard of living for our citizens while contributing to making our planet safer for all of its peoples.

Unfortunately, our numerous efforts have not brought the results we need. We are seriously constrained by the limitations of our human, material and financial resources. We can only go beyond these limits if we obtain the requisite assistance from those who are in a position to do so.

In the Barbados Declaration, the participating states declared:

“ The international community should cooperate with small island developing States in the implementation of the Programme of Action for the Sustainable Development of Small Island Developing States by **providing effective means**, including **adequate, predictable, new and additional financial resources** in accordance with chapter 33 of Agenda 21 ; **facilitating the transfer of environmentally sound technology**, including on **concessional and preferential terms** as **mutually agreed**, taking into account the need to protect intellectual property rights as well as the special needs of developing countries; and **promoting fair, equitable and non-discriminatory trading arrangements** and a **supportive international economic system.**”

These promises have hardly been kept. Instead a double jeopardy has emerged for developing countries. On the one hand, we have received very little of the “adequate, predictable new and additional financial resources” and “transfer of environmentally sound technology on concessional and preferential terms.” On the other hand, the meagre resources we generate within our countries are dwindling under trading arrangements which are the opposite to being “fair, equitable and non-discriminatory.”

The examples of the trade in bananas, rice and sugar show very clearly that those with economic might are not reluctant to exercise their power to manipulate trade arrangements even if the result is severe damage to national economies and the social dislocation of large sections of the population. This is clearly not “a supportive international economic system.”

As we assess the achievements during the first decade of the SIDS-POA, we recognise the importance of a common programme of action for developing countries that are ecologically and economically vulnerable because of similar physical features.

Guyana is fully committed to a course of sustainable development. The SIDS-POA is an integral part of our chosen path. We have achieved much, but could have done much more. We are disappointed by the failure of the international community in not “providing effective means.”

We will continue to play our part in the efforts to strengthen the mechanisms at the regional and global levels to improve the implementation of the SIDS-POA. At the same time, we must in unity insist that the international community work towards changing the hostile international environment into a supportive one.

Now more than ever, we need to further advance the call by the Great Guyanese and Caribbean Statesman, Dr Cheddi Jagan for a New Global Human Order to provide a truly supportive international environment for the sustainable development of Small Island and Low-lying Coastal Developing States.

Background to Report

Following the United Nations Conference on Environment and Development (UNCED), held in Rio de Janeiro, Brazil in 1992, a special meeting referred to as The United Nations Conference on the Sustainable Development of Small Island States (SIDS), was convened in Bridgetown, Barbados, from 25 April- 6 May 1994. This Conference had its origin in Chapter 17 of Agenda 21. The UN General Assembly (UNGA) Resolution 47/189, which established the Conference, set a number of objectives including, *inter alia*, a review of current trends in the socio-economic development of Small Islands Developing States (SIDS); defining a number of specific vulnerabilities of SIDS and specific actions and policies relating to environmental and development planning to be undertaken by these States, with help from the international community; as well as identifying elements that SIDS need to include in medium- and long-term sustainable development plans. The Conference produced and adopted the Barbados Programme of Action (BPOA) for the Sustainable Development¹ of Small Island Development States and the Barbados Declaration.

In 2002, the World Summit on Sustainable Development (WSSD) reaffirmed the special case of SIDS and highlighted a series of SIDS-specific issues and concerns in the Johannesburg Plan of Action, adopted by the Summit. At the WSSD, the United Nations General Assembly called for a review of the Barbados Programme of Action (BPOA) at an international meeting scheduled for 2004 in Mauritius. The main aims are to renew political commitment, evaluate the status of implementation, and determine the forms of support to overcome identified constraints. To this end, Guyana, like other SIDS member countries, is required to provide information on her respective national circumstances for the review, using a prepared format that was endorsed by the Alliance of Small Island States (AOSIS) in January, 2003.

¹ This is referred to as the Barbados Programme of Action, which is a blue print for action on sustainable development that should be undertaken by SIDS with the cooperation and assistance of the international community.

1 SOCIO-ECONOMIC CONTEXT

1.1 Key Characteristics

1.1.1 Guyana's Geographic Characteristics

Guyana, the only English speaking country located on the North Eastern shoulder of the South American Continent north latitude between 1°10' degree and 8°32' and west longitude between 56°30' and 61°20'², has a total land area of 214,970 square kilometres (83,000 square miles). The country is bordered by Venezuela on the west, Suriname on the east, Brazil on the South and South West and the Atlantic Ocean on the North (See Appendix 1).

Four major landform types can be identified in Guyana. The first is the low coastal clay belt (often referred to as the Coastal Plain) where most agricultural activities are conducted. The second is the Sandy Rolling Lands to the South of the Coastal Belt, which includes the Intermediate Savannas. The third landform is an undulating, central peneplain, which comprises more than half of the country's area and in which is located relatively virgin tropical rainforests and extensive mineral deposits such as gold and diamonds. It also stretches from the sand belt to the country's southern boundary, encompassing the Rupununi Savannas- which border Brazil. The fourth landform, referred to as the Guiana Highlands, is located in the mid western area of Guyana and includes the Pakaraima Mountain Range.

Guyana experiences an equatorial climate characterised by two wet seasons (May to mid- August and mid-November to mid-January) and two dry seasons (January to April and mid August to mid November). The average daily temperature is approximately 26.7° Celsius. Relative humidity is high with 80% or more on the coastal zone, approximately 70% in the savannah zone and 100% in the forested zone.

1.1.2 Population and Vital Statistics

Guyana's multi-racial population was estimated at 765,000 (to the nearest thousand) in 2002 with a marginal annual growth rate of 0.2%, a crude birth rate of 17.0 and a crude death rate of 9.4 per 1,000 population. Infant mortality rate (per 1,000 live births) in the same year was calculated at 29.0.

The 1991 National Census indicates that 34.8% of the population were under 15 years, 61.1% fell between 15 and 61 years and the remaining 4.1% were 65 years and older.

Generally, Guyana's population can be regarded as small relative to its land area, with a population density of about 4 persons per square kilometre. However, attention should be drawn to the fact that only 10% of the population live in the interior, while the remaining 90% inhabit the narrow strip of coastal plain that occupies only about 7.5% of the total land area of the country.

The narrow strip of coastline lies approximately 1.4 metres below sea level. In fact, while the country remains one of the most under-populated and unexploited in the Caribbean region, the

² Guyana is an integral part of the Guiana Shield.

coastal zone, and in particular the capital and primate city Georgetown,³ have shown significant growth in recent years with an estimated population density of between 360 persons to 700 persons per square kilometre. It is worthy of note that in 2002 the urban population was estimated at 37.2%.

The low population density, coupled with the very difficult terrain in some Administrative Regions such as Regions 8 and 9 make it costly to provide certain social services and infra-structural development necessary for the support of economic ventures.

1.1.3 Economic Performance

Guyana's economic performance can be characterised by three main phases since its independence in 1966⁴. During (1966 to the late 80's) the economy had experienced decreasing output, large fiscal deficits, high inflation, and a build up of external debt arrears, as a result of a centrally planned economy characterised by state monopoly of the major productive sectors and the financial institutions, together with an extensive program of controls on prices, credit and foreign exchange.⁵

During the second phase (1989 to 1997) Guyana experienced major economic reforms following the implementation of a donor-supported Economic Recovery Program (ERP). The ERP abolished virtually all price controls, increased fees for public services, abolished import prohibitions, unified the exchange rate, simplified the tariff structure, and established market-based interest rates. By 1990 performance in all the major sectors was at its worst, since independence. On the contrary, from 1991 to 1997 results were impressive: annual GDP growth rate averaged 7.1%; the deficit of the non-financial public sector decreased in the same period from 16.3 % of GDP to 3.2%; financial transfers (including transfers to public enterprises) declined from a yearly average of 8.0% of GDP to 1.3%; and poverty rates declined from 43.2% to 35%.⁶

By 1999, approximately 66% of the country's export earnings came from the four primary commodity exports: sugar (25%), gold (22%), bauxite (14%) and rice (10%). Despite the fact that production had improved, markets (in terms of prices and volumes accepted) had worsened, making the sectors still susceptible. Consequently, Guyana's terms of trade declined by 2 percent over the second half of the 1990s. Agriculture and mining accounted for half of GDP, services one-third and manufacturing and construction one-sixth. Bauxite, forestry and gold remained the most attractive sectors for foreign investment during the 1990s.

It is worthy of note that between 1998 –2002, the average annual growth rate of GDP has been 0.6% and the fiscal deficit has widened to an average of 6.0 %. This was due to a combination of political and social unrest, adverse weather conditions, floods, terms of trade deterioration and increased expenditure on social services to alleviate poverty. According to the World Bank (2002) *"Guyana is the fourth poorest country in the Western Hemisphere with a per capita income of*

³ Georgetown is considered a primate city, as it is more than double the size of the next largest town, that is, Linden.

⁴ Egoum, Bossogo, Philippe; Faal, Ehrima; Nallari, Raj; Weisman, Ethan. (March 2003) Guyana: Experience with Macroeconomic Stabilization and Structural Adjustment and Poverty Reduction.

⁵ Guyana Public Expenditure Review (August 2002)

⁶ Ibid

US\$940 in 2000.⁷

1.1.4 Poverty Situation in Guyana

According to the 1993 Household Income and Expenditure Survey (HIES)/Living Standards Measurement Survey (using the head count approach) about 43% of Guyana's population lived below the poverty line, with 29% living in extreme poverty, while the highest incidence of poverty was found in rural areas, particularly in interior locations. In 1999, a Living Conditions Survey (LCS) undertaken to measure the impact of economic and social programmes on poverty indicated that the proportion of the population living below the poverty line was 35% with 19% living under conditions of extreme poverty. This suggested a decrease of 19% in the incidence of absolute poverty levels and of 34% in the incidence of extreme poverty. While poverty had fallen in both urban and coastal areas, particularly in Georgetown, interior locations had experienced only marginal changes. Table 1 below provides information on the poverty gap in Guyana (Guyana PRSP 2001).

Table 1 Guyana Poverty Gap in %, 1993 and 1999

Region	1993 Gap	1999 Gap
Georgetown	8.7	5.4
Other Urban	6.3	3.0
Rural Coastal	14.4	11.3
Rural Interior	46.1	44.9
Guyana	16.2	12.4

Source: The Guyana Poverty Reduction Strategy Paper, 2001

As indicated in Table 1, poverty was reduced in Guyana as a whole by 3.8%.

The poor in Guyana are characterised by self-employment in agriculture or manual labour, unemployment and those employed as domestic workers and in the construction sector, larger family size and number of dependents, lower levels of education, and having very little access to proper and adequate communications. Given the population distribution on the coast, therefore, it is not surprising that the number of institutions and expenditure on these structures in the areas of education, health and communication in this zone are much higher than those in other parts of the country.

⁷ Only higher than that of Nicaragua, Haiti and Honduras

Table 2 Number of Educational Institutions by Education District (1997 – 1998)⁸

Education District	LEVELS							
	Nursery	Primary	Community High	General Secondary	Special Education	Technical/Vocational	Teacher Training	University
Region 1	11	39	1	3	0	0	0	0
Region 2	44	37	3	5	0	0	1	0
Region 3	61	63	6	7	0	2	0	0
Region 4	62	56	7	7	1	3	0	0
<i>G/Town</i>	40	35	11	19	4	9	1	1
Region 5	36	32	2	5	0	2	0	0
Region 6	67	57	3	14	1	3	1	1
Region 7	24	24	1	1	0	0	0	0
Region 8	11	15	1	1	0	0	0	0
Region 9	8	37	1	2	0	1	0	0
Region 10	22	31	1	5	1	2	1	0
Total	386	426	37	68	7	22	4	2

Source: Modified from Digest of Educational Statistics of Guyana 1997 – 1998, Ministry of Education, 1998

Attention should be drawn to the fact that the GOG had begun since 1994 the process of decentralising the education system (for example, teacher training) with the view to providing more opportunities for persons who reside particularly in the hinterland areas of Guyana which had little attention in the past.

As in the case of education, the best health care facilities are located on the coast, in the form of government- and private-owned hospitals, a number of health centres, clinics and health outposts. The population on the coast has the highest level of life expectancy in the country, for example, 64 years, and the lowest incidence of infant mortality, for example, 21 per thousand (Ministry of Health, 1998). While it is true that these figures may vary for different areas on the coast, generally they are the norm rather than the exception. Additionally, while malaria tends to be widespread in the interior regions, it is low in coastal areas.

⁸ All private schools (nursery, primary, secondary and technical/vocational) have been excluded, though these have been mushrooming in Georgetown

1.2 Key Challenges

1.2.1 Impacts of globalisation on trade and exports, in particular as a result of trade liberalisation:

Guyana's economy is more dependent on trade than almost any other country in the world.⁹ In fact, 75% - 80% of its total exports consisted of four products: in 2002, sugar and rice represented approximately 34% of Guyana exports, while bauxite and gold accounted for a further 35%, and unprocessed forest products made up 8%. To this end, globalisation presents to Guyana significant threats, given the country's exceptionally high dependence upon the external sector.

Generally, the threats of globalisation to the viability and survival of Guyana's economy are related to issues such as world recessions, financial crisis, dramatic swings in the prices of key commodities, and lack of appropriate access to key markets. For example, markets for bauxite, sugar and rice have come already under severe pressure as prices and conditions have become less favourable. On the other hand, globalisation offers to Guyana prospects and promises of expanded markets, access to technology, and the ability to provide and sell services through the Internet network.

Constraints faced by Guyana with regards to meeting the challenges posed by globalisation include, but are not limited to: (a) limited value added materials for export, (b) inadequate access to credit; (c) limited export promotion services for Guyana's exports; (d) inadequate financing for the implementation of commitments¹⁰ to WTO (e) limited new and foreign direct investment (FDI) and domestic investment; (f) limited institutional and physical structures and (g) limited human resources, given the current migration rates of skilled nationals; (h) increasing shipping cost; limited entrepreneurial, managerial and technical skills and financial and marketing expertise.

Thus, Guyana must continue its efforts and give increasing attention to: eliminating trade barriers and the strengthening of the country's negotiating power; education and training to improve the quality of the labour force; improved regulation of the country's financial system; protection of domestic markets from unfair competition, and maintaining access of Guyana's products to foreign markets; reduction to/removal of foreign barriers to the exportation of Guyana's non-traditional agricultural products; development of adequate and integrated transport infrastructure; maintaining competitive exchange rate.

⁹ As reported in C. VanGrasstek's National Trade Strategy, "Trade is more important to Guyana than to almost all other countries in the world. Even by comparison with other CARICOM members, Guyana is exceptional for its high level of dependence upon the external sector."

¹⁰ Guyana's commitments are documented in WTO, "Guyana: Schedule of Specific Commitments" GATS/SC/37 (15 April 1994)

Actions Taken

Guyana has made significant effort to address the challenges of globalisation on trade and exports. These include: the modernisation of key traditional export industries, particularly sugar, rice and bauxite; improving access to markets; diversification of the economy; and increasing competitiveness. Other more specific actions taken are:

- Implementation of a FAO agriculture trade negotiation capacity building project. This involves: the establishing of a trade library and information centre; the teaching of trade economics to members of staff in Ministries of Agriculture and Foreign Trade & International Cooperation to carry out analytical and other preparatory work for the definition of agriculture trade policy and negotiation strategies for Guyana; and the commissioning of sector specific studies examining the effects of different international trade scenarios for Guyana;
- Preparation of a National Trade Strategy for Guyana to advance its development objectives in the context of increasing globalisation. In addition, a Working Paper has been prepared on " Guyana's participation in Multilateral and Regional Trade Negotiations and the United Nations Framework Convention on Climate Change (UNFCCC);
- GoG is implementing a tax reform action plan aimed at modernising and simplifying the tax system and increasing administrative efficiency;
- Formulation of an Investors Road Map and the passing of an Investment Bill;
- A Small Business Bill has been drafted and passed;
- Mapping of Guyana's legal commitments to WTO as they relate to the service sectors. The new National Coalition of Services Providers has undertaken this exercise;
- Implementation of the EU project on Improving the Competitiveness of the Rice Industry;
- Guyana is also a beneficiary of the Regional Transformation Programme that focuses on diversification of the national economy and improvement of standards;
- A Public Sector Modernisation Program; and
- A proposed Commercial Court and Alternative Dispute Resolutions Mechanisms project aimed at improving the commercial environment.

See also Section 4.5.

1.2.2 Natural Disasters

Guyana's topography renders it vulnerable to natural risks since most of the country's key investments are in low lying areas and are protected by sea defences. Frequent and uncontrolled breaches due to unanticipated high tides whether due to natural or anthropogenic causes will adversely affect sugar, rice and other agricultural production. Moreover, unfavourable weather, such as prolonged periods of heavy rainfall or prolonged periods of droughts (e.g. *El Nino* phenomenon), as well as frequent fires in homes and businesses also jeopardise national agricultural production. These risks, if they occur, will negatively impact on growth and poverty

reduction.

Guyana's major constraints with respect to natural disasters are (a) the absence of a national land use planning process that incorporates environmental risks criteria and (b) the lack of technology that will guarantee adequate and timely forecasting information with a view to reducing economic loss from natural and technological hazards, and to minimize human suffering from natural and technological hazards.

Actions Taken

- Drafting of a Comprehensive Disaster Management Programme (CDM);
- Integration of pollution prevention measures into environmental authorisation process by the Guyana Environmental Protection Agency;
- Dissemination of information obtained the CPACC project on sea level rise and Guyana's coastal vulnerability;
- Establishment of a Disaster Response project referred to as the El Nino Emergency Response Project that received financial assistance from the World Bank and the UNDP. Institutions that have benefited from this project are: the former Guyana Water Authority, Guyana Sewerage and Water Authority (GUYWA), the National Drainage and Irrigation Board (NDIB), the Hydro-meteorological Division and the Civil Defence Commission; and
- Incorporation of risk assessment (particularly as it relates to public health and safety) as part of the Environmental Impact Assessment, which became mandatory by law in 1996.

1.2.3 National security and crime, including issues pertaining to large EEZs (drugs, pollution, poaching etc.)

In Guyana, criminal activity is rooted in drugs, poverty, and un-employment especially among the youth. During the past year there were increasing tendencies towards violent crime and kidnappings. In addition, there was a proliferation of small arms and other weaponry, both licensed and on the illegal market. Consequently, physical insecurity had increased dramatically, together with accelerated outward migration.

These issues warrant institutional reform of the Disciplined Services, the upgrading of their intelligence and operational response capability and tactics, improved Police-Community relationship, and greater security collaboration with neighbouring States because of the increasing trans-boundary characteristics of criminal activities.

Actions Taken

- Establishment of key institutions such as Ethnic Relations Commission and the Disciplinary Services Commission
- Inauguration of a Commission of Enquiry into the Disciplined Services with special emphasis on the Police Force;
- Reactivation of community policing groups particularly in the hot spot areas;
- Provision of protective equipment to increase in crime fighting; and

- Increased budgetary allocations for training and forensic investigations.

1.2.4 Unemployment:

Unemployment is intrinsically related to poverty and remains a grave challenge for Guyana. A recent study supported by the National Commission on Women indicates that Guyana has an unemployment rate of 12.88%, compared to 9.1% in 1999. Generally, un-employment is higher among women (19.6%) than men (9.04%). There is also a geographic dimension to unemployment in Guyana. At the regional level, it is highest in regions 10, 4 and 6 respectively. Moreover, whereas men and women of Region 10 face this problem equally, more women face unemployment in both Regions 6 and 4.

The major constraints to the creation of employment are (a) the slow growth of Guyana's economy and inadequate number of productive and remunerative jobs; (b) public sector policies/IMF (e.g. an employment freeze) that are detrimental to the creation of employment; and (c) need for integrated policies to address more effectively the needs of the informal sector, for example, incentives and concessions do not generally apply to small and medium scale enterprises, although attempts have been made to strengthen their role through micro and small enterprise development (NDS, 2001-2010).

Actions Taken

- The Government has organised a Business Summit with the private sector to chart a new course of rapid investment and growth, with the goals of employment creation and poverty reduction.
- The PRSP proposes a broad-based labour intensive, economic growth that will generate quick supply and labour responses and support the private sector in making investments that are critical for economic growth and expansion;
- Development of the agro-forestry sector with the aim to create productive employment and to promote self-sufficiency that will, in part, alleviate poverty.

1.2.5 HIV/AIDS, Tuberculosis, Malaria, and Filariasis

1.2.5.1 HIV/AIDS

The first case of HIV/AIDS was observed in Guyana in 1987. At the end of 2002, there were 2588 known AIDS cases in Guyana. However, the true extent of HIV/AIDS in Guyana is unknown, with up to 60% of the suspected infected population not reporting. The largest number of reported cases occurs among people within the 20–49 year old range, accounting for 75 % of cases in 2002. During 2002 were more male than female cases within all age groups except the 20–24 year old age range.

Reports of AIDS cases have been received from all ten administrative regions of the country with Region 4, which includes the capital city of Georgetown, having the highest incidence rate of 114.8 cases per 10,000 people, the next highest being Region 10, which includes the mining town of Linden, with an incidence rate of 86.6 cases per 10,000 people.

In 2000, the majority of reported cases (96.5%) were due to unprotected heterosexual sex. At the start of the epidemic, men were more affected than women. However, more women, particularly young women, are now being infected. New cases are increasing among young women at a faster rate than among young men, and there are more infected women in the 15-24 age group than men. In 1997 the male-female ratio was 1.7:1; this has dropped to 1.2:1 in 2000.

According to the Human Development Report 2001, 3.1% of 15-49 year olds in Guyana were living with HIV/AIDS. However, the UNAIDS Report on the Global HIV/AIDS Epidemic for 2002 reports a prevalence of 2.7% for the same age group. Prevalence among 15-24 year olds is estimated to be among the highest in the Caribbean, with only Haiti and the Bahamas having higher rates.

1.2.5.2 Tuberculosis (TB)

The incidence of TB has doubled since 1990, reflecting the concomitant increase in HIV/AIDS in the population. In 1999, there were 407 reported cases per 100,000 people, with an incidence rate of 52.58.¹¹ Case fatality rates are high (18%), and there are also high rates of non-compliance and low rates of completion of treatment. Originally, almost a third of all cases were found in the Amerindian population. However, there has been a shift to the general coastal population, primarily young males (peak incidence is in males aged 25-34)¹², mirroring the HIV/AIDS epidemic.

In 2002, there were 590 reported cases with an incidence rate of 75.7, more increases than 2001 when there were 422 cases registered. The 7.8% of cases were less than 15 years old and 2.7% had co-infection with HIV (see Table 3 below).

Table 3 **Number of Tuberculosis cases 1990 and 1997-2000**

Year	Number of cases	Rate/100,000 population
1990	169	21.39
1997	381	48.23
1998	318	41.80
1999	407	52.58
2000	420	53.9
2001	422	54.1
2002	590	75.7

Source: Ministry of Health Reports, 1990 to 2002

¹¹ PAHO, Guyana Health in the Americas 2002 Report

¹² Ibid

1.2.5.3 Malaria

Malaria is a major health problem in Guyana, and is largely endemic in the interior regions 1, 7, 8, 9 and 10. Sixty percent of all cases are found among the Amerindian population. According to the Malaria Plan developed by the Ministry of Health, *Plasmodium falciparum*, which causes severe morbidity and mortality, continues to be the dominant species.

Table 4 Number of Malaria cases 1998 -2002

Year	Number of cases	Rate/100,000 population
1998	52,244	6702.9
1999	27,283	3500.4
2000	24,018	3081.5
2001	27,122	3479.8
2002	21,895	2809.5

Source: Ministry of Health reports. 1997 to 2002

There was a decrease in the incidence of new cases from 43,609 in 1997 to 27,283 in 1999. In 2000, there were 24,018 cases. It is estimated that 136,415 workdays were lost in 1999 because of malaria. Malaria often goes untreated, especially in children, and many people have multiple episodes per year. Bed nets are used by 61% of children under 5, but only 11% of the nets are treated with insecticide. Malaria is also thought to be a significant contributory factor to anemia in women and children.

1.2.5.4 Filariasis

Rapid mapping was conducted in the 10 Administrative Regions. Of 2,325 persons tested, 9.04% were positive. The presence of filarial transmission was established in Regions 3,4,5,6 and 10. The population most affected was the age-group 5-15 years where the positivity rate was 12.32%. In the age group 16-40 the rate was 5.49%. The ratio of males to females was 45:55.

In August 2002 the Lymphatic Filariasis Elimination Programme was introduced by Ministry of Health of Guyana. The goals of this programme are to interrupt transmission of *Wuchereria bancrofti* and to eliminate Lymphatic Filariasis as a public health problem in Guyana using salt fortified with Di-ethyl Carbamazine (DEC). Additionally, the Ministry of Health developed a list of required monitoring and evaluation activities:

- Sentinel Site Surveillance
- Market penetration surveys and salt use/ Knowledge, Attitude & Practices (KAP) Surveys
- MF/antigen spot check surveys
- National Lymphatic Filariasis prevalence survey

- Certification of Elimination

Two sentinel sites were activated and surveys were conducted in order to find the prevalence of Filariasis through the immunochromatographic antigen card test (ICT). In total 1,149 people were investigated and 262 had tested positive for the determination of antibodies for filarial (22.8%). Moreover, last 24 July the first DEC Salt campaign was launched in order to prevent and eliminate Filariasis in Guyana.

Other Actions Taken

- Formulation of a National Health Plan (2003-2007) which includes general improvement of the health sector including the extension of health care services, improvement of health facilities;
- The establishment of a Health Insurance Scheme, and measures to address inequalities in access to health and for the provision and delivery of services to vulnerable groups;
- The formulation and formal acceptance of a National Policy Document on HIV/AIDS as well as a National Strategic Plan for 2003 – 2007;
- Increased access to anti-retroviral drugs and an increased allocation for the procurement of pharmaceuticals;
- Increased financial allocation to the National AIDS Programme;
- Adoption of the 1992 Global Malaria Control Strategy and an Implementation Plan for Malaria Control 2001-2005;
- Establishment of Regional Health Authorities; and
- Modernisation of the Sector through the current Health Sector Policy and Institutional Development Project that is financed by the IDB.

1.2.6 Urbanisation

Urbanisation in Guyana is characterised, to a large extent; by the occupancy of abandoned sugar cane fields located on the urban fringe. It is based on two distinct approaches that have given rise to a recognisable development pattern. The first approach is organised by the Ministry of Housing and involves the handing over of land titles to targeted low-income and middle-income families.

The second approach involves the illegal occupation of land by squatters who continue to live in those areas until due recognition is given to them as lawful landowners.

Both types of development create numerous problems for Guyana and as such, the government is implementing measures to improve communications among all stakeholders. In addition, on site water services are provided by the Ministry of Housing, and the Basic Needs Trust Fund, among others, while Guyana Water Incorporated (GWI) is tasked with the provision of potable water to the housing areas. Currently, there are two hundred sites which require urgent attention, and which will be prioritised within the Ministry's ten year Development Plan.

1.2.7 Water and sanitation in rural and urban areas

Guyana has a high level of coverage for water supply in the capital city and coastal strip where the majority of the population resides. Although water resources are generally abundant, there are problems related to reliability of water services and water quality. With the exception of Georgetown, water is available for few hours a day typically, and water tests carried out in 1999 showed that, in many cases, water quality needs to be improved.

Sewerage services are supplied only to a limited number of households in Georgetown. The rest of the country relies on septic tanks and pit latrines. In addition, Guyana is faced with serious sanitation issues, such as, poorly designed on-site sanitation, uncontrolled dumping of sludge from septic tanks, inadequate solid waste disposal and poor maintenance of surface drains.

Whilst it is intended that the newly created Guyana Water Incorporated (GWI) will become financially self-sufficient, virtually all capital investment to date has been funded by donor agencies and this will continue for at least the next five years. The key constraints related to water and sanitation are:

- The high cost of power (accounts for 55% of total expenditures);
- Affordability and willingness of customers to pay for services;
- Reliance on donor agencies for investment;
- Lack of working capital for operations and maintenance;
- Leakage; and
- Collection efficiency.

Actions Taken

- Guyana has developed a comprehensive reform programme characterised by four principal components. These are: (a) the merger of two former water utilities into a single national public company (GWI), and the management of the new company has been contracted out to the private sector with the requirement for a special strategy to deal with hinterland water supply and sanitation issues; (b) a full cost recovery strategy designed for the sector to achieve financial sustainability through increased tariffs and reduced wastage, while directing subsidies to the poorest households. (c) a sector investment programme designed to rationalise existing production facilities to lower operating costs, introduce water treatment and dis-infection along with rehabilitation and expansion of the transmission and distribution networks; and (d) a new legal, institutional and regulatory framework created through a new Water Bill, including the introduction of national water standards and a National Water Council, to direct water resource management policy.
- In relation to Sanitation, Guyana, through the EPA, reviewed and assessed locations, for the disposal of waste in six administrative regions. Funds for this project were provided by the UNDP under the Education, Awareness and Capacity Building Programme (GUY-99-001). Also, criteria have been developed for the identification and Approval of Landfill Sites for Solid Waste Disposal in Guyana.
- Public awareness seminars on solid waste management issues (under the UNDP project) were held in each of the ten administrative regions.

- In relation to housing the GOG initiatives include divestiture of Government-owned land, squatting area upgrading, crisis response in depressed areas; policy reform and the provision of social services to low income areas. Actions being considered by the GOG are: strengthening of the processes for land use planning and for approving land development; auctioning land to developers; modernising legislation for land-use planning; and institutional strengthening of the Central Housing and Planning Authority (CH&PA) along its main lines of business by establishing effective information and financial/accounting systems.

1.2.8. Climate Change and Sea-Level Rise

As mentioned earlier, about 90% of the Guyana's population lives on a coastal belt that is 1.4 metres below sea level. In the last decade, in particular, extreme weather conditions were more frequent. Given the importance of the coast of Guyana and the services that are provided on this narrow strip, the potential adverse impacts due to sea level rise cannot be overstated. With most of the potable water being provided by artesian wells whose water tables are susceptible to saltwater intrusion, increased salinity content of freshwater supplies, and the possible increase in costs to treat these, are real possibilities. Additionally, it is quite possible that given the archaic waste disposal systems in Guyana that the potential for further freshwater contamination and water-related illnesses will also increase.

Already, specific areas suffer from saltwater intrusion mainly due to the many drainage canals and water outlets, overtopping, and flooding resulting from heavy rainfall. Any rise in the sea level that will exacerbate this situation can only lead to further lost of million of dollars, due to further destruction of livelihoods, degradation in the quality of life and decline in land quality. Since the coast is critical to the economic development of the entire economy, the ripple effects are expected to be felt further than the coastal regions of Guyana.

The major constraints are limited institutional capacity in terms of trained professionals and research capability, the lack of and in some cases, low level of awareness on the sea level rise phenomenon and its consequences among the general public, inadequate budgetary allocations to public sector agencies relevant to the implementation of the conventions, lack of new and efficient technology, deficiencies in the current monitoring systems.

Actions Taken

- Guyana signed the United Nations Framework Convention on Climate Change on June 1992 and ratified it on August 1994;
- In 1997 a sensitisation program funded by the World Bank on global warming and its effects was launched and included a public awareness programme which sought to address the effects of *El Nino* and *La Nina* and targeting farmers, agricultural extension officers and citizens;
- The rehabilitation and strengthening of the meteorological/hydrological network in order to produce data and information that will promote understanding of the global weather and climate. To this end, the World Bank project has contributed to a strengthening of the

hydro-meteorological database and awareness of weather events and sea level rise, though there is still need to have real time data at the National Meteorological Centre to enhance the effectiveness of the project;

- Monitoring of sea level rise and strengthening of sea defences (EU funded projects)
- Guyana is also a signatory to the Kyoto Protocol.
- The establishment of a National Climate Committee (NCC), comprising several Governmental agencies, the University of Guyana (UG) and the Guyana Manufacturers Association (GMA), in 1997. In turn, this body has established a National Task Force to prepare **the Initial National Communication and the Action Plan**. These were completed and distributed in 2002;
- Guyana has been participating, over the years, in the regional OAS funded project referred to as **Caribbean Planning for Adaptation to Climate Change (CPACC)**. Thus, Guyana has joined with other CARICOM States to develop national programs to mitigate climate change including:
 - Creation of climate change databases;
 - Compilation of an inventory of coastal resources and use;
 - Conduct Guyana's vulnerability assessments of sea level rise;
 - A socio-economic assessment of the vulnerability of Guyana's coast in three pilot areas;
 - Guyana's Climate Change Adaptation Policy and Implementation Strategy for Coastal and Low-Lying Areas;
 - Formulation of a policy framework for coastal and marine management;
 - Development of economic and regulatory proposals for adaptation to climate change; and
 - Institutional strengthening and human resource development of relevant national agencies.

2 NATIONAL FRAMEWORK FOR SUSTAINABLE DEVELOPMENT (SD)

2.1 National Environmental Policy and Legislation

The clearest statement of National Policy on the Environment is contained in the National Environmental Action Plan (NEAP) 2001–2005. Here, unequivocal commitment is given to Sustainable Development, including Sustainable Human Development, as the cornerstone of the country's socio-economic programme. In particular, the Policy states that the Government of Guyana will endeavour to, among other things:

- Assure all people living in the country the fundamental right to an environment, adequate for their health and well-being;
- Achieve a balance between the use and conservation of the nation's resources to meet the needs of economic development and improve standards of living;
- Conserve and use the environment and natural resources of Guyana for the benefit of both the present and future generations; and
- Ensure prior environmental assessment of proposed activities, which may significantly affect the environment; ensure that conservation is treated as an integral part in the planning and implementation of development activities.

The intention is to integrate economic, environmental and social values during planning and distribute benefits equitably across socio-economic strata and gender during implementation. This position is endorsed and reinforced by the National Development Strategy (NDS), which indicates the need for environmental protection to be treated as a cross-sectoral issue in all aspects of the development process.

Since the first 1994 NEAP, the Environmental Protection Act of 1996 was promulgated. This Act established the Environmental Protection Agency¹³ on June 5, 1996, giving it an overall responsibility for the management of the environment. The purpose of the Act is to provide for the management, conservation, protection and improvement of the environment, the prevention and control of pollution, the assessment of the impact of economic development on the environment and the sustainable use of natural resources.

The mandate of the EPA is:

- To implement steps and systems for the effective management of the natural environment ensuring conservation, protection and sustainable natural resources use;
- To coordinate the environmental management activities of all persons, organisations and agencies;
- To prevent or control environmental pollution;
- To play a coordinating role in the preparation and implementation of the cross-sectoral programmes of environmental content;

¹³ The Environmental Protection Agency received institutional support from the IDB from August 1998 to January 2000, as phase I of an Environmental Management Programme

- To promote public participation in the process of integrating environmental concerns in development planning ensuring sustainability; and
- To coordinate a national environmental and public awareness programme.

2.2 National Coordination Mechanisms/Committees

Rather than creating a single organisation to address sustainable development issues in Guyana, the Government has established a number of mechanisms to achieve a similar goal. Chief among these, and at the highest decision making levels, are: (1) the appointment of an Advisor to the Executive President on Sustainable Development; and (2) the establishment of (a) the Guyana Parliamentary Sector Committee on Natural Resources with responsibility for monitoring the operation of spheres of operations of ministries, as well as their administrative structures; and (b) a Cabinet sub-committee on Natural Resources and Environment which is chaired by the Head of the Presidential Secretariat. The Cabinet sub-committee addresses issues regarding sustainable development, and specifically related to natural resources use, which requires policy decisions.

At lower level, there exists a Natural Resources and Environment Advisory Committee (NREAC). The NREAC is a high-level committee comprising directors of natural resource institutions (for example, forestry, mining, water, agriculture, land use, energy) and the Guyana Environmental Protection Agency. This committee has been tasked with examining environmental and resource policy prior to submission to the Guyana Cabinet for approval.

Additionally, Guyana has established (a) the National Biodiversity Advisory Committee whose function is to advise the EPA on issues related to Biodiversity Management and Research; (b) the Integrated Coastal Zone Management Committee with responsibility for the development of an integrated coastal zone management plan and coordinating the activities of the various sectoral agencies with some involvement in management of coastal resources; (c) the National Biosafety Committee to review the Protocol on Bio-safety and develop guidelines, regulations, and recommendations on policy; (d) the National Climate Committee referred to in Section 1.2.8; and (e) the Pesticides and Toxic Chemicals Board that is tasked with the formulation and implementation of the Pesticide and Toxic Chemicals Act and Regulations for the regulation of pesticide use, pesticide effluent discharge standards, storage, disposal and transportation requirements, among others.

At the regional administrative level, there exists the North Rupununi District Development Board that was legally established as an NGO in 1996, and has since become the 'voice' of, and the decision-making mechanism for communities surrounding the Iwokrama Rainforest. This NGO also promotes people's participation and involvement and accesses financial resources for community development.

2.3 National Strategies and Action Plans

As a clear indication of its commitment to the path of sustainable development, Guyana has developed a number of strategies and action plans. These include the National Development Strategy, National Environmental Action Plan, and National Strategy for the Conservation of Biological Diversity, National Biodiversity Action Plan, Integrated Coastal Zone Management

Strategy, Integrated Coastal Zone Management Action Plan, and National Environmental Education and Public Awareness Strategy. While these national strategies and action plans are designed to meet national priorities they are generally referenced to International and Regional Actions for Sustainable Development Planning such as Agenda 21 and the Barbados Programme of Action.

The process adopted for the development of National Strategies and Action Plans ensured the involvement of all key stakeholders. Typically stakeholders and the public have had more than a single opportunity to contribute to the formulation of these documents as consultations were generally held at several stages in their development. For instance, the National Strategy for the Conservation of Biological Diversity (NSCBD), evolved out of several consultations at various phases of its formulation. Consultations were not confined to a few coastal locations but extended into hinterland regions where the country's biodiversity abounds. In these hinterland regions the consultations benefited from the input of indigenous people who live closely with forests, savannahs and the biodiversity they support. The same approach was used for the development of the National Biodiversity Action Plan.

The National Environmental Action Plan was revised in December 2000 after a national consultation was convened with the aim of seeking inputs from a wide cross section of governmental and nongovernmental agencies. Those inputs were incorporated into a draft document that was circulated to key stakeholders, who after perusal of the document convened for a second consultation. The deliberations at these consultations have shaped the final document.

At the national level, Guyana's major challenges for the attainment of sustainable development are: (a) land use planning and Geographic Information System (currently supported by the German Technical Cooperation (GTZ) (b) establishment of a functional Protected Areas System; (c) modernisation of the country's forestry and mining legislation; (d) on-going international agencies support for institutional strengthening at the national level (including the Environmental Protection Agency and the Guyana Geology and mines Commission respectively; (e) environmental monitoring and (f) improved maintenance of sea defences, transport networks, and drainage and irrigation infrastructure.

2.4 Lessons Learnt

During the period 1994 – 2002, Guyana has learned several lessons in implementation or establishment of national sustainable development mechanisms and sustainable development policies. Chief among these are the following:

- Enhancing institutional capacity, and in particularly, Human Resource Capacity is critical to effective and efficient implementation of the legal mandates of sectoral agencies;
- Partnerships among the government, private sector, NGOs;
- Strong political will and support, community support and an aggressive public awareness strategy are prerequisites to achieving SD;
- There is need to increase efforts at diversifying its economy and to improve its support services (for example, roads, electricity, and storage facilities) and the quality of its

products in an effort to reduce its fiscal vulnerability related to, among other things, globalisation;

- Guyana must have, at all times, a strategy to strengthen its participation at both the regional and international levels;
- More attention to be paid to the post – project implementation phase;
- Project evaluation at various stages is necessary, particularly in relation to budgeting and budget lines, to ensure effective spending; and
- Appropriate and affordable technology must always be considered as a critical element of maintenance.

3 NATIONAL PROGRESS MADE & PROBLEMS ENCOUNTERED IN THE IMPLEMENTATION OF THE BPOA: Sectoral and Cross-Sectoral Areas

3.1 SECTORAL AREAS: Progress Made and Problems Encountered

3.1.1 Climate Change and Sea-Level Rise

3.1.1.1 Improvement of Hydrometeorological Capability

In 1997, Guyana launched a sensitisation programme on global warming and its effects, with financial support from the World Bank. This included specific public awareness activities that addressed the effects of *El Nino* and *La Nina* and targeted farmers, agricultural extension officers and citizens. Thus, farmers are better able to use weather forecasts to guide their field operations. Moreover, as a means of promoting the integration of weather forecasts in agricultural planning at the level of the farmer, the Hydrometeorological Service provides seasonal forecasts. However, since forecasts should be compatible with the needs of specific farmers, this level of prediction capability has to be targeted. As such, suitable technology transfer mechanisms need to be adopted with due consideration being given to applicability of and training to use new technologies.

Guyana has commenced work on the rehabilitation of the meteorological/hydrological network. The strengthening of the network will produce data and information to better understand the global weather and climate. Additionally, the Hydrometeorological database has been enhanced to create greater awareness of weather events and sea level rise. However, Guyana still needs to provide real time data at the National Meteorological Centre to enhance the effectiveness of the project.

Interpretation of weather forecasts has posed a difficulty for farmers, hence reducing its potential benefits to farmers and national productivity as a whole. As such, there is need for weather and climate education to be included in the school curriculum. In addition a concerted education policy in science and technology applications and benefits is necessary at the national level. One approach to dealing with this issue is the provision of additional funds for consultation/sensitisation at the family and community levels where the losses due to climate change are greater felt. Guyana needs support for the adaptation strategies to which Guyana has a legal obligation.

3.1.1.2 Reduction of Greenhouse Gases

Being very cognisant of the link between sustainable development and the protection of the atmosphere, Guyana has addressed the latter at the highest levels of policy making. To ensure a coordinated approach to development in these areas, a National Climate Committee (NCC), comprising several Governmental agencies, the University of Guyana (UG) and the Guyana Manufacturers Association (GMA) was established in 1997. This body has formed a National Task Force and has developed the Initial National Communication and the Action Plan under the guidance of an international consultant. In addition, several workshops, working groups and task force meetings were held with a view to training local resource personnel who prepared the several chapters of the two reports. These activities have allowed for the transfer of scientific knowledge relating to climate change.

The Initial National Communication (base year 1994) attempts to document the various scenarios that indicate the likely impacts on the biophysical and socio-economic environment, as a result of

climate change. It also makes key recommendations for the adaptation to and mitigation against the climate change impacts.

The findings, based on the 1994 national inventory, propose that Guyana's contribution to emissions of greenhouse gases is negligible. Policies and programmes to address climate change, and to further reduce emissions need to be implemented, for example, the establishment of a Climate Change Unit as a legal body with responsibility to coordinate all programmes identified in the Initial National Communication and Action Plan.

3.1.1.3 United Nations Framework Convention on Climate Change

This Convention was entered into force by Guyana on 1994/11/28 and a National Inventory of Greenhouse Gases was prepared for the base-year, 1994. Having secured financial assistance from the UNDP and GEF, Guyana has been able to develop and publish periodic, national inventories of anthropogenic emissions.

In August 1998, a National Climate Committee was set up and the Initial National Communication to the Secretariat of the UNFCCC was submitted. Even prior to this submission, Guyana has been taking steps in keeping with obligations to the Convention. For example, Guyana has participated in a regional project executed by the OAS and known as **Caribbean Planning for Adaptation to Climate Change (CPACC)**. Under this project, Guyana joined with other CARICOM States to develop national programs to mitigate climate change and has been successful with several initiatives that are outlined under Section 1.2.8.

Key constraints affecting Guyana's ability to fulfil its commitments under the UNFCCC include:

- Limited capacity for the establishment of a National Climate Change Unit to respond in a timely manner to climate change issues;
- Limited capacity to update and public National inventories of anthropogenic emissions and removals by sinks of greenhouse gases;
- Inadequate resources to introduce, develop and apply appropriate technologies in the controlling, reduction and prevention of anthropogenic emissions of greenhouse gases in sectors such as energy, transport, industry, agriculture, forestry and waste management;
- Limited capacity to promote conservation and enhancement of sinks and reservoirs of greenhouse gases including biomass, forests and oceans, as well as other coastal and marine ecosystems;
- Inadequate capacity to implement adaptation plans for the adverse impacts of climate change on coastal zone management, water resources and agriculture;
- Inadequate resources to promote public awareness, education and training in climate change issues to include all stakeholders; and
- Inadequate capacity to extend the research and data collection needed to support the international effort and strengthen local efforts to prepare responses to climate change.

3.1.2 Natural and Environmental Disasters

Vulnerability studies (for example, socio-economic assessment of the vulnerability of the coast in Guyana) have been conducted by CPACC, but the country is faced with the problem of a lack of substantial funding deemed necessary to build the extensive infra-structure that would provide adequate protection of the coastal belt.

The Office of the President, in collaboration with the UNDP and the Caribbean Disaster Emergency Response Agency (CDERA), has facilitated a National Consultation on Disaster Management with the view to promote comprehensive disaster management at the national level and to seek its adoption and integration into policy considerations in Guyana. This initiative is supported by USAID. Consequently, Guyana, in June 2003, developed a National Disaster Management Strategy. (See Section 1.2.2 for more details)

The key constraints to the management of natural and environmental disasters in Guyana are inadequate financing to ensure the recruitment of personnel, effective technology (example, adequate communication systems) for reliable and timely forecasting, and the procurement of equipment and accessories for fire fighting; as well as the absence of proper land management and un-regulated development, and maintenance of infrastructure.

In terms of environmental disaster management, there exists a pest forecasting management plan prepared by the Ministry of Fisheries, Crops & Livestock (Quarantine Division). This document outlines a strategy to deal with the management of pests and disease outbreaks.

3.1.3 Coastal and Marine Resources, including coastal and marine biodiversity resources (include turtle conservation)

3.1.3.1 The UN Convention on the Law of the Sea

The **UN Convention on the Law of the Sea** was ratified in 1993 by Guyana. There is a need to obtain for the country more direct benefits (relating to rights and privileges) from this initiative by taking steps to develop adequate institutional capability to provide the monitoring, control, and surveillance necessary and the resource assessment capability. These are necessary to protect diligently its marine resources from over exploitation through proper conservation and management measures.

3.1.3.2 Maritime Boundaries Act

The Maritime Boundaries Act provides for the making of regulations governing the living resources of the submarine and marine areas of Guyana.

3.1.3.3 Wider Caribbean Initiative for Ship Generated Waste

Guyana has also initiated work on the Wider Caribbean Initiative for Ship Generated Waste project. This took the form of the establishment of a national task team in 1994 to address the legal,

technical and institutional arrangements required for the ratification of the International Convention for the Prevention of Pollution (MARPOL 73/78) from ships - Guyana acceded to this Convention on 10 December 1997. Thus, local legislation was drafted to incorporate provisions for the accommodation of this convention.

3.1.3.4 Coastal Zone Management

With regards to Coastal Zone Management, Guyana embarked on an IDB funded **Shore Zone Management Program** (SMP) which allowed for the completion of two major background studies, namely: a feasibility and design study to formulate the overall program needs and priorities to maximize the usefulness and sustainability of the SMP for Guyana, and an institutional assessment of the agencies and their strengths and weaknesses with regard to sustainable management of the coastal zone.

3.1.3.5 Cartagena Convention

A national meeting was convened in Guyana to publicise the Cartagena Convention for the protection of the marine environment of the Wider Caribbean Region. At present, this Convention is engaging the attention of the Government of Guyana.

3.1.3.6 Biosafety

With regards to Biosafety, Guyana established a National Bio-Safety Committee as a subcommittee of the National Biodiversity Advisory Committee to advise on biosafety issues. Guyana has indicated its desire to accede to the Cartagena Protocol on Bio-safety and is in the process of developing its National Biosafety Framework, with funding from UNEP/GEF.

3.1.3.7 Marine Turtle Conservation

The Guyana Marine Turtle Conservation Society (GMTCS), with financial and technical assistance from a number of institutions including the WWF, UNDP, FFI, and USAID, has undertaken a number of projects that will ultimately lead to the conservation of marine turtles at Shell Beach in Region 1. These projects are based on five thematic areas, namely, marine turtle conservation, education and awareness, research, community empowerment and protected areas.

3.1.3.8 RAMSAR Convention on Wetlands

Guyana has been making preparations to accede to the RAMSAR Convention. In October 2000, two preparatory workshops were held and two sites were proposed. These are: (i) the Rupununi Wetlands and (ii) Shell Beach.

3.1.4 Land Resources, including Terrestrial biodiversity

3.1.4.1 Combating Deforestation

Cognisant of the need for sustainable management of its forest resources, Guyana has taken measures to charter a development course to meet the challenge of sustainable forestry as outlined below.

3.1.4.1.1 Forest Policy

Guyana has an approved Forest Policy developed by the Guyana Forestry Commission (GFC)¹⁴ in 1997, in collaboration with the Department for International Development (DFID) with the aim to emphasise the management of Guyana's forest resources for national benefits. In addition, the country has a *National Forest Sector Plan* and a *Code of Practice for loggers*.

The National Forest Plan gives the framework and outlines programmes and activities that must be implemented in order to ensure implementation of the policy and compliance with the law.

3.1.4.1.2 Legislation

Guyana has in place a Forest Act to enable the effective implementation of the Forest Policy and the National Forest Plan. In addition, a Code of Practice for Timber Harvesting has been developed and incorporated into the Environmental Management Plans of timber companies.

3.1.4.1.3 Forest Management

In its drive for sustainable forestry, Guyana has placed all areas in excess of 20, 000 acres under the ambit of the State Forests and management under the Guyana Forest Management Plan. This plan covers issues including, but not limited to, the natural environment, area management history, silviculture, forest inventory, production operations, yield regulations, harvesting operation, environmental considerations and monitoring and research.

Moreover, the GOG and the UNDP have signed a Memorandum of Understanding (MOU) to promote cooperation between the two parties in the area of sustainable forest management (SFM). Thus, Guyana will implement PROFOR (Programme for Forests) which basically consists of three components: (a) identifying successful strategies for SFM; (b) strengthening national forest programmes (NFPs) and Forest Partnership Agreements (FPAs); and (c) developing innovative financing for SFM.

Other national efforts include: an inventory of tree species in Guyana that will provide a basis for development schemes in Forestry, and will contribute to Guyana's National Land Use Policy Guidelines; and a forest zoning plan with digitisation of forest concession boundaries.

¹⁴ GFC is a semi-autonomous organization formed in 1979 to manage and control the utilization of State forest; to ensure optimum and sustained use of forest produce and the maintenance and improvement of the environment (GFC, 2000).

3.1.4.1.4 Forest Monitoring/Environmental Monitoring

The GFC has resident forest officers stationed at strategic location in Guyana. These officers are tasked with the responsibility of monitoring the forest concessions and sawmills, and to a lesser extent, lumberyards.

In 1999, a log tagging system was enforced in order to minimize the incidence of illegal logging practices in Guyana. With reference to the SFPs, a quota system has been introduced.

3.1.4.1.5 Area Management Plan

Through the Guyana Forestry Commission (GFC), an Area Management Plan has been established for the country. This Plan provides a strategic planning framework for the SFP areas. Moreover, the GFC has ongoing rapid appraisals (RAPs) for SFP concessionaires so as to determine whether individual SFPs are adequately stocked to support current timber harvesting. It is worthy of note that results of the rapid appraisal guide the general framework of the Area Management Plan.

3.1.4.1.6 Forest Certification

With the assistance of the UNDP/GEF/EU through the Programme for Forests (PROFOR), as well as the WWF, Guyana has taken steps to advance the process of developing national standards for forest certification. For example, a National Workshop on Forest Certification was held on 10-13 July 2000, to assess the role that certification could play to promote the viability and sustainability of the forest sector in Guyana; and an NGO, with financial assistance from WWF, has established the Guyana National Initiative on Forest Certification (GNIFC) to advance the process of certification.

3.1.4.1.7 Silviculture Surveys

Guyana has already conducted four post-harvest assessments in concessions under the Silviculture Survey Programme, with the view to providing a clear indication of the quantity; quality and timings for the next two harvest cycles, as well as comparing projections with recently completed harvest. This will allow for a quantitative demonstration on whether the logging operator has utilised the forest resources in a sustainable manner, as outlined in the National Forest Policy (GFC, 2002).

3.1.4.1.8 Strategic Plan

Currently, GFC is in the process of developing a Strategic Plan 2002 to 2006

3.1.4.1.9 Vocational Training Programme

Guyana has acquired ITTO funding to set up a Vocational Training Centre in Guyana in association with the Tropical Forest Foundation, Forest Producers Association and the Guyana Forestry

Commission. The Centre is expected to provide key skills training in Reduced Impact Logging and include dendrology, forest mensuration and surveying, chainsaw operations and directional tree felling, and cartographic skills. The 2 year project will:

- Establish training programme and curriculum
- Develop training site/s
- Procure equipment and facilities
- Recruit and train staff
- Deliver training

3.1.4.2 Biodiversity Research

There is also on-going biodiversity research conducted by Iwokrama International Centre for Rain Forest Conservation and Development which was established in 1996 to promote development of technologies for sustainable management of tropical rain forest biodiversity and resources, the preservation and application of the knowledge and innovations of local indigenous communities while providing for the equitable sharing of benefits from these to the communities. The Centre has also begun the process of identifying the components of biological diversity at the site and provide for the *in situ* conservation of biological diversity.

Other initiatives include:(a) the Tropenbos –Guyana Programme that contributed significantly to forest research in Guyana in terms of supporting the country's forest policy and management; as well as institutional capacity building, through the sponsorship of a number of Masters and PhD level students and (b) a programme of collaboration between the Edinburgh Centre for Tropical Forests (ECTF) and (c) the establishment of a Forest Research Unit in the GFC.

Guidelines for biodiversity research have been drafted by the NBAC and must be applied to researchers desirous of conducting research on biodiversity in Guyana. The EPA coordinates all biodiversity research in Guyana, and has in place a system of application and review for both national and international researchers.

There is also a Centre for the Study of Biological Diversity which stores biological specimens and shares information on its collection with institutions locally and regionally.

3.1.4.3 Protected Areas

Guyana is finalising a project document for the establishment of the Guyana Protected Areas System (GPAS), which is a component of the National Protected Area System (NPAS). This project has been undertaken in keeping with international initiatives in the area of conservation and management of biological resources and biodiversity. It has taken on a programmatic approach and has as its major components: capacity building and legislation.

Moreover, a National Protected Areas Secretariat, comprising a small multi stakeholder group of agencies and bodies involved in the operation and management of protected areas, was established in August 2000.

The Secretariat has been vested with the responsibility to coordinate planning and implementation of a NPAS which includes the two legally designated protected areas in Guyana (Kaieteur National Park and Iwokrama Rainforest Reserve), as well as five other areas in Guyana. These have been identified as Shell Beach, Kanuku Mountains, Mount Roraima, Orinduik Falls and an area still to be defined in Southern Guyana (See **Appendix 3**).

The key constraint associated with the implementation of the United Nations Convention to Combat Desertification in Guyana is the lack of financial resources and other resources required to (a) investigate the volume of existing reserves and to determine recharge of coastal aquifers; (b) to eliminate flooding from inland and seaward sources through improved sea defenses and drainage and irrigation systems and (c) undertake data collection of coastal processes (erosion and accretion which impacts adversely on Guyana's coastal and riverain defences.

3.1.5 Energy

In recognition of the invaluable role of new, environmentally friendly and efficient energy supply in its drive for sustainable development, Guyana has formulated a National Energy Policy (NEP) that promotes the substitution of imported fossil fuels and the increased use of renewable sources. Moreover, new energy legislation has paved the way for the establishment of a new Guyana Energy Agency with overall responsibility for coordination among various energy related departments and units.

National energy projects that are related to development and the provision of sustainable energy resources and systems include:

- Amaila Falls Hydropower project—a proposed 100MW facility with the National grid as the main load centre located on the Kuribrong River. The project is currently awaiting a power purchase agreement.
- Turtuba Hydropower Project- a potential 200-400MW facility to be located on the Mazaruni River and has the potential to either export power to Brazil or the Caribbean island chain, or supply Guyana's bauxite/aluminium industries.
- Delta-Caribbean Wind Farm Project –a proposed 7-12MW-wind farm project along the coast of Guyana.
- Guyron Wind Energy - Guyron has been granted a MOU by the government to conduct wind studies at eight locations in Guyana.
- Biomass Energy Farm Project- a Guyana Energy Agency project that links between energy and natural resource management.
- Cogeneration at the new Skeldon Sugar Factory - the construction of a new sugar factory that will include cogeneration facilities for the combined generation of heat and power.

- Demonstration projects for electrification of un-served hinterland areas.

The key constraint posed to the development of renewable energy projects in Guyana is financing. Nonetheless, Guyana has made a number of incentives available, especially to the private sector, in an effort to promote and develop the country's vast renewable energy resources.

3.1.6 Management of Wastes and Provision of Water and Sanitation Services

Guyana's commitment to assuring proper management of wastes and the provision of potable water and adequate sanitation services are advancing at several levels, as listed below.

3.1.6.1 Institutional

A Draft National Solid Waste Policy has been developed. This document covers issues such as regulatory framework, institutional and operational framework, waste strategy, cost recovery, public awareness and education and monitoring and enforcement.

3.1.6.2 Political

A National Water Council is soon to be set up and the Public Utilities Commission will assume responsibility for water regulation in the near future. Also, the Guyana Advisory Solid Waste Management Association has been established.

3.1.6.3 Organisational

Guywa has been merged with GS & WC to create a single national water entity. The new Guyana Water Inc. has been issued a ten-year license that contains distinct target to inform its daily operations. Also, a Management Services Contract has been let to Severn Trent Water International to manage GWI for a period of five years.

3.1.6.4 Operations and Investment

Major projects are underway (for example, a Sectoral Analysis of Solid Waste Services in Guyana and the Guyana Municipal Governance and Management Project¹⁵) to improve services in both urban and peri-urban areas. These are intended to provide a daily service with standards very close to the WHO. Major works have also been planned for Georgetown to refurbish and improve both the water supply and the sewerage system.

With respect to the hinterland areas, there is a separate strategy, which aims to provide the population with adequate services involving appropriate technology, community involvement and better organisation to achieve sustainable systems.

¹⁵ The Guyana Municipal Governance and Management Project was prepared by the Federation of Canadian Municipalities and submitted to CIDA for financial support (estimated at US\$5.7 million) in July 2001.

The major constraints with respect to the sectoral achievement of earlier stated goals are:

- Lack of investment in the right solutions at the right time and place;
- Poor design of, and lack of commission following, construction;
- Inadequate maintenance due to poor management understanding of asset management and working capital that work together to produce mal-functioning systems.
- Absence of a coordinated national policy on waste management;
- The absence of a single overarching regulatory body for solid waste management and
- The absence of a levy income for application to solid waste management.

These issues are being addressed by the management of GWI and will require better education, property inspections, improved water quality and the implementation of water control measures.

3.1.7 Tourism

3.1.7.1 Kaieteur National Park

The Ministry of Tourism, Industry and Commerce (MTIC) and the WWF have recently undertaken an initiative aimed at introducing limited, environment-compatible facilities into the Kaieteur National Park area. These facilities include a rainwater retrieval system for visitor use, solar panels for the provision of electricity and the provision of wooden benches in a designated rest area near the Falls. Other projects include signage, renovation of the guesthouse and the training of wardens.

3.1.7.2 Charette

A Charette¹⁶ was hosted in Guyana, in March 2003, by the MTIC and Conservation International – Guyana, and attended by international experts and their Guyanese counterparts in the public and private sectors, NGOs, civil society, as well as indigenous communities, who described and documented a vision for the development of eco-tourism at three core sites in Guyana: Kaieteur, Historical Georgetown and the Rupununi. This initiative supported by the UNDP and USAID.

3.1.7.3 Canopy Walkway

The construction of a Canopy Walkway at Iwokrama Field Station is a sustainable mechanism that ensures non-intrusive enjoyment of the canopy vistas of the Iwokrama Rainforest. The elevation of the walkway (about 30 metres) protects fragile vegetation beneath while guaranteeing vantage viewing.

¹⁶ A Charette is an intensive workshop organized to plan and design difficult projects in a short period of time. (Kanuku News, April 2003, CIG.

3.1.7.4 Georgetown Heritage District

Guyana has developed an urban sustainability plan, which seeks to blend the interests of tourism with those of heritage conservation. The ongoing project designates specific zones in the city as being of special heritage interest, and prescribes guidelines for developers and builders to seek conformity. It also makes recommendations regarding both architectural styles and designs, and building materials.

3.1.7.5 Communities Impacted

There is an ongoing nature-based tourism development project at Saxacalli, where development of tourism takes place in accordance with developments in the community itself and at a pace that is comfortable for the community. An environmental club has been formed in the primary school, which has a predominantly indigenous population, and villagers are encouraged to harness timber and agricultural resources for long-term benefit.

3.2 Cross-Sectoral Areas

3.2.1 Financing and Investment for SD

Project / Programme	General Goals	Institution/s Responsible for Financing and Investment
National A Comprehensive Disaster Management Programme	To develop a Comprehensive Disaster Management Strategy	UNDP-Guyana; PAHO
Georgetown Solid Waste Management Project	To contribute to the improvement of the environment and consequently the quality of life of the Georgetown and environs population, through better solid waste management	IDB
Environmental Management Programme Phases I and II	To consolidate a sustainable environmental management system and to develop sector -wide capacity for the implementation of environmental programme	IDB
Capacity building for Environmental Management in the Sustainable Utilisation for Natural Resources (particularly, biodiversity, renewable energy and pollution prevention)	To promote sustainable utilisation of natural resources with specific reference to biodiversity, renewable energy and pollution prevention and control.	UNDP
Integrated Coastal Zone Management	To strengthen Guyana's existing capacity for decision making with respect to coastal and marine resources by establishing a ICZM	CDB

	system	
Poor Rural Community Support Services programme	To enhance support services in poor rural communities	CDB
Monitoring of Sea level Rise and Strengthening of Sea Defences	To monitor sea level rise in Guyana and to strengthen existing sea defences to avoid inundation of agricultural and residential areas.	EU
SIMAP III AND BEAMS	To develop a system by which environmental issues will be integrated within the SIMAP project cycle for Phase III activities	SIMAP and BEAMS
GREEN FUND	To provide financial resources for community based initiatives and some technical report related to environmental enhancement and protection	UNDP-Guyana
Greenhouse Gases Emission Reduction Related to the Rice and Wood Industries in Guyana	To reduce Greenhouse Gases emitted from the rice and wood industries in GY	CIDA
Caribbean Renewable Energy Development Programme	To develop the necessary financial mechanisms to promote investment into renewable energy projects and a pipeline of renewable energy projects	GEF/GTZ
Guyana Environmental Capacity Development in the Mining Sector (GENCAPD)	To develop educational materials with regards to the use of environmentally friendly technology in the mining sector	CIDA
UNICEF Sustainable Amazon Project	To promote sustainable improvement in health and well-being in Amazon programme Communities through improved water supply and improved sanitation.	UNICEF
Local Systems for Integrated Child Protection	To improve sanitation through hygiene education and the construction of Ventilated Improved Pit Latrines (VIPs)	UNICEF
World Heritage Poverty Alleviation programme	To rehabilitate an Old Railway Station For use as a market for indigenous products, as well as a training venue for young entrepreneurs.	UNESCO
Guyana Marine Turtle Conservation Strategy	To facilitate the establishment and effective management of the proposed Shell Beach Protected Area	WWF-Guiana's Forests and Environmental Conservation Project
Biological Diversity Conservation	To develop management plan for selected species to protect biological diversity	WWF-Guiana's Forests and Environmental Conservation Project
Environmental Impact Monitoring/Gold Mining Project	To monitor the impacts of mercury pollution in selected bodies of the Mazaruni Basin in Guyana	WWF-Guiana's Forests and Environmental Conservation Project
Regional Caribbean Planning for the Adaptation to Climate Change (CPACC) and Mainstreaming Adaptation to Climate Change (MACC)	To assist member countries to prepare for adaptation to climate change and to improve capacity of implementing agencies at the national and regional levels	OAS WB/GEF

3.2.2 Capacity building and Co-ordination

Nature of Initiative (institutional, human resource or coordination)	Level of Initiative (i.e. National, Sub-Regional, Regional)	Partners
Establishment of the Guyana EPA	National	GOG and IDB
Development of Memoranda of Understanding to assure networking in the area of environmental management	National	EPA and the Ministries/Organisations (Health, Agriculture, Local Government, Guyana Geology and Mines Commission, Guyana Forestry Commission, and Central housing and Planning Authority.)
The process of establishing Kanukus as a Protected Area; GPS and CRE training, as well as mapping.	National	GOG and CIG
Education and Training to improve administrative management and forest monitoring capabilities	National	GFC and ODA
Establishment of a Vocational Training Centre to provide skills training in reduced impact logging, forest mensuration and surveying, chainsaw operations, and cartographic skills	National	International Tropical Timber Organisation (ITTO), the Tropical Forest Foundation, the Forest Producers Association and the GFC.
Public awareness and training in sustainable mining technologies (GEMCAPD)	National	CIDA, GGMC, EPA and UG
Enhancing the capacity of the Ministry of Health and Education with respect to planning and project management.	National	CIDA and MOH and MOE
Establishment of the Bina Hill Training Institute that focuses on technical, vocational and leadership skills.	National	CIDA
Establishment of a National Ozone Action Unit	National	GOG/UNEP
Institutional Strengthening and Human Resource Development in Environmental Health issues	National	PAHO
Education and Training for local government personnel in the areas of solid waste management and ICZM, and biodiversity management	National	EPA and UNDP

Enhanced Environmental Education, Public Awareness and Capacity Building to develop capacity and to provide environmental information to various target groups in a society	National	UNDP-Guyana
Associated Schools project and Environmental Improvement of Schools Project	National	UNESCO
Literacy enhancement to promote greater understanding of HIV/AIDS among youth	National	UNESCO
Training in Pollution Management	National	EPA and IDB
WUN Initiative: Capacity Building in communities to manage water resources and to improve environmental sanitation through training and information.	National	UNICEP and Youths from regions 1,7, 8, 9 and 10.
Institutional Strengthening and Capacity Building for Guyana's Protected Areas System to support in –country capacity training for protected areas planning and management and to provide a case study for Protected Areas Management	National/Regional	Fauna and Flora International (FFI)
Education and Training for sustainable development through short courses, and degree programmes in the areas of environmental studies, tourism, environmental health, forest biology and agriculture	National / Regional	University of Guyana (UG) and the EEC Guyana School of Agriculture
Awareness Building, community based wildlife management systems and provision of employment opportunities for community at Shell Beach	National	WWF-Guiana's Forests and Environmental Conservation Project and GMTCS
Sustainable Use of Natural Resources in areas surrounding Chenapau in Region 8) and the protection of cultural diversity for fostering economic development	National	WWF-Guiana's Forests and Environmental Conservation Project and people of Chenapau
Enhancing capacity of the Guyana Zoo to meet the educational and conservation mandates of zoos embraced globally through production and dissemination of wildlife educational materials.	National	WWF-Guiana's Forests and Environmental Conservation Project
Development of broad based participation and partnerships within forestry the sector to promote harmonisation of policies,	National	WWF-Guiana's Forests and Environmental Conservation Project and GFC

guidelines and regulations; and to improve collection and dissemination of forest – based data to promote improved forest management practices		
Training of indigenous people in Region 9 as Community Coordinators in methods of conducting resource evaluation.	National	CIG, GOG and local communities
SDNP-provides decision makers and civil society with knowledge resources and expertise for both design and implementation of SD. SDNP also establishes connectivity to Guyana's networks and the Internet	National and Regional	UNDP-Guyana

4. TRADE, INVESTMENT, CAPACITY BUILDING AND COOPERATION AND THE STATUS OF SIDS VULNERABILITY

4.1 National Trade Concerns

As pointed out earlier in this report, trade is indispensable to Guyana's economic development process. Thus, Guyana's main trade and investment concerns as related to sustainable development are its small population size, smallness of market size, heavy dependence on extractive industries for export products, export competitiveness, non-tariff barriers (NTBs, for example, certification, standardisation and quality control); a high debt burden, inadequate physical infrastructure and its related high transportation cost, particularly for farmers; and an inadequate institutional framework. Others include absence of clear priorities defined by the country's economic sectors (e.g. access to foreign markets, removal of foreign barriers to the exportation of Guyana's non-traditional agricultural products); and limited financial and human resources.

4.2 National/Community Based Initiatives

Guyana has taken some initiatives related to trade practices and services, including those that aim at diversifying exports and improving national competitiveness:

- Export of Guyana's non-traditional agricultural crops initiatives related to trade practices and services, including those that aim to diversify exports, or for improving national competitiveness;
- Diversifying the national economy base through nature- based tourism and non-timber forest products, among others; and
- Expanding the country's agricultural base by improving the efficiency of harvesting and packaging.

4.3 Key Investment related Concerns and Needs

The key investment related concerns and needs related to sustainable development include:

- Foreign Direct Investment (FDI) that is based, to a large extent, on export-oriented natural resource industries of timber and minerals. Although there is the legally mandated environmental impact assessment for development projects, there is still need to guard against any potential threat to the goals of environmental sustainability within the context of achieving development objectives;
- Guyana needs to be resolute in undertaking the reforms required to attract foreign direct investment in order to compete for a share of a smaller pool of FDI;
- Inability of local financial institution to respond to local needs;
- Need for development of manufacturing sector; and
- Reducing barriers to investment in renewable energy.

4.4 Capacity Building

Guyana's principal concerns with regards to capacity building for sustainable development include: the need to enhance human resource capacity at various sectoral agencies and ministries, including the Ministry of Foreign Trade and International Cooperation and the Guyana Environmental Protection Agency to respond adequately to the threat posed to the attainment of sustainable development due to social, political, environmental and economic factors at the national and global levels. A general area of need is data collection, data analysis, and information dissemination, with the view to improving overall performance at the national planning level.

Other areas are Geographical Information System within the natural resources sector to provide reliable, timely and technical information to the government; improved data and observation monitoring and recording for more effective sharing and dissemination of information to assist in predicting climate forecasts; and training in water resources management at all levels needs.

4.5 Regional/ National Mechanisms or Programmes

- **The Free Trade Area of the Americas (FTAA)** –an initiative of the American government to create a free trade area from Alaska to Argentina.
- **The Caribbean Community (CARICOM)** tasked with improving the regional economic integration of its members states (including Guyana) through the establishment of a Caribbean Single Market and Economy. Also related to CARICOM is the establishment of a number of hemispheric agreements such as the CARICOM/Cuba arrangement, the CARICOM/Venezuela Trade and Investment Agreement and the CARICOM Columbia agreement on Trade, Economic and Technical Cooperation;
- Establishment of a **Regional Negotiating Machinery (RNM) at the regional level** that provides a single focal point for negotiations and coordinates information and efforts in other trade negotiation with particular reference to ACP/EU negotiations, the FTAA and the round of the WTO. Closely related to this process is the **National Trade Negotiation Committee, which** monitors the work of the negotiating groups in the FTAA and the WTO. Reports from this Committee inform the deliberations of the **National Advisory Committee on External Negotiations (NACEN)**¹⁷ established by the Ministry of Foreign Trade and International Cooperation;
- **The Ministry of Agriculture's Project Cycle Unit (APCU)** synchronises CARICOM and WTO matters on behalf of the Ministry and convenes a regular trade working group which keeps abreast with trade developments and their impacts on the sector;

¹⁷ NACEN comprises representatives from the government, the private sector, the labour movement and the University of Guyana (UG).

- **The African, Caribbean, and Pacific (ACP)** countries responsible for, among other things, negotiating preferential arrangements with the European Union. Successful preferential arrangements are key to Guyana's export of sugar and rice¹⁸;
- **The Caribbean Basin Initiative (CBI)** which allows for non-reciprocal duty free access by member countries of CBI for eligible goods to the United States of America; and
- **CARIBCAN** – a programme created to deal with trade, investment and industrial cooperation within and among Commonwealth Caribbean countries, as related to preferential duty free access to the Canadian market.

4.6 **Vulnerability Concerns and Actions Taken** (See Section 6 and Sub-section 1.2.1)

¹⁸ "The most immediate threat to Guyana's interest is posed by the Australian and Brazilian challenge to the EU sugar regime" (VanGrasstek, C. A National Trade Strategy for Guyana, USAID GEO Project, September 2002.

5. MILLENNIUM DEVELOPMENT GOALS (MDG'S) AND SD IN SIDS

5.1 Poverty Eradication

Guyana has two very notable strategies for the eradication of poverty faced by more than 60 % of the population. These national initiatives are referred to as the PRSP and the NDS.

5.1.1 National Development Strategy

The National Development Strategy titled "Eradicating Poverty and Unifying Guyana: A Civil Society Document" has as its objectives: (a) to attain the highest rates of economic growth possible; (b) to eliminate poverty in Guyana; (c) to achieve geographic unity; (d) to attain an equitable geographical distribution of economic activity; and (e) to diversify the economy. This two-prong strategy focuses on inclusive, participatory, accountable and transparent practices, as well as, macro-economic policy and economic management through tax reforms, formulating an investment strategy and code, establishing a one-stop investment agency to expedite and facilitate the investment process in Guyana; enhancing the country's revenue collection agencies charged with procurement, and with their monitoring.

The main challenges posed by reduction of poverty are (a) to diversify Guyana's economic base, to improve the quality of jobs, (the 1999 Living Conditions Survey showed that 83 percent of persons in the poorest quintile were gainfully employed), (b) to stem the migration of the country's technical, managerial and professional personnel, (c) to accelerate the pace of reforming the economic and political structures to facilitate participatory, self-directed approaches which can result in genuine empowerment (d) building a socio-political climate that is conducive to investment (e) to acquire adequate financial resources to support the PRSP.

5.1.2 The Poverty Reduction Strategy Paper

A direct approach to mainstream poverty alleviation efforts has been the development of a Poverty Reduction Strategy Paper (PRSP) that places emphasis on the policy framework within which poverty can be markedly reduced. The strategy focuses on maintaining macroeconomic stability, pursuing sector policies to stimulate production, modernising the traditional economic base, and providing systemic support for private sector investment. In the area of governance, efforts will be focused on institutional and regulatory reforms, public accountability, legal and judicial reforms, meaningful community participation in local government and the protection of human rights. In the short to medium term, government will improve the maintenance, quality and coverage of sea defences, roads and drainage and irrigation systems. Over the longer term, private sector involvement in the provision of economic infrastructure will be encouraged. In addition, provision of titles for land will improve access to credit, especially for poorer farmers. Industrial estates will be established in rural regions to process agricultural products and engage in light manufacturing. These activities are expected to expand production and create thousands of jobs, thus increasing national, household and individual incomes.

Guyana's main challenges with regard to the poverty eradication are to diversify the economic base, to improve the quality of jobs (the 1999 Living Conditions Survey showed that 83 percent of persons in the poorest quintile were gainfully employed), to stem the outward migration of the

country's technical, managerial and professional personnel, and increase to accelerate the pace of economic and political reform to facilitate participatory, self-directed approaches that engender empowerment.

Major constraints include, but are not limited to, the divisive nature of politics in Guyana, limited and in some cases lack of human capital, lack of adequate social services to the population, poor infrastructure, a socio-political climate that is not conducive to investment; as well as the acquisition of adequate financial resources to support the PRS in its struggle to eradicate absolute poverty; absence of an enabling environment for private sector led growth and the failure, to date, to sustain poverty reduction.

National Initiatives

- Institutional and regulatory reforms, including improved expenditure allocation to social sectors and the establishment of special budget codes to identify expenditure items that have a poverty reducing function as a means of facilitating their tracking;
- Improved public accountability through strengthening of the audit process by the provision of increased resources for the timely completion and public dissemination of audit reports of public accounts;
- Implementation of the European Union's Social Sector Programme that provides support to projects in education, health and pure water supply sectors;
- Improved equity in the allocation of targeted poverty programmes by the two main government poverty alleviation programmes, namely; SIMAP and the Caribbean Development Bank's Basic Needs Programme;
- Implementation of the World Food Programme which provided assistance to Guyana's nursery and primary schools, health centres and community engaged in self-help work and feeding programmes. This ended about 3 years ago since Guyana was no longer eligible because it became a net exporter of food;
- Implementation of the Regional Transformation Programme that focuses on diversification, food security and safety and funded by FAO;
- Community participation in local government;
- Abolition of the Means Test which has resulted in Social Security Benefits being available to all old-age pensioners;
- Provision of low income housing areas and the regularisation of existing squatting areas through the issuing of land titles;
- Introduction of an IDB funded Basic Education, Access and Management Support Programme (BEAMS);

- Development of an Area development Strategy that will assure sustainable growth and development in Amerindian communities;
- A Community Resource Evaluation team for the Kanuku Mountains (a proposed protected area in Guyana) has been formed and 18 one-day workshops were held with community members to verify information contained in the report.

5.2 Education and Reduction of Child Mortality

5.2.1 Education

Over the years, Guyana has increased public expenditures on education. Education as a share of GDP increased from 4.5% in 1989 to an estimated 9.3% in 2001.¹⁹ Generally, primary school enrolment rates are at 98% (in fact, school attendance is compulsory in Guyana). Moreover, 97 percent of all children who enter the first grade of primary school eventually reach grade five. Nevertheless, there still remain significant disparities across regions and income groups.

National Initiatives

The Government of Guyana is committed to making education available to all Guyanese and has indicated its intention to:

- Upgrade basic education through curricula reform which was implemented under the Primary and Secondary Schools Reform Programme in 1996;
- Provide an adequate teaching-learning environment in schools as well as the central teacher training institution. These works are a component of the Primary School Education improvement Project (PIEP);
- Remove all current administrative and legal barriers to the establishment of private schools;
- Improve the consultative process with communities and target groups on cost-sharing activities, providing subsidies for the CXC and GCE for the poorest families;
- Current reforming of the Secondary School Entrance Examination (SSEE);
- Improved base-line data along with their computerisation;
- Implementing systematic budgetary monitoring procedures; and
- Facilitate the development of a National Strategy for Special Needs Education that will focus on putting children with special needs into the mainstream of education.

Other strategies to be adopted, as outlined in the PRSP, include reducing illiteracy, drop-out and repetition rates, retaining trained teachers in the education system, reviewing and revising the curricula, and improving teaching methodologies for effective learning.

¹⁹ World Bank (2002) Guyana Public Expenditure Review

Constraints facing Guyana's education system with regards to achieving universal primary education are: lack of adequate incentives for teachers, a massive brain drain in the teaching profession, inadequate arrangement for school management through the decentralisation to the community level, dearth of reliable sector-level data, lack of adequate provision in school system for children with special needs.

5.2.2 Reduction of Child Mortality

It is estimated that Guyana's infant mortality rate that was 54 in 1997 and 29.9 in 2000 will see a significant fall to 22 in 2015. Similarly, the under-5 mortality rate, which was 90 per 1000 in 1985, declined to 72 per 1000 by 1997 and is projected at 31 per 1000 in 2015²⁰. In spite of these reported improvements, the rates remain too high, and data show that communicable diseases contribute significantly to morbidity and mortality. The PRSP will see the introduction of the Integrated Management of Childhood Illnesses (IMCI), the promotion of "baby friendly" programmes and accelerated immunisation programmes, especially in hinterland areas.

To this end, Guyana's priorities are human resources development, and technical assistance to upgrade operating systems such as protocols for case management, patient care, treatment regimes, and materials management.

National Initiatives

- The diagnostic capacity of health centres and district hospitals will be upgraded, and regional disparities will be addressed through specific interventions;
- Trained medical personnel will visit health centres in the interior and difficult-to-reach regions on a regular basis to provide Primary Health Care (PHC);
- Increased support for mother and child programmes; and
- Improved radio and other communication networks to make maximum use of available health care resources.

Constraints to the reduction of child mortality in Guyana include the lack of training and retention of suitably qualified health care providers, lack of effective management of the logistical requirements of maintaining adequate supplies of drugs and other medical aids to health facilities, especially in the deep rural and riverain areas. The extension of coverage to residents who live in remote districts will require creative solutions, given available budgetary resources. Improving the image of the public health sector as a provider of quality health services will require mechanisms for monitoring community-based services.

5.3 Gender Equality and Empowerment of Women

One of the many approaches taken by Guyana to reducing gender disparities has been investment in education, especially at the technical and vocational levels. Higher investment in education generally provides real choices for women with regards to marriage, family, work and life as a

²⁰ PAHO/WHO Health Situation in the Americas, Basic Indicators (2002)

whole. While available data does not indicate any major difference in female and male enrolment in primary and secondary education in Guyana, this has not translated into real gains for women in terms of jobs: the female un-employment rate at 14 percent was more than twice that for men (6 %) in 1999, and 19.6% and 9.04% in 2002.

National Initiatives

- Establishment of the National Commission on Women and the Inter Ministry Committee whose primary objective is to eradicate inequities in gender relations;
- Under discussion is an initiative to establish Regional Women's Desks in the ten Administrative Regions, each with an appointed Regional Women's Affairs Officer whose mandate will be to address matters pertaining to women's concerns at the regional level. This post will be an extension into the Region of personnel reporting to the Women's Affairs Bureau, working in conjunction the Regional Women's Affairs Committees. The aim of this initiative is to strengthen the implementation capacity of the rural mechanism for project and programmes delivery to women in rural and hinterland communities, and for addressing issues affecting women;
- Establishment of Community groups for women as support mechanisms at the local level;
- The operation of the Guyana Women's Leadership Institute (GWLI) and the National Resource and Documentation Centre (NRDC) for Gender and Development established under the "Building Capacity in Gender and Governance Project". The NRDC provides vital information on gender and on women and development, and concentrates on the promotion of gender equity. The Centre's activities include the development and maintenance of current available information and networking with similar centres and women's organisations in the Caribbean, the wider Commonwealth and the USA;
- The establishment of a Difficult Circumstances Unit (DCU) within the ministry of Labour, Human Services and Social Security which facilitates the advancement of women by providing food and financial aid to women in difficult circumstances;
- A number of other organisations such as Caribbean Association for Feminist research and Action (CAFRA) and Help and Shelter have been facilitated gender sensitive training programmes targeting the police and other groups.

The major constraints facing Guyana in this area are financing gender mainstreaming programmes, the geographic difficulty in accessing the poorest women in Guyana (the Amerindians); and the paucity and un-reliability of statistical data on gender matters (though there is broad agreement on their status in relation to poverty and employment) that can inform the planning and decision making process.

5.4 Global Partnership for Sustainable Development

Description of Initiative	Partners
UNDP SDNP-SIDS NET	SIDS, UNDP, Natural resources agencies in Guyana
Iwokrama ²¹ International Centre for Forest Conservation and Development	Commonwealth Secretariat, UNDP, CIDA, EU and Government of Guyana
Regional Conference Biodiversity Conservation in the Guianas	Conservation International (Suriname and Guyana) and the Government of Guyana
Timber Sales Agreement (TSA) of 200,000 areas of forests to be maintained in the pristine states maximizing on the environmental services it provides.	GOG and CI

²¹ Iwokrama is an autonomous not-for-profit research and development institution established by Guyana and the Commonwealth to demonstrate how tropical forest biodiversity may be conserved and sustainably utilised for ecological, social and economic benefits.

6. EMERGING ISSUES AND SPECIAL NEEDS

In an effort to effectively implement the BPOA, Guyana must address its economic, social and environmental vulnerabilities and the issue of good governance.

6.1 Vulnerabilities

Some studies²² done on the structural and institutional weaknesses of developing countries define these vulnerabilities as:

1. The risk posed by exogenous shocks to systems of production, distribution and consumption, or "economic vulnerability";
2. The risk of damage to the country's natural ecosystems, or "environmental vulnerability"; and
3. The degree to which social cohesion is negatively affected by stresses and threats from external forces or intrinsic factors (internal and external), or "social vulnerability".

6.1.1 Economic Vulnerability

Guyana, as a small developing state, is extremely vulnerable to terms of trade shocks (as discussed in Section 2.1. The most visible shocks are on Guyana's economic growth processes and economic development as its economy is dominated by the production of and export of primary products (sugar, rice, bauxite, gold and timber). Guyana's high dependence on commodity exports means that the Guyanese economy is extremely vulnerable to cyclical movements in commodity prices.

In addition, Guyana is faced with the problem of debt servicing: although the level of Guyana's external debt is not high in absolute terms²³, the level of debt service payment was determined to be unsustainably high in relation to the debt- to- gross national income ratio.²⁴

In December 2003, Guyana reached completion point under the enhanced Highly Indebted Poor Countries (HIPC) Initiative, qualifying under the fiscal criteria which require the ratio of the NPV of debt to Central Government revenue to be under 250 percent. In July 2004, the IMF favourably completed the second review of Guyana's three year Poverty Reduction and Growth facility under the terms of which an indicative ceiling of 260 percent is set on the ratio of Guyana's NPV debt to revenue. The challenge that faces Guyana now lies in the allocation of resources to finance its critical developmental and poverty alleviation programmes without violating the debt to revenue ceiling.

However, Guyana's economy remains vulnerable to any potential social unrest or disruptions in public service delivery which, accumulatively, may lead to increased fiscal deficit and the resultant increase in domestic borrowings and " a crowding- out of private investment".²⁵

²² This main source of these arguments is "Vulnerability and Small Island States" by a Research Team from the University of the West Indies Centre for Environment and Development.

²³ Guyana has received substantial debt relief under the HIPC and Enhanced HIPC programmes to bring about fiscal and external sustainability.

²⁴ World Bank (2002) Guyana Public Expenditure Review.

The research team on SIDS cited earlier concluded that given the capabilities of the private sector in most of SIDS, the minimal flow of Foreign Direct Investment (FDI) that is strongly linked to the perceived vulnerability of SIDS, and a limited market infrastructure which does not yet allow effective and efficient operation of market forces, governments will have to play a greater – not a reduced – role to lessen the growing vulnerability of SIDS.

Some of the initiatives undertaken by the government to address the issue of economic vulnerability include, but are not limited to, securing preferential markets in the EU, CET and CARICOM and bilateral agreements; making appeals to the WTO; supporting the private sector in any attempt that seeks to further engage value added production (example, pine-apple, timber and non-tropical timber products); facilitating investments through the creation of GOINVEST, and the Investment Code; and diversifying the agriculture sector (See Section 2.1 for more details).

6.1.2 Environmental Vulnerability

Guyana's natural ecosystems (e.g. the continental shelf, wetlands, savannahs, forests, wetlands, fresh water, coastal zones, marine resources and soils) are essential to providing services to the economy and society. Degradation (for example through growth of informal small scale gold mining and agriculture) in the quality of the environment's resources will lessen the level of service the environment can provide to meet domestic needs and contribute to export earnings. Moreover, these environmental resources are affected by both natural and human hazards, including social behaviour and the country's relative un-preparedness to deal effectively with environmental pressures, including impacts associated with climate change, long periods of heavy rainfall, weak sea defences, erosion of dams or, on the other hand, prolonged periods of droughts (e.g. *El Nino* phenomenon) already discussed in Sections 1.2.2 and 1.2.8. There are serious risks posed to Guyana's economic growth with regard to its agricultural production. As pointed out earlier in this document, these risks, if they occur, will affect Guyana's potential for economic growth and development, as well as jeopardise the implementation of its poverty reduction strategy.

In view of the above, Guyana has taken a number of positive steps towards reducing its environmental vulnerability. These steps have been outlined in Sections 1.2.2, 1.2.8, 2.3, 3.1.4 and 3.1.6. In addition, there is in place the Environmental Protection Act (1996) that makes Environmental Impact Assessment mandatory for most development activities²⁶ as a precautionary approach, as well as a Water Act that promotes rational use of water resources.

6.1.3 Social Vulnerability

Guyana's social vulnerability is related to limited institutional capacity to confront these stresses. The country's social vulnerability can be explained in terms of a long list of factors, including the following:

²⁵ Ibid, pp. 13

²⁶ Project proposals are screened by the EPA before decisions are made with regards to the undertaking of EIAs.

- The high incidence of poverty among the Guyanese society with respect to employment, access to social services including potable water and sanitation, adequate health care and educational opportunities.
- Reduced levels of participation in the labour force, currently at some 55 percent, as well as growing unemployment and underemployment, especially among youth;
- Reduced institutional, human resource capacity as a result of large-scale emigration of skilled labour (particularly in the areas of health and education) in the last two decades;
- Changing consumption patterns, particularly among young people, whose aspirations are influenced by the media and its growing dependence on food imports to meet domestic needs;
- Limited progress in developing and deploying science and technology to address common development challenges; and
- Criminal activity, drug use and the HIV/AIDS epidemic.

Recognising that a country's human resource and social capital are critical to the achievement of sustainable development, Guyana has taken several initiatives to address the issue regarding its social vulnerability. These include, *inter alia*, the construction of new hospitals, poly-clinics, health huts, the President's Youth Challenge Initiative, the IPED Youth Initiative and entrepreneurial skills training, and a national Consultation on Crime. Other efforts are documented in **Sections 1.2.4, 1.2.5, 5.1, and 5.2.**

6.2 Good Governance

The commitment to good governance in Guyana is a strong one, dictated by a collective recall of the past and the imperatives of the present situation.

The return of democracy in 1992 was associated with a mobilized society eager to reject the excesses of a defeated regime. The new Government carried out many refreshing initiatives to end the various manifestations of the administrative dictatorship that preceded it. Subsequently wide ranging constitutional reform solidified the many changes that took place in all respects of national life in response to the commitment to good governance. Strong demands were made and met for the tempering of the authority of the executive branch of Government. Equally strong ones were met with regards to the powers and immunities of the Executive President.

Fundamental rights were expanded and the rights of citizens to their enjoyment entrenched. Those changes were a direct response of the citizens to the 1980 constitutional barriers that had destroyed their society.

In improving governance, statutory and constitutional reform also addressed long standing social issues that made the society vulnerable to divisiveness, ethnic insecurity, discrimination, violence and crime. The major reform was enhanced Parliamentary oversight of the Executive with laws to entrench mandatory reporting to Parliament of the activities of the Executive Branch. Specific Parliamentary bodies were created to implement the oversight functions. Parliamentary oversight also extended, for the first time, to decisive role in the appointment of members of the

Constitutional Service Commissions that are tasked with appointment and discipline of public officers.

The creation of the four Rights Commission, Rights of the Child, Women and Gender Equality, Indigenous Peoples and Human Rights Commissions, with entrenched parliamentary roles in their composition was a direct response to long standing ills of the Guyanese society.

Importantly, because Guyana is multiethnic society it is this first formed Ethnic Relations Commission whose function is vital in addressing Guyana's ethnic insecurities. Good governance is also the expected outcome of the reform in the financial sector.

Apart from the mandatory reporting of central Government financial operations and Parliamentary oversight, strong measures have also introduced in monitoring public accounts and public procurement. The autonomous office of the Auditor General reports to Parliament and a Public Procurement Commission has been created to among its many responsibilities assess and monitor public procurement.

The reform of the electoral system has seen the introduction of geographic representativeness in Parliament and will see the return of individuals and groups contesting local government elections, an important dilution of Proportional Representation.

Good governance reforms have also been effected in the private sector particularly in the area of banking, insurance, company law and securities market. The overarching regulatory and licensing and architecture has been straightened with the roles of auditors more clearly defined. Fiduciary responsibilities of directors of companies have also been addressed in the reformed corporate environment.

Guyana continues to respect press and religious freedoms. Good governance has inexorably led to a focus on the poor and Guyana's defining developmental model in the pro poor Poverty Alleviation.

Government programmes in all of its sectors mainstreams Poverty Alleviation with considerable focus on the social sector. Government has promoted access to social goods and services and the removal of inequity in accessing such goods and services. Good governance has seen a burgeoning interest in environmental concerns that led to the promulgation of the Environmental Protection Act and the Environmental Protection Agency. Attention is now been focussed on the creation of Protected Areas.

In Guyana good governance and its implementation remains a priority in its quest for development.

7. CONCLUSION

Guyana remains committed to the path of sustainable development, and in particular, the agreements reached by SIDS, as outlined in the Barbados Declaration. As this report shows, Guyana has made significant progress in many areas including poverty alleviation, environmental management and capacity building. However, the major constraint to Guyana's successful achievement of the goals of sustainable development is financing.

Bibliography

Bynoe, P. and Bynoe, M. (2000) *Final Report on a Socio-Economic Assessment of the Vulnerability of Guyana's Coast.* EPA.

CIDA (2001) *Guyana Municipal Governance and Management Project. Detailed Project Proposal* prepared by the Federation of Canadian Municipalities.

Durant, N. (2002) *Working Paper on Guyana's Participation in Multilateral and Regional Trade Negotiations and the United Nations Framework Convention on Climate Change (UNFCCC)*, London: ODI.

Egoum, Bossogo, Philippe; Faal, et al (March 2003) *Guyana: Experience with Macroeconomic Stabilisation and Structural Adjustment and Poverty Reduction.*

EPA (2001) *National Environmental Action Plan*

EPA (1997) *Annual Report*

EPA (1998) *Annual Report*

EPA (2000) *Annual Report*

EPA (2001) *Annual Report*

EPA (2002) *RIO Plus Ten National Report.*

EPA (2002) *Integrated Coastal Zone Management and Action Plan.*

EPA (2003) *Guyana's Draft Report for presentation to the World Summit on Sustainable Development.*

EPA (2000) *Guyana's Draft Report on RIO plus 10.*

GFC (2002) *Overview of Progress in Guyana towards ensuring sustainable production of tropical timber*

Government of Guyana (2000) *National Development Strategy (2001-2010) Eradicating Poverty and Unifying Guyana. A Civil Society Document.*

Government of Guyana (2001) *Guyana Poverty Reduction Strategy Paper.*

Government of Guyana (2003) *Comprehensive Disaster Management Strategy: A Results Framework for the Republic of Guyana*

Government of Guyana/Government Network (2003) *Guyana Public Sector Modernisation Plan. Volume I.*

Jones, E. (2003) *The Republic of Guyana Strategic Results-Based Framework for Disaster and Loss Reduction. Developed under the Caribbean Comprehensive Disaster Management (CDM) Strategy Programme for the UNDP-Guyana.*

Kanuku News (2003) April

Ministry of Education (1998) *Digest of Educational Statistics of Guyana*

Ministry of Health Reports, 1990 to 2002

Ministry of Health Reports, 1998 to 2002

Noble, C. (2001) *An Examination of the United Nations Framework Convention on Climate Change and the Convention on Biological Diversity in the Context of Guyana*. A Final Year Project in Partial Fulfillment of a B.Sc Degree in Environmental Studies.

PAHO/WHO (2002) *Health Situation in the Americas: Basic Indicators 2002. Special Program for Health Analysis*.

PAHO (2002) *Guyana Health in the Americas 2002 Report*

PAHO (2003) *GASWMA Workshop Report on "Analysis of Solid Waste Management Services in Guyana"*.

PAHO (2003) *Manual for Environmental Health Contingency Planning for Floods in Guyana*.

UNDP (1993) *Household Income and Expenditure Survey (HIES)/Living Standards Measurement Survey*

UNDP (2001) *Human Development Report: Making New Technologies Work for Human Development*.

UNDP (2002) *Reports on States Parties under Article 18 of the Convention on the Elimination of All Forms of Discrimination Against Women. 1998-2002*

UNDP (2003) *Draft Report On Progress Towards The Achievement Of The Millennium Development Goals In Guyana*.

UNDP (2003) *Making Global Trade Work For People*, New York: Earthscan Publications Ltd.

Vangrasstek, C. (2002) *A National Strategy for Guyana prepared for the Ministry of Foreign Trade and International Cooperation, USAID Project. September 2002*.

World Bank (2002) *Guyana Public Expenditure Review*. Caribbean Country Management Unit, Poverty Reduction and Economic Management Sector Unit, Latin America and the Caribbean Regional Office.

WTO. "Guyana: Schedule of Specific Commitments" GATS/SC/37 (15 April 1994)