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SURINAME



COUNTRY PROFILE



UNITED NATIONS

INTRODUCTION - 2002 COUNTRY PROFILES SERIES

Agenda 21, adopted at the United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro in 1992, underscored the important role that States play in the implementation of the Agenda at the national level. It recommended that States consider preparing national reports and communicating the information therein to the Commission on Sustainable Development (CSD) including, activities they undertake to implement Agenda 21, the obstacles and challenges they confront, and other environment and development issues they find relevant.

As a result, in 1993 governments began preparing national reports for submission to the CSD. After two years of following this practice, the CSD decided that a summarized version of national reports submitted thus far would be useful. Subsequently, the CSD Secretariat published the first Country Profiles series in 1997 on the occasion of the five-year review of the Earth Summit (Rio + 5). The series summarized, on a country-by-country basis, all the national reports submitted between 1994 and 1996. Each Profile covered the status of all Agenda 21 chapters.

The purpose of Country Profiles is to:

- Help countries monitor their own progress;
- Share experiences and information with others; and,
- Serve as institutional memory to track and record national actions undertaken to implement Agenda 21.

A second series of Country Profiles is being published on the occasion of the World Summit on Sustainable Development being held in Johannesburg from August 26 to September 4, 2002. Each profile covers all 40 chapters of Agenda 21, as well as those issues that have been separately addressed by the CSD since 1997, including trade, energy, transport, sustainable tourism and industry.

The 2002 Country Profiles series provides the most comprehensive overview to date of the status of implementation of Agenda 21 at the national level. Each Country Profile is based on information updated from that contained in the national reports submitted annually by governments.

Preparing national reports is often a challenging exercise. It can also be a productive and rewarding one in terms of taking stock of what has been achieved and by increasing communication, coordination and cooperation among a range of national agencies, institutions and groups. Hopefully, the information contained in this series of Country Profiles will serve as a useful tool for learning from the experience and knowledge gained by each country in its pursuit of sustainable development.

NOTE TO READERS

The 2002 Country Profiles Series provides information on the implementation of Agenda 21 on a country-by-country and chapter-by-chapter basis (with the exception of chapters 1 and 23, which are preambles). Since Rio 1992, the Commission on Sustainable Development has specifically addressed other topics not included as separate chapters in Agenda 21. These issues of trade, industry, energy, transport and sustainable tourism are, therefore, treated as distinct sections in the Country Profiles. In instances where several Agenda 21 chapters are closely related, for example, chapters 20 to 22 which cover environmentally sound management of hazardous, solid and radioactive wastes, and chapters 24 to 32 which refer to strengthening of major groups, the information appears under a single heading in the Country Profile Series. Lastly, chapters 16 and 34, which deal with environmentally sound management of biotechnology, and transfer of environmentally sound technology, cooperation, capacity-building respectively, are presented together under one heading in those Country Profiles where information is relatively scarce.

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LIST OF COMMONLY USED ACRONYMS

ACS	Association of Caribbean States
AMCEN	Africa Ministerial Conference on the Environment
AMU	Arab Maghreb Union
APEC	Asia-Pacific Economic Cooperation
ASEAN	Association of Southeast Asian Nations
CARICOM	The Caribbean Community and Common Market
CBD	Convention on Biological Diversity
CIS	Commonwealth of Independent States
CGIAR	Consultative Group on International Agricultural Research
CILSS	Permanent Inter-State Committee for Drought Control in the Sahel
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
COMESA	Common Market for Eastern and Southern Africa
CSD	Commission on Sustainable Development of the United Nations
DESA	Department for Economic and Social Affairs
ECA	Economic Commission for Africa
ECCAS	Economic Community for Central African States
ECE	Economic Commission for Europe
ECLAC	Economic Commission for Latin America and the Caribbean
ECOWAS	Economic Community of West African States
EEZ	Exclusive Economic Zone
EIA	Environmental Impact Assessment
ESCAP	Economic and Social Commission for Asia and the Pacific
ESCWA	Economic and Social Commission for Western Asia
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
FIDA	Foundation for International Development Assistance
GATT	General Agreement on Tariffs and Trade
GAW	Global Atmosphere Watch (WMO)
GEF	Global Environment Facility
GEMS	Global Environmental Monitoring System (UNEP)
GESAMP	Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection
GHG	Greenhouse Gas
GIS	Geographical Information Systems
GLOBE	Global Legislators Organisation for a Balanced Environment
GOS	Global Observing System (WMO/WWW)
GRID	Global Resource Information Database
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome
IAEA	International Atomic Energy Agency
ICSC	International Civil Service Commission
ICSU	International Council of Scientific Unions
ICT	Information and Communication Technology
ICTSD	International Centre for Trade and Sustainable Development
IEEA	Integrated Environmental and Economic Accounting
IFAD	International Fund for Agricultural Development

IFCS	Intergovernmental Forum on Chemical Safety
IGADD	Intergovernmental Authority on Drought and Development
ILO	International Labour Organisation
IMF	International Monetary Fund
IMO	International Maritime Organization
IOC	Intergovernmental Oceanographic Commission
IPCC	Intergovernmental Panel on Climate Change
IPCS	International Programme on Chemical Safety
IPM	Integrated Pest Management
IRPTC	International Register of Potentially Toxic Chemicals
ISDR	International Strategy for Disaster Reduction
ISO	International Organization for Standardization
ITTO	International Tropical Timber Organization
IUCN	International Union for Conservation of Nature and Natural Resources
LA21	Local Agenda 21
LDCs	Least Developed Countries
MARPOL	International Convention for the Prevention of Pollution from Ships
MEAs	Multilateral Environmental Agreements
NEAP	National Environmental Action Plan
NEPAD	New Partnership for Africa's Development
NGOs	Non-Governmental Organizations
NSDS	National Sustainable Development Strategies
OAS	Organization of American States
OAU	Organization for African Unity
ODA	Official Development Assistance/Overseas Development Assistance
OECD	Organisation for Economic Co-operation and Development
PPP	Public-Private Partnership
PRSP	Poverty Reduction Strategy Papers
SACEP	South Asian Cooperative Environment Programme
SADC	Southern African Development Community
SARD	Sustainable Agriculture and Rural Development
SIDS	Small Island Developing States
SPREP	South Pacific Regional Environment Programme
UN	United Nations
UNAIDS	United Nations Programme on HIV/AIDS
UNCED	United Nations Conference on Environment and Development
UNCCD	United Nations Convention to Combat Desertification
UNCHS	United Nations Centre for Human Settlements (Habitat)
UNCLOS	United Nations Convention on the Law of the Sea
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNDRO	Office of the United Nations Disaster Relief Coordinator
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFCCC	United Nations Framework Convention on Climate Change

UNFF	United Nations Forum on Forests
UNFPA	United Nations Population Fund
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund
UNIDO	United Nations Industrial Development Organization
UNIFEM	United Nations Development Fund for Women
UNU	United Nations University
WFC	World Food Council
WHO	World Health Organization

WMO	World Meteorological Organization
WSSD	World Summit on Sustainable Development
WTO	World Trade Organization
WWF	World Wildlife Fund
WWW	World Weather Watch (WMO)

CHAPTER 2: INTERNATIONAL COOPERATION TO ACCELERATE SUSTAINABLE DEVELOPMENT IN DEVELOPING COUNTRIES AND RELATED DOMESTIC POLICIES

Decision-Making: No information available.

Programmes and Projects: No information available.

Status: No information available.

Capacity-Building, Education, Training and Awareness-Raising: No information available.

Information: No information available.

Research and Technologies: No information available.

Financing: No information available.

Cooperation: See **Chapter 2-Trade** of this Profile.

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CHAPTER 2: INTERNATIONAL COOPERATION TO ACCELERATE SUSTAINABLE DEVELOPMENT IN DEVELOPING COUNTRIES AND RELATED DOMESTIC POLICIES - TRADE

Decision-Making: Suriname has experienced periods of social and political instability since it gained independence from the Netherlands in 1975¹. In 1999, a wave of industrial unrest, coupled to growing parliamentary and judicial impasse, grew into widespread demands for the resignation of the President. Agreement was reached for early general elections for members of the National Assembly, the District and Local Councils. Most Government and donor efforts and activities in 1999 and early 2000 were focused on ensuring independent and transparent national elections.

The coalition Government that came to power after the May 2000 general elections has been faced with considerable challenges to spur economic growth, introduce fiscal discipline, reduce unemployment and poverty, and restore confidence in the country, for its citizens as well as foreign investors. In the Government Declaration 2000 - 2005 good governance and the restructuring of the economy are mentioned as indispensable to achieving growth and improving living conditions. A number of policy measures are mentioned for a more stable and effective legal and socio-economic framework, in order to facilitate equitable and sustainable human development. There is increasing political pressure to develop sectoral policies to overcome major impediments to economic growth and long-term sustainable development. After economic growth, the greatest challenge remains the translation of gains into concrete benefits for the people in a stable political environment. The situation will have to be managed properly to avoid social tension, and calls for a balanced approach between economic reform and social equity.

Since independence, Suriname has enjoyed significant financial and budgetary support from the Netherlands. The suspension of Dutch development aid in early 1983 and the political instability dealt a serious blow to the economy of the country. With the decline of external financial resources (ODA), public investment declined substantially from 10.0 percent of GDP in 1982 to 2.0 percent in 1987. This, together with the precipitous fall in the prices of bauxite and aluminum, two of the country's major export products, aggravated the economic crisis. The combination of economic problems necessitated a fundamental shift in economic policy from being predominantly state-led to one that sought to give greater recognition to the role of prices in a freer market in order to propel economic growth and development.

(Source: UNDAF for the Republic of Suriname 2002-2006)

The Multi-Annual Development Plan (MOP) for the period 2001-2005, seeks to achieve sustainable economic growth, poverty reduction and improvement in the standard of living through increased productivity, facilitated by: an enabling policy environment that includes a recently adopted Investment Law; autonomous and market-oriented functioning of state and para-statal enterprises; increased access to productive land; a more efficient public sector; improvement of financing opportunities; the provision of credit for small entrepreneurs and; training and upgrading of skills. In the implementation of the MOP special attention will be paid to: vulnerable groups, the promotion of broad participatory approaches, gender mainstreaming, environmental considerations and timely evaluation and monitoring of policy measures. It is Government's intention to link this monitoring intimately to monitoring of the achievements of the Millennium Development Goals, and to achieve a harmonization of the monitoring system with Human Development Index (HDI) indicators.

The MDP, in determining the *selection of sectors for long term strategic production*, takes into consideration the optimal utilization of the potential of several production factors that is only partially exploited such as:

1. Natural resources, especially in the rain forest, marine fishery and unused agricultural land as well as marginally exploited ores;
2. Human resources, due to hidden unemployment in the public sector and the informal sector, as well as national entrepreneurs and other Surinamese currently living abroad;

¹ UNDP Briefing Notes

3. Existing infrastructure facilities that could be used more efficiently;
4. Production capacity currently present in especially state-owned enterprises; and
5. National savings leaking out of the country and possibilities for multilateral external financing and technical assistance.

Programmes and Projects: No information available.

Status: No information available.

Capacity-Building, Education, Training and Awareness-Raising: No information available.

Information:

Social indicators of development

Social indicators of development			
	1975-1980	1995-1999	2005 (proj.)
Population			
Population	361,637	431,272	453,885
Population growth (%/year)	-1.2	1.2	1.2
Population structure (%)	(1980)	(1995)	
0-14	41	33	30
15-60	53	60	61
60 and older	6	7	9
Social indicators			
Unemployment (%)	16 (1980)	11 7(m), 17(f)	8
Poverty (%)		63	-50%
Criminal offences	6761	23750	-25%
Labor participation rate (%)	50	56 66(m), 37(f)	60
Income distribution:	(1978)	(2000 4th qtr)	
Poorest 40% earn of total income	16.7%	12.6%	20%
Richest 20% earn of total income	42.9%	51.8%	40%

Source: MDP 2001-2005

Research and Technologies: No information available.

Financing: No information available.

Cooperation: Suriname subscribes fully to the aims and principles of the United Nations Conference on Trade and Development (UNCTAD). The Government also intensively follows the developments within other organizations such as WTO, and subscribes fully to the principles and the Plans of Action of both the Summit of the Americas held in Miami in 1994 and in Santa Cruz de la Sierra in Bolivia in 1996 respectively, which are also included conclusions with regard to sustainable development and trade. Within this framework, Suriname participates in the activities of Organization of American States (OAS), Inter-American Development Bank (IDB) and Economic Commission for Latin America and the Caribbean (ECLAC).

* * *

CHAPTER 3: COMBATING POVERTY

Decision-Making: In the MDP 2001 – 2005 (the Government’s Multi-Annual Development Plan; MDP) high priority is given to poverty eradication as a key area of action towards sustainable development. In fact, the Government has committed itself to a policy of sustainable human development through economic growth and poverty eradication. In keeping with the Millennium Development Goals to eradicate extreme poverty and hunger by the year 2015, a poverty eradication plan was drafted and incorporated into the MDP. The plan was developed through wide consultations among Government, civil society, the private sector, the international donor community in Suriname, and the UN agencies operating in Suriname. It seeks to address the multi-dimensional nature of poverty, identifying the potential for investment, trade, banking and the development of small and medium-sized enterprises, public administration reform and human resource development possibilities, while exploring possibilities for high growth through the utilization of existing resources.

Strategy for poverty reduction and improvement: One of the objectives of the government's policy is the creation of a more socially just society. Efforts will be aimed at creating development prospects for all, providing for opportunities that will enable all persons, including the underprivileged and vulnerable groups, to fully participate in the labor process. Social policies will not only be focused on the elimination of social backwardness, but also on the improvement of living conditions. Focal points of the strategy to improve living standards include:

- The creation of opportunities: the implementation of measures aimed at quick, sustainable growth in correlation with efforts towards strengthening the human and physical potential of the underprivileged;
- Encouraging participation: to create opportunities for the poor that enable them to influence those conditions that determine their living standards through their increased participation in the political process and level of decision-making; and
- Improved social care: the implementation of strategies specifically aimed at increasing standards of living so as to reduce the vulnerability of the poor.

Specific target groups that due to their special characteristics, deserve special attention under the MDP include:

- Youth, especially the unemployed and those trying to get out of their poverty status by starting their own business (including the agrarian sector);
- Underprivileged women, especially pregnant and nursing women;
- Women trying to establish their own private business;
- Persons who are unable to independently earn sufficient income to provide for themselves, especially senior citizens and persons with a disability;
- Workers with incomes below the official poverty level. Following a thorough study, a minimum salary level will be introduced in order to guarantee workers and their families fair living standards; and
- Inhabitants of and migrants from the interior and other underdeveloped areas.

(Source MDP 2001-2005)

Programmes and Projects: No information available.

Status:

Percentage of poor households and percentages of poor people (based on income as welfare indicator)

Period	Engelcoefficient	Poor HH	Poor PP
1968/1969	63	13.34	16.83
	56	21.62	26.07
	49	29.73	35.35
1978	63	27.95	32.78
	56	33.59	38.42
	49	40.00	44.84
1999/2000	63	55.15	60.85

	56	60.24	65.95
	49	66.97	71.98
2000.4	63	57.49	62.21
	56	64.86	69.24

Period		Interval	
1968/1969		11.44% -43.44%	
1978		22.29% -54.29%	
1999/2000		41.38% -73.38%	
Fourth quarter 2000		42.26% -74.26%	
	49	70.02	74.11

Source: GBS (2001)

Estimated Probable percentages of poor people for Suriname, based on income as welfare indicator

Source: GBS (2001)

Percentages of poor households and percentages of poor people

Period	Engelcoeff	Poor HH	Poor PP
1968/1969	63	16.72	21.75
	56	22.64	28.81
	49	29.90	36.57
1999/2000	63	47.11	53.46
	56	52.40	59.24
	49	58.18	64.69

Source: GBS (2001)

Capacity-Building, Education, Training and Awareness-Raising: No information available.

Information: No information available.

Research and Technologies: No information available.

Financing: No information available.

Cooperation: No information available.

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CHAPTER 4: CHANGING CONSUMPTION AND PRODUCTION PATTERNS

Decision-Making: No information available.

Programmes and Projects: No information available.

Status: No information available.

Capacity-Building, Education, Training and Awareness-Raising: No information available.

Information: No information available.

Research and Technologies: No information available.

Financing: No information available.

Cooperation: No information available.

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CHAPTER 4: CHANGING CONSUMPTION AND PRODUCTION PATTERNS – ENERGY

Decision-Making: No information available.

Programmes and Projects: No information available.

Status: No information available.

Capacity-Building, Education, Training and Awareness-Raising: No information available.

Information: No information available.

Research and Technologies: No information available.

Financing: No information available.

Cooperation: No information available.

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CHAPTER 4: CHANGING CONSUMPTION AND PRODUCTION PATTERNS – TRANSPORT

Decision-Making: No information available.

Programmes and Projects: No information available.

Status: No information available.

Capacity-Building, Education, Training and Awareness-Raising: No information available.

Information: No information available.

Research and Technologies: No information available.

Financing: No information available.

Cooperation: No information available.

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CHAPTER 5: DEMOGRAPHIC DYNAMICS AND SUSTAINABILITY

Decision-Making: The country is divided into 10 administrative districts that are governed through the Ministry of Regional Development, and each district is divided into "resorts." Each of the country's 62 "resorts" has its own council. The National Assembly has legislative power in Suriname and consists of 51 members who are elected for a period of five years. The President, who is chosen by the Assembly, has executive power. (*Source: PAHO, country health profile; last updated 2001*). The policies of the Ministry of Health and Environment have had the most impact on actual demographic trends. The Government of Suriname considers the population growth and the fertility level of the country satisfactory and wants to maintain the status quo.

Programmes and Projects: The Ministry of Social Affairs only provides Child Support for up to four children and even though the amount of the support is insignificant. Largely due to the work of the Lobi Foundation and the general medical practitioners, birth control devices are readily available to the general public, which has resulted in the reduction of the family sizes.

Status: The last population census was conducted in 1980. The main distinction in population issues has been the contrast between the coastal areas (city and rural) and the hinterland (interior). Mainly tribal peoples inhabit the interior: Amerindians and Maroons. Demographic statistics of the coastal areas have always been much more reliable than those of the interior. Fertility levels and population growth in the interior seem higher than in the coastal areas. Suriname's population has hardly grown since independence in 1975, which is mainly due to emigration.

Capacity-Building, Education, Training and Awareness-Raising: No information available.

Information: No information available.

Research and Technologies: No information available.

Financing: No information available.

Cooperation: In 1994, Suriname participated in the International Conference on Population and Development. A National Preparatory Commission was established for the Conference consisting of the Ministry of Internal Affairs, the Ministry of Health and Environment, the Ministry for Foreign Affairs, the Ministry of Planning and Development (including the National Planning Office and the General Statistics Office) and the Lobi Foundation (an NGO which works in the area of Family Planning).

* * *

CHAPTER 6: PROTECTING AND PROMOTING HUMAN HEALTH

Decision-Making: The Central Office of the Ministry of Health includes: the Medical, Nursing, and Pharmacological Inspectorates the Legal Department; the Planning Department; and a General Administrative Department. Health legislation is outdated and, except for a few changes in laws regulating pharmacies, there have been only ad hoc and minor adaptations. Updating legislation is a priority, especially in the areas of strengthening the control functions of the Ministry of Health, and the establishment of National Health Council. The Legal Department of the Ministry of Health is charged with coordinating efforts with the Ministry of Justice and the Permanent Commission on Health in the National Assembly to update health legislation.

Strategies, policies and plans: To protect the health status of the population, the Government formulated the Policy Paper 1996, which aims to provide material and social support on a needs basis to individuals and groups in vulnerable socioeconomic situations, and ultimately to enable target groups to become self-sufficient. The Ministry of Social Affairs and Housing provides the existing system of supports, which includes cash transfers to the elderly and to poor families, child allowances (covering 27,659 mothers and 64,000 children in 1994), and free medical care for the poor (about 25% of the population). A system providing subsidized packages of commodities was set up to safeguard the availability of foods and a basic nutritional status. Today, there are 130,000 recipients of these packages, including households and institutions. The system will be phased out, providing cash payments amounting to about US\$ 37 each, an amount that is insufficient to meet the cost of living of the elderly and the poor.

The 1997–2001 Policy Paper of the Ministry of Health identified two core problems in the health care system: financing and the lack of trained personnel. The focus of the Ministry's policies for the 1997–2001 period is to stop the decline of the health care sector. Measures planned to regulate and reorganize the system include institutionalization of a National Health Council; strengthening of management; updating health legislation; continued privatization of government hospitals, the Regional Health Service, and other institutions; and restoration of health care facilities in the Interior. The Policy Paper gives priority to "participation of local communities, mobilization of local resources, and decentralization of health systems management." Programs aimed at the target groups of women, children, and the working class is diarrhea control, immunization, and cervical cancer screening. The Government will implement "a compulsory national health insurance system for the total population, including mechanisms to regulate salaries of service providers, to control prices of drugs and other inputs, and to control the costs of intramural care." Financial policies will focus on stopping open-ended financing of hospitals, budgeting programs, and the gradual elimination of subsidies. Targets for health care budgeting, including the limit of government expenditure to between 6% and 8% of GNP, are addressed in the Policy Paper. Intramural care should be limited to less than 52% of the health care budget.

The Central Office of the Ministry of Health will be reorganized to enable it to function as a center for policy development, supervision, and coordination. The provision of services to the public will stop being a function of the Ministry of Health. Priority is also given to the rehabilitation of the Medical Mission facilities in the Interior. The process of privatization of the Regional Health Service is ongoing, as well as changes in its organization that emphasize decentralization of management, strengthening of local health centers, and community participation. Disease control programs given high priority are those against malaria; dengue; schistosomiasis and soil-transmitted helminthes; sexually transmitted diseases, including HIV-infections; leprosy; and tuberculosis. In March 1993, the National Assembly ratified the International Convention of the Rights of the Child. New legislation has been formulated to bring the laws of the land in line with this Convention.

Programmes and Projects: The Bureau of Public Health is the main organization for public and preventive health care and includes a health education department, an epidemiology and biostatistics department, and several programs for family health and disease control. This office provides information on disease distribution through its epidemiology unit, which operates a surveillance system on communicable diseases in cooperation with the Regional Health Service. The system depends on weekly reports of 27 sentinel reporting stations. Other organizations with disease control activities and health promotion are the Dermatologische Dienst of the Ministry of Health, the Veterinary Service of the Ministry of Agriculture, the so-called "Cross Associations"

(nongovernmental organizations with well-baby clinics), and foundations such as Stichting Lobi and the Youth Dental Service Foundation.

The Dermatological Department has the following goals: the control of STDs and HIV/AIDS; the elimination of leprosy by the year 2000 (an official policy target of the Ministry of Health); and the control of dermatological conditions such as yaws, leishmaniasis, and other communicable diseases. Services are provided through a central polyclinic in Paramaribo, the district hospital in Nickerie, and the district health center in Wonoredjo. Each year, the Dermatological Department handles 24,000 patient visits and performs 46,000 laboratory tests. Between 25% and 30% of visits are due to STDs, and only 7% have been related to leprosy. The institution offers syphilis serology for the hospitals (except the Academic Hospital), the blood transfusion service, and the Regional Health Service. It employs 3 dermatologists; 1 general physician; 18 registered nurses; 2 social workers; and 21 administrative, technical, and housekeeping personnel.

The Stichting Lobi foundation promotes family planning and the prevention of cervical cancer deaths. Priority target groups are adolescents, young adults, and inhabitants of the Interior. Stichting Lobi estimates that of 80,000 men and 84,000 women, 45% need family planning services, which would require some 470,000 rounds of the contraceptive pill and 5 million condoms per year. It currently distributes 320,000 rounds of oral contraceptives and 550,000 condoms, or 68% and 11%, respectively, of the estimated needs. Stichting Lobi also screens women for cervical cancer, with 10,000 to 12,000 Pap tests yearly.

The Regional Health Service, a semi-private, government-subsidized institution, provides health care for the poor in the coastal areas. It serves 120,000 people covered by the Ministry of Social Affairs and Housing and another 25,000 covered by the State Health Insurance Fund. It offers free service for immunizations, counseling, family planning (in cooperation with Stichting Lobi), and dental services for schools (in cooperation with the Youth Dental Service Foundation). The number of patients covered by the Ministry of Social Affairs and Housing increased from 78,448 in 1991 to 93,124 in 1995. Visits made by these patients more than doubled, from approximately 200,000 per year in the 1991–1994 period to more than 400,000 in 1995. Visits by State Health Insurance patients also doubled from 50,000 visits per year in the 1991–1994 period to more than 100,000 in 1995. It is not clear whether this increase reflects improved administrative procedures or increased utilization of services.

The Regional Health Service operates 11 health centers offering medical, pharmaceutical, and laboratory services, and clinics for children under age 5; 27 polyclinics offering medical and pharmaceutical services and clinics for children under age 5; and 19 auxiliary posts located in villages in the districts and operated by visiting doctors and nurses a few days per month. The Regional Health Service employs 55 doctors, 20 assistant-physicians, 48 nurses, 59 nursing auxiliaries, 28 nursing-assistants, 39 pharmacy assistants, 10 laboratory technicians, 15 trained midwives, and about 250 administrative and support staff. The operational costs were US\$ 2.2 million in 1996 and US\$ 3.2 million in 1997. Special projects of the Service receive financial and technical assistance from the Dutch Government and PAHO. One such project is the "Global Restructuring Project," which involves restructuring the Regional Health Service, emphasizing decentralization of managerial authority to district health centers, and community participation through local and regional health councils. The project also covers the renovation of 32 polyclinics and personnel housing in the districts. Approximately 89% of households are within 5 km of a polyclinic or health post and 60% use them on a regular basis.

The Medical Mission is a private, nonprofit organization that receives government subsidies and acts as an umbrella organization for missionary foundations. It aims to develop an affordable health care system based on the needs of the community and the promotion of health awareness. The Ministry of Health assigned the Medical Mission with the responsibility for all medical care in the Interior. The target population of the Medical Mission is 48,500 (80% Bushnegroes and 20% Amerindians). The Medical Mission employs 170 persons, including 4 physicians, 6 registered nurses, and 62 "health assistants." The Medical Mission operates 45 health posts, including 6 clinics in the Interior.

There are four general hospitals in Paramaribo and one in Nickerie. There is one psychiatric hospital. In January 1996, there were 3.1 beds per 1,000 population: 387 in Academic Hospital, 304 in s'Lands Hospital, 227 in Diakonessenhuis Hospital, 287 in St. Vincentius Hospital (a Roman Catholic hospital), and 60 in Nickerie District Hospital. In 1989, the combined occupancy rate of the four major hospitals in Paramaribo was 62%, a rate that

increased slightly to 67% in 1995. The average length of hospitalization decreased from 11 days in 1989 to 10 in 1995. Academic Hospital is the only hospital with a department for emergency medicine, with 33,959 admissions in 1996. The number of deliveries at the hospital rose from 746 in 1995 to 894 in 1996. The Academic Hospital supports a smaller, "dependent" hospital with 50 beds for chronically ill patients, drawing patients from the coastal area. Patients can be admitted after referral by general practitioners. The State Pharmaceutical Company is the central importer, producer, and distributor of drugs and medical supplies. It maintains 14 pharmacists and 15 pharmacies, and the Regional Health Service has 32 additional auxiliary pharmacies at its facilities. Some 2,525,000 pharmacy prescriptions were processed in 1996.

A program for the supply of medical equipment and consumables is being implemented with financing through the Dutch Treaty Funds. As part of the program, quality control and local production of drugs are upgraded, and standard lists are assembled for different categories of supplies. Suriname is following the essential drugs policy advocated by WHO, and has developed a national formulary. Better maintenance of medical equipment was achieved through the establishment in 1993 of a Joint Technical Unit, with the contribution of all hospitals and laboratories. With help from the Belgian Government, the infrastructure of the Joint Technical Unit is being improved. Currently there is an arrangement for sending patients to the Netherlands for medical procedures not performed in Suriname. The State Health Insurance Foundation has paid an average of US\$ 20,000 per case (with assistance from the Netherlands). The 1996 budget was designed for 200 such cases.

The Medical Mission has a special training program for health assistants, and Stichting Lobi has one for midwives. The Bureau of Public Health also has a training program for environmental inspectors. The University of Suriname introduced a public health curriculum in 1992–1993 and a course for physiotherapists in 1996. The Youth Dental Service Foundation promotes dental health by providing dental care to children 0–17 years of age. In 1996, a total of 207,516 activities were carried out, including 33,738 dental extractions. The Foundation operates a training center and 30 dental clinics in the periphery (10 located in health centers and 20 in schools). The Ministry of public works is responsible for collection and disposal of solid wastes and construction and certification of sewage systems. The policy is to privatize garbage collection services and to set up a semi-private "Sewage Authority" to take care of sewage systems.

The Suriname Water Company and the Ministry of Natural Resources are responsible for the establishment and operation of piped drinking water networks. The Ministry of Natural Resources operates small local systems in the districts and in the Interior. The company covers Paramaribo and parts of Wanica, Nickerie, and Albina; it also serves a strip of 500 meters on both sides of the 50-km road connecting Paramaribo and the International Airport in Zandery. The provision of drinking water by the company increased to about 22,220,000 liters in 1996. The Paramaribo Water Supply Project, which started in 1994, will provide a sufficient supply of drinking water to every home in Paramaribo. *Click www.planbureau.net/mdp2001-2005.doc to see the health care reform policy*

Status: Suriname has faced a recent period of economic decline and overall hardship, but as things seem to improve, those responsible for the provision of the PHC are pursuing a common course, joining efforts and sharing collective responsibilities. The issues of "Quality of Life" and "Survival Strategies" are also becoming more pertinent. As in all developing countries, emerging and re-emerging infectious diseases do pose a threat to the country's public health as to its development and progress. The primary health care provision is currently being re-evaluated with community participation for planning and strengthening of health care services, which requires identification of deficiencies and selection of priority activities. The personnel leaving the sector and country for better pay hard hit many health institutions. Though officially reported health indicators do not indicate a decline, the health system is experiencing serious constraints.

Capacity-Building, Education, Training and Awareness-Raising: No information available.

Information: Until the late 1980s, PHC coverage of the population was nearly complete; health indicators were at the high end for a developing country; and basic health services were guaranteed for the largest part of the Surinamese population.

HEALTH

Health indicators			
Average life expectancy	65 63 (m), 67 (f)	71 68(m), 73(f)	71
Estimated birth-rate per 1,000	29.2	22.8	22.8
Estimated death-rate per 1,000	7.1	6.6	6.6
Infant mortality (per 1000 new born)	32	15	13
Maternal mortality (per 1,000 new born)	8 (1980)	72	-50%
HIV/AIDS (total number of infected)	0	(1999) 1253	-25% (ages 15-30)

Research and Technologies: No information available.

Financing: No information available.

Cooperation: The major international and bilateral partners in the development of the health sector are the Governments of the Netherlands and Belgium, PAHO, United Nations Children's Fund (UNICEF), and IDB. Some of the most important projects developed through technical and financial cooperation include: (1) reorganization of the Bureau of Public Health, using Dutch Treaty Funds; (2) the Drugs and Medical Supplies Project, financed through Dutch Treaty Funds; (3) restructuring the Regional Health Service, financed through Dutch Treaty Funds and PAHO; (4) the Malaria Control Program financed by Dutch Treaty Funds and PAHO; (5) treatment of patients overseas; (6) the National AIDS Program, a project supported by the European Union and PAHO; (7) the Tuberculosis Control Program, supported by PAHO; (8) the National Immunization Program, supported by PAHO and UNICEF; and (9) the maternal and child health program supported by PAHO and UNICEF.

(Source: PAHO, country health profile; last updated 2001)

Click <http://www.iadb.org/regions/re3/suhlth.pdf> to see the IDB health sector assessment report 1999

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CHAPTER 7: PROMOTING SUSTAINABLE HUMAN SETTLEMENT DEVELOPMENT

Decision-Making: No information available.

Programmes and Projects: A low shelter income program is being implemented which is financed by the IDB and executed by the Ministry of Social Affairs and Housing. The main objectives of the program are:

- (a) To improve the housing conditions of low-and moderate-income households;
- (b) Harness Suriname's most capable private finance institutions, NGOs, and Community-Based Organizations (CBOs) to assist under-served households in lower, and middle income neighborhoods improve or construct a house; and
- (c) Make shelter policies and subsidies more efficient, equitable, and transparent.

The approach of the program contrasts strongly with the traditional one used by the Government of Suriname (GOS). Traditionally, Government contracts large construction companies to build relatively large units (80 m²) on large lots (400 m² to 500 m²) sold at highly subsidized prices sometimes financed by deep interest-rate subsidies. Although this turnkey method resulted in very high costs and subsidies, Government succeeded in building 20% of the current housing stock and distributing much land. Hence, many low and moderate-income Surinamese have either a lot or a small house. However, declining real incomes have stopped households from building on these lots and repairing the houses they have. Under the program, GOS has agreed to direct demand subsidies targeted to low/moderate-income households largely for housing rehabilitation and expansion, but also for in-fill new construction of expandable core housing on smaller lots (300 m²). Households make the decisions and, in general, will hire small contractors to perform the construction. As a result, the average subsidy per household under the program is a fraction of the traditional approach. *Source: low-income shelter program.doc./ IDB*

Status: The number of rooms is highest in the urban strata where the mean is 4.64, for the rural strata this is 4.41 and for the interior the mean is 2.11. It is not justified to compare the interior with the rural or urban area as in housing situation is quite different in the interior. Here traditionally most families live in huts, with sleeping facilities separated in space from cooking and recreation facilities. The floor material in the urban stratum is by far the most favorable in terms of luxury, as 22 percent of the households have tiles or parquet, as against approximately 8 percent in the rural stratum and only 1 percent in the interior. On the other hand, sand, dirt or straw has the highest relative frequency in the interior (25.5 percent) (*Source: Suriname Multiple Indicator Cluster Survey 2000*).

Capacity-Building, Education, Training and Awareness-Raising: No information available.

Information: No information available.

Research and Technologies: No information available.

Financing: No information available.

Cooperation: No information available.

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CHAPTER 8: INTEGRATING ENVIRONMENT AND DEVELOPMENT IN DECISION-MAKING

Decision-Making: A Council for the Environment was supposed to be established in the Cabinet of the President. It would be responsible for the development of an overall environmental policy and its integration in the national development agency. For monitoring and control of environmental parameters, an Environmental Management Agency would be established, and relevant legislation would be developed or adopted. A National Strategy on Biodiversity is under preparation as well as a National Environmental Action Plan, and a Methodology for Ecological Economic Zoning. As a result of the United Nations Conference on Environment and Development (UNCED) in June 1992 and the Summits of the Americas, Suriname is embarking on its own Sustainable Human Development Planning processes through a bottom-up and top-down approach characterized by good governance, participatory democracy, a stable economic and political environment, dynamic private and public sectors, investment in population as the most important natural resource, belief in a free market economy and trade forces and belief in safeguarding and/or improving the environment. Within the process of participatory democracy, in which district and regional councils participate, decentralization issues will become operational through the consensus-building technique of the holistic people-centered approach. Communities will be involved in the planning and decision-making processes with regard to the optimized integration of environmental development into the other three main aspects of the Surinamese Sustainable Human Development Model under the guidance of the Ministry of Regional Development.

Programmes and Projects: No information available.

Status: No information available .

Capacity-Building, Education, Training and Awareness-Raising: No information available.

Information: No information available.

Research and Technologies: No information available.

Financing: No information available.

Cooperation: No information available.

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CHAPTER 9: PROTECTION OF THE ATMOSPHERE

Decision-Making: Within the limits of possibilities, the Ministry of public works and especially the Meteorological Service has been promoting activities related to the National Action on Sustainable Development. The ratification of the Montreal Protocol and related amendments is in process, as is the ratification of the United Nations Framework Convention on Climate Change (UNFCCC).

Programmes and Projects: Prior to ratifying the UNFCCC, Suriname has undertaken a project in the area of climate change financed by The Government of the Netherlands. This project, Climate Change Country Study Suriname (CCCSS) (US\$199,830) consists of an inventory of greenhouse gas emissions and a coastal study with three components: a) coastal profile, b) a vulnerability assessment for the different regions in the coastal zone, and c) a pilot project in which the findings of the inventory of GHG emissions and the coastal study will be applied for one coastal Zone Management Area. The study began in July 1997 and will be completed in August 1998. Country specific data required for the preparation of the inventory, based on 1994 data, will be collected from the following sectors: energy, industry, agriculture, forestry, land-use, waste-disposal and solvents and product use. In April 1998 a National Steering Committee on Climate Change was established and this committee functions as the National Climate Committee.

The national GHG inventory will be made according to the IPCC guidelines for National GHG inventories. The CCCSS is not providing funds specifically for the preparation of the national communication. The current UNDP/GEF proposal undertakes a realistic and comprehensive approach toward filling the gaps left from the CCCSS project in order to facilitate the preparation of the first national communication of Suriname to the COP. There are no other climate change related projects currently ongoing in Suriname.

The project will ensure close collaboration with the CCCSS and will share work between the research teams in order to enable an effective information exchange between the projects and full utilization of their results. It is envisaged that under the guidance of the Project Steering Committee, relevant outputs of the CCCSS can be integrated into the initial national communications for Suriname. This project has been developed out of a request by the GEF Focal point at the National Environmental Council for assistance to Suriname from UNDP through GEF in preparing its initial national communications. Suriname will be participating in the regional GEF-funded project entitled Caribbean Planning for Adaptation to the Global Change (CPACC). Early results of this project will be incorporated into the initial National Communication on Climate Change.

Institutional Framework and previous Initiatives Related to Climate Change: All environmental issues, including climate change, are coordinated by the National Council for the Environment, an advisory body to the President and part of the Cabinet of the President. The Council is responsible for the development of the overall environmental policies and advises and guides the director of the National Institute for Environment and Development (NIMOS) in setting priorities for environmental issues. This institute, established in March 1998, is responsible for the preparation and implementation of national legislation designed to protect the environment and will implement her responsibilities through a number of technical environmental offices. The Ministry of Natural Resources is responsible for the policy in the energy sector.

The primary objective of the project is to facilitate the preparation of the first national communication of Suriname to the Conference of the Parties (CoP) in accordance with the Article 12 of the UN Framework Convention on Climate Change, and following the guidelines adopted by the CoP for the preparation of initial national communications by Parties not included in Annex I to the Convention. The second objective of this project is to provide the necessary financial resources for Suriname to fully participate in the CPACC project, and therefore undertake regional planning related to the impacts of climate change on coastal and marine resources.

With the support of the Netherlands, a national inventory programme on emissions and Coastal Zone Management has been carried out between April 1997 and June 1998.

Cooperation

[Click here for national information from the Web site of the United Nations Framework Convention on Climate Change.](#)

[For the access to the Web Site of the Ozone Secretariat, click here:](#)

Status: No information available.

Capacity-Building, Education, Training and Awareness-Raising: In addition to meeting the communication obligations, the CCCSS project can be seen as an essential exercise to enhance general awareness and knowledge of climate change related issues in Suriname thus enabling Suriname to take those issues into account in general planning and strategy formulation for different economical and technical sectors, and also to strengthen its role in the international scientific forums and negotiation processes related to climate change. A part of this task is to facilitate the dialogue, information exchange and cooperation among all the relevant players in the field including governmental, non-governmental, academic, and private and "grassroots" sectors.

Last but not least, the project will establish an institutional framework, and build endogenous capacity preparing ground for eventual additional communication obligations, and for further development and implementation of the identified response measures addressing climate change and its adverse impacts. Components of the projects:

- Strengthened links to both national and international sources of information, an information center/network with adequate equipment and personnel;
- Programme of public awareness and public education activities on climate change;
- Reviewed national GHG and identification of gaps to complete the initial national communications;
- Analysis of potential options to abate/mitigate the increase in greenhouse gas emissions and to enhance removals by sinks;
- Study of the impacts of climate change on agriculture, health and the hydrological resources and wetlands and follow study of adaptation strategies in each of the five areas;
- Participation in all activities undertaken in the four regional components of CPACC;
- A national vulnerability and adaptation workshop to review the study on the impacts of climate change on agriculture, hydrological resources, human health and the outputs of the CPACC project on vulnerability and adaptation assessment to sea level rise and determine which elements to include in the national communication;
- Draft national action plan for effective response measures to climate change including measures to facilitate adaptation to climate change, as well as measures to abate the increase in greenhouse gas emissions and to enhance removals by sinks, incorporating results of the CPACC, CCCSS and other relevant projects;
- End of Project Workshop with wide local participation and relevant international partners to present the results of all components of the project, to discuss the results with the objective of finalizing the national action plan for effective response measures to climate change (focusing on "win-win" abatement (i.e. - promoting both economic development and reducing greenhouse gas emissions) and adaptation measures; and
- Based on the results of the studies, and the results of the end of project workshop, compile and prepare, publish, and submit the initial national communication of Suriname to the UNFCCC following the guidelines adopted by the Conference of Parties

Information: See under Capacity-Building, Education, Training and Awareness-Raising

Financing: No information available.

Cooperation: The Montreal Protocol and its Amendments were signed in 1998. The United Nations Framework Convention on Climate Change was signed in 1992. The ratification of the Montreal Protocol and related amendments is in process, as is the ratification of the United Nations Framework Convention on Climate Change (UNFCCC). See also under **Programmes and Projects**.

CHAPTER 10: INTEGRATED APPROACH TO THE PLANNING AND MANAGEMENT OF LAND RESOURCES

Decision-Making: So far, land use planning has not been implemented in a coordinated way. The Land Service of the Ministry of Natural Resources is responsible for the granting all land issues and can provide various land titles and user rights to private and public entities. The decisions about the granting of land are based on the information available on prevailing soils, forests and geology. The National Planning Bureau of the Ministry of Planning and Development Cooperation is responsible for regional and physical planning. The Bureau is the coordinating body with regard to zoning and land use planning. The different Ministries are represented in an inter-departmental advisory council. The Planning Act of Suriname, which should guide these activities, originates from 1973, but has never been fully implemented.

Programmes and Projects: An Ecological Economic Zoning project will soon be taken up for an integrated planning of the use of land resources. An Environmental Management Agency will be responsible for monitoring the control and management of land use.

Status: No information available.

Capacity-Building, Education, Training and Awareness-Raising: No information available.

Information: No information available.

Research and Technologies: Suriname is in the process of introducing a new technology for land use planning, zoning and monitoring of land use, but will need substantial institutional support.

Financing: No information available.

Cooperation: Suriname cooperates within the framework of the Amazonian Cooperation Treaty with regard to strategy and technology and with financial assistance mainly from the European Union, IDB and the Netherlands.

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CHAPTER 11: COMBATING DEFORESTATION

Decision-Making: The Ministry of Natural Resources is responsible for the forestry sector and gives policy guidance. The Forest Service is in charge of the management and control of the public forests. Other Ministries and institutions involved in forestry matters include: the Ministry of Trade and Industries with regard to the wood processing industry; the Jan Strake Training Center of the Forest Service for the training of lower level staff; and the Center for Agricultural Research of the University of Suriname for forestry research. In 1992, Suriname enacted a new Forest Management Act, which is directed to sustainable management of forest resources. The Multi-annual Plan of the Government gives guidelines for forest policy and for the forestry programme. Initiatives for updating the forest policy have been undertaken by the Food and Agriculture Organization of the United Nations (FAO) and European Union. The Forest industry is organized in several associations. There are different associations for loggers, saw millers, wood producers and wood exporters. The principles of sustainable development shall guide the decisions with regard to the expansion of the forestland area for production.

Programmes and Projects: Several programmes and/or projects have been prepared or are under preparation to improve Suriname's capacity for the sustainable management of forests.

Status: Forests are one of Suriname's most abundant natural resources with a high economic potential. In 1995, the value of the forest industry exports totaled approximately US\$3.2 million. The value of the forest industry exports increased by more than 400% compared to the 1994 figure. Focusing on the total forestland of 14,855,800 ha (more than 80% of the total land area in Suriname) and the present area utilized for timber production (2,414,800 ha), the largest part of the forests are still preserved. Almost the entire forestland in Suriname is state-owned. The responsibility and authority regarding the state of forests is with the Government. Deforestation is negligible. During the last 10 years, less than 1% of the forest land of Suriname has been converted into other uses, primarily for mining purposes. The forests are a substantial carbon dioxide sink and contribute to combating the intensification of the global greenhouse effect.

Capacity-Building, Education, Training and Awareness-Raising: No information available.

Information: The latest national forest inventories were carried out by the Forest Service with the assistance of the Food and Agriculture Organization of the United Nations (FAO), with a total inventory area of 400,000 ha from 1070 to 1974 and an additional 80,000 ha from 1979-1982.

Research and Technologies: No information available.

Financing: No information available.

Cooperation: Assistance for institutional strengthening, capacity-building and policy formulation is given by the main partners with regard to forest development, namely the United Nations Development Programme (UNDP), European Union, FAO and the Netherlands. Within the framework of the Amazonian Cooperation Treaty, several projects directed to sustainable use of natural environment are being undertaken.

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CHAPTER 12: MANAGING FRAGILE ECOSYSTEMS: COMBATING DESERTIFICATION AND DROUGHT

Decision-Making: No information available.

Programmes and Projects: No information available.

Status: No information available.

Capacity-Building, Education, Training and Awareness-Raising: No information available.

Information: No information available.

Research and Technologies: No information available.

Financing: No information available.

Cooperation: The Government of Suriname has not signed the International Convention to Combat Desertification in Countries Experiencing Drought and/or Desertification Particularly in Africa as of 17 June 1998.

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CHAPTER 13: MANAGING FRAGILE ECOSYSTEMS: SUSTAINABLE MOUNTAIN DEVELOPMENT

Decision-Making: No information available.

Programmes and Projects: No information available.

Status: The mountain areas in Suriname are almost completely uninhabited and unexploited. The highest mountain's top is only 1,280 m. foreign investors have shown interest in these areas for forestry and gold mining purposes. Developments in these sectors could cause environmental problems mostly related to increased erosion.

Capacity-Building, Education, Training and Awareness-Raising: No information available.

Information: No information available.

Research and Technologies: No information available.

Financing: No information available.

Cooperation: No information available.

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CHAPTER 14: PROMOTING SUSTAINABLE AGRICULTURAL AND RURAL DEVELOPMENT

Decision-Making: No information available.

[Click here to link to the Biosafety Information Network and Advisory Service \(BINAS\), a service of the United Nations Industrial Development Organization \(UNIDO\), which monitors global developments in regulatory issues in biotechnology.](#)

[Click here to link to Country and Sub-regional Information on Plant Genetic Resources of the Food and Agricultural Organization of the United Nations.](#)

[Click here to go to Web Site of the Codex Alimentarius Commission, which includes information on the Codex Alimentarius and the Joint FAO/WHO Food Standards Programme.](#)

[Click here to access the Web Site of the Consultative Group on International Agricultural Research \(CGIAR\).](#)

[Click here to access the sixteen international agricultural research centers that are members of the CGIAR.](#)

[For country reports on Plant Genetic Resources, click here.](#)

[To access the FAOSTAT Data Base for information by country, item, element and year, click here:](#)

Programmes and Projects: No information available.

Status: No information available.

Capacity-Building, Education, Training and Awareness-Raising: No information available.

Information: No information available.

Research and Technologies: No information available.

Financing: No information available.

Cooperation: No information available.

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CHAPTER 15: CONSERVATION OF BIOLOGICAL DIVERSITY

Decision-Making: The importance of Biodiversity Conservation has been recognized since a long time. A legislative framework for biodiversity conservation is in place. The *Nature Conservation Act* of 1954 recognizes that protected areas are important for scientific, recreational and educational purposes, as well as for ethical and economic reasons. The law prohibits activities within reserves that diminish their integrity. Under this law, the Head of the Suriname Forest Service is designated as the entity responsible for managing nature reserves and for handling ancillary matters regarding conservation. The Nature Conservation Division, reporting to the Head of the Forest Service assists the Ministry in this respect. Suriname's Forest Management Act of 1992 provides for the sustainable management of forest concessions and establishment of Protection Forest and Specially Protected Forests.

Suriname is a signatory to a number of UN and regional environmental conventions. The country signed the UN Convention on Biological Diversity in June 1992 and ratified it on January 12, 1996. Suriname is also signatory to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), the Convention on Wetlands of International Importance Especially as Waterfowl Habitat (Ramsar Convention), the Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere (The Western Hemisphere Convention) and the Amazon Cooperation Treaty with Bolivia, Brazil, Colombia, Ecuador, Peru, Guyana and Venezuela. This treaty established the Commission on the Amazonian Environment (CEMAA) to address common conservation concerns in Amazonian countries, including within the Guayanian Shield.

Parts of the Convention on Biological Diversity are covered by provisions in the Nature Preservation Law (under the Forest Service), the Game Law and the Law on Forest Management (both under the Ministry of Natural Resources, Forest Service), the Fish Protection Law and the Sea Fisheries Law (both under the Ministry of Agriculture, Animal Husbandry and Fisheries, Fishery Service). Other agencies related to biodiversity are the Ministry of Planning and Development Cooperation, National Planning Bureau (e.g. coordination of a draft National Environmental Action Plan, NEAP), and Environmental Working Groups in several Ministries. The intention is to include a National Environmental Policy Board and an Environmental Management Agency in National Environmental Action Plan (NEAP). The Nature Preservation Law of 1954 provides a possibility to establish reserves (now 13). Inventories of ecosystems of the interior will enlarge these figures for protected areas. The Game Law fully protects all mammals, birds, sea turtles and other species mentioned, except those that are designated as game, cage and predominately harmful species.

Programmes and Projects: The Ministry of Natural Resources in close collaboration with UNDP started in 1994 with the early initiative for a project to strengthen the national capacity to create sustainable long-term conservation of the globally significant Guayana Shield tropical forest wilderness biota. The Ministry executed a USD \$0.3 million UNDP Pre-Investment Facility (PRIF) project of the Global Environment Facility (GEF) aimed at formulating a large GEF project for enhancing the capacity of Suriname to conserve its biodiversity. This resulted in the UNDP project "Conservation of the Globally Important Central Suriname Nature Reserve in Suriname's Guayana Shield Bio-region", that is in implementation now, with a total budget of about US\$ 18 million funded by GEF, UNF, CI, WWF and UNDP.

The Government of Suriname's decision to create the Central Suriname Nature Reserves (almost 10% of the nation's surface area) demonstrates a commitment to conservation on a scale few countries can rival. Second, the Government of Suriname has made a parallel commitment to making protected area management and wild resource conservation a focal point of its national sustainable development strategy. The project thus represents a rare opportunity to effect globally significant, long-term conservation cost-effectively, not only because threats to biodiversity are low in Suriname, compared to other areas, but also because stakeholder support is so high. Capacity building investments engendered through the project will galvanize the conservation community in Suriname and mobilize further international support for conservation activities. The project places a special emphasis on integrating local and indigenous communities into conservation management processes.

The project aims at protecting the rich biodiversity of Suriname's tropical forests. It will operationalize protected area management in 2 globally important and representative sites, namely the Central Suriname Nature Reserve (CSNR), the single largest tropical forest reserve in the Guayana Shield, and the Sipaliwini Nature Reserve (SNR) in south Suriname. The project would create and capitalize the Suriname Conservation Foundation (SCF), enabling it to reach an initial endowment target of US\$ 15 m. The SCF will provide funding for conservation operations in the two reserves, including for infrastructure and staffing, capacity strengthening, biological and social assessment activities, conservation awareness and education, and targeted support for the development of ecotourism as a conservation-enabling form of livelihood. At an umbrella level, the project would support management planning for the reserves, strengthen the cadre of conservation professionals by providing training, strengthen controls over the wildlife trade, and promote progressive policy development. These interventions will be spearheaded through the creation of new conservation partnerships between the government and non-government sectors and local communities.

Status: Over 80% of the land surface (165,940 squared km) of Suriname is covered by tropical rainforests, while the very small human population (approximately 400,000) is concentrated in and around the capital, Paramaribo, and along the coast. The biological diversity is high: 185 mammal species, 668 bird species, 152 reptile species, 95 amphibian species, 452 fish species, 6,135 plant species, (of which 5,075 Spermatophyte species) and 1,750 invertebrate species, while large areas of the interior (the Guyana Shield) still remain unknown for their flora, fauna, ecosystems and ecological relations. Many inventories were concluded between 1900 and 1980 by foreign institutions, and most specimens collected were taken out of Suriname.

Capacity-Building, Education, Training and Awareness-Raising: No information available.

Information: No information available.

Research and Technologies: No information available.

Financing: No information available.

Cooperation: Suriname participates in the Special Environment Commission of the Amazonian Cooperation Treaty, the Caribbean Environmental Program (including activities of the Cartagena Convention), Conference of CITES, Wetlands Convention and the Convention on Biological Diversity, and has relations with several international agencies. The Convention on Biological Diversity was signed in 1992 and ratified in 1996. The Convention on International Trade in Endangered Species (CITES) of Wild Fauna and Flora was signed in 1981 and ratified in 1995.

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CHAPTER 16 AND 34: TRANSFER OF ENVIRONMENTALLY SOUND TECHNOLOGY, BIOTECHNOLOGY, COOPERATION AND CAPACITY BUILDING

Decision-Making:

Technology: Suriname intended to embark on its own National Environmental Action plan in which recommendations for the introduction of environmentally sound technologies would be given for all relevant sectors. In addition, recommendations would be given on the organizational framework needed in order to coordinate all the activities and on the financial, technological and human resources implications. For example, a number of legal entities (now called Institutes) would be developed for the implementation of environmentally sound technologies, the acquisition of these technologies, the enforcement of laws, etc. In the beginning, financing would be provided by donors. Later on, as much as possible, financing was supposed to be provided by activities within the sectors in question. While developing the Surinamese Human Development Model, the best available sustainable resources management and resource use techniques have to be introduced in order to optimize economic, social, human and environmental development.

Biotechnology: No information available.

Programmes and Projects:

Technology: No information available.

Biotechnology: No information available.

Status:

Technology: Already within the bauxite industry, environmentally sound adaptations have been deployed, although without governmental control mechanisms. With regard to the development of gold mining, detailed technological approaches are being scrutinized at the moment.

Biotechnology: No information available.

Capacity-Building, Education, Training and Awareness-Raising:

Technology: No information available.

Biotechnology: No information available.

Information:

Technology: No information available.

Biotechnology: No information available.

Research and Technologies:

Technology: No information available.

Biotechnology: Biotechnology in Suriname is limited to the tissue culture of bananas. Experiments have been made with the tissue culture of pineapple, mushrooms and some other crops. However, only bananas are cultured on a commercial basis by using this technique.

Financing:

Technology: See under **Decision-Making**.

Biotechnology: No information available.

Cooperation:

Technology: No information available.

Biotechnology: No information available.

CHAPTER 17: PROTECTION OF THE OCEANS, ALL KINDS OF SEAS, INCLUDING ENCLOSED AND SEMI-ENCLOSED SEAS, AND COASTAL AREAS AND THE PROTECTION, RATIONAL USE AND DEVELOPMENT OF THEIR LIVING RESOURCES

Decision-Making: The Forest Service under the Ministry of Natural Resources is responsible for the coordination of the management by relevant agencies of the coastal Multiple Management Areas (MUMAs). The Nature Conservation Division of the Forest Service is already the Suriname Administration Authority for the Wetlands Convention. The legal basis for the protection of the sea is provided by the Sea Fisheries Law (with the possibility for fishing quotas) and the International Convention for the Prevention of Pollution from Ships (MARPOL).

Strategies, Policies, and Plans: In the coastal areas, there are four nature reserves and one Multiple Management Area (MUMA). The policy is to cover the whole estuarine zone by MUMAs and to formulate and implement management plans for these MUMAs. The latter is now being done for each part of this zone according to an order of priority, which is related to the possible impact by agriculture (rice cultivation), crude oil exploitation, and aquaculture projects.

Programmes and Projects: No information available.

Status: The Marine Zone of Suriname stretches from the boundary of the Exclusive Economic Zone (EEZ) up to the coastline. It has a surface that equals the land area of Suriname. The Marine Zone may be subdivided in the Deep Sea and the Continentals Sea.

1. The Deep Sea is found from the northern boundary of the Exclusive Economic Zone (EEZ) at 200 nautical miles (370 km offshore) up to the Continental Slope (ca 80 nautical miles or 150 km offshore). This area with depths between 200 m to over 4000 m measures about 75,000 sq. km.

2. The Continental Sea is found above the so-called Continental Shelf or Continental Flat, between the Continental Slope and the coastline. From the relatively steep continental slope (between the 200 m and 100 m depth contour) the continental sea floor gradually climbs over a distance of 150 km up to the coastline. The Continental Sea measures about 65,000 sq. km. In the Continental Sea, three sub-zones, each approximately 50 km wide, are distinguished:

Blue Water Zone or Outer Zone: between the continental slope and the 60 m depth contour. This zone covers an area of about 25,000 sq. km). The water is clear (blue) and sunlight penetrates up to the ocean floor. Along the edge of the continental shelf (fossil) coral reefs are found. Next to shrimp trawling, snapper trawling and snapper long lining takes place up to a depth of 80 m.

Green Water Zone or Middle Zone: between the 60 and 30 m depth contour (20,000 sq km). The water in this zone is colored green by the abundance of green algae as a result of the combination of the availability of nutrients from the land zone (very limited in the Blue Zone) and the still rather deep light penetration compared to that in the next ("Brown Water") zone. Next to shrimp trawling in this zone, between 30 and 50 m, snapper trawlers and snapper long liners are active. Up to a depth of 50 m, food fish trawling is common practice.

Brown Water Zone or Inner Zone: between the 30 m depth contour and the coastline (20,000 sq. km). The "brown" water is baded with mud from the Amazon River, brought by the east-west flowing Guyana Current. Light penetration is less than 10 cm. Within the Brown Water Zone, the Surinamese

Territorial Waters are found: a 12 nautical miles (about 22 km) wide zone along the coast, with an area of about 8,500 sq. km. In this zone the diversity of animals is rather low; shrimp species, catfish, and commercial fish are found. Next to shrimp trawling (in waters deeper then 10 m), food fish trawlers operate in the zone from 20 m on and deeper. In shallower waters drift nets are used. Tidal mudflats are the area of bank net fishermen.

Since 1989 Suriname is establishing a zone of Multiple-use Management Areas (MUMA's) along its coast to facilitate Integrated Coastal Zone Management (ICZM) .

In the north, the Coastal Zone is bordered by the 6 m depth contour. The southern boundary coincides as much as possible by river banks and by distinctive man made structures. Boundaries are described in separate paper "Marine and Coastal Zone Management". The total Coastal Zone measures about 3,250 sq. km of land area (sea area excluded)

Physical features: Climate - The offshore climate is much dryer than onshore. The average annual rainfall (1959-1969) measured by the former lightship in front of the Suriname River mouth amounted only 798 mm/y (Pons, 1972). A narrow strip of land along the coast is significantly drier than the remaining part of Suriname. In the 1971-1980 period, the Coronie coast showed an average annual rainfall of 1442 mm/y, the remaining stations along the coast showed somewhat higher figures up to 2048 mm/y. During the same period the average annual rainfall south of the coastal zone varied between 2226 and 3054 mm (SPS, 1988). Compared to the inland areas, the dryer narrow strip along the coast shows a higher amount of sunshine hours, stronger wind speeds, lower humidity and higher evaporation (SPS, 1988). Suriname has no hurricanes.

Geomorphology - The coast of Suriname is part of the very dynamic "Wild Coast" of the Guyana's. In a 50 km wide strip along this coast, the east-west flowing Guyana Current is loaded with mud from the Amazon River. As a result of this, huge mudflats are deposited in front of the coast. Echo-sounding maps of the coast clearly show an undulating pattern of depth contours: mudbanks are alternating with deep depressions. The Guyana Current, supported by the NE trade winds, is shifting the pattern of mudflats and depressions in the western direction. Along the coast, accretion of mudflats (and sand beaches) is noticeable at their western fronts and erosion at their eastern ends. As a result of this, mudflats and sand beaches "drift" along the coast with an average speed of 1.5 km a year (Augustinus, 1983; Augustinus et al. 1989).

About 95% of the 375 km coastline of Suriname consists of clays. Nearly all sand beaches, with a total length of about 20 km, are found along the eastern part of the coast, particularly in the Commewijne and Marowijne districts. Behind the coastline we find the Young Coastal Plain, mainly consisting of extensive Holocene clay flats slightly above sea level (former coastal mudflats). These clay flats alternate with up to 4 m high shell and sand ridges (former beaches) also known as "cheniers", which run approximately parallel to the coast.

Hydrology and water quality - The hydrology of the Coastal Zone is not well understood. Drainage patterns are predominantly seen along the swamp edges. To the north short creeks drain the excess water into the sea. To the south short creeks often drain into the lower stretches of rivers that run parallel to the coastline. Although no drainage pattern can be seen in the central parts of coastal swamps, a watershed is supposed to exist halfway, dividing swamp areas into a "seaside" and a "riverside" drainage area.

Biological features: Vegetation - The estuarine zone of Suriname is a good example of the mangrove zone of the biogeographical coastal region between the Amazon and the Orinoco river mouths (Cintron-Molero, 1986), nowadays known as the Guianan Mangroves Ecoregion. The ecosystem map of the Lowland of Suriname (Teunissen, 1978) shows an almost uninterrupted mangrove belt along the coast, varying in width between 1 and 8 km. Behind the mangrove belt, a distinct zoning of ecosystems can be noticed, related to the hydrology, geomorphology and soil development.

The Coastal Zone of Suriname shows the following ecosystems: *From the coastline to the south*: young coastal mangrove; older coastal mangrove; dying coastal mangrove; lagoons; salt marsh; salt and brackish grass swamps; open coastal mangrove; brackish grass swamp; "brantimaka" swamp scrub; freshwater grass swamp; "watrabebe" swamp wood; and "pruimen-zuurzak" swamp wood. *Along lower river courses*: freshwater mangrove; and riverside mangrove. *On beaches and inland ridges*: beach vegetation; coastal ridge wood; ridge forest; and secondary forest. *Grass and peat fire*: During every dry season, many "grass" swamps burn by man-made fires. If rains fail to fall during the Short Rainy Season (SRS), the Long Dry Season (LDS) lasts 8 months: from mid August up to the Long Rainy Season (LRS) starting late April. Such extremely long dry periods were reported from 1745/46, 1767/68, 1797/98, 1845/46, 1898/99, 1911/12, 1925/26, 1939/40, 1963/64 (Bubberman, 1973) and 1997/1998 (El Niño).

During such periods, swamps dry up and peaty top soils desiccate completely. Then, grass fires may become peat fires. Although peat fires may be self-generating by lightening or bacterial heating, there are strong indications that also peat fires are caused by men (Bubberman, 1973). Peat fires may destroy all swamp vegetation including

swamp wood and swamp forest as trees, rooting in peat layers, loose grip and fall over. Almost 75 % of the swamp areas in the coastal region of Suriname are covered with non-climax vegetation, which means that the original high swamp forest may have been destroyed by fire (Teunissen, 1993). Once peat layers are burning, it is virtually impossible to extinguish the fire. Only the next rains of the Long Rainy Season (LRS) may stop them. After peat fires, LRS rains may create temporarily open water areas. On such open waters, floating meadows can develop which form new peat layers on which woody swamp vegetation may develop again.

Flora: The majority of plant species found in the brackish zone of the Coastal Zone have a cosmopolitan, a pantropical, an Afro-American, or a Caribbean distribution, probably because most propagules are distributed by sea currents and migratory birds. Farther inland, in the freshwater swamps, the majority of plant species are confined to the South American continent or to the Guyana Region (Lindeman, 1953). *Fauna: Mammals* - In Suriname, the mammalian fauna of the estuarine zone was never systematically inventoried. However, from literature (Husson, 1978) a list of over 50 species of mammals can be extracted for the estuarine zone. Except for the Guiana white dolphin, none of the mammals is confined to the estuarine zone. In Suriname the manatee is considered as a vulnerable species (Duplaix and Reichart, 1978).

Bird: According to De Jong, Spaans & Held (1984), the Surinamese coastal area is of special importance as feeding and nesting ground for more than 118 species of coastal birds, of which more than 70 species are defined as waterfowl according to the criteria of the Ramsar Convention. For outstanding features about coastal birds. See also under **Chapter 3** of this Profile.

Herpetofauna: Sand and shell beaches, exclusively located in the eastern part of Suriname, are suitable as nesting beaches for sea turtles. The leatherback turtle (*Dermochelys coriacea*) and the green turtle (*Chelonia mydas*) are the most common species. The beaches of Suriname and La Guyane are considered as the last refugium for the leatherback turtle. *Fishes, crabs and shrimps:* Over 300 fish species are known from the near-coastal and estuarine waters (Bruijning & Voorhoeve, 1977) as well as 20 species of crabs and 11 species of shrimp (Holthuis, 1959).

Socio-economic features: Archeological resources - Important Amerindian archaeological sites are found all over the coastal zone. The most important sites are: mounds Hertenrits, Wageningen I and II, Bucklebury I and II and Peruvia ridge in the western part of the coastal zone, all sites with raised fields in their neighboring swamp areas (Hertenrits style group); site Tingi-olo ridge in the Weg naar Zee area (Kwatta style group); and raised field complexes in the eastern part of the coastal zone (Barbakuba style group).

Historical resources: Important historical features are mainly found in the former plantation areas along the coast of Nickerie and Coronie, in the Coppename and Suriname River mouth areas, and the former plantation areas of Warapa and Matapica, Motkreek and Oranjekreek.

Present population: Except for the area of Greater Paramaribo, the coastal zone of Suriname is sparsely populated. Outside the capital, only smaller settlements are found such as Nieuw Nickerie, Wageningen, Coronie, Boskamp, Right Bank area Lower Saramacca, Garnizoenspad, Right Bank area Lower Commewijne, and near Galibi (Christiaan and Langamankondre).

Cultural resources: Well preserved cultural features can be found in the Carib villages of Langamankondre and Christiaankondre (Galibi area) in the Marowijne River mouth. In Suriname, tribal communities don't have any land rights.

Global importance: Economic - Fisheries: The Ocean Zone provides shrimp and foodfish for export. Estuarine ecosystems are particularly important as spawning and nursery grounds for the marine fauna, including foodfish and shrimp for export to international markets.

Ecological and Environmental: Best representative of unique Guianan Ecoregion ecosystems. The Surinamese Coastal Zone contains the most extensive and pristine mangrove ecosystems in the worldwide unique Guianan Ecoregion. *Beaches and turtles of international importance:* Sand and shell beaches, exclusively located in the eastern part of Suriname, are suitable as nesting beaches for sea turtles. The leatherback turtle (*Dermochelys coriacea*) and the green turtle (*Chelonia mydas*) are the most common species. The beaches of Suriname and La Guyane are considered as the last refugium for the leatherback. In 2001, the number of nests amounted 40,000 for the leatherback, and 8000 for the green turtle.

Wetlands and waterfowl of international importance: In 1985, Coppename-monding Nature Reserve received the Wetlands Convention status of "Wetland of International Importance". For 21 waterfowl species, parts of the Surinamese coastal area are of international importance (De Jong, Spaans & Held, 1984). The criterion for international importance is: 10,000 or more individuals, and/or at least 1% of the biogeographic population per area (as defined by Scott and Carbonell, 1988).

Regional importance: Economic: Fisheries - The Ocean Zone of Suriname provides shrimp and foodfish for neighboring countries fishing in our waters. The Surinamese nursery grounds are also important for deep-sea fisheries activities in the other Guianas.

Ecological and environmental: Principal South American wintering grounds for migratory shorebirds - The Surinamese coast may be considered as the principal South American wintering ground for migratory shorebirds from Nearctic regions. In the period 1982-1986, by means of aerial surveys, Morrison & Ross counted more than 2.9 million Nearctic shorebirds along the entire South American coastline (approximately 28,000 km), including the Surinamese coastline (375 km). Along the Suriname's coast alone, they counted 1.5 million shorebirds, being 52% of the total of shorebird populations wintering in South America (Morrison & Ross, 1989).

Western Hemispheric Reserves: In 1989 the Bigi Pan MUMA, the Coppename-monding NR and the Wia NR received the status of "Hemispheric Reserve" within the Western Hemisphere Shorebird Reserve Network (WHSRN). Since then, these areas are twinned with two protected areas in the Bay of Fundy, Canada, which are used as breeding area by the same flyway populations of Nearctic shorebirds visiting Suriname during northern winters. *Critical breeding area for Scarlet Ibis:* Between the Orinoco and the Amazon River mouths, the coast of Suriname shows the highest density of nesting colonies of ciconiiform birds. For the South American endemic scarlet ibis, the coast of Suriname is of critical importance with up to 35,000 breeding pairs during top years (Spaans, 1974, 1990b).

National importance: Economic - The coastal ecosystems of Suriname broad belt of mangrove forests which provide significant goods and services, such as:

Coastal protection - Mangrove forests protect the coast and river estuaries against erosion, enhance sedimentation and stimulate coastal accretion. Conversion of mangrove forest means loss of free coastal protection. Recently, in the "Weg naar Zee" area (Paramaribo District), mangrove forest conversion (for agricultural purposes) resulted in severe coastal erosion and a significant loss of coastal land. Along the Coronie coast and at "Zeedijk" (Nickerie District) as well as along the entire east coast of the Republic of Guyana, costly construction and maintenance of sea defense works is required to substitute the mangrove forest.

Fisheries for local use and export - Seafood abundance is directly related to the extent of the local mangroves. Up to 90 % of marine fish and shrimp species are found in and near mangrove areas during one or more periods of their life cycle. High production of seafood is found in the nearshore habitats where small-scale fisheries are practiced: in the shallow sea, the river estuaries, tidal creeks, lagoons and brackish swamps. These ecosystems provide the local market with foodfish and shrimp. Also large-scale industrial deep-sea fisheries benefit from the nursery function of these ecosystems.

In 1994, the contribution of the Fisheries Sector to the GNP varied between 2.9 to 3.3 %, while the sector employed 4,878 people, which is 4.6 % of the countries economic active population. Since that year (registered) annual catches significantly decreased.

Beekeeping - Although beekeeping in mangrove ecosystems is declining, the apiculture has still the potential to revive.

Economic and ecological: Nature tourism, recreation and research - The ecosystems of the Coastal Zone and their outstanding nesting beaches, bird life and small-scale fisheries and sport fisheries activities certainly become a more and more important source for nature tourism, outdoor recreation and research. Archaeological, historical and cultural resources are of national importance.

Environmental: Waste water treatment - Because of turbid coastal waters and their tidal action, coastal waters in Suriname have the capacity to treat large quantities of organic wastewater from sewers.

RESOURCE MANAGEMENT STAKEHOLDERS

ToR: Clearly identify the different stakeholder groups, including donors, national, regional and international NGO's involved or interested in coastal zone or resources management in Suriname. Specify their types and levels of involvement as well as specific areas of interest.

Public sector: Nature Conservation Commission (NBC) - Based on GB 1954 no 26, the NBC is appointed by the President and consists of high level representatives of the Ministry of Natural Resources (NH), Agriculture, Animal Husbandry and Fisheries (LVV) and Regional Development (RO). The NBC advises the Government with regard to nature conservation affaires, such as site selection and management of protected areas and with regard to wildlife management. Since then, the NBC is officially appointed as the Scientific Authority for the RAMSAR Convention, the CITES Convention and of the Western Hemisphere Convention.

Ministry of Natural Resources (NH): Based on GB 1954 no 26, the State Forest Service (LBB) and its Nature Conservation Division (NB) are responsible for the management of all established nature reserves. By Ministerial Decrees, LBB/NB is also responsible for the management of all established MUMA's. Next to this, LBB/NB is officially appointed as the Administrative Management Authority for the RAMSAR Convention, the CITES Convention and the Western Hemisphere Convention.

Other Ministries, government departments and semi-government foundations: According to the "Resolution Task Descriptions Departments" (SB 1991, No 58), currently many ministries are responsible for certain aspects of ICZM. In the existing Management Plans for Coastal MUMA's (McCormick, 1990; Teunissen 1997, 2000a/b) over fifty recommendations are formulated in which over eighty issues are addressed, needed to arrive at and implement an operational National ICZM System.

For all government institutions involved in ICZM, the table below shows the numbers of recommendations and addressed issues and a list of involved departments.

Government Institutions	Number of recommendations - dations	Number of addressed issues	Main departments to be involved
POLICY MAKING / INITIATING			
President's Office (incl. National Environmental Council (NMR))	8	8	President of the Republic of Suriname
President's Office (incl. National Environmental Council (NMR) and National Institute for Environment and Development (NIMOS)) Council of Ministers			Council of Ministers
IMPLEMENTATION OF ICZM SYSTEM			
Ministry of Planning and Development Cooperation (PLOS)	1	1	National Planning Office (SPS), Department of Physical Planning Environment (ROM)
Ministry of Natural Resources (NH)	18	20	Bureau of Lands (DOM)
			Nature Conservation Division of LBB
			Foundation for Nature Conservation in Suriname (STINASU)
Ministry of Agriculture, Animal Husbandry and Fisheries (LVV)	16	31	Fisheries Dept.
			Pesticides Dept.

Ministry of Public Works (OW)	8	15	Hydraulic Dept.
Ministry of Regional Development (RO)	2	2	District Majors, District and Resort Councils
Ministry of Education (MINOV)	2	2	University of Suriname
Ministry of Defense (DEF)	2	2	Coast Guard
Ministry of Foreign Affairs (BUZA)	2	2	Legal Issues and International Agreements Dept.
Ministry of Transportation, Communication and Tourism (TCT)	0	0	Maritime Authority Suriname (MAS)
Ministry of Justice	0	0	Legal Issues
Ministry of Finance	0	0	Customs Department
TOTAL NUMBERS	58	82	

Private Sector and NGOs/CBOs: It will be clear, that an ICZM should be also should have the full support of the land and water users and inhabitants of the Coastal Zone: private enterprises, NGO's and Community-based Organization (CBOs) including tribal communities. They all should participate as being parties with interest in the "wise" use of the Coastal Zone.

Donor organizations: Over the last ten year, next to the Government input, technical and financial assistance for coastal management was received from:

- *Intergovernmental and regional organizations*, such as UNEP Caribbean Environmental Program (for Cartagena Convention), UNDP, Ramsar Convention (Small Grants Fund). and Organization of the American States (OAS);
- *Bilateral donor agencies*, such as the Canadian Wildlife Service (CWS), the US National Oceanic and Atmospheric Administration (NOAA), the Government of France, Ministry of Environment; and
- *Non-governmental organizations*: such as the American Oceanographic Society (AOS) Asociacion de Universidades Amazonicas (UNAMAZ), Ducks Unlimited (Canada), World Wildlife Fund (WWF).

Capacity-Building, Education, Training and Awareness-Raising: No information available.

Information: See under **Research and Technologies**.

Research and Technologies: *Management research and impact studies* - Since the early 70s, nature conservation studies, including monitoring programs, have been carried out in and in between these reserves, focusing on the changing shoreline (Augustinus, 1978, '83 a and b, 88, Augustinus et al, '89); vegetation and flora (Sterringa, 1971; Pons, 1972; Julen, 1974; Teunissen, 1978, '80); biological functioning and natural production of estuarine ecosystems (Panday-Verheuvell, 1976; Reseda 1985, Swennen & Spaans, 1985); coastal birds (de Vries 1966, Haverschmidt, 1968, Spaans 1974, '75, '78, '84; De Jong, Spaans & Held, 1984; Swennen and Spaans, 1985); sea turtles (Schulz, 1975, '80; Reichart & Fretey, 1993; BIOTOPIC, 1996, 2001) and fish resources (Engel, 1981; Charlier, 1988).

These research programs were carried out, supervised and coordinated by the Nature Conservation Division (NB) of the Suriname Forest Service (LBB) and by the Foundation for Nature Preservation in Suriname (STINASU) in co-operation with the Fishery Division (VD) of the Ministry of Agriculture, Animal Husbandry and Fisheries (LVV), the Hydraulic Research Division (WLA) of the Ministry of Public Works (OW), the University of Suriname and several regional and international research organizations. As a result of the research/monitoring programs, coastal changes became better understood, also in relation to nature conservation.

Young mangrove forests are the favorite nesting places for scarlet ibises and for most species of herons. Young mangrove forest become mature while new ones establish elsewhere. Natural changes in the hydrology and water quality of the coastal wetlands may improve or worsen the quality of the feeding grounds of coastal birds which frequently have to move to new feeding areas and nesting sites. Sand beaches, the nesting sites for sea turtles, are

constantly moving westward along the coast. So, soon after the establishment of the first coastal reserves, it became already clear that nature conservation along the very dynamic coast of Suriname is not adequate by establishing reserves with fixed boundaries: sooner or later vulnerable populations move to unprotected areas as a result of the changing shoreline.

Next to management research, also *Environmental Impact Studies* (in between and south of protected areas) added to the knowledge of the functioning of estuarine ecosystems. These studies mainly focused on construction of drainage diversion dams (ILACO et al. 1976; Teunissen 1976; HASKONING et al. 1993); road construction (Teunissen 1973; Sevenhuijsen 1984; Buijs 1985; Lubbers et al. 1985; Van der Steege, 1985); polder construction (De Jong 1982; Pareyn 1985; LAMEYER INTERENATIONAL et al. 1993; Teunissen 1995); pesticide use (Vermeer et al.; 1974; Fyffes 1976; Hicklin & Spaans 1993); oil field development (HASKONING, IWACO & IBT 2000; E2 Environmental Alliance 2000); Teunisen & Noordam 2001) and urban development (Teunissen 2001, DHV et al. 2001)

Next to the studies of coastal changes and ecosystem dynamics, the impact studies also made clear, that the areas in between and south of the existing nature reserves (the entire Coastal Zone as defined above) should be managed as a “special management area” in order to safeguard the coastal ecosystems and their goods and services for the future.

Financing: No information available.

Cooperation: *International, Regional and Bi-National Treaties, Conventions and Agreements* - The United Nations Convention on the Law of the Sea (UNCLOS) was signed on 10 December 1982. Although Suriname has not yet ratified the United Nations Framework Convention on Climate Change, it has initiated with the assistance of the Dutch Government a project on sea-level rise. Suriname also participates in the Amazon Cooperation Treaty, the Caribbean Environment Program (including the Cartagena Convention), MARPOL and the United Nations Framework Convention for Climate Change. Suriname and French Guyana will enlarge their cooperation with regard to nature conservation and the environment, especially in the coastal areas.

The Government of Suriname, aware of its international responsibilities regarding coastal management and its resources became a Contracting Party (CP) to the:

Sea conventions (in chronological order)

- Convention on the High Seas. CP since 1959;
- Convention relating to Intervention on the High Seas in cases of Oil Pollution Casualties. CP since 1975;
- Convention on the Prevention of Pollution of the Sea by Dumping of Waste and other Materials or London Dumping Convention. CP since 1988; and
- Convention for Prevention of Marine Pollution from Ships or MARPOL Convention. CP since 1988.

Conventions including biodiversity and coastal management issues (in chronological order)

- Amazon Cooperation Treaty. CP since 1978;
- Convention on International Trade in Endangered Species of Wild Fauna and Flora or CITES CONVENTION. CP since 1981;
- Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere. CP since 1985;
- Convention of Wetlands of International Importance, especially as Waterfowl Habitat or RAMSAR CONVENTION. CP since 1985;
- Convention for the Protection and Development of the Marine Environment in the Wider Caribbean Region (CARTAGENA CONVENTION) (Cartagena, 1983);
Suriname is not yet a CP of the Cartagena Convention but already participates in programs under the Convention’s Caribbean Environmental Programme (CEP), such as of the program “Integrated Planning and Institutional Development for the Management of Marine and Coastal Resources (IPID)”;
- Western Hemisphere Shorebird Reserve Network (WHSRN). Member since 1989.
- Agenda 21 of the United Nations Conference on Environment and Development (UNCED). Signed in 1992;

- UN Convention on Biological Diversity. CP since 1997;
- Convention for the protection of the World Cultural and Natural Heritage. CP since 1997; and
- UN Framework Convention on Climate Change (UNFCCC). CP since 1998.

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**CHAPTER 18: PROTECTION OF THE QUALITY AND SUPPLY OF FRESHWATER RESOURCES:
APPLICATION OF INTEGRATED APPROACHES TO THE DEVELOPMENT,
MANAGEMENT AND USE OF WATER RESOURCES**

Decision-Making: There are plans to establish a National Board of Water Management in addition to the Management Authority (Water) for the Multipurpose Corantijn Project in the northwestern part of Suriname.

Programmes and Projects: See under **Decision-Making**.

Status: In Suriname, public waterworks serves ninety percent of the population, but the service level is not adequate. About 60% of the population is served by public sewerage, which is also inadequate. The wastewater treatment in urban areas consists mainly of septic tanks and latrines.

Capacity-Building, Education, Training and Awareness-Raising: No information available.

Information: No information available.

Research and Technologies: No information available.

Financing: No information available.

Cooperation: Regional/international cooperation is undertaken under the Pan American Health Organization.

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CHAPTER 19: ENVIRONMENTALLY SOUND MANAGEMENT OF TOXIC CHEMICALS, INCLUDING PREVENTION OF ILLEGAL INTERNATIONAL TRAFFIC IN TOXIC AND DANGEROUS PRODUCTS

Decision-Making: Suriname recognizes its responsibility with respect to sustainable development and is aware of its obligations to take the necessary precautions in time to prevent coming generations from disasters. Therefore, Suriname ratified the International Convention for the Prevention of Pollution from Ships (MARPOL) 73/78 with all its five Annexes in 1988, in order to prevent and fight pollution from ship-generated waste and other hazardous disposal. However, due to circumstances, only now does Suriname have the opportunity to prepare the necessary legislation to implement MARPOL. This will be done in cooperation with the Dutch Ministry of Public Works under a programme, which has already started. The existing legislation on water transport will also be updated during this work. The legal focus point in Suriname (an IMO project) is involved. The Surinamese Government and the Parliament are studying a proposal for the privatization of waste management in order to simplify and ensure the processing of waste. Preparations for the Maritime Authority are very advanced. The necessary facilities and other technical provisions resulting from the MARPOL Convention are to be provided by this authority.

Programmes and Projects: No information available.

Status: No information available.

Capacity-Building, Education, Training and Awareness-Raising: No information available.

Information: No information available.

Research and Technologies: No information available.

Financing: No information available.

Cooperation: See under **Decision-Making**.

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CHAPTER 20 TO 22: ENVIRONMENTALLY SOUND MANAGEMENT OF HAZARDOUS, SOLID AND RADIOACTIVE WASTES, INCLUDING PREVENTION OF ILLEGAL INTERNATIONAL TRAFFIC

Decision-Making:

Hazardous Wastes: No information available.

Solid Wastes: No information available.

Radioactive Wastes: No information available.

Programmes and Projects:

Hazardous Wastes: No information available.

Solid Wastes: No information available.

Radioactive Waste: No information available.

Status:

Hazardous Wastes: No information available.

Solid Wastes: No information available.

Radioactive Wastes: No information available.

Capacity-Building, Education, Training and Awareness-Raising:

Hazardous Wastes: No information available.

Solid Wastes: No information available.

Radioactive Waste: No information available.

Information:

Hazardous Wastes: No information available.

Solid Wastes: No information available.

Radioactive Waste: No information available.

Research and Technologies:

Hazardous Wastes: No information available.

Solid Wastes: No information available.

Radioactive Waste: No information available.

Financing:

Hazardous Wastes: No information available.

Solid Wastes: No information available.

Radioactive Waste: No information available.

Cooperation:

Hazardous Wastes: Relevant institutions in Suriname are engaged in the exchange of views on the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (BC), which should ultimately lead to its ratification. The importance of the BC for the states in the Caribbean region is increasing due to the fact that the region is one of the most frequently chosen routes of hazardous wastes.

Solid Wastes: No information available.

Radioactive Waste: No information available.

CHAPTER 24 TO 32: STRENGTHENING THE ROLE OF MAJOR GROUPS

Women: Decision-Making: Various initiatives have been taken by the Government in cooperation with NAOS such as: the institution of the Monitoring Group for Women's Policy for the development of a policy plan, which has already been approved by the Government but not yet implemented; the establishment of the Women's Bureau at the Ministry of Internal Affairs; and writing of the National Report for Beijing. Status: In 1992, the proportion of women to men in the Parliament was 6%. In 1996, it was 14%. Capacity-Building, Education, Training and Awareness-Raising: Curricula and educational material do not yet promote gender relevant knowledge. Cooperation: The Convention on the Elimination of All Forms of Discrimination Against Women was signed and ratified in 1993.

Children and Youth: Decision-Making: Suriname strives to establish a process that promotes dialogue between the youth and Government at all levels and to establish mechanisms, which permit youth access to information and opportunity to present their views in implementing Agenda 21. At the moment, youth are not involved in the national development processes and mechanisms. The four most relevant youth fora in Suriname are the Jaycees, the Youth Assembly, Nayuga and the Leo's/Rotaracts. Capacity-Building, Education, Training and Awareness-Raising: Youth organizations are active in Clean Up the World campaigns, and Earth Day activities are promoted by NAOS in Suriname. Youth organizations should also initiate more activities, like the Jaycees did in 1997, by organizing a national seminar called "Development Starts with a Clean Environment."

Indigenous People: Decision-Making: The Association of Indigenous Village Leaders in Suriname (*Vereniging van Inheemse Dorpshoofden in Suriname – VIDS*) was established in 1992, shortly after the signing of the Agreement on National Reconciliation and Development (the 'Peace Agreement'), signed by the Government of Suriname, the Jungle Commando (Maroon guerrilla group) and the Tucajana Amazonas (indigenous guerrilla group). The traditional authorities of the indigenous peoples did suffer seriously from the disruption of the normal authority structures in the interior of Suriname, and the association was established with as one of its most important goals, the restoration of the traditional authority as known to the indigenous peoples in the past centuries.

The long term vision of the VIDS - VIDS is of the opinion that indigenous peoples in Suriname must take up a worthy place in the Surinamese society and in world's community, whereby indigenous peoples enjoy a legal security that is based on our centuries' old rights of self-determination and legal recognition of the rights on the lands that we have lived on, used and protected for many centuries, whereby there are respect and esteem for the traditional indigenous culture and life style, whereby the indigenous peoples have equal development opportunities and enjoy the same civil rights as other segments of the population and other citizens of the country, whereby there is no discrimination on base of race, social class or culture and whereby indigenous peoples contribute substantially to the sustainable development of the country and of the world.

Strategies, policies and plans: In the next five years, VIDS wants to achieve the following objectives:

- The Constitution of Suriname must be changed in order for it to recognize indigenous peoples in Suriname as such;
- The rights of indigenous peoples in Suriname must be legally recognized, among others land rights and traditional indigenous authority structures;
- Indigenous peoples in Suriname must be represented in all relevant decision-making bodies of the country;
- Processes for sustainable socio-economic and cultural development in the indigenous villages in Suriname must be initiated, where the indigenous peoples will start and implement these projects and programs under own management. Particular attention will be given to projects that are focused on education, health care, economic strengthening, maintenance of a healthy environment, conservation of biodiversity, conservation of forests, sustainable energy, preservation of traditional knowledge and strengthening of community organizations;
- Indigenous peoples must be well informed regarding national and international developments, in order to be able to plan strategies and activities for the indigenous communities based on these realities;
- The Bureau (Secretariat) of VIDS must fulfill an efficient and effective role in all activities leading to the realization of above-mentioned objectives; and

- VIDS must have sustainable financial income to be able to finance the planned activities.

Programmes and Projects: *A Program of action* - VIDS will undertake the following activities to achieve the before mentioned objectives:

Objective 1: Constitutional reform

- 1.1. Intensify and support the process of awareness and consciousness with regard to the rights of indigenous peoples, in indigenous communities as well as in the larger Surinamese society and towards policy makers
- 1.2. Obtain legal advice regarding proposals for constitutional reform

Objective 2: Recognition of land rights, traditional authority structures and other rights

- 2.1. Promote or support discussions (workshops, seminars) on the content of eventual land rights and other indigenous peoples' rights
- 2.2. Design and implement projects aimed at the mapping of indigenous territories ('demarcation projects')
- 2.3. Design and implement projects aimed at obtaining legal advice regarding the recognition of land rights and other rights, including through the exchange of experiences with other indigenous peoples and organizations in other countries
- 2.4. Optimal participation of indigenous representatives in decentralization projects of the Government, in order to safeguard the recognition of traditional authority structures in the outcomes of these projects

Objective 3: Representation of indigenous peoples in relevant bodies

- 3.1. Capacity strengthening of indigenous representatives through training, exchange visits to other organizations or participation in national, regional and international meetings and other events.
- 3.2. Establish and maintain strategic contacts with relevant bodies and organizations

Objective 4: Processes for sustainable socio-economic and cultural development

- 4.1. Capacity strengthening for village organizations for the formulation, execution and other aspects of development projects
- 4.2. Organize, or support in the organization of an indigenous youth congress in Suriname for the identification and organization of educated and skilled indigenous resource persons
- 4.3. Logistic support, where necessary, of village organizations with the development and implementation of development projects
- 4.4. Continuous flows of information regarding project financing opportunities to village organizations
- 4.5. Critical guidance to non-indigenous organizations that have interior communities as their target group

Objective 5: Well-informed indigenous peoples

- 5.1. Maintain a communication network through two-way radio senders and other means of communication
- 5.2. Enlarge the reach of Radio Galibi (FM radio station) and stimulate the establishment of similar radio stations in other places in the interior
- 5.3. Distribute an information bulletin
- 5.4. Establish a library
- 5.5. Strengthen the capacity of VIDS board members, including through training, participation in workshops and other meetings, regular discussion and board meetings

Objective 6: Effective and efficient Bureau (secretariat)

- 6.1. Establish a VIDS secretariat with its own legal personality in the form of a foundation ("Foundation Bureau VIDS")
- 6.2. Recruit for the Bureau at least a project manager, office manager and administrative assistant
- 6.3. Equip the Bureau adequately with facilities for the support of above-mentioned activities, including computer and Internet facilities, two-way radio sender, transport vehicle, library
- 6.4. Strengthen the capacity of the Bureau personnel in order to effectively support the activities of VIDS (training in project management, financial and other administration, communication strategies, networking with relevant organizations, basic legal knowledge and the such)

Objective 7: Sustainable financial income

- 7.1. Develop and implement a resource mobilization strategy
- 7.2. Organize a donor coordination meeting
- 7.3. Initiate discussions regarding the establishment of a commercial, profitable indigenous enterprise
- 7.4. Actual establishment of such commercial indigenous enterprise

Source: Multi-annual Programme of the VIDS 2002-2006

Non-governmental Organizations: Decision-Making: The environmental NAOS have formed various fora such as the Platform Amazone Rainforest Suriname (PARS) and the Sustainable Farming Environmental Alliance (Milieubond). NAOS participate in national policies on an ad hoc basis.

Local Authorities: Status: Within the National Assembly, Agenda 21 may be known by title, but not by its content. However, the Government supports various national activities in line with Agenda 21 policies without there being part of a national policy on sustainable development. There are no local Agenda 21s in Suriname.

Workers and Trade Unions: Decision-Making: Within the Tripartite Council consisting of the representatives of the Government and employers' and employees' organizations, subjects such as safety, health, and reducing occupational accidents and injuries, etc. are broadly discussed, but not as part of an integral environmental policy network. Cooperation: Suriname does not have full information of the ILO Conventions.

Business and Industry: Decision-Making: The new Standard Mineral Act (1997) is the first known governmental initiative encouraging the concept of stewardship in management and use of natural resources by entrepreneurs. Two big enterprises have adopted sustainable development policies.

Scientific and Technological Community: Decision-Making: The Environmental Department has been established for education, research and international cooperation purposes. Capacity-Building, Education, Training and Awareness-Raising: Some efforts have been taken towards improving the exchange of knowledge and concerns between the scientific and technology community and the general public. There is a public environmental exhibition space at the University of Suriname.

Farmers: Status: Suriname does not yet have a tradition to promote and encourage sustainable farming practices and technologies. However, there are some encouraging initiatives such as the promotion of mixed farming systems in order to minimize the use of artificial fertilizers, and the import of organic fertilizers to which the farmers have reacted enthusiastically.

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CHAPTER 33: FINANCIAL RESOURCES AND MECHANISMS

Decision-Making: Funnelling financing through a proper development planning based on the Surinamese Sustainable Human Development processes is the main task of the Ministry of Planning and Development Cooperation. An appropriate and stable political environment is necessary for an efficient and effective fulfilment of this task. Only in such circumstances can a suitable sustainable resources management and resource use be achieved. *Strategies, Policies, and Plans:* The Government is also pursuing the policy of extending and diversifying the number of donors and of providing the country with the best possible technologies available. Although financing for donors mainly provide sustainable development, Suriname tries to finance as much as possible through the efforts of its own population. Donor coordination is necessary for the most efficient use of financial assistance. Donor-oriented assistance is very much appreciated when Suriname is on the verge of embarking on its own Sustainable Human Development Model. In addition, development of legislation and efficient law enforcement mechanisms together with participatory democracy and good and dynamic governance are necessary. The Government of Suriname has availed itself of the support of several donors to achieve these goals. The possible financial resources for development in Suriname are: public sector investments and direct foreign investments; and donor gifts and loans from multilateral institutions.

According to the information provided by our developing partners, the Netherlands, China and Japan and the multilateral organizations; IDB, EU, IsDP and the UNDP, the total amount for reserved funds(per June 2001) is 305.635.000 USD.

Foreign investments: Through the years private investors have shown an increased interest in Suriname. The number of foreign investors increased between 1990 and 2000 as compared to 1975-1989 and the period before 1975. Most foreign investors in 1990-2000 were from the USA (18%), followed by Trinidad & Tobago (14%), Canada (14%), China (14%) and the Netherlands (8%). Judging from the number of enterprises in 1990-2000, investors mainly focused on crude oil and mining (32%), forestry (17%) and financial services (15%).

Macroeconomic prospects (2001 - 2005): Medium-term projections assume that as a consequence of policy measures, large fiscal adjustment is accomplished and that alumina prices and volumes each increase by an annual 2 percent. The price of crude oil is assumed to stay at current levels, and production to grow by 10 percent a year. The levels of grants and direct foreign investments are also assumed to gradually rise, and external borrowing to be avoided, unless covered by Dutch guarantee funds.

As a result, interest rates will decline, and net foreign assets (in months) will increase to 3 months of imports in 2002. The table shows an annual economic growth of 3 percent, declining inflation in 2002 and increasing local investments during this period. Stabilization of the economy will lead to improved prospects, attracting both domestic and foreign investors. Private investments are projected to increase from 13.8% in 2001 to 15.5% in 2005. On the long run, financial sector reform will increase the efficiency of private investments financed by the banking system. Privatization of the least efficient public enterprises will boost the productivity of their assets. Higher levels of more productive investment and financial stability will increase the rate of growth.

GDP growth is expected to increase in the 2001-2005 period . The increase will amount to 4% in 2005. Per capita income is also expected to rise from USD 2248 in 2001 to USD 2465 in 2005. *Source: MDP 2001-2005*

Programmes and Projects: No information available.

Status: Status of the MDP 2001-2005 per September 4, 2001- The MDP has already been approved by the Council of Ministers. The State Council debates on the MDP are currently underway. The State Council is a high level advisory body headed by the President of Suriname, in which representatives of political parties, labor unions and the private sector participate. Its tasks also include checks of draft legislation on compatibility with the Constitution. Once the MDP has passed the State Council, it goes to the National Assembly for debate and approval. Following the inclusion of all approved comments and changes, the MDP becomes a law that is to be observed during the entire five-year administrative period. The National Assembly is formally entrusted with monitoring implementation of the MDP. The government submits its annual budget, based on the MDP, which

includes an annual public sector investment program (Jaarplan), which must be consistent with the MDP, for approval to the National Assembly.

Challenges: Suriname is endowed with a very good natural resource base, comprising substantial bauxite reserves, extensive tropical forests, fertile soils in the coastal areas, large and mostly unexploited resources of gold, kaolin and dimension stones, and very good water and air quality. The revenues generated by Suriname are very low at the moment, and, for the greater part, still generated by bauxite operations. Agricultural and other production-oriented activities are at a very low level. This, together with the so far heavily import-oriented economy, has limited Suriname's capacity to finance its economic, social, human and environmental development. Therefore, donor-oriented assistance is very much appreciated when Suriname is on the verge of embarking on its own Sustainable Human Development Model. In addition, development of legislation and efficient law enforcement mechanisms together with participatory democracy and good and dynamic governance are necessary. The Government of Suriname has availed itself of the support of several donors to achieve these goals.

[For information on participating States in the Global Environment Facility, click here:](#)

[For information about issues and projects in Latin America and the Caribbean from the World Bank, click here:](#)

Capacity-Building, Education, Training and Awareness-Raising: No information available.

Information: No information available.

Research and Technologies: No information available.

Cooperation: See under **Decision-Making**.

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CHAPTER 35: SCIENCE FOR SUSTAINABLE DEVELOPMENT

Decision-Making: No information available.

Programmes and Projects: No information available.

Status: No information available.

Capacity-Building, Education, Training and Awareness-Raising: No information available.

Information: No information available.

Research and Technologies: No information available.

Financing: No information available.

Cooperation: No information available.

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CHAPTER 36: PROMOTING EDUCATION, PUBLIC AWARENESS AND TRAINING

Decision-Making: The Ministry of Planning and Development Cooperation and the University of Suriname together with the Ministry of Education and Human development are the key bodies responsible for decision-making. A comprehensive educational framework is being prepared. The Surinamese Sustainable Human Development Model (SSHDM) places the Surinamese people in the center. Investing in our own population and participatory democracy as well as in dynamic and active private and public sectors are important aspects of this approach. However, these goals can only be achieved when educational capabilities of the population as a whole are continuously being raised to an even higher level, especially development-oriented educational capabilities which consider technology the key to development.

Programmes and Projects: *Education reform* - Reform will focus on the improvement of efficiency, increase of social and geographical accessibility and increase of effectiveness. The Department of Education will dispose of unnecessary tasks and give schools more tasks and responsibilities on the basis of the community-based principle. In the framework of decentralization, schools, beginning with those at Junior and Senior Secondary Level (VOJ and VOS), will be liberalized by extending the authority of school leaders in the areas of maintenance and simple material provisions. Firstly, schools will be merged into larger administrative units, after which these units will be turned into independent legal entities.

From the gender perspective, increased investments will be made in the development of the people, with special attention for youths of both sexes in disadvantaged situations, as the best guarantee for sustainable economic development and social justice. In this, efforts of youths will be made visible, while obstacles to their development will be eliminated. Based on the results of a gender analysis of the educational system, measures will be taken to increase participation of both boys and girls. Schooling in the afternoons and evenings will be adjusted and increased in such a way that youths, drop-outs from regular education and adults will have more options to realize their study plans.

Measures to increase efficiency: In order to let education proceed smoothly and to increase its efficiency, supporting Departments such as Curriculum Development, Inspection, Counseling, Examination Bureau, Research and Planning and the Bureau International Relations will be strengthened. In this framework, steps will also be taken to computerize the Ministry's entire administration. In this way, the Ministry will be better able to turn the available rough data into information to assist in the assessment of policy and to conduct a rational management of personnel and students. Besides that, it will be possible to conduct good analyses of financial and study results. In order to increase accessibility of higher education, boarding houses will be built in several centers in the interior to accommodate students. In cooperation with the special services and with the Ministries of Regional Development, Social Affairs, Health, Internal Affairs, Justice and Police and Defense, among others, the so-called nucleus system will be introduced. Under this system, centers will be established in designated geographical areas to provide services to surrounding villages.

In order to increase internal effectiveness, which means the flow of pupils, improvement of availability and quality of teachers will be one of the measures that will be implemented.

In order to make education more child-friendly and result-oriented; all training of teachers will be restructured. The Institute for Advanced Teacher Training (IOL), which directly and indirectly provides the teachers for elementary and secondary schools, will be strengthened institutionally, in order to eliminate the shortage of qualified teachers at secondary level. The transformation of this college to a university-level institute in the mid-term will be considered. Full- day schooling is preferred in the training of teachers, while it is the intention to spread evening schooling for teachers over sufficient years. Through refresher courses and other means, teachers will continually be provided with the knowledge, skills and attitudes that are necessary to do a good job. Consequently, a mechanism will be established for permanent training and schooling of teachers.

All forms of vocational training and education will be re-evaluated and restructured in order to meet the real need for trained and skilled workers for national production and services. The National Institute for Schooling, Labor

and Profession (NISAB) will be re-activated. This institute, in which the government, business, and labor participate, must bring lower and secondary vocational education in line with the qualitative and quantitative needs of the labor market. Lower agricultural education will be re-introduced as one of the subjects at lower vocational schools. The advanced elementary education (MULO) will be evaluated on the viability of its goals and on a possible need for a partial change into vocational education or training.

(Source; MDP 2001-2005)

Status: Educational and environmental development is expensive. Therefore, the optimization of economic, social, human and environmental development is important. The still untouched vast natural resource base of Suriname constitutes a very high potential for financing the components of the SSHDM. However, the use of natural resources has to be done in accordance with the sustainable resource management and resource use system, which call for proper policies and research.

Capacity-Building, Education, Training and Awareness-Raising: See under **Programmes and Projects**.

Information:

Educational indicators			
Literacy (%)	90.8 (1980)	93 95(m), 91.6 (f)	95
Repetition rate (%)	20	25 (primary school)	20
Dropout rate (%)	26 (1980)	7 (primary school) 17 (junior secondary)	5 (primary school) 15 (junior secondary)

Research and Technologies: No information available.

Financing: See under **Cooperation**.

Cooperation: With regard to capacity-building and technological development in this field, Suriname has established contacts with different universities in Europe, USA and the Caribbean Region. Within the more comprehensive educational framework currently in preparation, a more effective and efficient capacity-building and technology transfer can be effectuated. Suriname is also a member of the Caribbean Council for Science and Technology. Financing for these issues comes mainly from donors.

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CHAPTER 37: NATIONAL MECHANISMS AND INTERNATIONAL COOPERATION FOR CAPACITY-BUILDING IN DEVELOPING COUNTRIES

This issue has been covered under the heading **Cooperation** in the various chapters of this Profile.

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CHAPTER 38: INTERNATIONAL INSTITUTIONAL ARRANGEMENTS

This issue deals mainly with activities undertaken by the UN System.

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CHAPTER 39: INTERNATIONAL LEGAL INSTRUMENTS AND MECHANISMS

This issue has been covered under **Decision Making** and **Cooperation** in the various chapters of this Profile. However, you will find below a list of International Legal Instruments.

International legal instruments relevant to sustainable development include:

- The Amazon Cooperation Treaty;
- The principles of the United Nations Conference on Trade and Development (UNCTAD);
- The Summits of the Americas; and
- A treaty between Suriname and Brazil concerning friendship, cooperation and commerce. The Parties will closely cooperate to create a rational strategy for the conservation of flora and fauna in the border areas.

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CHAPTER 40: INFORMATION FOR DECISION-MAKING

This issue has been covered either under **Chapter 8** or under the headings **Decision-Making** and **Information** in the various chapters of this Profile.

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INDUSTRY

Decision-Making: No information available.

Programmes and Projects: No information available.

Status: No information available.

Capacity-Building, Education, Training and Awareness-Raising: No information available.

Information: No information available.

Research and Technologies: No information available.

Financing: No information available.

Cooperation: No information available.

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SUSTAINABLE TOURISM

Potential: By any measure Suriname enjoys raw tourism resources of the highest quality – including vast tracts of wilderness, large pristine river systems, extremely productive coastal ecosystems and unique cultural and historic attractions. The country’s ecosystems provide habitat for a number of species – Cock-of-the-Rock, Giant River Otter, and four species of sea turtle - which provide specialty tourism attractions. Suriname was an early tropical nature-based tourism destination when it attracted significant international bird watching tourism in the 1970s. The country’s unusual mix of African, Asian, European and indigenous Amerindian cultures, including great diversity of cuisine, religion, language, music and festivals contribute further to Suriname’s enormous tourism potential. The Maroon cultures of Suriname in particular are truly unique in the world. Complex and fascinating history is told in the structure and character of Suriname’s human settlements. Paramaribo retains hundreds of historic structures, some dating from the 17th Century.

These resources - the relative safety of the country, reliable infrastructure and utilities, widely spoken English and proximity to important nature and cultural tourism source markets in North America and Europe - offer significant opportunities for Suriname to develop specialty tourism of considerable value in the near future.

The type of tourism resources Suriname possesses – history, culture, and pristine nature are widely dispersed geographically and socially. Those dispersed resources provide numerous and varied opportunities for participation by a wide range of Surinamese entrepreneurs, small businesses and rural communities. Tourism is unique in that it can bring economic opportunities directly to the people who most lack them – the isolated communities of the interior. Through sustainable tourism, the Surinamese people can directly enjoy the economic benefits of their resources, in turn becoming the strongest advocates for their conservation and leading ultimately to a sustainable economic future.

Existing international tourism to Suriname is small and stagnant. Only a few thousand people travel as tourists to the country’s interior annually. Suriname does not have an image as a tourism destination anywhere except Holland, where it has a negative image. Tourism related businesses in Paramaribo are marginally profitable. For facilities in the interior, occupancy rates in the single digits are the norm and they struggle to survive. Currently there is little to encourage further private sector investment in tourism, but the quality of the tourism product must be developed if the market is to grow significantly.

Yet Suriname’s tourism industry is much more limited by imagination than by the quality of the raw tourism resources themselves, capital investment potential of the private sector or the government’s policies. This project is based on the principle that by investing the relatively small resources required to create two models of success, tourism will begin on a self-generating path of growth carried forward by the private sector.

Decision-Making: Suriname enjoys the lowest population density and the highest percent of remaining rainforest cover of any moist tropical nation on Earth. In 1998 Suriname moved to protect their enviable status by creating the Central Suriname Nature Reserve (CSNR) – a wilderness protected area of over 1.6 million hectares – one and a half times the size of Jamaica and covering 10% on the land surface of the country. In order to develop tangible benefits from expanding conserved areas and to ensure their long-term protection, direct economic benefits from conservation must be developed. Unlike any other option, tourism provides the opportunity for Suriname to benefit from the nation’s resources while at the same time conserving them.

Given Suriname’s small and narrow economic base (80% of 1999’s foreign exchange earnings of \$470 million came from bauxite), ecotourism has the potential to become an important engine for economic growth and development and a leading foreign exchange earner in a short period of time. Specialty tourism is an ideal economic activity for Suriname because of the opportunities it provides for economic participation in this country where private sector enterprise opportunities are limited (40% of the country’s labor force is directly employed by government and another 20% by parastatials). Furthermore, all of the leading economic activities (mining, oil, rice farming, shrimp and fisheries) require significant capital investment and are therefore accessible to few.

Programmes and Projects: In 2000, the IDB awarded CIS a project design non-reimbursable loan of US\$135,000 to carry out the *Tourism Development and Conservation Promotion Program*. That program involved 25 international experts and 60 Surinamese stakeholders in a planning charette that resulted in the publication, “The Suriname Tourism Development Assessment and Guide”. The analysis and project design activities carried out under that program have provided a strong strategic and conceptual basis for the activities to be performed under the *Suriname Sustainable Tourism Development Project*. In addition, other ongoing activities of CIS in the CSNR (e.g. management planning, baseline biological and socioeconomic assessments) and the Upper Suriname River (small grants, bioprospecting, tourism development support) will provide a strong framework for detailed project design, implementation, and monitoring and evaluation.

The primary objective of the proposed *Suriname Sustainable Tourism Development (SSTD) Project* is to kick-start Suriname’s fledgling tourism industry, catalyzing the rapid growth of the tourism private sector and, as a result, significantly impacting the Suriname economy. As with all successful tourism development, it will have at its core the development of tourism products that successfully address the mixture of functional, aesthetic, symbolic and psychological aspects necessary to provide a compelling visitor experience. The project will achieve this by creating strong international-quality anchor attractions in the CSNR and USR, supporting the integrated development of numerous aspects of those products: including small business start-up and development support, training and technical support, interpretive development, targeted marketing and model infrastructural development. The project will begin immediately marketing Suriname as a specialty tourism destination to targeted international niche markets – birdwatchers, wilderness river trippers and cultural ecotourists. Interpretive and infrastructure development will proceed simultaneously, to begin improving the product and the level of satisfaction of these initial tourists. The project will support the development of Suriname’s inbound tourism industry, enabling it to become the principal engines and beneficiaries of the growth of tourism.

Geographic Focus: The project will maintain a strong geographic focus for its interventions in order to ensure that the quality of the visitor experience of the two targeted products will be adequately developed to meet international standards. Support to the private sector will also be focused in these two geographic areas and in a third targeted sub-sector: 1) community-based products and services in the Upper Suriname River; 2) business support in the privatization of aspects of tourism product development in the Central Suriname Nature Reserve – especially facilities management, service provision and tour operating; and 3) crafts industry support.

Status: Present Conditions - Despite spectacular raw tourism resources, Suriname does not yet possess a single tourism product that meets the demands of international tourists. Suriname’s policy makers are not convinced of the potential of tourism and those working in the fledgling tourism industry do not, for the most part, have a vision or strategy for turning their resources into internationally competitive products. Suriname’s tourism industry is handicapped by the model of the two stagnant existing markets – the Paramaribo elite and Dutch family and friends seeking weekend recreation (picnicking, fishing and river bathing) in the “interior” – and a nearly complete lack of knowledge of the products being offered by other tropical destinations in the Americas. As of yet the concept of community tourism is in its infancy in Suriname – with no good working model yet in place. Within Suriname there is little recognition or understanding of what is unique and interesting and attractive about Suriname to the foreign tourist.

Capacity-Building, Education, Training and Awareness-Raising: No information available.

Information: No information available.

Research and Technologies: No information available.

Financing: No information available.

Cooperation: No information available.