

SEYCHELLES NATIONAL REPORT ON THE IMPLEMENTATION OF THE UNITED NATIONS CONVENTION TO COMBAT DESERTIFICATION



REPORT PREPARED AND SUBMITTED BY

**THE GOVERNMENT OF SEYCHELLES FOR CONSIDERATION
BY THE COMMITTEE TO REVIEW THE IMPLEMENTATION OF
THE CONVENTION TO COMBAT DESERTIFICATION (UNCCD)
IN THOSE COUNTRIES EXPERIENCING SERIOUS DROUGHT
AND/OR DESERTIFICATION, PARTICULARLY IN AFRICA.**



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1.0 Executive Summary

1.1. Focal Point Institution

Name of Focal Point	Mr. Didier Dogley
Address including email address	National Botanical Garden Mont Fleuri P.O. Box 445 Fax number: (++248) 22 55 98 Email: d.dogley@env.gov.sc or didierD21@hotmail.com
Country specific websites relating to desertification and land degradation	http://www.env.gov.sc

1.2 Status of NAP

Seychelles has not yet prepared its NAP. It is currently preparing a project under the LDC and SIDS Targeted Portfolio Approach for Capacity Development and Mainstreaming of Sustainable Land Management for submission to GEF to seek funding under the GEF operational program: OP 15. These extra funding will enable Seychelles to prepare its NAP.

1.3 Member of SRAP/RAP

Name of subregional and/or regional cooperation framework		Involvement specifically in topics such as water harvesting techniques, soil erosion etc.
1.	SADC	SIMDAS, Integrated Research Project on Land- water -Ecosystem Management; funded by UNESCO and managed by University of Botswana (HOORC)
2.	Indian Ocean Commission	Coastal and watershed Management Project Proposal. It is still in the drafting stage

1.4 Composition of National Coordination Body

Name of institution		Government	NGO	Private sector	Gender
1.	Department of Natural Resources	√			M
2.	Department of Environment(Forestry)	√			M
3.	Department of Environment (Conservation of Wildlife)	√			M
4.	National Meteorological Services	√			M
5.	Seychelles Island Fund		√		M
6.	Seychelles Island Development	√			M
7.	Praslin Development Fund		√		M
8.	Farmers Association		√		M
9.	Plant conservation Action group		√		F
10.	Department of Land use	√			M

1.5 Total Number of NGOs accredited to the Process

Seychelles being a small island state has only a limited number of NGOs. Therefore there is no real need to establish an NGO National Coordinating Body. This in itself will create more bureaucracy and duplication of efforts and may be detrimental to the whole consultative and participatory process. The most important NGOs active in environmental and land degradation related issues are already represented on the National Coordinating Body. In Seychelles, this system has been tried for various conventions and national development issues and has been found to very effective. It is important to note that NGOs represent 40 percent of the organizations represented on the National Coordinating Body.

1.6 Total number of acts and laws passed relating to the UNCCD

1.6.1 Five most important ones:

Title of Law		Date of Adoption
1.	Town and Country Planning Act	1972 (not under review)
2.	Environment Protection Act	1994
3.	Breadfruit and other trees (Protection) Act	1917 (currently being reviewed)
4.	State Land and Rivers Reserves Act	1991
5.	National Park and Nature Conservancy Act	1972

1.7 The Consultative Process.

1.7.1 Existing Partnerships/projects agreements initiated or concluded within the framework of the UNCCD.

Seychelles has not yet entered into and has not initiated any partnership agreements. It still has to develop its National Action Plan and Medium Term investment Plan.

1.7.2 List of consultative meetings on UNCCD implementation.

Seychelles has not been involved in any consultative meetings on the implementation of the UNCCD.

1.8 Name of 10 projects currently under implementation which are directly or indirectly related to UNCCD.

Name of Project	Project implemented within the framework of the NAP/SRAP/RAP?	Project implemented within the framework of...	Time frame	Partners involved	Overall budget/ US\$
1. LDC and SIDs Targeted Portfolio approach for capacity development and mainstreaming of sustainable land Management	NAP	UNCCD GEF OP15-SP1	2005-2008	UNDP	800 000
2. Integrated Ecosystem Management in Seychelles.	None of the above	CBD GEF OP#12	2005-2015	UNDP	6 000 000
3. NEPAD-CAAP bankable project Profile	None of the above	FAO NEPAD	Nov. 2003- Nov. 2004	FAO NEPAD	120 000
4. SIMDAS, Integrated Research Project on Land - water – Ecosystem Management.	SRAP	UNESCO	2004-2011	UNESCO University of Botswana	560 000
5. FFM project Island restoration Project	None of above	CBD National Environment protection programme		FFEM ICS ¹ ETF ² GOS ³	800 000
6. Rehabilitation of coastal	None of the above		2005-2009	GOS	20 000

ecosystem					
7. Management of Morne Seychellois national park	None of the above	National Environment protection programme		GOS	15 000
8. Rehabilitation and upgrading of Le Niol treatment work(water)	None of the above	Upgrading of National Water supplies	On-going	GOS	2 000 000
9. Sea water Desalination plants (4 plants on 3 islands)	None of the above National Water supplies		On-going	GOS	30 000 000

ICS¹ : Island Conservation Society, a local environmental NGO

ETF²: Environmental Trust Fund finances local environment projects

GOS³: Government of Seychelles. Its involvement is through the various Ministries and national agencies.

2.0 Strategies and priorities established within the framework of sustainable development plans and/ or policies.

2.1 Introduction

The 1993 Constitution of Seychelles defines access to a clean, healthy and ecologically balanced environment as a basic right of all Seychellois. In Seychelles the protected areas represent 47 % of the total land area. Sites and habitats have been provided with greater protection with the promulgation of two new protected areas and designation of about 370 areas as "Sensitive Areas". The Environment Protection (Impact Assessment) Regulations, 1996, lists 304 sites of high ecological and morphological value, where development will be limited.

The continuous efforts by the Government of Seychelles to conserve and protect its natural heritage through a strong policy of sustainable development are well known and accepted internationally. The Government of Seychelles has pledged to continue to make significant investments in the conservation and sustainable use of its natural resources and related biodiversity and ecosystems. However, national resources are not sufficient to achieve effectiveness and sustainability in the long-term management and utilization of natural resources including the conservation of globally unique and threatened ecosystems and the management of its coastal resources. Whilst Seychelles may have

one of the highest per capita investments in environmental management, there is still a great need for more participation by international agencies, donors, local private sector, NGOs and civil society in environmental management.

Although, Seychelles became a party to the convention in 1996, its involvement as a party has been relatively low. Seychelles has not yet prepared its NAP and it was only recently, that a request was made to the secretariat for technical and financial assistance for it to prepare its National Action Plan. At the national level there is several important policy documents which cover the main thematic areas covered under the UNCCD. Most of these will be covered under the various headings further on in the report. However, the most important of these is the Environment Management Plan of Seychelles or the EMPS 2000-2010, which covers all development Sectors in the country.

2.2 Environment Management Plan of Seychelles or EMPS.

With the realization of the importance of the environment to the main economic sectors, it was decided that sustainable development was paramount to the long term development of Seychelles. The first EMPS 1990-2000 provided decision makers with a valuable instrument for measuring and planning sustainable development and its impact on the environment. The second EMPS 2000-2010 was prepared in 1999, with the assistance of World Bank (available at <http://www.env.gov.sc>). Its main goal was to address sustainable development in a planned and coherent manner but with a stronger involvement of all relevant stakeholders and with wide public consultation and participation.

2.3 The Strategies and priorities established within the framework of the Environment Management Plan (2000-2010) and other policy documents.

The main principle governing the preparation of the EMPS 2000-2010 is to treat all development issues in a holistic manner closely linked to both the physical and living components of the environment to ensure sustainability. Mechanisms have been built in to involve the broadest possible participation by civil society and the public sector to ensure transparency, accountability, good governance and equity. After long consultations 10 thematic areas were chosen to cover all major social and economic sectors and others, which were felt to be cross cutting were also included as such.

Within the Context of the EMPS 2000-2010 prioritization was done by all the working groups as a team exercise and ranking was done according to programmes and not

according to sectors. A set of clear criteria was provided to rate the various programmes. Land Use and Coastal Zone Management, Integrated Forest Protection and Sustainable Agriculture, Energy Conservation and Renewable Energy and Watershed Management programmes, all belonging to the UNCCD main thematic areas, were all rated as high priority.

2.4 Vision 21 + Ecotourism policy

The strategy includes environmental codes of conduct, the development of eco-trails, the necessity for EIAs for tourism development projects, community projects, 'green' tourism infrastructure, alternative sources of water (desalination), etc. Tourism developments affect biodiversity both directly (habitat encroachment) and indirectly (changes in water tables, water courses, pollution, etc.)

2.5 National Land Use Plan (PAT)

The National Land Use Plan or Plan d'Aménagement du Territoire (PAT) was finalised in 1992 to address development needs for the three main inhabited islands of Seychelles. Detailed district development plans are being developed but those plans do not cover the whole of a district and only a few districts are being covered. The National Land Use Plan is currently under review. One problem with this policy document relating to land use is that it was never made into a legal document. Decisions affecting biodiversity, agriculture and land degradation directly or indirectly can be made without recourse to legal processes.

2.6 International conventions

Seychelles is party to several international conventions relating directly to biodiversity, including the CBD, the Stockholm Convention, CITES and the Nairobi Convention, with programmes actively supporting them (e.g. the production of NBSAP in 1997, the EMPS 2000-2010, updated legislation with respect to CITES listed species, the current production of a plant conservation strategy). Within the Department of Environment a Unit has been set up to coordinate all activities related to conventions.

2.7 Relevant strategies and priorities established within the land use and land management programme area.

2.7.1. Introduction;

Compared to other developing countries, a significant proportion of the islands are urbanized. Economic activities and other forms of development are concentrated mostly on the narrow coastal plains of the three main islands, particularly Mahé which has about 90 % of the population. Of this, some 40% is located on the east coast a belt of 7 km by 1 km. The population density of Victoria increased from 450 people per square kilometer in the late 1980s to 519 people per square kilometer in 1994. The current national population density is 178 people per square kilometer for the whole of Seychelles.

Land in Seychelles is subject to severe competition amongst potentially conflicting uses. The current physical planning system, effective and efficient in the past, is showing increasing signs of strain brought about by increased economic activity that is having to be managed within the confines of a legal, technological and administrative framework which has remained virtually unchanged for close to 25 years.

The scarcity of land has prompted the reclamation from the sea of more than 500 hectares of land on the North East of Mahé. The total land area is for phases I and II. Together with the lack of adequate infrastructure in the South of Mahé, this has reinforced the imbalance of population on Mahé, with the northern region receiving 61% of population and growth (PAT, 1992)

2.7.2 Relevant strategies and Priorities

Many of the supportive policies and policy instruments for the national and sustainable resource use and settlement planning are already in place and have contributed by a large measure to orderly development in Seychelles. These are, or have been six main planning and programming initiatives that have focused on the development of national assessments and strategies within a broader national and/or international framework (Micoock, 1996). Three of these, the National Development Plan 1989-1994, the National Land Use Plan (PAT) and the Seychelles Environment Management Plan (EMPS) 1990-2000 together constituted a single integrated national strategy for achieving sustainable development. One of the EMPS management priority areas is to prepare a programme to implement the new Plans, emphasizing consolidated zoning in line with guidelines and

restricting development in sensitive, protected and areas of high altitude, as well as redirecting growth (another is to areas is to develop sustainable financial mechanisms for land use and coastal zone management). The PAT, the first of its kind, remedied a major deficiency in the planning system by providing a framework for rational, orderly and sustainable development of land.

In spite of the acute shortage of land to meet the demands of development, the Government has maintained its conservationist approach to land use management. Many of the supportive policies and policy instruments for the rational and sustainable resource use and settlement planning are already in place and have contributed by a large measure to orderly development in Seychelles.

The Government has pursued a policy of providing every needy family with housing through home-ownership. The Statement and Strategy on Social Development for Seychelles Beyond 2000 aspires to reduce poverty through a Survey and Poverty Action Plan with a view that all persons can access the basic social amenities inclusive of housing. Housing has been one of the social sectors that traditionally have afforded a high priority by Government. By 1994, home ownership had increased to 68.5 % whilst private housing rental had decreased to 6.2%. The Government through the Ministry of Land Use and Habitats (MLUH) is providing some good quality housing but at low cost for the tenants to Seychellois needing families. A Government Land Bank project started in 1991 released around 2000 residential lots at subsidised price, fully serviced with roads, electricity and water, for private housing construction. This project was supported by low interest loan from Government.

These two projects have a real positive impact on the life of the ordinary and poorest citizens but have led to numerous residential developments on the hillside responsible for soil degradation and erosion problems due mainly to deforestation and badly planned terrace cutting.

2.8 Strategies and priorities related to climate change and water security.

In Seychelles the current demand for water has risen beyond the actual planned capacity of all the islands' reservoirs and the country is already experiencing severe water shortages during the dry months of the year. The maintenance of the water supply during dry periods requires the provision of substantial storage reservoirs. To date only

prominent water catchments, that of the Rochon River and a few minor ones has been exploited. Storage available in the existing La Gogue and Rochon reservoirs is inadequate to cater for the existing and future water demands. A total of 83% of the population (1994 Census) receive treated water supply.

The average per capita consumption of water on Mahé, the main island, is 140 litres a day which adds up to a total net demand of 14,500 kilolitres a day. The deficit between water supply and demand amounts to 4,141 kilolitres (kl) a day and will rise to 16,175 kl a day based on today's supply figures. The settings up of four desalination plants are to serve Seychelles until 2010 on the basis that demand for water consumption would grow at a rate of 6.5% per annum. However, as a result of increased demand from industries, the consumptions of water have surpassed all forecasts with an 18% growth in 2002 and 11% in 2003.

Seychelles main water management priority areas to rectify the present and future problems of sustainability in the water sector are:

- **Promote measures to reduce demand and increase conservation**
- **Promote sustainable measures to increase potable water supply to the population**
- **Establish effective integrated water management system**

To address adaptation and response strategies in the water resources sector, both supply adaptation and demand adaptation need to be considered. Supply adaptation implies management and planning for watershed management, infrastructure development, water distribution and water quality. Demand adaptation includes issues such as pricing policies, conservation and efficiency technology changes and land use planning.

2.9 Strategies and priorities within the agricultural sector and soil management.

The Agricultural Policy 1993-2003 relaunched private entrepreneurship in national agricultural production activities. Currently out of an area of about 2900 hectares with agricultural potential, 600 hectares are under some form of agricultural production although only about 200 hectares are under intensive cultivation. There are about 400 registered crop farmers, some 1500 legal pig farmers and 55 licensed poultry farmers.

The two major soil types of the Seychelles are very infertile and the upland soil is highly leached (mean annual rainfall of 2700 mm), on steep relief and is strongly eroded. High pests and diseases prevalence, low rainfall between May to September, an obvious migration of agricultural activities toward the slopes and high slurry output (50L/head of pig/day) pose additional threats to sustainable agricultural production. In an effort to mitigate the climatic, biological and the physical factors and to ensure high agricultural output per unit area cultivated about 100 tonnes of compounded fertilizer, 75 tonnes of fertigation fertilizers, 15 tonnes of pesticides, about 1000 tonnes of manure and 10^6 m³ irrigation water are consumed annually.

The agricultural sub-sector policy as reflected in the National Agricultural and Fisheries Policy 2003-2013 framework document and its Action Plan embodies the strategies and priorities for the sub-sector for the next decade and has as major objective the achievement of a higher national food security through sustainable agricultural development. It addresses seven areas of concern among which is agricultural land and the optimization of its use. In this regard, it proposes a number of mechanisms such as the renewal of the farming population through the introduction of young farmers, excising housing plots which are currently bound to agricultural land, the promotion and the adoption of technology for sustainable agricultural production, soil management etc.

Secondly, and probably more importantly, it proposes legislation for the protection of agricultural land with a view to secure all land with agricultural potential into a national agricultural land bank. A few of the remaining areas of focus of the agricultural sub-sector policy framework document address soil management both directly and indirectly, as for example through training of personnel in soil management at the tertiary level. Besides, the Biodiversity, Forestry and Agriculture thematic area of the EMPS 2000-2010 further emphasizes sustainable national agricultural development through sustainable soil management practices.

Land is a very finite resource in the Seychelles and it faces many competing ends. Agricultural land is either privately owned or the State leases to interested parties. In the former case, the lessee may lease for either a fixed monthly sum of money or may have a share cropping arrangement with the landowner. In the latter case, the lessee has a renewable lease and pays a nominal fee on a monthly basis, although the perennality of the lease is a function of the extent the lessee executes his agricultural development plan.

In both cases thus land tenure is an issue, as it is not guaranteed over an extended period of time.

In order to mitigate the effects of drought not only on the agricultural sector but also on the other sectors of the economy, high investments that characterize water capture, distribution and storage projects are required. Specifically, continuity of production in the agricultural sector can only be ensured through adequate water capture, storage and application. This calls for technology acquisition, evaluation, transfer and adoption, with necessary costs implications.

2.10 Strategies and priorities within the Forestry Sector.

The ever increasing impact of human activities on the forest environment has made conservation of natural resources, including forest biological diversity an urgent and critical issue over the past 20 years. This has been well reflected in the Environment Management Plan of Seychelles (EMPS) 2000 – 2010 where the forestry sector is well represented through five projects.

During that period, forest conservation has moved from being a focus of a relatively small group of forestry staff in the government and scientists to being a mainstream feature of national policy and planning. This has given rise to the existing forest policy which is based on the Seychelles Forest Management plan sector study prepared in 1993. The policy primarily emphasizes the protection of forested areas for biodiversity conservation and eco-tourism purposes and the sustainable management of plantations for timber production. This Forest policy also takes into account the National land use plan and macro-economic situations of the country, and it includes detailed analysis of the sector, proposals for sectoral objectives and strategies, and a proposal for a comprehensive development programme for the forest sector. The country's National Biodiversity Strategy and Action Plan was published in 1997, as part of Seychelles' commitments to the Convention on Biological Diversity, and also identifies priority areas for forest management. A forest Fire Contingency Plan has also been completed to improve the efficiency of dealing with forest fires in Seychelles.

In line with the EMPS, the NBSAP and the current National Forest Policy, the following areas are being considered as priority for strategic actions for implementation in line with UNCCD mandates:

1. The protection of forested areas for biodiversity conservation, eco-tourism purposes and watershed management.
2. The sustainable management of forest products
3. Strengthen research and capacity building for effective management regimes for biodiversity restoration of degraded land.
4. Enhance and strengthen capacity to implement best practices for forest threats management (i.e. Fire and Tree diseases).
5. Encourage partnership, networking in biodiversity restoration programmes through community based conservation (including investigating the feasibility of incentive approaches).
6. Review and strengthen legislation and enforcement protecting forest biological diversity.

2.11 Relevant strategies and priorities established within the Biodiversity focal area.

Within the EMPS 2000-2010 several thematic areas are important for biodiversity but the main one is the biodiversity sub-theme within the thematic area Biodiversity, Forestry and Agriculture. The aims are closely linked to NBSAP (see below). The aims which are of relevance to UNCCD relate to the restoration of habitat integrity through:

- Increasing *in situ* conservation (including control of alien invasive species and management systems for the drier outer islands).
- Strengthening of identification and monitoring of biodiversity.
- Strengthening *ex situ* conservation.
- Strengthening biodiversity research, capacity building, community partnership and networking.
- Protecting and conserving wetlands and promoting their importance as functioning ecosystems.

There are also links with several other thematic areas of the EMPS, such as Forestry and agriculture. Commerce-Industry-Production, Fisheries-Marine Resources, Tourism-Aesthetics, Land Use-Coastal Zones-Urbanisation, which include sustainable use of land and coastal resources, 'greener' practices within industry, eco-tourism development, infrastructure development and revision of legislation. The design of the EMPS is such that all programmes should lead to greater sustainability in biodiversity and land

management and therefore contribute towards implementing the convention. However, the impact of development sectors has often been negative in terms of biodiversity.

As mentioned above, the two national policies (NBSAP and EMPS) are closely interrelated. In NBSAP there is more emphasis on management and sustainable use of natural resources. Another main theme is the consolidation, harmonisation and revision of biodiversity legislation (including law enforcement), for the protection of threatened species and sensitive ecosystems. The implementation of the Strategy has, however, been somewhat limited, except through the EMPS programmes. As a result of further decisions within the Convention on Biological Diversity (CBD), Seychelles is currently in the process of finalising a National Strategy for Plant Conservation and the NBSAP add-on with support from UNEP, which will include issues pertinent to UNCCD.

The objective of the National Wetlands Policy is to protect and conserve wetlands and promote their importance as natural functioning ecosystems. It aims to reverse the trend in loss, modification and degradation of wetlands. This policy has yet to be endorsed by the Government. Its adoption will have a significant beneficial effect on wetland biodiversity and on water tables, particularly in lowland areas.

Additional priorities within the biodiversity focal area are to streamline data collection and management, and to ensure sustainable management of outer islands' biodiversity.

3.0 Institutional measures taken to implement the Convention, including legislative and institutional frameworks and arrangements, linkages and synergies with other environmental conventions and as appropriate, with national development strategies.

3.1 Supportive Institutional Framework and measures taken to address land Use issues.

The Ministry of Land Use and Habitat (MLUH) is the umbrella ministry to the land use sector but in collaboration with the Ministries in charge of Local Government, Environment and Natural Resources, and Tourism. The MLUH provides information on land use, manages the state land, provides housing, to monitor development and assist the Planning Authority in its responsibilities. Like other ministries the MLUH is shifting its role from provider to facilitator.

The Planning Authority is a board composed of high level representatives from ministries and other organizations. It has the responsibility to approve Building Permissions, prepare Architectural Guidelines and Land Use Plans. Through time this Authority has been mainly concentrating on Building Permissions approval. Every construction in the Seychelles has to receive a Green Card from the Division of Environment and the approval of the Planning Authority or it has to be approved by the Minister for MLUH under Section 10. On case by case basis development has been well controlled but a global vision is lacking.

A National Geographical Information Systems (GIS) in 1993 was put in place to assist the decision making in Land Use Planning. In the mid 1990s a National Centre for GIS opened its doors in the Ministry of Community Development (MCD) which is now known as MLUH. This system has been used in different areas like planning, cadastral, terrain modeling and recently applied in a study with regards to flooding in various districts.

3.2. Legislative and regulatory Framework

With time different Acts have been voted by the National Assembly to manage land use development. The most powerful of these Acts of relevance to land use and terrestrial development is the Town & Country Planning Act of 1972, which requires that permission for all forms of terrestrial development. The EMPS (1990-2000) first raised the need for EIAs. As a result the Environmental Protection Act (EPA) was enacted in 1994 including EIA regulations. To date several guidelines have been published and any development is subjected to an EIA. In addition to the regulation, an Atlas of Sensitive Zones, published by the Ministry of Environment in 1998, is also utilized when assessing development. Other Acts are relevant like the Breadfruit and other Trees (Protection) Act, the Lighting of Fire (Restriction) Act and the National Parks and Nature Conservancy Act.

3.3 Policy, Institutional, Legal and Regulatory Framework related to climate change and water security

Government has formulated a policy on water, which aims at providing 95% of the population with potable water by the year 2010. Today; about 20% of the population still uses untreated water. Development in the upper hills is polluting watercourses and catchments. It is furthermore obvious that there already exists a shortage of supply of water during drought periods. Being aware of the situation, Government has studied the

situation very carefully with the assistance of consultants, in particular Sir Alexander GIBB & Partners, over the last decade. Notable were studies for a dam at Grand Anse, Mahe and the feasibility of converting an existing brackish water lagoon to a fresh water lagoon. Both concepts were not implemented due to financial and environmental considerations. The setting up of the **National Climate Change Committee** within the Ministry of Environment and Natural Resources coordinates the development and implementation of the national climate programme, as well as acting as the interface between the national climate programme, government and the private sector. Seychelles as a Party to the UNFCCC had prepared its **Initial National Communication** to the **United Nations Framework Convention on Climate Change (UNFCCC)**. This incorporates strategies for human resource, scientific, technical and institutional capacity building. It also stipulates vulnerability and impact assessment, disaster preparedness, adaptation options, technology transfer to reduce the severity of land degradation from extreme weather events and stresses adaptation options and mitigating the effects of climate change on land degradation.

The **Water, Sanitation and Waste** thematic area in the **Environment Management Plan Seychelles (EMPS) 2000-2010** has as objectives to reduce water demand, to improve water supply and to promote an effective integrated water management system on the more important inhabited islands. The support programmes comprise of: i) water demand management, ii) installation of desalination plants, iii) improvements of safe yields of existing water sources, iv) improvements to transmission/reticulation system, v) improvements to water treatment works, vi) water management institution and human resources capacity building and vii) watershed management.

The main institution involved in water resources management is the Public Utilities Corporation (PUC), which is responsible for the provision of safe drinking water to the populace. Other relevant institutions are the Ministry of Environment and Natural Resources, Ministry of Health and Ministry of Land Use and Habitat. Water tariffs are uniformly established for the whole country.

The Water Division of PUC manages all national water resources, allocates abstraction rights and it is the main body that undertakes all national capital water supply projects. A Water Management Board was supposed to be set up as laid down in the EMPS 2000-2010 and will have as one of its mandates to introduce and enforce legislation related to

measures for water conservation, such as to include water tanks on new housing and industrial infrastructure. So far this is yet to be materialised.

The Rivers' Committee handles communal and private issues pertaining to water abstraction and the Ministry of Environment and Natural Resources administers a number of small reservoirs and communal irrigation water distribution systems whereas the National Meteorological Services (NMS) has the responsibility to issue climate prediction and early warning system in cases of extreme weather events.

3.4 Legal Framework

The most important legislation that protects rivers, catchment areas and regulate the tapping of water is the Stateland and Rivers Act (1991), the Breadfruit and other Trees (Protection) Act and the Environment Protection Act (1994).

One of the achievements in dealing with the climate change issues is the setting up of the National Climate Change Committee which encompasses different representatives of government agencies and private sector. Other achievements have been mainly on the **promotion of sustainable measures to increase potable water supply to the population.** This was achieved partially by:

- The setting up of four desalinations plants to serve Seychelles until 2010 on the basis that demand for water consumption would grow at a rate of 6.5% per annum.
- Improving Mahé water distribution costing SR 4.4M
- Rehabilitation and upgrading of Le Niole Treatment works costing SR 9.2 M
- Implementing the La Digue Water Supply Project at a cost of SR 6.9 M
- Implementing Praslin water supply phase II costing SR 1.22M.
- Implementing South Mahé transmission pipeline network

3.5. Institutional measures taken to implement the Convention within the agricultural sector.

3.5.1 Measures taken

Based on local research done by the Department of Natural Resources(Agriculture and Fisheries) applying between 20-30 tonnes per hectare of any well decomposed organic matter either as compost or farmyard manure optimizes the water holding capacity of the

soil; improve its aeration etc among a host of other benefits which promote good soil management. By and large, both soil types of the Seychelles benefit significantly from practices that improve both their physical and chemical characteristics.

Terracing along the contour on upland soil is a mandatory cultural practice in place for well over fifty years in the Seychelles and allows for sustainable exploitation of that particular soil type for agricultural production. The terraces tilt inwards along the contour of the slopes and their faces are planted with grass with a view to limit the soil erosion especially under intense rainfall conditions.

Seychelles through funding from the African Development Bank (AfDB) has also invested considerably in water facilities for irrigation purposes. There is a Farmers Training Centre which provides one or two year certificate training for pre-service candidates, as well as specialized short term training in a range of topics for in-service candidates.

By and large, both soil types benefit significantly from practices that improve both their physical and chemical characteristics. Seychelles through funding from AfDB has also invested considerably in water facilities for irrigation purposes. There is a Farmers Training Centre and school children are provided with basic agricultural skills at both primary and secondary level.

3.5.2 Legal Framework of the agricultural sector.

Some legal frameworks related to the exploitation of fresh water might come to bear on the overall aspects of national agricultural production. The Rivers' Committee, a statutory body that handles communal and private issues pertaining to water abstraction, should include more than one representative from the agricultural sector. Additionally, there is a need to set up a Water Management Board with a view to effect sustainable water use through sustainable land management. It would define the amount of the national water reserves that should be allocated to national agricultural production through the joint exploitation of rivers, streams, boreholes and the use of recycled water (either from animal rearing activity or of household origin) for food production. This would gain even greater significance under the forecast of more extreme weather events. Inevitably, a number of the above undertakings would involve cross- sectoral collaborations for example the use of national water reserves would involve the Water Division of PUC.

Safeguarding national agricultural land through legislation and the development of an agricultural land bank would be of national significance in view of strong competition from other competing development sectors. Indeed, in a general manner there is a need to review and update all legislation that have a bearing on sustainable agricultural production.

3.5.3 Institutional Framework within the agricultural sector:

The Ministry of Environment and Natural Resources is the umbrella ministry to the agricultural sector. It provides adequate institutional support to the food producers through various services offered at cost or for free. It also works closely with the Farmers Associations. It enhances the congregation of food producers into associations especially for marketing strength, regional and international exchanges for collaborative benefits sharing. It provides loans through the Development Bank at low interest rates and with long grace periods. There are continuous interactions of the ministry's field agents with the food producers to provide guidance. The Farmers' Training Centre provides formal and informal training to established and potential farmers. There are regular field demonstrations, a national horticultural and agricultural show, workshops, audio-visual programmes that combine sustainable agricultural production with sustainable soil management. This has the net overall effect of increasing employment opportunities, farm revenue and thus ensures a higher standard of living for food producers. The State depends on international bilateral and multilateral cooperation to back much of its support it provides to the agricultural sector through projects as those assisted by FAO, AfDB and BADEA. However, it is already evident that there are gaps in the institutional support associated with an insufficiency of trained support personnel especially at the mid technical and tertiary level and the lack of logistical support (vehicles and specialized soil analytical laboratory, agricultural land management through GIS, adequate disposal of slurry from pig farms etc) to support all the activities associated with sustainable agricultural production and land management.

There are obvious financial gaps. The annual recurrent budget of the umbrella ministry cannot address issues pertinent to the enforcement of the convention and emergency situations in the sector are addressed on an ad-hoc basis. The high national GDP per capita limits financial assistance from bilateral and multilateral partners.

3.6. Institutional measures taken to address land degradation within the Forestry sector.

3.6.1 Institutional Measures.

Phenomenal efforts have been made both to increase the area of land in protected area systems and to make more strategic choices concerning the protection of additional areas which have led to more than 45% of the Seychelles total land area to have conservation protection status (Strict Nature Reserves, Special Nature Reserves, Areas of Outstanding Natural Beauty, National Parks,). Apart from high biodiversity areas, considerations have been given to areas threatened by land degradation as well as catchment systems. , Although there has been increasing encroachment pressure, particularly for housing and related road construction, old abandoned agricultural lands have been naturally converted into forests.. There has been increasing cooperation and partnerships with other governmental organizations and private agencies in forest management over the past decade.

3.6.2 Legal Framework related to Forestry and terrestrial protected areas

The relevant present ordinances and acts that impact on Forest management are: (i) Breadfruit and Other Trees Act (Cap 122) of 1917, amended schedule of 1988; (ii) State Land and River Reserves Ordinance (Cap 150) of 1903; (iii) Forest Reserves Ordinance (Cap 153) of 1955; (iv) Town and Country Planning Ordinance (Cap 160) of 1972, amended in 1976, 1977, and 1978; (v) National Parks and Nature Conservancy Ordinance (Cap 159) of 1971, amended by Ordinance of 1973 and Act of 1982, and (vi) Lighting of Fires (Restriction) Ordinance (Cap 232) of 1940. The coco de mer management decree was reviewed in 1994.

In addition to actions already cited under Biodiversity section below the Forestry Sector has been active in developing partnerships, joint programmes and formal agreements between other government and non-government agencies to develop sustainable forest and biological diversity management such as: (i) gazette regulations for Morne Seychellois and Praslin NPs, (ii) enter into formal agreements for management of certain conservation areas, (iii) initiate discussions with landowners in priority conservation areas, with a view to entering management agreements and gazetting as Special Nature Reserves, (iv) initiate dialogue with stakeholders of Praslin and Morne Seychellois NPs and other key forests, regarding the scope for participation in management, (v) initiate dialogue with landowners

adjacent to some rivers, in order to start implementing the regulations on riverine reserves, (vi) clarify the protection of indigenous and endemic tree species, and seek temporary means to close the loophole on exploitation of indigenous plants, (vii) identify which areas designated as forest in the National Land Use Plan are on state land and assess if any areas should be gazetted as Forest Reserves.

3.7 Institutional measures taken to implement the convention, including legislative and institutional framework within the Biodiversity conservation national programme.

3.7.1 Institutional framework and measures

Biodiversity is included in the work of the Conservation Section and Forestry and National Park Section within the Ministry of Environment and Natural Resources. There are also a number of relevant parastatal organisations – Seychelles Islands Foundation (SIF) which is responsible for the management of Seychelles two natural World Heritage Sites (Vallée de Mai and Aldabra atoll), SCMRT/MPA which manages marine protected areas, and Islands Development Company (IDC) which is responsible for the outer islands. There are also at least six environmental NGOs in Seychelles dealing with biodiversity conservation and management, including the management of several small island conservation areas. Several small privately owned islands have conservation programmes.

Measures taken by government with respect to biodiversity include creating a variety of protected areas covering about 47% of the land area of Seychelles and also creating an inventory of sensitive zones and sites. Most protected areas have management plans. Any future measures to maintain or restore naturally functioning ecosystems will be of value in the sustainable use and management of land.

3.7.2 The legislative framework:

Legislation pertinent to biodiversity is diverse and very fragmented. Important overall legislation includes:

- National Parks and Nature Conservancy Act (1969).
- Environment Protection Act (1994) – including Environmental Impact Assessment regulations.
- Wild Animals and Birds Protection Act (1961).

- Breadfruit and Other Trees (Protection) Act (1917).

Biodiversity legislation is currently in the process of being rationalised, harmonised and extended to include new aspects such as genetic resources.

3.7.3 Capacity building:

This is basically being dealt with through the National Capacity Self Assessment (NCSA) process, which is currently investigating capacity building needs for UNCCD, UNFCCC, and CBD. Furthermore the government of Seychelles through the Ministry of Education and Youth and the Ministry of Administration and Manpower Development also has its own programme for human resources development at the National level. The Department of Environment is also actively establishing links with other regional institutions to develop exchange programmes for staff of the Division of Nature and Conservation and other homologous institutions in the region to build local capacity. Links with The University of Zurich and Swiss Federal University are also being strengthened, especially in the Forestry Sector where a number of university students have been conducting research in Seychelles in areas of local priorities.

4.0 The consultation process in support of the preparation of the Environment Management Plan, national Report and the partnership agreement with develop country parties and other interested entities.

4.1 National Coordinating Body:

In December 2003 a national workshop was organized under the National Capacity Self Assessment Programme to assess and evaluate the implementation of the three main Rio – convention, i.e. the UNCCD, CBD and UNFCCC. Following that meeting a working group composing of six senior government officers coming from the main relevant Ministries and parastatal led by the Director General for Crop Development from the Natural Resources Department, within the Ministry of Environment and Natural Resources was set up to assess the implementation aspect of the UNCCD in Seychelles. The other senior officers came from Forestry, Islands Development Company, Territorial Planning and land use, Nature Conservation and National Meteorological Services. The same group was later appointed as the National Coordination Body for the Convention. This group has now been enlarged to include representatives from key NGOs such as the

Framers Association, the Praslin Development Fund, Plant Conservation Action Group and Seychelles Island Fund.

4.2 The UNCCD National Report Process

Six consultants were appointed to prepare the National Report. They were provided with the relevant documents and links to the UNCCD website. In view that Seychelles had not yet prepared its National Action Plan it was felt that it would be more appropriate to report as accurately as possible based on the guideline provided but according to the various key sectors. This will provide a more in depth analysis of the current status of the implementation of the convention in Seychelles. The consultants had to consult with representatives of relevant organizations working within their thematic area in regard to the drafting of the report. During the period of January 2004 to August 2004 the consultants met with the focal point at least six times to discuss both the drafting of the National report of the UNCCD. Towards the end of the Month of March the team started drafting the report based on information collected during the previous months.

5.0 Financial allocation for national budgets in support of implementation as well as financial assistance and technical cooperation including their inflows.

Seychelles reputation for investing significantly in environment protection is internationally well known and accepted. The reasoning behind it is due to the realization by the decision makers of the importance and significant contributions of a healthy and functioning environment to the economy of Seychelles. But the Government has necessarily tended to fund the most pressing environmental problems. Additional funds are needed in particular for biodiversity assessments and management plans for the granitic island of Silhouette and also for the more arid outer islands where little research has been carried out other than for the World Heritage Site of Aldabra atoll. The new project proposed by the Government of Seychelles for UNDP/GEF funding will hopefully go some way to addressing certain aspects of the UNCCD, including sustainable integrated ecosystem management strategies. In addition, partnerships between government, NGOs and the private sector could be further consolidated.

The total annual budget of Seychelles for the year 2004 is about 2 billion Seychelles Rupees or US\$. 365 million, of which about RS.47 million or USD 9 million goes towards the Department of Environment alone and US\$ 4 million to Natural Resources. The Ministry of Environment and Natural Resources, MENR, is the Ministry responsible for

Agriculture, Forestry, wildlife conservation, Protected and sensitive areas, control of development and pollution among others. For a small island economy struggling against economic decline the amount of money allocated to protect and rehabilitate the environment is high. It invested in period of 2001-2003 US\$ 23 million in four desalination plants two on the main island of Mahé, one on Praslin and a fourth on La Digue. Other smaller investments were made in upgrading and repairing existing water storage and distribution infrastructure.

Most of the external funds for development programmes are funded by FAO, GEF, World Bank, ADB and other international Donors. Seychelles receives limited aid from developed country parties. Most of the aid, it receives goes towards Fisheries. The only existing partnership is the Seychelles – Reunion (France) partnership which cuts across a whole range of sectors including agriculture and land degradation issues. In addition, Seychelles is a member of the regional organization, the Indian Ocean Commission, through which it receives technical and financial support from the European Union for coastal zone management issues. It is also a member of the trade organization COMESA, the AC-EU grouping, the SIDS and the Commonwealth. Seychelles is also party to various international conventions and organizations e.g. CITIES, CBD, UNFCCC, UNCCD, WMO, WHO, FAO and WTO.

6.0 Review of Bench marks and indicators utilized to measure progress and an assessment thereof:

6.1 Early Warning Systems

The National Meteorological Services (NMS) is equipped to prepare and issue early warnings of imminent menace of an extreme weather event to PUC and the populace. Seasonal and Medium Range Rainfall Forecasts are also prepared at the NMS and disseminate to PUC and the population at large. National disaster response plan provides clear action for responding to national disaster;

Government with UNEP's assistance has commissioned the development of a National Risk and Disaster Management Strategy to improve the response plan. This could contribute in the effective coordination of an Early Warning System.

6.2 Review of Bench marks and indicators used to measure progress in agriculture.

In order to scientifically assess the state of soil degradation of both soil types at any one time, it would be important to invest in a national soil diagnostic laboratory. Regular sampling and diagnosis of soil on cultivated plots for example would provide an accurate assessment of the soil requirements for fertilizer and organic matter with a view to avoid soil degradation, promote sustainable agricultural production and avoid environmental pollution through excessive uses of fertilizer. This unfortunately cannot be done at present due to lack of appropriate facilities.

6.3 Environment Protection

Within the parameters of environment protection various systems have already been established to measure the level of degradation and pollution of land, ecosystems and water. Within the protected areas permanent sample plots and transects have been fixed to measure changes and data is collected and analyzed on a periodic basis. The same has been done on trails used for ecotourism activities and Seychelles is in the process of developing its own ecolable for tourism establishments and carrying capacities for islands. Hotels and other tourist establishment are funding monitoring programmes to assess coastal zone degradation. The information is being fed into the Department of Environment's database. The Public Utilities Cooperation, Water Division and the Department of Environment, Pollution Control Unit monitor water quality in rivers, streams, marshes and assess their quality. Currently the Conservation Section within the Department of Environment has embarked on a prestigious project with ARDA an organization based in La Reunion, and the Natural History Museum to survey all fresh water species in Seychelles. The presence or absence of these will provide excellent indicators as to the quality of water in Seychelles rivers and wetlands.

Although there are various monitoring programmes that exist in the country which relate to UNCCD there is no specific programme addressing bench marking and indicators for land degradation.

UNCCD Country profile
September 2004

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Biophysical indicators relating to desertification and drought

1. Climate

1.1 Index of aridity : Data are available for only one station, The international Airport at 4° 40' S, 55° 30' E from 1977.

Table Showing: Index of aridity of the Seychelles National Airport

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Aug	Nov	Dec
1977	95.3	90.2	34.8	50.8	15.7	9.8	11.3	11.5	8.6	52.9	21.9	46.1
1978	88.0	60.3	25.2	51.5	7.0	9.3	5.0	2.7	7.0	45.1	71.9	131.5
1979	60.9	26.7	47.6	46.1	3.2	10.8	12.3	4.3	3.4	41.1	39.5	65.1
1980	29.8	91.1	12.0	40.2	45.7	11.1	18.3	6.7	3.5	8.3	42.3	45.1
1981	63.8	70.2	32.1	9.3	27.6	6.3	9.8	2.8	2.4	12.8	75.2	
1982	73.6	1.7	39.1	31.3	12.7	9.1	18.3	21.4	39.4	46.9	72.6	90.6
1983	149.8	16.3	23.4	44.8	52.0	13.0	28.4	39.7	74.6	20.2	24.6	62.6
1984	104.1	117.2	11.4	14.8	1.8	9.4	5.1	14.6	11.6	64.0	38.5	58.0
1985	50.0	27.2	74.1	33.4	21.9	2.9	13.2	65.8	14.2	43.8	32.8	67.0
1986	50.5	11.9	32.0	35.4	10.3	36.4	19.6	2.2	1.8	16.1	32.3	99.9
1987	110.7	50.4	22.6	22.4	48.6	22.9	8.9	8.6	26.9	52.4	18.0	10.8
1988	66.5	13.1	29.8	17.5	18.7	26.1	26.8	41.5	26.9	49.8	40.8	55.5
1989	74.0	47.2	12.8	15.6	16.0	11.8	45.0	18.5	11.0	37.7	44.6	57.7
1990	84.4	61.8	24.1	41.9	87.0	12.8	9.0	2.2	12.2	4.6	46.8	25.8
1991	199.1	17.1	32.4	28.6	39.4	5.3	29.4	5.0	31.6	26.7	33.8	131.0
1992	124.2	20.3	60.9	128.0	130.9	37.5	4.3	30.0	19.0	31.0	10.4	87.4
1993	139.2	64.9	41.1	53.6	41.3	9.0	4.4	10.9	34.7	30.5	35.6	30.2
1994	62.8	113.5	24.9	57.0	5.8	17.7	34.3	75.0	27.2	58.4	57.7	97.5
1995	56.3	84.9	16.4	28.0	45.5	62.9	24.3	6.7	56.2	39.6	37.9	77.9
1996	100.0	80.4	40.2	18.2	14.3	20.2	12.4	14.6	50.9	9.1	53.5	40.9
1997	28.6	42.1	72.1	81.1	16.0	112.0	8.9	129.7	57.9	85.8	89.2	64.1
1998	136.1	91.2	41.6	31.3	100.6	14.8	18.7	3.9	34.7	12.1	27.1	32.7
1999	135.3	99.9	38.3	17.0	19.0	8.0	19.4	35.1	34.9	20.9	88.6	54.0
2000	64.2	119.6	189.3	17.5	16.3	6.3	4.4	8.8	20.2	14.1	99.0	147.6
2001	98.1	224.6	46.9	40.5	35.1	30.0	8.5	22.6	14.6	1.2	29.9	52.0
2002	367.0	68.0	64.0	59.3	5.7	19.4	6.2	19.7	97.4	51.6	40.7	31.5
2003	124.0	29.7	31.9	45.6	123.6	56.7	45.4	7.7	44.8	40.9	28.1	168.4

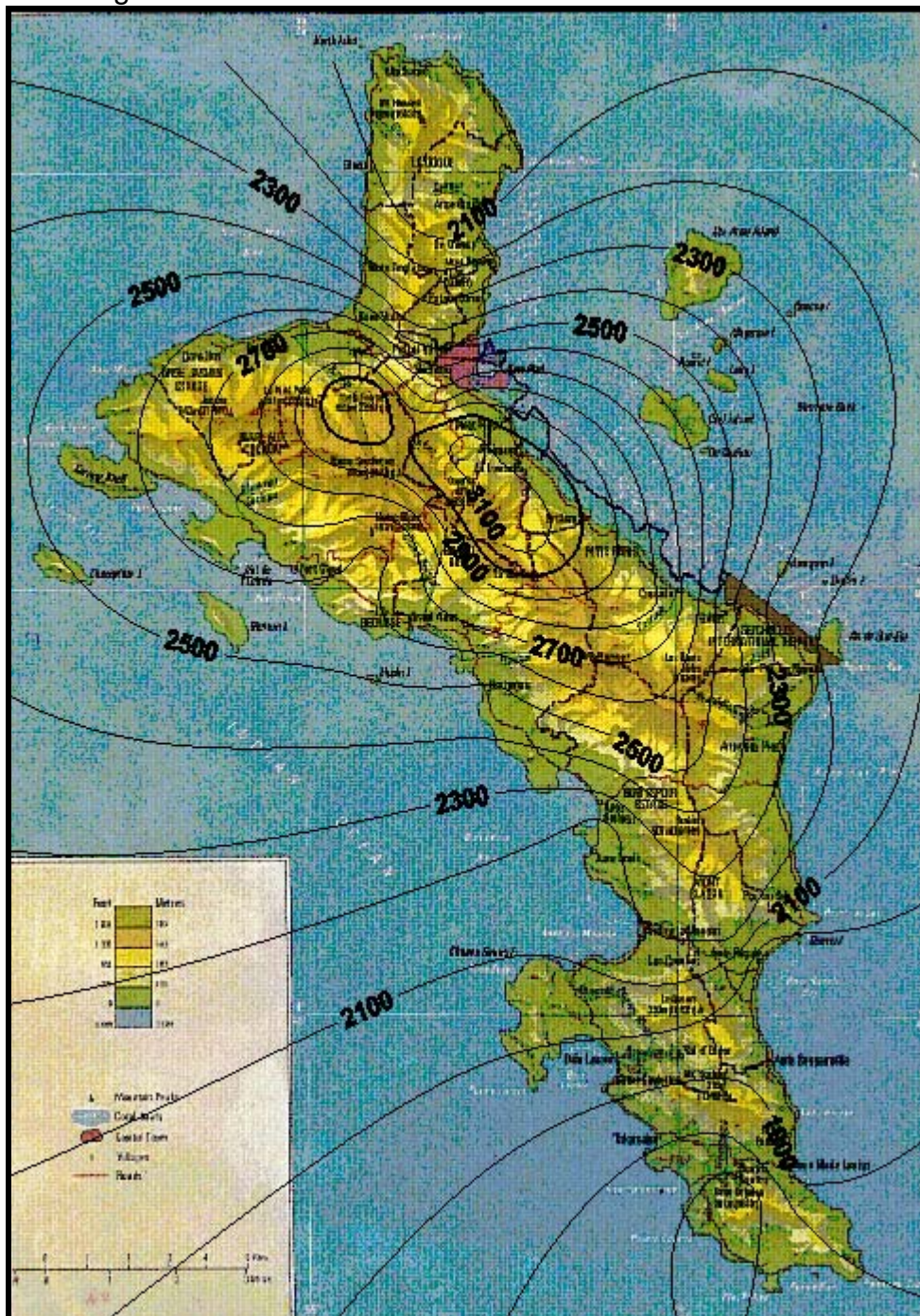
1.2 Normal Rainfall

Only selected station on the island of Mahé, Praslin and La Digue has been selected (See **appendix 1** for the rainfall data for each station). Some of the outer islands have been omitted since they do not have any long term climatic data and recent data.

1.3 Climatic zone map

No climatic zone map has been attempted due to the lack of Long Term Climatic data over the archipelago and therefore, the different zones cannot be established. However, there is only a map available for the island of Mahé, one of the 115 islands of the Seychelles which received most rainfall as a result of its topography compared to the low coral islands.

Map showing the mean annual rainfall over Mahé



2.0 Vegetation and Land Use

2.1 NDVI (normalized difference vegetation index)

For the moment, the Seychelles does not have information on NDVI since the Country has not yet started to deal with remotely sense data.

2.2 Vegetation cover (% of total land area) **90%**

Land use	1990 – 1999	2000 – 2003
Arable crop land	*	*
Irrigated	*	*
Rainfed	*	*
Pasture	*	*
Forest and woodland	90%	90%
Other land	10%	

* No data available

2.3. Surface albedo

No such map is available either at the GIS or the Meteorological services.

3.0 Water resources

- | | |
|---|---------------------------------|
| 3.1. Fresh water availability | 1.13 km³/year |
| 3.2. Fresh water resources per capita | 140l/ day |
| 3.3. Agricultural water use (million m ³) | 9 million m³ |
| 3.4. Industrial water use | 152254 m³ |

4.0 Energy

Consumption

- | | |
|--|-------------------|
| 4.1. Energy use per capita (kg oil equivalent) | No data |
| 4.2. Agricultural energy use per hectare (millions of BTU) | Negligible |

Production

- | | |
|--|-------------------|
| 4.3. Energy from renewable excluding combustible renewable and waste (% of total supply) | negligible |
|--|-------------------|

Renewables -Consumption by sector

- | | |
|---|-------------------|
| 4.4. Industry (% of total renewable consumption) | Negligible |
| 4.5. Residential (% of total renewable consumption) | Negligible |
| 4.6. Agriculture (% of total renewable consumption) | Negligible |

Note that certain islands on Mahé, Praslin and La Digue as well as some other isolated island communities (eg. Cousin and Curieuse) do use either solar water heating and Phovoltaic (PV) modules but such data on renewable energy technology is not available.

5.0 Types of land degradation

Type of degradation	1990 – 1999		2000 – 2003	
	million ha	Percent of total area	million ha	Percent of total area
Erosion		1.6%		0.3%
Deforestation		0.1%		0.07%
Bushfires		1.3%		0.9%
Others		*		*

Note that illegal logging is taken as the deforestation.

*No data available

6.0 Rehabilitation

Lands under rehabilitation	1990 -1999	2000 -2003
Rehabilitation of degraded crop land (km ²)	*	*
Rehabilitation of degraded rangeland (km ²)	*	*
Rehabilitation of degraded forest (km ²)	5	1.5

*No data available

Socio-economic indicators related to desertification and drought

7.0 People and economy

7.1. Population (total)	81,177
Population: urban (percent of total)	29.9 %
Population: rural (percent of total)	70.1%
7.2. Population growth (annual %)	1.1%
7.3. Life expectancy (years)	70.3
7.4. Infant mortality rate (per 1,000 live births)	17.6
7.5. GDP (current US\$)	3829.9 million
7.6. GNI per capita (current US\$)	697.8
7.7. National poverty rate (% of population)	16 % (LESS THAN RS 845)
7.8. Crop production (metric tons)	4254 tons
7.9. Livestock production (metric tons)	2028 tons

8.0 Human development

8.1. Primary education completion rate (% age group)	100% 12 years
8.2. Number of women in rural development (total number)	No data
8.3. Unemployment (% of total)	4%
8.4. Youth unemployment rate (age 15-24)	1303
8.5. Illiteracy total (% age 15 and above)	9%
8.6. Illiteracy male (% age 15 and above)	10%
8.7. Illiteracy female (% age 15 and above)	8%

9.0 Science and technology

9.1. Number of scientific institutions engaged desertification-related work (total number) **5**

APPENDIX 1 Precipitation data for Anse Boileau Station 4° 43'S 55° 29'E (1950-2003)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1950	323.9	561.1	138.7	322.6	581.4	77.2	82.8	188.2	225.3	166.6	124.2	412.2
1951	241.1	211.3	260.9	99.8	53.9	46.2	30.2	191.0	77.5	401.6	80.5	272.3
1952	348.2	345.4	63.5	386.8	245.1	242.8	63.5			104.9	214.1	519.4
1953	439.4	150.6	197.9	109.7	137.9	90.4	57.9	30.0	211.3	151.4	372.4	556.8
1954	200.7	32.3	1.0	66.3	115.1	85.6	140.0	126.0	95.8	26.7	96.0	248.7
1955	670.8	209.5	288.0	395.5	79.5	4.8	28.9	*	*	45.7	135.9	353.6
1956	44.5	*	369.3	117.6	48.8	79.0	72.4	123.4	105.7	114.3	298.2	310.1
1957	311.9	296.7	91.9	133.9	165.6	192.8	63.3	42.9	41.9	529.1	114.1	270.5
1958	79.0	89.9	30.7	112.5	303.5	271.3	185.7	31.7	32.8	17.8	109.2	176.3
1959	433.8	176.3	41.7	121.7	73.4	45.5	27.2	33.3	85.1	46.2	47.0	35.1
1960	26.4	47.7	59.2	230.9	38.9	93.2	123.7	63.7	17.5	177.0	39.9	350.0
1961	411.0	269.0	266.5	218.4	8.9	0.0	18.0	326.9	342.4	292.6	462.0	402.1
1962	347.7	285.7	84.6	247.7	299.2	241.3	184.9	104.9	205.5	157.7	320.5	124.7
1963	265.2	*	*	206.5	284.2	35.3	138.4	397.0	222.3	132.8	315.7	148.6
1964	544.6	142.2	97.5	338.6	311.9	77.0	231.9	122.4	410.2	17.0	*	400.6
1965	238.3	336.3	127.0	254.5	452.9	56.1	188.7	147.3	204.0	506.7	604.8	372.4
1966	381.8	175.8	248.9	336.3	49.5	111.0	160.5	231.9	94.7	268.0	261.9	48.0
1967	402.6	205.7	69.1	241.8	351.0	167.1	31.5	234.2	222.8	217.2	268.2	280.7
1968	474.5	280.2	533.2	101.6	259.8	59.7	125.0	97.8	193.0	355.9	248.2	325.9
1969	425.7	124.2	218.2	168.7	112.5	52.6	41.7	39.9	47.5	84.6	255.5	331.5
1970	189.5	180.9	120.9	213.9	310.9	57.4	133.3	83.3	12.7	105.4	213.6	260.9
1971	232.7	63.5	172.7	211.1	15.2	81.0	33.8	110.0	168.9	37.3	289.8	167.9
1972	244.3	79.8	145.8	122.2	131.8	89.7	36.3	170.9	279.7	481.1	287.3	306.6
1973	279.7	96.8	173.5	52.8	201.4	278.9	69.3	63.3	16.8	207.5	33.5	452.1
1975	499.1	185.9	163.6	110.5	49.3	45.2	20.6	114.3	84.6	65.5	102.9	452.1
1976	347.7	369.8	84.8	170.7	19.1	70.1	87.4	175.8	128.3	48.3	53.1	442.0
1977	381.8	293.1	258.3	237.5	65.8	69.3	61.5	87.6	62.7	406.9	144.3	266.5
1978	331.0	232.9	76.5	258.1	71.9	59.9	35.8	24.4	71.4	247.7	391.7	325.4
1979	609.3	111.8	284.2	270.8	55.9	60.5	87.9	40.6	16.4	247.7	391.7	325.4
1980	106.9	170.7	28.0	191.0	330.3	84.6	100.0	36.9	25.0	61.1	177.1	282.2
1981	232.8	62.0	175.5	40.3	166.8	66.2	61.8	21.2	22.8	155.0	250.0	524.1
1982	179.5	31.6	146.8	137.2	121.3	21.3	85.3	65.2	262.4	475.7	311.0	284.8
1983	466.4	0.0	183.1	234.1	232.4	94.2	111.5	185.6	382.3	70.5	111.0	189.3
1984	366.8	204.0	89.6	135.8	4.2	42.6	48.3	234.9	82.3	256.2	216.6	295.1
1985	302.7	20.0	561.1	43.2	91.0	5.2	50.2	88.7	217.5	50.2	171.1	234.5
1986	188.7	*	*	*	*	*	*	*	*	*	*	*
1987	250.0	226.4	81.1	91.4	224.1	124.0	53.7	32.7	154.7	176.6	83.5	33.6
1988	306.6	70.7	75.0	218.2	137.1	174.9	113.0	230.7	202.3	139.4	192.9	223.1
1989	357.1	110.5	120.2	225.2	101.3	69.7	172.6	132.0	65.0	235.8	280.5	300.6
1990	477.7	195.3	86.8	291.8	365.7	32.0	49.9	19.0	77.1	14.3	177.1	115.1
1991	472.1	88.5	202.8	161.0	198.8	49.3	130.1		187.3	104.7	232.4	393.5
1992	325.8	66.0	109.1	253.4	557.0	212.4	38.9	118.6	109.8	207.1	*	496.0
1993	389.9	101.4	273.8	332.9	185.0	95.0	54.5	119.0	195.0	158.8	102.0	144.3
1994	119.5	188.1	137.5	174.8	88.8	89.9	148.6	316.0	140.8	274.8	343.0	614.6
1995	257.5	216.1	151.1	169.8	207.2	481.3	111.8	72.6	338.4	280.9	212.7	334.0
1996	488.3	272.8	190.3	110.0	89.1	122.8	78.9	170.5	308.9	40.0	344.8	63.5
1997	225.6	351.1	250.0	272.4	49.9	582.6	48.8	719.7	271.2	229.3	205.4	250.0
1998	586.7	211.5	153.7	195.3	476.0	45.7	82.1	35.0	192.9	72.7	135.5	140.0
1999	313.6	140.3	74.5	73.3	26.5	18.4	93.6	163.5	150.3	109.3	129.9	206.4
2000	221.9	243.0	185.1	94.3	79.4	9.9	56.6	59.5	111.2	116.0	236.8	379.7
2001	251.9	467.7	93.8	82.4	83.7	206.8	88.8	122.7	53.6	72.0	208.6	227.0

2002	452.9	340.7	190.2	196.8	39.3	127.4	16.9	96.3	637.6	227.3	177.4	188.9
2003	509.9	74.4	177.1	138.2	402.6	199.5	148.0	45.9	173.4	350.2	210.3	560.4

La Passe , La Digue (4° 22' S 55° 50' E)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1950	211.3	270.3	104.7	251.2	141.2	34.8	41.9		189.2	47.7	127.3	285.2
1951	408.2	242.3	169.2	68.1	5.1	11.7	41.1	269.5	216.9	497.8	112.5	407.7
1952	391.9	235.2	31.7	209.3	109.2	82.8	22.3	68.1	20.8	13.7	87.9	247.4
1953	419.6	137.4	167.4	25.7	0.0	108.7	82.0	17.3	80.0	77.5	286.8	293.9
1954	158.2	10.7	77.5	51.3	252.2	161.3	43.9	130.6	87.4	84.3	100.1	545.3
1955	398.5	229.6	190.3	162.3	59.9	7.1	91.7	97.0	234.9	43.9	52.1	398.5
1956			103.9	208.5	74.9	29.5	21.1	246.9	95.5	130.3	261.4	267.7
1957	477.0	106.4	61.0	82.0	131.1	90.2	28.5	24.1	40.1	205.0	151.1	329.4
1958	140.5	60.2	143.3	84.8	240.0	400.3	64.8	27.4	18.8	99.1	120.9	242.6
1959	290.1	55.9	116.1	111.8	34.8	31.5	1.3	28.5	177.5	132.1	201.9	164.9
1971	192.0	287.5	58.4	146.6	42.7	127.3		112.0	58.7	42.7	143.5	158.8
1972	201.2	161.8	217.4	138.7	81.0	97.5	14.7	181.4	231.9	417.3	163.3	98.5
1973	240.3	165.4	180.3	66.3	60.7	106.4	45.7	61.0	12.2	27.7	33.3	141.2
1974	245.1	241.8	78.0	230.1	0.0	1.0	101.6	72.6	153.7	431.5	207.3	472.7
1975	434.5	159.2	309.6	38.8	52.5	13.2	9.6	118.8	163.0	4.3	155.9	270.5
1976	204.7	216.9	143.0	74.4	62.2	125.2	80.5	52.3	78.0	35.6	52.6	325.1
1977						24.4	17.8	21.1	75.9	248.1		
1978		138.2	48.3	65.8	71.1	*	*	*	*	*	*	*
1979	*	*	*	*	0.0	11.4	v		10.9	111.2	210.5	123.1
1980	*	*	*	105.4	166.1	86.2	47.9	7.3	0.0	8.8	107.7	
1981	*	*	*	*	*	*	*	6.1	0.0	115.5	154.1	470.3
1982	304.7	0.0	183.5	161.5	65.8	23.3	65.6	12.0	158.7	343.1	333.0	291.9
1983	327.3	88.9	12.2	138.0	140.0	0.9	120.2	336.7	247.0	301.9	323.1	148.5
1984	218.1	381.4	125.1	165.3	0.0	72.0	32.8	87.6	195.0	217.4	124.0	475.4
1985	163.3	44.7	264.7	190.0	81.5	9.2	49.9	501.4	84.1	103.8	105.4	383.2
1986	192.5	180.9	498.4	157.8	52.4	175.9	42.3	8.4	10.0	79.4	146.2	256.7
1987	331.9	140.9	120.8	42.7	191.1	70.5	66.3	247.3	88.3	435.5	52.4	62.3
1988	392.5	85.7	153.8	104.0	37.2	283.2	93.0	264.2	77.8	226.5	142.5	332.7
1989	338.8	147.9	132.9	102.9	68.0	120.4	404.8	104.9	47.9	221.8	165.7	594.0
1990	361.8	202.9	36.8	110.5	253.3	36.9	34.5	60.5	70.6	36.2	116.9	179.9
1991	316.3	155.3	117.9	73.2	197.5	26.1	87.9	83.4	175.7	134.5	150.5	691.8
1992	486.6	23.9	392.7	323.7	422.9	101.0	44.5	92.0	95.9	141.0	128.2	200.9
1993	345.2	334.5	101.6	183.6	43.5	89.0	10.3	47.4	233.1	196.0	65.5	144.8
1994	323.8	211.0	185.0	219.5	7.2	110.7	286.8	467.9	126.0	181.4	270.6	236.1
1995	375.6	141.9	85.9	267.2	213.2	146.1	42.2	62.1	185.0	181.7	90.3	27.5
1996	336.4	394.7	177.4	53.8	151.3	67.4	35.4	66.0	219.9	42.4	166.3	86.4
1997	143.6	78.5	223.2	92.8	80.4	283.4	25.4	683.1	292.2	424.1	393.0	271.0
1998	463.8	214.8	169.2	64.0	248.9	48.7	43.7	40.3	215.2	24.8	178.3	131.6
1999	369.5	340.1	129.9	127.9	47.2	12.2		142.6	138.1	64.6	379.8	213.3
2000	315.5	311.7	338.3	27.5	137.2	12.9	47.6	36.7	107.1	17.4	112.2	468.0
2001	415.3	123.7	48.3	252.5	154.7	115.5	19.8	26.9	70.0	20.4	159.1	442.6
2002	540.3	235.8	209.5	78.9	29.5	50.8	27.6	47.2	553.0	169.2	185.1	159.8
2003	320.5	88.1	237.3	97.9	265.7	246.8	322.1	71.6	155.9	167.9	66.1	442.7

Grand Anse, Mahé (4° 40' S, 55° 26' E)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1950	63.0	297.9	234.9	53.1	128.5	164.3	89.1	159.5	41.4	234.2	208.3	358.4
1951	365.8	532.4	166.4	206.3	396.2	102.1	86.4	170.2	440.2	276.3	277.6	308.6
1952	242.6	231.1	283.7	130.8	56.9	39.4	84.3	181.1	238.5	486.7	154.7	343.9
1953	304.0	352.5	118.4	341.1	176.3	222.8	51.8	165.1	59.4	241.8	69.6	136.4
1954	515.9	290.3	277.9	162.6	298.9	167.4	70.9	51.1	433.6	213.6	388.1	498.6
1955	246.9	27.7	124.2	97.0	234.9	331.0	196.1	216.9	194.8	39.9	76.7	472.9
1956	1222.5	273.8	251.9	313.4	124.7	21.6	49.3	98.6	203.5	87.1	173.2	337.1
1957	84.8	303.0	380.0	272.0	65.3	98.3	154.4	101.9	134.1	163.6	322.1	339.6
1958	439.7	443.5	118.6	161.3	218.9	244.1	81.8	47.8	28.9	705.4	212.6	520.9
1959	170.7	91.9	36.8	107.9	347.7	501.4	205.2	88.7	43.4	0.0	130.6	367.3
1960	470.9	391.9	190.7	209.0	518.2	51.3	105.9	36.1	27.9	208.5	73.9	476.0
1961	537.0	382.5	491.2	301.0	18.5	7.1	52.3	412.5	426.7	322.6	430.3	268.5
1962	264.2	217.9	63.0	217.2	355.6	250.4	249.4	141.2	198.4	212.3	242.3	158.0
1963		285.5	267.2	214.9	488.9	26.2	174.2	380.0	320.0	204.5	363.2	166.9
1965	507.2	292.9	236.7	228.3	437.1	36.1	217.9	99.1	246.4	355.3	510.8	490.5
1966	239.0	208.3	408.4	189.7	46.5	119.9	158.8	169.4	104.9	246.9	236.7	77.0
1967	440.2	121.7	55.9	150.9	399.5	204.0	61.0	318.5	181.1	12.2	534.4	576.0
1968	348.5	387.4	587.0	74.4	233.7	54.4	170.7	114.8	221.2	275.8	345.7	409.9
1969	697.7	175.8	228.9	130.0	49.5	52.6	64.3	50.8	65.5	81.8	293.1	458.2
1970	291.1	160.5	187.9	116.8	278.4	177.3	113.3	120.9	23.9	193.5	171.4	268.2
1971	177.8	84.8	141.5	234.2	27.9	103.6	37.6	116.6	126.2	21.6	287.8	176.3
1972	245.1	122.4	99.6	267.5	145.8	114.8	72.6	72.1	297.7	508.8	385.6	489.2
1973	375.4	170.4	333.2	150.4	279.9	101.1	134.1	78.2	58.9	198.9	2.5	298.2
1974	367.5	340.1	118.4	139.9	1.5	4.1	23.9	94.5	220.2	597.9	416.1	416.6
1975	622.0	286.2	116.8	61.4	76.2	54.3	44.9	141.9	60.9	162.3	247.3	365.2
1976	626.4	469.9	86.9	161.8	18.8	163.6	215.1	238.3	204.5	47.2	57.4	275.6
1977	474.7	224.8	258.6	276.9	173.7	111.8	310.9	121.7	45.0	303.8	121.4	212.8
1978	476.0	161.8	194.6	417.1	88.9	21.3	71.1	94.2	103.6	299.7	356.1	551.7
1979	443.5	139.3	330.0	360.7	92.4	131.9	124.2	93.4	30.9	351.2	308.2	421.2
1980	96.5	273.1	23.8	334.7	344.7	120.5	119.8	115.8	37.7	63.6	251.6	265.8
1981	255.3	165.3	315.4	46.8	272.5	80.4	90.1	58.6	52.7	141.3	299.4	528.8
1982	279.2	32.4	223.6	114.3	182.6	157.0	178.1	170.7	376.8	499.7	432.0	334.6
1983	724.6	58.7	243.4	185.0	212.9	122.9	236.5	330.7	409.7	138.8	267.7	299.0
1984	499.7	312.9	110.5	57.2	15.3	45.0	119.0	159.0	126.8	280.8	556.5	189.9
1985	396.7	96.4	409.7	171.2	164.1	17.5	91.8	555.7	93.5	366.9	166.2	379.2
1986	230.0	201.9	313.7	330.4	96.2	285.6	101.6	53.3	23.6	109.1	149.1	392.1
1987	460.0	350.0	35.7	40.1	398.2	137.6	64.9	69.9	139.3	248.3	93.7	25.0
1988	494.9	45.7	261.4	265.4	194.5	257.7	240.9	260.6	239.4	260.0		
1989	394.0	191.0	197.6	181.2	179.2	243.9	295.4	198.5	105.0	363.1	323.4	286.0
1990	465.2	436.3	255.0	86.2	186.9	240.5	61.8	116.0	128.0	46.7	129.7	93.7
1991	688.9	91.3	143.3	65.7	270.2	77.4	171.5	70.9	178.6	90.8	157.6	
1992	425.8	56.6	440.5	454.1	535.5	251.1	62.0	174.6	225.9	230.3	73.0	352.6
1993	592.3	206.6	346.6	123.9	211.2	10.3	98.8	52.0	228.5	304.3	119.7	111.2
1994	231.6	239.4	70.0	370.4	79.4	76.5	239.1	515.3	135.6	125.3	268.8	305.0
1995	326.7	286.4	106.6	146.3	226.3	465.2	135.1	59.8	428.5	311.3	228.4	332.8
1996	509.8	251.7	372.1	91.0	81.0	174.4	76.5	185.0	220.1	11.3	500.0	150.9
1997	258.9	212.9	377.1	232.0	127.3	517.6	44.3	690.7	357.6	362.8	280.4	400.0
1998	657.2	250.0	175.9	205.3	328.3	82.3	77.8	54.7	188.0	77.0	164.5	144.7
1999	453.5	318.5	121.1	65.0	98.4	24.1	128.9	217.4	201.0	71.5	256.0	236.8
2000	213.3	254.8	224.0	75.0	129.2	82.0	103.1	71.4	154.8	126.9	249.9	487.6
2001	366.7	497.2	175.7	184.7	167.4	219.1	61.0	118.0	86.8	19.4	162.1	310.8
2002	525.5	345.5	300.3	204.8	61.3	132.6	81.2	101.2	671.2	340.4	216.6	137.9

2003	560.5	113.0	243.3	285.2	484.6	314.2	248.4	89.1	224.7	267.0	123.2	820.0
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Long Pier 4° 37'S 55° 29'E

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1950	294.9	323.9	161.5	434.1	129.3	38.9	46.5	115.3	147.3	141.5	246.4	429.8
1951	379.2	281.4	242.1	190.5	50.5	23.9	45.7	129.8	169.7	505.2	97.5	420.9
1952	452.9	380.5	495.3	226.8	134.6	95.3	47.2	95.3	55.9	64.3	107.7	235.2
1953	519.9	155.4	278.9	244.6	304.0	129.5	43.7	29.5	225.8	139.4	433.8	307.8
1954	259.1	169.9	236.5	115.3	174.5	51.3	63.5	75.9	57.9	80.8	79.0	460.5
1955	942.3	336.3	287.0	297.4	55.4	24.1	37.6	83.6	230.6	21.8	91.9	383.8
1956	197.4	329.4	373.1	243.8	46.5	37.8	40.9	61.2	103.6	88.1	373.9	231.4
1957	352.8	347.5	99.8	120.9	173.0	187.2	30.5	20.6	24.4	435.1	141.7	456.2
1958	184.2	607.8	103.9	130.3	264.7	270.3	115.1	22.4	28.7	15.5	153.2	374.7
1959	482.6	208.8	166.9	187.5	102.9	20.6	17.5	35.6	116.6	126.0	231.4	315.2
1960	268.7	422.9	132.3	183.9	68.1	53.1	69.6	32.8	10.9	198.9	69.3	368.6
1961	701.0	495.8	516.4	254.5	5.6	7.4	27.2	284.2	357.1	278.9	320.5	233.1
1962	214.9	293.4	94.0	226.8	302.8	155.7	131.6	82.8	178.3	238.8	232.4	312.8
1963	391.4	268.2	359.8	119.7	310.6	39.6	101.5	273.1	212.3	184.1	283.5	166.0
1964	726.4	208.8	148.9	315.8	227.0	67.7	203.7	92.3	275.4	148.8	178.9	375.8
1965	387.4	408.4	338.0	194.8	549.7	44.7	101.3	98.4	265.8	373.2	538.7	258.0
1966	483.1	302.9	311.1	181.1	39.8	69.9	205.8	132.0	68.2	173.4	231.4	118.8
1967	577.7	157.0	60.7	157.1	216.3	112.7	67.9	146.2	89.6	122.2	256.9	618.1
1968	403.0	261.1	561.0	32.8	272.5	67.5	99.1	104.8	125.6	187.6	168.9	384.7
1969	559.7	98.3	324.6	144.8	77.8	60.5	23.1	22.5	60.1	71.1	194.6	327.9
1970	209.6	155.8	198.1	94.0	158.8	81.4	71.4	73.0	10.2	148.3	193.1	332.3
1975	575.0	400.0	167.6	160.8	30.3	60.2	47.1	100.6	50.8	90.2	231.0	333.8
1976	425.6	617.4	179.7	129.3	22.1	40.7	68.7	122.3	145.3	86.6	29.3	382.0
1977	278.1	385.3	174.1	276.6	90.5	36.1	52.6	66.2	53.6	251.0	120.7	261.4
1978	625.2	194.6	99.5	263.0	106.6	58.1	17.8	18.1	47.5	188.4	354.4	525.7
1979	331.7	217.1	445.3	209.1	23.6	53.8	53.4	17.0	31.9	333.0	136.3	365.9
1980	115.1	433.2	31.3	210.3	194.5	24.4	68.2	43.1	16.8	28.2	163.9	209.0
1981	228.1	171.7	271.1	140.8	220.4	32.1	46.0	52.7	17.4	96.2	285.3	573.9
1982	220.1	34.4	143.7	150.6	57.6	40.2	60.1	65.3	154.0	301.8	251.7	264.3
1983	499.6	125.0	120.8	218.5	176.0	95.8	148.2	157.8	290.3	121.1	104.3	370.6
1984	266.9	372.0	71.5	47.8	12.7	29.3	15.3	52.4	58.7	338.2	215.0	528.8
1985	185.7	133.4	387.1	136.0	116.3	16.3	34.3	416.1	155.1	312.1	84.0	321.4
1986	215.8	100.2	158.9	204.0	77.6	160.9	122.9	9.5	6.8	117.3	119.0	418.9
1987	711.2	221.6	151.7	100.8	234.3	153.7	33.9	66.7	123.9	253.7	109.9	87.8
1988	370.5	82.1	271.9	126.5	137.8	70.1	104.2	146.1	188.2	220.0	151.4	140.0
1989	400.0	236.8	77.0	127.8	85.6	39.3	176.7	69.1	41.2	217.8	291.6	279.3
1990	617.4	443.0	160.9	201.0	362.3	47.3	35.7	18.0	49.8	19.9	196.7	40.3
1991	668.5	128.8	78.4	79.7	142.1	20.6	96.9	10.0	141.5	64.5	166.3	360.5
1992	457.4	136.5	214.9	501.3	470.9	106.1	23.8	78.6	112.8	142.8	40.6	360.9
1993	592.3	295.7	258.6	250.0	116.1	25.5	9.0	38.2	124.6	137.8	122.4	262.2
1994	578.8	359.4	112.3	291.7	8.2	42.1	181.1	285.2	99.2	152.2	252.0	364.5
1995	289.7	368.3	93.5	187.6	267.2	310.4	78.3	21.6	245.6	250.6	86.6	247.4
1996	448.1	300.8	211.0	154.1	70.9	58.9	30.6	28.8	56.4	83.4	207.9	123.4
1997	160.3	387.2	353.7	338.1	60.2	534.6	34.2	641.3	212.9	370.3	350.7	336.9
1998	648.5	373.8	170.1	221.0	290.2	102.3	69.3	10.2	143.6	45.1	218.3	159.6
1999	539.9	403.3	287.8	79.0	71.3	25.1	80.3	139.9	196.8	126.1	363.6	471.4
2000	278.0	501.0	468.0	58.7	32.8	23.0	53.4	102.5	146.2	133.5	419.0	699.4
2001	420.4	798.8	94.6	113.2	231.2	137.9	32.6	53.4	25.6	7.1	146.4	239.8
2002	801.5	391.9	253.5	208.9	34.1	70.2	23.9	38.5	502.9	209.9	256.6	123.5
2003	712.9	168.1	96.8	222.0	412.2	285.0	223.7	35.7	262.2	130.9	164.8	1039.4

Grand Anse Praslin (4° 19'S, 55° 42' E)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1950	329.7	417.1	147.8	245.1	179.1	53.6	32.5	88.6	238.8	175.3	103.1	188.5
1951	332.5	123.7	116.1	116.6	15.5	13.7	26.4	131.3	219.5	351.8	71.6	625.6
1952	531.4	286.0	126.7	221.2	97.5	220.7	45.7	141.2	31.2	95.8	148.1	226.6
1953	506.7	191.3	346.2	223.8	87.9	76.5	132.3	13.2	245.9	94.2	247.9	341.1
1954	209.8	112.0	101.3	149.1	156.7	204.5	42.7	115.1	57.9	35.1	47.8	533.4
1955	517.7	340.9	240.5	133.4	100.3	3.8	99.1	126.0	224.3	43.7	125.5	578.6
1956	219.2	279.7	225.8	162.8	191.3	19.1	24.9	192.8	126.0	210.8	335.5	276.4
1957	592.8	165.4	173.2	106.9	144.5	73.9	43.7	17.0	55.4	211.3	175.0	282.7
1958	306.1	45.7	168.4	37.1	211.8	553.2	47.8	21.6	18.0	22.9	236.2	178.3
1977			175.3	289.8	90.7	34.5	53.4	85.5	55.6	288.6	32.1	276.5
1978	241.5	201.9	45.7	368.7	133.8	42.3	7.1	23.9	26.5	144.5	406.7	677.0
1979	270.9	137.6	197.1	223.6	38.3	23.3	86.9	21.9	10.2	174.6	151.5	248.6
1980	101.6	458.3	87.6	87.0	156.3	61.5	93.2	38.7	30.8	52.3	138.7	146.9
1981	107.1	212.2	204.8	28.0	151.3	5.5	11.2	32.4	9.3	70.3	178.3	388.9
1982	155.6	34.4	71.4	98.3	105.3	44.0	79.9	79.0	223.4	329.0	208.2	174.9
1983	280.5	45.1	16.7	140.7	169.1	51.2	105.5	300.3	425.0	201.2	163.0	432.8
1984	221.0	226.9	64.5	65.3	117.5	56.6	23.7	78.1	118.6	89.9	218.4	328.3
1985	120.6	28.4	198.3	111.6	114.9	5.4	38.4	283.1	112.2	175.5	187.2	390.7
1986	179.5	96.1	214.9	189.9	112.5	126.7	37.5	18.7	4.1	56.8	197.7	297.2
1987	339.3	78.4	37.8	107.7	236.0	72.0	44.5	222.0	126.7	358.6	50.8	77.4
1988	261.6	114.6	233.5	122.3	23.7	133.3	80.7	121.6	65.3	200.4	109.3	143.1
1989	257.9	60.2	205.5	118.5	22.2	109.1	254.0	116.9	126.5	153.5	106.9	323.0
1990	337.2	164.8	169.9	207.7	233.7	43.9	13.3	23.5	21.9	9.2	75.9	60.4
1991	139.7	27.5	55.5	54.8	58.7	5.2	49.8	31.7	62.0	47.1	71.9	203.3
1992	526.6	36.1	217.4	176.8	201.2	86.9	14.2	29.0	92.4	59.6	32.0	275.8
1993	409.0	327.1	30.0	72.7	25.5	90.1	10.3	58.2	274.4	118.8	51.7	56.9
1994	348.9	85.7	185.0	177.1	44.2	51.4	155.5	283.9	237.3	102.8	173.2	176.9
1995	239.4	132.8	136.3	160.4	147.6	99.5	50.1	45.0	229.0	186.8	76.9	392.6
1996	289.6	296.9	280.8	62.3	153.9	69.0	25.4	61.4	173.4	2.8	207.2	128.4
1997	174.3	37.8	220.9	190.8	136.8	214.8	13.7	615.5	402.7	518.7	495.2	389.2
1998	277.0	232.2	269.7	69.0	271.1	53.4	24.0	47.1	167.2	9.4	181.9	143.0
1999	399.2	293.0	49.7	61.2	51.5	8.9	74.7	125.4	131.7	17.5	278.5	218.3
2000	87.6	295.2	449.2	70.1	275.3	11.1	42.9	30.9	101.7	87.7	114.3	300.1
2001	610.0	267.2	142.7	284.2	126.4	77.4	16.0	17.6	38.5	5.9	221.7	218.9
2002	715.9	391.1	183.4	145.1	38.3	48.8	26.7	38.9	476.7	437.1	217.4	148.7
2003	212.9	132.2	186.9	230.0	263.2	174.8	192.1	52.6	144.2	76.1	33.6	384.2

Anse Aux Pins (4° 42' S 55 ° 31'E)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1950	317.5	406.7	147.6	251.5	382.0	38.9	69.1	104.1	236.2	98.0	208.8	442.5	225.2
1951	274.1	283.2	266.7	152.7	52.8	30.2	34.8	173.0	216.9	461.3	132.6	247.4	193.8
1952	335.5	286.0	368.1	375.9	223.8	160.3	71.4	153.2	68.8	59.7	110.2	246.1	204.9
1953	338.6	276.3	250.4	203.7	120.7	95.3	66.3	30.0	198.6	118.6	212.6	710.7	218.5
1954	261.6	234.4	213.1	223.0	162.6	105.7	99.8	112.5	97.0	61.2	158.7	290.6	168.4
1955	571.3	286.5	252.7	342.7	143.0	31.2	33.8	56.9	243.3	35.1	114.3	446.5	213.1
1956	94.2	329.4	175.8	332.0	53.6	62.7	58.9	109.0	118.1	201.7	390.7	442.0	197.3
1957	384.8	321.3	202.2	159.3	249.7	221.0	37.3	30.0	30.0	432.8	154.9	437.9	221.8
1958	46.7	78.5	33.3	203.7	224.3	366.0	156.5	37.8	30.2	6.1	128.5	278.9	132.5
1959	474.0	227.3	89.1	167.4	73.4	30.7	25.7	35.8	162.3	179.6	295.4	176.3	161.4
1960	320.0	296.7	136.9	352.5	28.2	64.3	101.1	46.2	8.6	165.1	36.1	363.2	159.9
1961	408.7	283.7	406.4	266.9	10.9	3.3	14.2	265.7	381.3	263.4	501.1	358.1	263.6
1962	307.6	282.2	61.5	170.9	213.1	123.4	167.6	88.1	189.5	126.2	276.3	147.1	179.5
1963	297.2	188.0	260.6	202.2	327.9	40.9	116.1	359.7	282.2	264.7	356.1	193.0	240.7
1964													0.0
1965													0.0
1966	337.6	442.2	213.4	225.0	58.4	66.0	154.7	192.5	21.1	229.1	209.5	127.0	189.7
1967	244.9	166.1	26.7	189.7	432.6	134.4	27.2	185.9	156.7	120.4	296.4	366.0	195.6
1968	524.0	478.5	702.3	18.0	346.2	40.6	63.2	106.2	210.3	233.2	230.6	367.5	276.7
1969	433.8	74.4	251.5	139.4	127.5	43.4	19.8	27.9	31.5	124.5	193.0	336.6	150.3
1970	250.7	179.3	149.6	241.1	241.1	42.4	131.1			69.9	329.4	262.9	158.1
1971	207.0	215.1	5.8			129.5	67.8	142.2	145.5	38.6	281.7		102.8
1979	382.1	87.0	253.6	264.7	32.0	61.7	104.3	60.0	30.9	249.4	274.7	290.2	174.2
1980	214.0	393.8	65.1	200.1	360.8	84.4	92.3	81.4	26.3	87.0	186.0		149.3
1981	263.1	256.3	241.8	35.4	158.3	47.5	58.1	27.3	27.7	127.9	507.3	626.8	198.1
1982	291.9	32.8	242.1	105.5	74.4	48.4	97.1	116.2	196.3	331.6	277.6	400.4	184.5
1983	543.9	71.1	159.8	223.5	243.6	84.2	168.0	201.4	379.4	121.5	100.7	383.1	223.4
1984	504.6	516.8	62.3	105.3	6.5	42.0	22.0	120.0	96.2	352.3	147.5		164.6
1993	454.3	229.6	231.5	243.1	210.7	48.4	27.8	85.9	162.9	142.8	273.3		175.9
1994	357.8	281.1	113.6	200.4	39.3	78.9	109.6	323.4	199.5	167.0	283.6	575.6	227.5
1995	455.3	357.5	127.3	333.3	322.7	428.4	168.7	86.7	519.4	253.9	244.3	335.6	302.8
1996	714.0	392.2	215.0	123.0	85.4	94.7	58.6	87.3	195.3	19.1	227.4	179.0	199.3
1997	141.8	208.1	351.8	373.0	108.5	567.0	47.7	689.9	281.1	354.5	349.2	273.2	312.2
1998	513.5	184.4	242.5	177.3	411.2	61.4	88.9	17.1	193.8	150.7	133.1	199.0	197.7
1999	376.7	238.4	178.3	90.9	64.0	23.0	73.3	128.3	145.5	79.3	209.1	245.7	154.4
2000	270.3	214.6	374.5	112.9	77.5	32.9	43.6	36.0	94.1	112.1	290.8	428.7	174.0
2001	274.6	477.1	112.8	123.2	106.5	130.5	62.8	92.9	76.8	17.9	209.3	357.6	170.2
2002	520.5	280.2	233.1	311.2	31.5	32.0	24.1	77.4	470.2	164.8	187.5	179.3	209.3
2003	345.0	97.1	90.4	221.1	516.7	221.6	98.1	35.4	211.9	241.0	101.9	664.9	237.1

Seychelles International Airport (4° 40' S, 55° 30' E)

	JAN	FEB	MARCH	APRIL	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
1972	293.2	150.3	151.4	133.6	154.6	53.6	20.9	169.6	256.8	403.9	389.1	228.5
1973	388.0	228.5	255.2	166.1	150.3	80.5	49.7	70.6	52.0	39.2	39.7	296.3
1974	557.5	395.4	174.6	186.8	6.7	26.0	17.6	85.8	231.9	564.7	432.1	232.6
1975	526.6	306.3	96.1	209.5	35.1	42.2	28.9	109.7	78.1	51.1	202.8	288.3
1976	348.7	495.8	208.7	216.1	21.0	41.9	62.3	126.5	160.7	41.9	38.5	273.5
1977	450.7	485.4	217.0	307.1	100.5	67.6	68.6	74.8	69.9	345.2	147.4	223.5
1978	470.7	323.8	159.5	302.1	45.2	59.3	32.3	21.5	59.8	309.1	356.0	560.2
1979	303.4	162.2	242.2	282.5	22.3	61.1	83.4	27.2	26.7	265.6	229.1	263.8
1980	167.6	493.6	77.2	205.5	241.4	65.0	97.3	39.0	24.9	53.2	213.9	210.0
1981	402.8	403.1	208.6	61.8	165.7	34.7	55.4	18.2	18.1	80.2	441.2	549.6
1982	337.6	9.1	207.8	156.8	67.7	47.1	94.3	109.8	216.3	271.3	296.4	350.5
1983	609.6	87.1	126.6	213.4	276.9	68.4	165.2	223.8	389.6	112.3	105.9	292.2
1984	425.7	507.4	55.0	75.4	10.7	50.2	30.9	96.7	71.6	295.0	187.0	244.3
1985	203.4	149.7	344.7	175.3	120.3	15.7	68.6	371.6	88.6	255.8	139.8	272.5
1986	257.8	57.1	173.2	169.4	56.5	157.9	99.8	15.2	13.0	107.4	152.0	396.8
1987	449.3	278.8	127.9	118.2	230.1	109.4	51.4	52.0	159.5	259.8	92.7	57.9
1988	286.4	74.8	171.7	92.4	86.5	121.1	124.0	178.3	160.9	274.6	202.4	239.6
1989	316.0	233.8	63.9	86.8	98.1	71.1	276.9	117.0	75.0	234.4	251.6	272.3
1990	414.5	313.4	139.9	220.3	418.4	62.5	43.6	15.0	71.5	28.5	194.8	126.5
1991	798.2	95.0	141.9	160.5	177.3	25.9	134.6	26.8	191.3	126.4	146.0	474.3
1992	438.6	96.8	292.2	463.2	558.9	172.6	22.4	175.8	109.0	180.6	42.4	373.2
1993	505.4	282.1	185.6	257.4	226.1	54.1	23.8	61.4	189.7	165.2	156.1	157.3
1994	258.8	430.1	122.4	285.4	36.4	89.9	151.2	366.7	151.5	289.8	269.9	333.5
1995	235.9	433.1	101.2	148.5	233.4	325.9	130.4	41.5	341.2	249.6	204.8	319.3
1996	470.9	372.3	237.5	104.5	84.2	89.4	62.1	83.3	300.8	51.5	247.9	209.1
1997	132.0	212.4	340.2	354.5	94.6	528.6	47.3	694.1	265.1	320.9	324.8	244.7
1998	477.6	329.3	198.2	152.0	311.9	69.3	74.9	22.1	184.1	67.8	121.2	121.0
1999	418.0	370.8	167.7	83.1	94.8	40.2	103.2	168.4	160.6	105.6	285.4	238.5
2000	206.7	452.2	465.8	87.2	82.6	30.1	20.5	45.9	100.8	67.7	332.5	552.1
2001	357.0	611.0	217.9	187.1	175.4	122.8	38.4	131.9	85.5	8.8	152.7	195.0
2002	734.0	251.0	285.4	215.8	30.8	92.3	29.3	104.3	456.8	256.6	175.1	134.3
2003	448.7	136.7	154.3	185.7	489.6	196.8	167.2	43.1	235.9	163.0	128.6	592.9