

Please provide to following details on the origin of this report

Contracting Party	Republic of Seychelles
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<i>Submission</i>	
Signature of officer responsible for submitting national report:	
Date of submission:	06/11/01

Please provide summary information on the process by which this report has been prepared, including information on the types of stakeholders who have been actively involved in its preparation and on material which was used as a basis for the report

The National Focal point transmitted the report documents to the focal point for forest biological diversity, the Director of Forestry.

The questionnaire was sent out to **23** stakeholders (see below) and a national workshop was organised to discuss and finalise responses submitted by stakeholders. The consensus reached through this meeting was then compiled in a first draft. The document was then subject to editorial review by the CBD national focal point, the Director Conservation prior to submission to the CBD Secretariat

In detail the documents were circulated to key personnel in the Ministry of Environment, as well as to the Director General of Environment, Director General of the Policy Planning and Services, Director Conservation, Director of Botanic Gardens and the Director of Environmental Assessment and Pollution Control.

In the wider sense the Director General of the Ministry of Agriculture and Marine Resources, the Environmental Education Co-ordinator of the Ministry of Education, officials of the Ministry of Local Government and Sport, Seychelles Bureau of Standards, Ministry of Foreign Affairs, Ministry of Tourism And Civil Aviation discussed issues pertaining to forest biological diversity and forwarded the same.

A number of the private owners and managers of smaller islands, who contribute to the conservation and sustainable use of forest biological resources (e.g. ecotourism) were also contacted e.g. Marine Park Authority managing Curieuse Island, managers of Fregate Island, Denis Island, Aride Island, Bird Island, Cousine Island, North Island, Cousin, Slhouette

The NGOs Birdlife Seychelles and the Nature Protection Trust of Seychelles were also contacted as most of the research topics they are involved relate and depend on forest biological diversity.

Decision IV/7 on Forest biological Diversity

1. What is the relative priority afforded to implementation of this decision by your country?					
a) High	<input checked="" type="checkbox"/>	b) Medium	<input type="checkbox"/>	c) Low	<input type="checkbox"/>
2. To what extent are the resources available adequate for meeting the obligations and recommendations made?					
a) Good	<input type="checkbox"/>	b) Adequate	<input type="checkbox"/>	c) Limiting	<input checked="" type="checkbox"/>
				d) Severely limiting	<input type="checkbox"/>

2c

The main implementing agency of the decision IV/7 is the Forestry Section in the Ministry of Environment. The recurrent budget of the ministry is only in a position to cover the running costs of the forestry activities. The Majority of the capital projects addressing the recommendations of the CBD need external funding by the different donor agencies

3. Has your country assessed the status and trends of its forest biological diversity and identified options for its conservation and sustainable use? (Decision IV/7, paragraph 12)	
a) no	<input type="checkbox"/>
b) assessment underway (please give details below)	<input type="checkbox"/>
c) assessment completed (please give details below)	<input checked="" type="checkbox"/>
d) not relevant	<input type="checkbox"/>

3 c) priority areas have been addressed

- (i) In 1993 the Seychelles Forest Management Plan/Sector Study was completed with the objective of obtaining adequate information on the status of the forest resources of Seychelles. The aim was to establish a forest resource management strategy and programme to ensure the sustainability of the resource base. Further to that the strengths and constraints in forest and conservation policies were identified.
- (ii) A complete survey of the endemic and threatened plant species of the granitic Seychelles was carried out from 1994 to 1996 and a report compiled. All species were classified according to the International Conservation (IUCN) criteria of critically endangered to vulnerable species. A second report compiled areas of special conservation value for the plants of the granitic islands of Seychelles.
- (iii) The Cabinet of Ministers approved the Forest Policy paper in 1996, which was prepared with the assistance of the UNDP. The Forestry Policy statement aims at establishing the basic principles, broad objectives, main forest functions and priorities and strategies for forestry development in Seychelles. The forest Policy paper was prepared as required by the Seychelles Forest Management Plan and must be read together with the Forest Management Plan/Sector Study

- (iv) In 1999 an integrated management plan for the largest terrestrial national park covering 20% of the main island was submitted. In line with the preparation of the same a thorough assessment was conducted over the period of 1 year.
- (v) One of the flag ship species of Seychelles forest biological diversity is *Lodoicea maldivica*, the double coconut, which is the biggest seed in the plant kingdom. The seed is commercialised as a souvenir. Since 1999, a project for the sustainable management of *Lodoicea maldivica* started with the University of Reading. The project is still ongoing.
- (vi) Ecotourism development is being encouraged as a means of sustainable use and to add value to forest resources. In line with the ecotourism development leaflets introducing the nature trails are on sale and some of the money generated will be reinvested in ecotourism and conservation projects
- (vii) Some work to assess the threats posed by invasive species is ongoing:

Example 1

Experiment at "Congo Rouge" conducted by the Commission de L'Océan Indien (COI) with the European Union support:

The aim of the experiment was to find the different approaches in order to eradicate some invasive plant species such as Cinnamon (*Cinnamomum verum*) and Chinese Guava (*Psidium cattleianum*). The experiment lasted for two years (1994 to 1996). The experiment was conducted at 750 metres altitude in a forest high in biological diversity.

Several techniques were used; cutting of the trunks, manual uprooting of the young exotic plants, ringing of Cinnamon and Guava trees, chemical treatment of the stump and trunks using *Round Up* (*herbicides*).

The result of the experiment revealed that the techniques employed have some negative impact and significant disturbances on the biotic environment especially towards the detriment of the endemic species (subjected to high light intensity, disorganisation of the humus layer, disorganisation of the interconnection of the roots between individuals, contamination of endemic by the chemical products when in close proximity, the appearance of new intruding species).

In line with the experiment, an endemic nursery was set up in 1998 with the aim of propagating endemic plant species in areas where the potential for endemic species to thrive well were identified.

Example 2: The Forestry Section conducted a similar experiment, at an altitude of 450 metres, at Mare aux Cochons in February-March 1998. One of the aims is the reintroduction of rare endemic species such as Bois de Fer (*Vateriaopsis sechellarum*). The starting cohort is through the coppicing of mature Cinnamon and *Jambosa* (*Eugenia jambos*), whereas the young saplings are manually

uprooted. The site is regularly monitored so as to remove any exotic species in the vicinity of the **endemic** saplings planted.

<i>If a developing country Party or a Party with economy in transition -</i>	
4. Has your country requested assistance through the financial mechanism for projects that promote the implementation of the focused work programme on forest biological diversity? (Decision IV/7, paragraph 7)	
a) no	
b) yes (please give details below)	✓

4 b):

- i) A concept paper was submitted to the Global Environment Facility (GEF) UNDP under the project name "Granitic Islands Terrestrial Ecosystems Biodiversity Conservation"

The aim of the project is to develop a conservation strategy for the forest of the granitic islands of Seychelles.
- ii) The ongoing GEF mid-sized Avian Ecosystems project, an NGO /Govt partnership project, contained specific components for both mountain and coastal forest ecosystem assessment and for coastal forest ecosystem rehabilitation.

Programme element 1: Holistic and inter-sectoral ecosystem approaches that integrate the conservation and sustainable use of biological diversity, taking account of social and cultural and economic considerations

5. Has your country identified methodologies for enhancing the integration of forest biological diversity conservation and sustainable use into an holistic approach to sustainable forest management at the national level? (Work Programme, paragraph 13)	
a) no	
b) yes - limited extent (please give details below)	✓
c) yes - significant extent (please give details below)	
d) not applicable	

5.b):

The Seychelles Government is aiming towards a holistic approach to integrate the conservation and sustainable use of forest biological diversity. At present the main components of the methodology applied are legal protection, a permit system to control the felling of trees, where decisions are taken on a case by case basis, permanent monitoring, survey's and sensitisation and public awareness.
In detail a process to prepare a Biodiversity and Conservation Act under which all the components of plant genetic resources management and conservation will be covered has started. Legal protection is being updated. The protection system will cover stringent laws for plant species that are critically endangered and less stringent laws for those that are not critically endangered.

Prior to the law regulations and mechanisms had been set up, which concern the best practices and approaches for the collection of plant

material e.g. for medicinal purposes. One species, the *Lodoicea maldivica* has its own management decree, as it is a flagship species for Seychelles and has considerable immediate commercial value. The felling of commercial exotic timber species in plantations is selective. In Seychelles forestry is no longer practiced as a major commercial business, but it is more conservation oriented, e.g. selective felling of mature trees in plantations. Native trees are generally not felled for commercial purposes. An Environmental Impact Assessment (EIA) is required for any development under the national legislation.

6. Has your country developed methodologies to advance the integration of traditional forest-related knowledge into sustainable forest management, in accordance with Article 8(j)? (Work Programme, paragraph 14)	
a) no	
b) yes - limited extent (please give details below)	✓
c) yes - significant extent (please give details below)	
d) not applicable	

6 b):

- (i) The first settlement of Seychelles was only in the 1770's, traditional forest related knowledge is therefore limited. However, some knowledge on medicinal properties of different plant species is known. An association is in the process of being formed where the traditional healers are being sensitised on the issue of sustainable harvest methods.

7. Has your country promoted cooperation on the conservation and sustainable use of forest biological resources at all levels in accordance with Articles 5 and 16 of the Convention? (Work Programme, paragraph 15)	
a) no	
b) yes - limited extent (please give details below)	✓
c) yes - significant extent (please give details below)	
d) not applicable	

7 b):

The Ministry of Environment has established sound co-operation with institutions like RBG Kew, Eden Project, FAO, Reading University, Forestry Commission UK, GEF. However existing co-operation are based on issues at hand and taking into account prevailing limitations. With regards to article 16 access to technology has only being practised to a limited extent, e.g. identification of unknown pest and disease in the forests.

8. Has your country promoted the sharing of relevant technical and scientific information on networks at all levels of protected forest areas and networking modalities in all types of forest ecosystems? (Work Programme, paragraph 17)	
a) no	
b) yes - limited extent (please give details below)	✓
c) yes - significant extent (please give details below)	
d) not applicable	

8 b):

- (i) The Ministry of Environment is awaiting for the official launching of its Web page. The Government of Seychelles completed its first National Report and also published its National Biodiversity Strategy Action Plan in 1997. The Environmental Management Plan of Seychelles (EMPS) 2000-2010 was launched in 2000. Both have been distributed widely.
- (ii) Unfortunately, the majority of scientific information is being held in research and other institutions all around the world. Most of the scientists were and are of foreign origin. Locally held information however, is being made available on a case-by-case basis on request.

Programme element 2: Comprehensive analysis of the ways in which human activities, in particular forest-management practices, influence biological diversity and assessment of ways to minimize or mitigate negative influences

9. Has your country promoted activities for an enhanced understanding of positive and negative human influences on forest ecosystems by land-use managers, policy makers, scientists and other relevant stakeholders) (Work Programme, paragraph 29)	
a) minimal activity	
b) yes - limited extent (please give details below)	
c) yes - significant extent (please give details below)	✓
d) not relevant	

9c)

- (i) Prior to any development an Environmental Impact Assessment is required under the Environment Protection Act.
- (ii) The country ran several workshops for key stakeholders on forest fire prevention and control from 1994 to 1999. The same was done for the guidelines regarding tree felling.
- (iii) A series of seminars were carried out during the preparation of the Forest Management Plan Sector Study. All aspects of forest management and forest conservation were widely covered during these activities.

10. Has your country promoted activities to assemble management experiences and scientific, indigenous and local information at the national and local levels to provide for the sharing of approaches and tools that lead to improved forest practices with regard to forest biological diversity? (Work Programme, paragraph 30)	
a) minimal activity	
b) yes - limited extent (please give details below)	
c) yes - significant extent (please give details below)	✓
d) not relevant	

10c)

- (i) The Environmental Trust Fund (ETF) of Seychelles is an organisation whereby individuals can donate and make contributions towards the preservation, conservation and protection of the Environment in general. A multi-sectoral board of governors ensures the sharing of finance in line with the above subject. The population is given sufficient information through the media. (TV, radio, newspaper, brochures) and through extension services, whereby forestry officers act as extension officers while undertaking site visits e.g. inspection upon receipt of request for tree felling.
- (ii) There are several institutions, (Town and Country Planning, NGO's, ETF and the Environment Public Relations section) which are responsible for the sharing of information and on the sound approaches that can be carried out to improve forest practices with regard to forest biological diversity conservation and protection.
- (iii) The process of compiling the Environmental Management Plan of Seychelles ensured information gathering through broad national consultation and national workshops,
- (iv) The preparation of the National Biodiversity Strategy and Action Plan was undertaken using the same principles.

11.Has your country promoted activities with the aim of providing options to minimize or mitigate negative and to promote positive human influences on forest biological diversity? (Work Programme, paragraph 31)	
a) minimal activity	
b) yes - limited extent (please give details below)	
c) yes - significant extent (please give details below)	✓
d) not relevant	

11 c):

- (i) Apart from alien invasive species a serious threat to Seychelles biodiversity is forest fire. To address this issue a Forest Fire Contingency plan has been prepared. To further strengthen the plan a Technical Co-operation Programme was developed with FAO for forest fire management.
- (ii) The Seychelles has designated approx. 50% of its total land area as protected area (National Parks, Nature Reserve etc.). In addition sea has been reclaimed to provide more land thereby negating the requirement to develop in forested biodiverse mountain areas.
- (iii) The Forest nurseries around the islands provide sufficient plant materials for supplying the general public demand in a bid to prevent illegal removal of young plants from the forest. The domestic timber industry is supplied entirely with exotics harvested from timber plantations, thus minimising the risk of people harvesting indigenous timber.

12.Has your country promoted activities to minimize the impact of harmful alien species on forest biological diversity? (Work Programme, paragraph 32)	
a) minimal activity	
b) yes - limited extent (please give details below)	✓
c) yes - significant extent (please give details below)	✓
d) not relevant	

12 b):

- (i) The main threat to Seychelles forest biological diversity is alien invasive species and the problem is currently so broad that only certain areas/species of particular concern have been addressed to date.

12 c)

- (i) In 1993 the Seychelles Forest Management Plan/Sector Study was completed with the objective to obtain adequate information on the status of the forest resources of Seychelles in order to establish a forest resources management strategy and respective programme to ensure the sustainability of the resource base. Further to that the strengths and constraints in forest management and conservation were identified.
- (ii) With financial assistance from the Dutch Govt. a project was designed and implemented to address the issue of invasive creepers. This included extensive public awareness campaigns the production of posters and information leaflets and various pilot control projects.
- (iii) Where possible some control measures are being practiced with the aim of eliminating/controlling some invasive exotic species. However, the control and elimination programme is difficult to implement because the invasive plant species are very aggressive the appropriate technologies and resources are lacking.
- (iv) During the last five years, a quarter of Forestry Divisions budget was spent on dealing with alien species.
- (v) Alien mammalian predator eradications carried out on four islands incorporating private sector , NGO and international partners have been successful with the goal of enhancing the status of endangered lowland forest biodiversity... notably endemic bird species.
- (vi) A number of the smaller and privately owned islands have embarked on forest ecosystem rehabilitation projects.

13.Has your country identified means and mechanisms to improve the identification and prioritisation of research activities related to influences of human activities, in particular forest management practices, on forest biological diversity? (Work Programme, paragraph 33)	
a) minimal activity	
b) yes - limited extent (please give details below)	
c) yes - significant extent (please give details below)	✓
d) not relevant	

13c)

With the help of the SADC through a regional process a list of Criteria and Indicators was compiled to help in the identification of gaps where research is needed or to study the impacts of human activities on forests. For the next decade (2001-2010) the body responsible for forestry issues in Seychelles has listed a series of programme/projects which have been considered as priority and must be implemented provided that there are funding. These include the following:

- (a) Provision for better forest protection system
- (b) Improve conservation of Forest Biodiversity
- (c) Enhance research on forests and species
- (d) Capacity building
- (i) Strengthen the management of protected areas.

The NBSAP document also identifies the gaps where research is needed. The EMPS lays out nationally agreed priorities in forest biological diversity management for the 2000-2010 period.

14. Does your country hold research results and syntheses of reports of relevant scientific and traditional knowledge on key forest biological diversity issues and, if so, have these been disseminated as widely as possible? (Work Programme, paragraph 34)	
a) not relevant	
b) some relevant material, but not widely disseminated	✓
c) significant material that could be more widely disseminated (please give details below)	
d) yes - already widely disseminated (please give details below)	

14 b):

- (i) Some materials are found in the Kew Garden in London, England
- (ii) The first settlement of Seychelles was only in the 1770s , traditional forest-related knowledge is therefore limited. However, some knowledge on medicinal properties of different plant species is known. An association is in the process of being formed where the healers are being sensitised on the issue of sustainable harvest methods.
- (iii) Unfortunately, the majority of scientific information is being held in research and other institutions all around the world. Most scientists were and are of foreign origin and it is only in the past 15 years that records are kept by the Seychelles Bureau of Standards. However information is being made available on a case-by-case basis as requested.

15. Has your country prepared case-studies on assessing impacts of fires and alien species on forest biological diversity and their influences on the management of forest ecosystems and savannahs? (Work Programme, paragraph 35)	
a) no - please indicate below whether this is due to a lack of available case-studies or for other reasons	✓
b) yes - please give below any views you may have on the usefulness of the preparation of case-studies for developing a better biological understanding of the problem and/or better management responses.	

15 a):

Submission of case studies within the deadline was not possible due to the lack of human resources. However if acceptable by the secretariat case studies will be submitted at a later date.

Programme element 3: Methodologies necessary to advance the elaboration and implementation of criteria and indicators for forest biological diversity

16. Has your country assessed experiences gained in national and regional processes, identifying common elements and gaps in existing initiatives and improving indicators for forest biological diversity? (Work Programme, paragraph 43)	
a) minimal activity	
b) yes - limited assessment made (please give details below)	✓
c) yes - significant assessment made (please give details below)	✓
d) not relevant	

16b: regionally , limited assessment made:

- (i) Seychelles is part of the South African Development Community (SADC) and is involved in the drafting of the SADC Forestry Protocol.
- (ii) Seychelles also participated through the SADC in the regional process to compile a list of Criteria and Indicators (C&I) for forest biological diversity. Even if the sets of C& I have not been nationally tested, it is however being practised on a case-by-case basis through the implementation of stand alone projects e.g. in the National Park managed by Forestry.

16 c: nationally, significant assessment made

- (i) Common elements and gaps were identified in relation to national projects (projects in the NBSAP). The gaps identified were bridge through the development of the Environmental Management Plan of Seychelles. Criteria and Indicators were developed as a tool.

16 Has your country carried out taxonomic studies and inventories at the national level which provide for a basic assessment of forest biological diversity? (Work Programme, paragraph 43)	
a) minimal activity	
b) yes - limited assessment made (please give details below)	✓
c) yes - significant assessment made (please give details below)	✓
d) not relevant	

17 b): As for lower plants and monocotyledons ie. grasses no taxonomic studies and inventories have been done.

17 c): Taxonomic inventories dates back as far as early as 1800. Significant assessments were carried out with regards to dicotyledons.