

HUMAN SETTLEMENT COUNTRY PROFILE

SEYCHELLES

Decision-Making

Programmes and Projects

- A. Providing Adequate Shelter for All
- B. Improving Human Settlement Management
- C. Promoting Sustainable Land-Use Planning and Management
- D. Promoting the Integrated Provision of Environmental Infrastructure: water, sanitation, drainage and solid waste management
- E. Promoting Sustainable Energy and Transport Systems in Human Settlements
- F. Promoting Human Settlement Planning and Management in Disaster-Prone Areas
- G. Promoting Sustainable Construction Activities
- H. Promoting Human Resource Development and Capacity-Building for Human Settlement Development

Status

Capacity-Building, Education, Training and Awareness-Raising

Information

Research and Technology

Financing

Cooperation

Decision-Making: The strengthening of the current Town and Country Planning Authority (whose mandate is to oversee all development projects) and its relationship with the Environment Impact Assessment Regulations has provided a significant basis for improved management of development, and a related reduction in population density in many sensitive areas. Seychelles has very strong laws protecting tenant rights.

Land-use planning: The main institution involved in this sector is the Ministry of Land Use and Habitat (MLUH). The Town and Country Planning Authority is the main body mandated with approving all infrastructure projects through the information collected by the field inspectors before final decisions are made. In some cases, development projects are refused on the basis of information provided from the field and consultation with stakeholders. The Town and Country Planning Act is the primary instrument dealing with land use and development for the last 28 years. The Act also made the provision for the establishment of an inter-ministerial body, the Town and Country Planning Authority, which is the authorizing body for all land development proposals today. A review of the Town and Country Planning Act (1972) is also ongoing. In 1992 the National Land Use Plan (Plan d'Aménagement du Territoire – PAT), was introduced for the three main islands providing zoning schemes and indicating land use patterns up to the year 2000. A Sensitivity Atlas of the various 'sensitive zones' of the islands has been compiled to aid in good land use management. Seychelles has also enacted Environmental Impact Assessment Regulations aimed at providing the necessary information and risk analysis before the final decision can be taken. The Environment Impact Assessment Process and the Planning Authority Process provide a framework for integrating environmental and developmental issues in decision-making.

Energy: The Ministry of Industry and International Business is responsible for setting policy for energy within a specific Energy Bureau where has been set up for this purpose.

Transportation: The Ministry of Tourism and Transport is the main government body, responsible for all forms of transport. The ministry is also responsible for the construction of roads, and coordinates its activities with the Ministry of Environment to reduce the impact of roads on the environment.

Environmental health: The Ministry of Health has an Environmental Health Section, which works very closely with the Ministry of Environment and Natural Resources on environmental health issues. Through the support of the Seychelles Bureau of Standards and the Ministry of Industries and International Business, a number of environment quality standards are currently in force, especially the effluent, air and noise pollution standards. The Seychelles is in the process of implementing the ISO 14000 series within all sectors, both government and the private sector to ensure better accountability of environmental impacts.

Atmosphere: The Ministry of Environment and Natural Resources is responsible for policy aimed at protecting the atmosphere in collaboration with the Seychelles Bureau of Standards and the Ministry of Tourism and Transport. There is currently standards for air quality, and air emissions from both stationary and non-stationary sources.

Programmes and Projects: the Environment Management Plan of Seychelles (EMPS 2000-2010) includes thematic areas relevant to human settlements like:

- Society, Population and Health (including Gender);
- Land Use, Coastal Zones and Urbanisation;
- Biodiversity, Forestry and Agriculture;
- Energy and Transport;
- Fisheries and Marine Resources/Processes;

- Water, Sanitation and Waste and
- Tourism and Aesthetics.

Review and implementation of the TCP Act 1992	Recurrent budget	Jan 1995	Dec 2002
Review and Revise PAT and Develop District Development plans in conjunction with Coastal Management Plan	4.0 (Recurrent budget)	Jan 1999	Jan 2005
Implementation programme for PAT, district and CZM Plans	-	Jan 1999	Jan 2005
Implementation programme for Reclamation Environmental Management	0.5	-	2002

Poverty: Since 1976, Seychelles has the policy to eliminate poverty, with government's policy to invest in education (Ministry of Education), housing (Seychelles Housing Development Corporation), basic health care (Ministry of Health) and also addressing issues of social stability and gender (Ministry of Social Affairs).

A. Providing Adequate Shelter for All: The Seychelles housing policy places strong emphasis in ensuring adequate supply of land, materials and financial resources to provide for a regular supply of housing for its small and growing population. The main institution mandated to implement Government's housing policy is the Ministry of Land Use and Habitat (MLUH). The main objective of the policies in place is to plan and manage resources made available for housing development in such a way that every seychellois family can confidently aspire to own their home within parameters of their own means. The policy places priority of access to assistance for housing to those who need it most and who are less able to afford

There exists some 1200 houses and apartments presently under rental stock managed by the Property Management Corporation (PMC). These will be sold off and each family's rental payments will be converted into repayment of a loan under the new loans scheme being introduced. The Property Management Corporation will be mandated to manage all common areas and grounds of the buildings for which the residents will be charged a monthly fee. It is emphasised that most persons in rental stock are currently classed as needy and not having the necessary means to own their own homes. Care will be exercised to ensure that the loan repayments are maintained at affordable levels for each family. The Ministry has 913 housing units under construction at present in most districts. All of this stock will be sold off to the families for which they are being built once completed

B. Improving Human Settlement Management: Government will continue to contract out the construction of standard apartments and houses for families classified within the low-income category and those that qualify in the middle income category under its national housing programme managed by MLUH. Government will also do the same for those families who are in the middle income bracket but are considered as low per person income. These houses and apartments will be sold outright through the provision of a housing loan from banks. The Housing Finance Company (HFC) has been recently created (2003) to promote and devise financial mechanisms to raise financial resources for housing development on behalf of Government. It will take the responsibility of managing the loan portfolio with the banks under the control of Government. MLUH will also sell complete condominium development projects to contractors to build apartments of various grades for sale to the remainder of the middle and the higher income groups under its Condominium Programme. The financing for such will come from the contractors or developers themselves and their banks. The selling prices and profit margins for these developments will be pre-agreed and set on a project by project basis. The onus will continue to be on affordability.

C. Promoting Sustainable Land-Use Planning and Management: District Level Land Use Plans are being prepared and combined with the strengthening the capacity of the GIS unit. Current projects are to develop long term development plans at district level, which are more detailed, focusing on reduce density or increase density of various zones in a planned manner, provision of proper support infrastructure, and cognizant of the surrounding environment.

As the movement of population on the island of Mahé is mainly towards the East Coast, major reclamation works have taken place there due to scarcity of land to build on and to avoid encroachment into the forests. The net effect of internal migration will be significant over the period of implementation of the housing project. Coastal population density on the East Coast of Mahé is expected to grow from 161 persons per square km in 1995 to 203 persons per square km in 2015.

The main challenges of urbanisation therefore centre on the ability of the country to:

- Provide more land for housing;
- Restrict building heights and density to accommodate for the type of tourism planned for the island;
- Raise sufficient capital to provide centralised services such as sewerage and solid waste management;
- To provide housing in a sustainable manner and minimise negative impacts on both physical beauty and ecological capital such as coastal and marine ecosystems.

Reforestation: Substantial reforestation, most using specific endemic trees has been undertaken with the assistance of Commission de l'Océan Indien (COI), the Dutch Trust Fund and others in the main islands of Mahe, Praslin, and La Digue. Endemic tree nurseries have been set up.

A National Biodiversity Centre at Barbarons, better known as the Seychelles Botanic Centre and Arboretum is due to be completed by the year 2010.

D. Promoting the Integrated Provision of Environmental Infrastructure: water, sanitation, drainage and solid waste management: See under Freshwater and Sanitation Profiles. See paragraph under A.

Such high rates of change strain the capacity of Governments in such sectors as housing and infrastructure, potable water and sanitation services, and solid waste disposal. For example, even though the population growth rate is relatively stable, there is a high demand for housing. With over 47 percent of the island (mainly the medium-to-high altitude forests) under conservation, protection and management, and a number of other areas (at least 10 percent of the total land area) declared as sensitive areas, the conflicts arising from land use and development are numerous. By early 2001, there were 5,348 families applying for housing with the Seychelles Housing Development Corporation (SHDC); a demand that is likely to grow in the future.

E. Promoting Sustainable Energy and Transport Systems in Human Settlements: An energy policy has been in place since 1999, with a primary focus on exploring economically viable and financially sustainable forms of energy.

Several projects related to climate change can be found in Seychelles National Communications to UNFCCC and EMPS. The Energy Bureau also has its own projects aimed at reducing energy consumption and dependence through better design and management. A cooker replacement project was undertaken in 1998 with much success. The intent was to encourage a shift to gas cooking which is much more efficient and cost-effective. Programmes outlined in EMPS are:

- Energy Conservation and Renewable Energy Programme;
- Sustainable Energy Extension and Education Programme; and
- Energy Sector Pollution Monitoring Programme.

Transportation: Seychelles has a good policy on transport. A vehicle testing station ensures exhaust air quality is maintained. There is currently an exploration into the use of alternative types of transports, especially those that do not depend upon fossil fuel.

With the support of UNDP a project is being developed to address sustainable transport strategies in the Seychelles. In addition EMPS has proposed the following programmes for this sector:

- Integrated Land-Use and Transport Planning Programme;
- Environmentally Sound Road Design and Construction Programme;
- Victoria Traffic Management Programme;
- Public Transport Improvement and Promotion Programme; and
- Transport Upgrading Enforcement and Surveillance Programme.

F. Promoting Human Settlement Planning and Management in Disaster-Prone Areas: Whilst a committee for national disasters has been in existence for a number of years under the aegis of different ministries and departments, the recent extreme weather events of 1997 and 2002 have led to an enhanced disaster management system. Most importantly, the President's Office has assumed overall responsibility for the National Disaster Committee (NDC). Complimenting this, a permanent Secretariat has been established, a National Disaster Fund set up and Seychelles has become more active in regional disaster management initiatives.

G. Promoting Sustainable Construction Activities: No information available.

H. Promoting Human Resource Development and Capacity-Building for Human Settlement Development: There is a training plan, which is being implemented. Two people are in overseas training on urban planning. In addition two employees of the Ministry of Land Use and Habitat are taking distance-learning courses on environmental management. A number of in-house training is also held.

Status: The small economy of the country is primarily dependent on tourism and fisheries, which provide most of the country's total foreign exchange earnings.

Poverty: The policy to eliminate poverty has been especially successful so far that poverty levels in Seychelles are very low (as per UN Definition), but the risk of the proportion of people living below the poverty line is high, noting the high economic vulnerability and isolation of the country.

Human settlements: Climate change will impact on human settlements and key economic sectors: About 85% of human settlement and infrastructure in the Seychelles are located along the coast. A rise in sea-level will result in the displacement of a large portion of the population. Coastline recession will also adversely affect infrastructure which supports the tourism and fisheries industries, the two key economic drivers of sustainable development. Water resources are also expected to be affected both in terms of quality and quantity. Climate change is expected to result in changes in rainfall pattern, evaporation, river runoff, groundwater recharge, and water quality in the Seychelles.

Land-use: In Seychelles, a huge proportion of the ecosystems are fragile and impacts are apparent. With over 47% of the island (mainly the medium-to-high altitude forests) under conservation protection and management, and a number of other areas (at least 10%) declared as sensitive areas, the conflicts

arising from land use and development are numerous. The Government has, on the other hand, also pursued a policy of providing every needy family with housing. In particular, recent reclamation activities over the East Coast of Mahe were undertaken as a trade-off to curb encroachment into the forests of Mahe.

The lack of land use plans at national and local level often makes environmental planning difficult. In fact the Environmental Impact Assessment Process is often faced with the dilemma of assessment of appropriate land use. Unplanned areas usually generate a number of conflicts among the local people with diverse interests, and also with the private sector which is often made to operate commercial operations within residential areas leading to noise and other conflicts. Poor planning in some areas has also affected drainage and increased flood risks. Non-point sources of pollution continue to constitute a major threat to the watershed and coastal environment, although the Government has made some heavy investments in waste water treatment in the main urban areas. Root causes of this threat include lack of a specific long-term integrated coastal management strategy and programme, no local land use plans, shortcomings of EIA's in assessing cumulative and long-term effects, as well as poor capacity for integrated coastal management. Improvements in policy, coastal zone management and sustainable use of land resources within an integrated ecosystem concept will improve land use planning and construction techniques and consequently allow this threat to be reduced. The problem of land use and availability will likely become more contentious in the near future as the population increases and the economy grows. Capacity and resources to better manage this limiting resource is vital to address this critical issue.

Energy: The energy supply of Seychelles is characterised by the importation of refined petroleum products, amounting to about 90% of the primary energy supply of the country. The Seychelles Petroleum Company (SEPEC) is the sole importer of petroleum products. From 158,989 toe imported in 1990, the importation has nearly doubled to 241,028 toe in 1998.

Transportation: From 1990 to 2000, the vehicle population grew from 6,050 to 8,921. Energy consumption of the road transport sector represents nearly 43% of the national total energy consumption.

Capacity-Building, Education, Training and Awareness-Raising: *Land-use-planning:* So far, very few initiatives exist, but there are plans to increase public awareness on land use planning and management of land resources, which is an extremely critical issue in Seychelles.

Energy: A series of small leaflets have been circulated widely aimed at increasing awareness towards energy conservation. Periodical television awareness programmes are also done.

Information: *Land-use planning:* Information is usually provided during consultation stages in the development of district plans. Information is available through a dedicated front office that provides potential developers with guidelines and regulations applicable to land use and construction.

Transportation: Media activities especially focusing on road safety are periodically implemented.

Research and Technology: *Land-use management:* Researches on past documents and on the GIS are being held but need to be updated frequently. The further development of the use of GIS in land use management.

Energy: A number of research initiatives were undertaken in the 1980s, with the solar wood dryer and solar water heating that are now well appreciated by many residents. There is currently little research done in this area, primarily due to lack of capacity.

Transportation: No research activities exist except for periodical trials such as pilot cars running on liquid petroleum gas.

Financing: Most of the programmes aimed at alleviating the relative poverty in Seychelles is financed through numerous government schemes, such as social security, short-term employment schemes, housing assistance schemes, low interest loans with flexible repayment terms, free access to education (including adult learning) and health, and in some cases support for legal representation. Some UN organizations also provide some financing in terms of technical support.

And-use planning: The Government of Seychelles funds almost all programmes.

Energy: Many of these projects are currently being implemented by using government resources. Donor support in this area is very poor.

Transportation: Seychelles provides economic incentives for low-fuel consuming vehicles and a high tax on new vehicles.

Cooperation: Government cooperates with all local sectors. No international cooperation exists in this area apart from that Seychelles participates actively to the programmes of UN Habitat.

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