

MAURITIUS COUNTRY PROFILE



General Information

Geography: The Republic of Mauritius consists of the main island, Mauritius, which lies approximately 20.17° S and 57.33° E and a group of small islands in the Indian Ocean, namely: Rodrigues, the Cargados Carajos, Agaléga, Tromelin and the Chagos Archipelago.

Area: Total land area of the Republic of Mauritius is 2040 km² and the marine exclusive economic zone covers an area of about 1.9 million km².



Capital: Port Louis

Topography: The main island Mauritius is 1865 km² in area, volcanic in origin, consists of a central plateau with a mean elevation of 300 – 400 meters and is surrounded by mountain ranges and plains.

Climate : Mauritius enjoys a mild maritime climate with summer extending from October to April and winter from May to September. Trade winds are prevalent throughout the year but are stronger in the winter when strong anticyclones pass to the south of the island. On average one cyclone passes within 100 km of Mauritius each year. Mauritius has a high annual rainfall of 3,900 mm³ on average, with maximum occurring in summer. Maximum mean temperature reaches 31°C in summer, while mean minimum temperature on the central plateau reaches 14°C in July and August.



Characteristics of Mauritius

Mauritius is a Small Island Developing State (SIDS) and, like all SIDS, it has certain unique characteristics and vulnerabilities that create additional constraints for its sustainable development. These include its small size, ecological fragility, susceptibility to natural disasters and climate change, narrow resource base, limited local capital for productive investment, remoteness from and dependence on international markets, high costs of transportation, limited diversification in production and exports and vulnerability to economic shocks. Effects of climate change and sea level rise are already being felt in numerous sectors namely on the coastal zone, strategic infrastructures, agriculture and freshwater resources and health among others. Limited land resources also, results in major challenges with regard to land use and planning for activities that are not compatible. Waste management is yet another key challenge given the limited options that are available in SIDS for waste disposal

and recycling. However, over the years, Mauritius has made sustained efforts to build resilience to face its numerous challenges. Mauritius has been able to build resilience to adapt to unfavourable national, regional and international conjectures as well as to the effects of climatic changes including cyclones, seasonal droughts and coastal erosion. These challenges have called for innovative approaches and major reforms in a number of critical sectors including education and training, agriculture and the financial sector.



Natural Resources of Mauritius

Land Resources: Mauritius was uninhabited until as late as 1598 and has been successively a Dutch, French and British colony, becoming independent in 1968. It is now one of the most densely populated islands in the world with a density of 591 inhabitants per square km. On the main island, 43 % of the land is used for agriculture, 25% for built up, 25 % for forests and grazing lands, 4% for infrastructure and other services and 3% as abandoned cane fields. High quality land, particularly in prime coastal areas, is scarce and is sought after by a variety of competing users. Land degradation, increasing urbanisation, competition for land, management of environmentally sensitive areas and ensuring sound agricultural practices are among the principal concerns that are being addressed to ensure sustainable land use in the country. Major progress has been made in wider ownership of land and in the provision of housing for all people. Over 85% of families live in homes which they own and which are predominantly robust and cyclone-proof. Furthermore, the Land and Development Act, 2004 provides an updated framework for land use planning and decision making at national and local level. A new awareness is emerging for the value of architectural style, removing eyesores and promoting a built environment that is in harmony with the natural environment of the country.

Biodiversity Resources: The Republic of Mauritius harbours a unique collection of some of the rarest plants and animals of the world. Indeed, the climatic, geological and topographical regimes prevailing in the island since its creation resulted in the evolution of diverse biota with a high degree of endemism with regard to fauna and flora. But, with development, this biodiversity has been adversely affected, especially by human habitation, direct exploitation and the invasion of alien plant and animal species. Mauritius is in fact, high on the world's list of countries for plant and bird species threatened with extinction. Native forests cover less than 2% of Mauritius and are isolated to the south west area of the island. Some 700 species of indigenous plants occur in Mauritius, out of which 300 are endemic and 70 already thought to be extinct. Furthermore, of the 44 known species of endemic land vertebrates that existed in Mauritius and adjacent islands, 21 species are now extinct and many are still critically endangered. The principle challenges being addressed by the country are to protect and restore the wealth of biodiversity being lost for future generations; to promote valuable economic and social uses for these natural resources and to strengthen regional and international collaboration essential to the success of such activities in SIDS. Indeed, over the last decade, there has been growing awareness for the

conservation of the indigenous flora and fauna of Mauritius and tremendous progress has been achieved in this field, with various organisations fully involved in the conservation and sustainable use of biodiversity resources.

Coastal and Marine Resources: Mauritius has a coastline which is 322 km in length and is almost entirely surrounded by a fringing coral reef enclosing a lagoon area of 243 km². The country has a rich but vulnerable coastal and marine biodiversity which include coral reefs, mangroves and wetlands. The establishment of the 200-mile exclusive economic marine zone has vastly extended the fisheries and other marine resources available. The coastal zone is under growing pressure from both sea based and land based activities with most of the pristine coastal sites having been exploited. Development associated with the expansion of tourism has resulted in the construction of a large number of structures on the coastal zone causing thus, a major challenge for coastal zone management. Major initiatives to protect the coastal zone have been undertaken as part of an integrated coastal zone management, including the banning of coral sand mining, the development of methods for beach nourishment, a national sewerage programme and daily beach cleaning. Closer attention is also being given to the 49 islets surrounding Mauritius and whose quality has been depleted through uncontrolled waste discharge and alien trees, shrubs and animals invasion. Creating a balance in areas of conflicting interests is a major aspect of the future development in the management of the coastal zone. Another equally important requirement is professional and technical development in this field which is of crucial importance for a coastal state.

Freshwater Resources: Mauritius has a high annual average rainfall of 3,900 Mm³ and is also served by a well developed network supply with many river sources, boreholes, aquifers and reservoirs with a capacity of nearly 100 Mm³. While high population density, heavy use of water for irrigation as well as increasing demands from industrial and tourism sectors place growing stress on water resources, there has been considerable improvement in the water supply, namely through, among others, the construction of run-off diversion schemes and dams, maintenance of networks, replacement of obsolete potable water infrastructure and reduction of unaccounted for water. Water is becoming a scarce resource in Mauritius. Development has brought increasing demand nearly outstripping the increased capacity for supply. Indeed, the country is in water stress and water scarcity category by international standards and better integrated water management is a priority. The major challenge in this sector is to have a better demand management strategy with greater efficiency in use and the development of recycled water for industrial and agricultural use.

Energy Resources: Mauritius imports all its fossil fuels, which is the main source of primary commercial energy. In 2006, 75% of the total energy requirement was met from imported fuels, while the remaining 25% was supplied from indigenous sources, hydro and bagasse principally. The transport sector with 49% of energy consumption by sector is the largest and growing user of energy in the country. Mauritius completed its National Rural electrification Programme more than 25 years ago. The country has a stable electricity supply through a

national grid system based on a diversity of fuel mix, which has evolved with time, gradually shifting from diesel to coal and increasing use of bagasse (a by-product of sugar cane). However, in the recent years, electricity demand has risen sharply due to sustained economic growth and a general improvement in the standard of living. Keeping pace with the expanding demand from all sectors whilst promoting the development of new renewable sources of energy is a major challenge. In so doing, Mauritius has to focus on a few options that have proved to be technically, economically and financially sound. With regard to the road transport sector, the challenge is to provide the country with a reliable, energy efficient, environmentally friendly and fairly priced transport with solutions for road congestion.



Environmental Management

Institutional Framework : The Ministry of Environment & NDU, through its technical department, the Department of Environment, has the primary responsibility of ensuring environmental protection, planning, monitoring, coordination and awareness raising. Other key Ministries concerned with environmental protection, mainstream environmental concerns within their work at both planning and implementation stages and deal with environmental complaints together with Local Authorities. The Ministry of Environment & NDU ensures coordination at different levels. The Police de L'Environnement also plays a key role in the enforcement mechanism especially for the control of littering, illegal dumping, vehicular emissions and abatement of nuisances such as noise and eyesores.

Legal Framework :



Statutory Bodies & Environmental Networks

National Environment Commission: As per the provisions of EPA 2002, the National Environment Commission (NEC), chaired by the Prime Minister, is the supreme environmental body and comprises all Ministers dealing with environmental issues. The NEC is the highest policy-making body mandated to monitor and review the work of public departments dealing with the protection and management of the environment and make recommendations accordingly.

Environment Coordination Committee: The Environment Coordination Committee (ECC) is steered at the level of the Ministry of Environment & NDU. Public departments and enforcing agencies dealing with environmental protection meet on this platform to ensure that policies are being implemented and that environmental laws are being complied with. The committee also advises the Minister on matters relating to pollution control measures and codes of practice for environmental protection.

Environmental Liaison Officers Meeting: Under the Environment Protection Act, Enforcing Agencies play a key role in pollution control and environmental protection as per the mandate of their respective institution. The Ministry of Environment & NDU ensures coordination at the level of the Environmental Liaison Officers (ELO) meeting. Furthermore, desk officers of all Enforcing Agencies and Local Authorities deal with environmental complaints in a concerted approach for pollution problem solving.

National Network for Sustainable Development: The National Network for Sustainable Development under the chairmanship of the Ministry of Environment involves all stakeholders including non governmental organizations, local authorities, community based organizations, and the business community. The network is a forum for discussions and consultations on sustainable development issues.

Other Statutory Committees: The **Environment Impact Assessment (EIA) Committee** is a platform where concerted actions are initiated by pertinent public organizations during the review of new projects. Recommendations made by all authorities concerned are listed in the promoter's EIA license and EIA post-monitoring exercises ensure compliance thereto.

The Integrated Coastal Zone Management (ICZM) Committee has over the years established itself and is active in coastal zone management through the active collaboration of all stakeholders involved in coastal zone management.



Support Systems

Environment Information System (EIS): The Ministry of Environment (MOE) has developed the EIS project to strengthen environmental information management in Mauritius. The project consists of two major components, namely: the development of a core set of Environmental Indicators for Mauritius and the development of a computer based EIS that makes maximum use of information technology for strategic management of the environment. In total, 28 different ministries, agencies and NGOs in Mauritius are involved in collecting and recording details of the parameters required for the core set of 32 indicators that have been developed through the project.

MUELEX: With the support of UNEP, Mauritius developed a National Legal Database for capacity-building to enhance access to environmental law information. This project is currently being implemented by the Ministry of Environment and NDU with collaboration of the Attorney General's Office and the Ministry of Information Technology and Telecommunications (Central Information Systems Division & Central Informatics Bureau). [MUELEX](#), the Mauritian web-based Database provides information on environmental law and policy to enhance

public participation in decision-making for sustainable environment and natural resources management. The Database targets the public, legal practitioners, public interest litigation; government officials, the civil society, the academia, magistrates and judges that will need readily available information for informed decision-making.

Programmes for Sustainable Development

Over the years Mauritius has shifted from a sectoral approach to a more integrated approach for environmental management and is moving on the path of sustainability. Initially in the 1970s, focus was put on nature conservation and land use planning. In the 1980s more attention was given to pollution control and in the 1990s after the RIO summit, the concept of sustainable development became predominant. The Government of Mauritius is fully committed to protecting the environment, health, welfare and quality of life of all its citizens. A new NEP aims at providing a comprehensive flexible policy framework with a built-in system for environmental management, monitoring, review and competitiveness as well as to foster sustainable production and consumption patterns. The first National Environmental Strategy (NES 1) and National Environmental Action Plan (NEAP 1) were prepared jointly by the World Bank and the government in February 1988. NEAP 1 was the first Mauritian blueprint for sustainable development. The document was also supported by a comprehensive Environmental Investment Programme (EIP) detailing 32 project proposals). It was designed to establish a policy, legislative and institutional framework for environmental management leading to the promulgation of the Environment protection Act and the creation of the Department of Environment and; to execute major infrastructural works ranging from the improvement of solid waste management to the setting up of a sewerage system.

With the rapid growth of the Mauritian economy, consumptions patterns have changed towards higher value-added industrial production and higher levels of consumption. Subsequently, in 1999, a second ten year National Environmental Strategy (NES 2) and National Environmental Action Plan (NEAP 2) for the Republic of Mauritius for the period 2000 – 2010 was prepared. It consisted of an investment and implementation framework that included project proposals, activities, costs and responsibilities for 72 projects. EIP 2 was geared towards achieving sustainable development with the following programmes: Management and Coordination Programmes, Resource Management Programmes, Sector Programmes and a Programme for Rodrigues. Some of the major projects completed include legislative reform (Environment Protection Act, 2002), setting up of the Environmental Information System and development of Environmental Indicators, strengthening of policy and strategic land planning (National Development Strategy), Islet recovery and restoration, National pest control strategy, Tourism Master Plan, Development of a Local Plan for Rodrigues, upgrading of existing dump sites and improvement of waste collection and storage.

These projects have been funded by the Mauritian government through revenues raised by taxation, grants and

loans from donor community, sponsorship and investment by the private sector as well as fund-raising by groups.

As a small island state with a fragile ecosystem and limited resources, we are also fully conscious of the serious consequences resulting from the degradation of the global environment and its impact on the quality of life, health and on the economy. As the causes and effects of environmental factors cross-national boundaries, pollution problems have to be addressed in a spirit of co-operation from the world community, Mauritius has thus signed some 38 environment related Conventions and Protocols, which are legally binding. Actions have been undertaken by different stakeholders namely Ministries, Non-Governmental Organisations among others.

Sectoral Projects for Sustainable Environmental Management

National Sewerage Programme

Proper sanitation is of crucial importance to ensure the health and quality of life of our people. With the assistance of the European Commission and other funding agencies, Government has thus embarked on a National Sewerage Programme (NSWP), which aims at improving sanitation in the country.

The NSWP provides a complete scheme for the development of wastewater sector in Mauritius and targets above 80 % connection to the sewerage system by the Year 2030. Pursuant to the NSWP, the Wastewater Management Authority is currently installing new sewerage facilities in various regions of Mauritius. The overall purpose of the wastewater projects in Mauritius is to prevent further degradation of the environment (marine, coastal and inland) and in so doing, to positively impact on the health and sanitary conditions of the Mauritians. To-date, 24% of households that is 75,000 families are connected to the sewerage network. It is projected that by 2009, 80,000 households will be connected to the network.

As part of an Independent Audit exercise and with the contribution of different stakeholders, the MOE has worked out a plan to monitor the quality of ground, surface and coastal waters and treated effluents discharged from the treatment plants so as to ensure that the wastewater projects were serving their purpose.

Development of an Integrated Coastal Zone Management Framework (ICZM) for the Republic of Mauritius.

The ICZM approach is considered as the most suitable framework for sustainable development planning in coastal and marine areas. In this context, the Ministry of Environment & NDU has commissioned the Development of an Integrated Coastal Zone Management Framework (ICZM) for the Republic of Mauritius. The framework will comprise the following components:

- (i) An ICZM Strategy for Mauritius in line with government policies and strategies for overall sustainable

development and also in accordance with the requirements of various regional and multilateral agreements to which Mauritius is party and which are pertinent to ICZM.

(ii) Review and development of an appropriate policy and regulatory framework to promote ICZM

(iii) Development of ICZM plans for pressure zones. The area plans will guide future development and intervention to promote sustainable development in the coastal zone. The number of area plans will be elaborated following the diagnosis and prioritisation phases and consultation with key stakeholders.

Environmentally Sensitive Areas in Mauritius and Rodrigues

Protection and conservation of environmentally sensitive areas have been identified as being a priority project in the National Environmental Strategies 1998. In this context, the Ministry of Environment & NDU has commissioned the study of **Environmentally Sensitive Areas in Mauritius and Rodrigues** with the main objectives to :

- Identify, classify and demarcate all environmentally sensitive areas (ESAs) in Mauritius and Rodrigues
- Prioritise the ESAs for protection and create a database for all ESAs to support and enhance decision-making
- Develop a comprehensive policy and legislations for the protection, conservation and sustainable development of ESAs in line with the NDS, and
- Prepare a comprehensive management plan for ESAs which will be financially and institutionally sustainable in Mauritius and Rodrigues