

Ministère de l'Environnement,
de la Gestion des déchets et
du Changement climatique

**BIODIVERSITE
ET RESSOURCES NATURELLES**



Les Assises de
l'Environnement

CAUDAN ARTS CENTRE / 16 -17 DECEMBRE 2019

TECHNICAL SESSION 1

BACKGROUND

Ever since the earth was inhabited, humans and other life forms have depended on resources that exist freely in nature to survive. These resources include water (ocean and fresh water), land, soils, rocks, forests (vegetation), animals (including fish), fossil fuels and minerals. They are called Natural Resources and are the basis of life on earth.

Human's use of natural resources has helped to improve the lives of billions. However, at the same time, there has been degradation and unsustainable use of many ecosystem resources such as those provisioning fresh water, consistent fisheries and purification of air and water. The Republic of Mauritius has limited natural resources, which have been degraded by intensive agriculture, land development, and the invasion of exotic species. Human activities also have an impact on the biodiversity, which is the variability among living organisms from all sources including, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part.

At the core of sustaining biodiversity is the understanding of the connection between our consciousness, thoughts and actions, and their impact on our environment. It has been seen that long-lasting change in any social or environmental system starts with a profound shift in the minds and hearts of people. The current loss of biodiversity is therefore a clear call to transform our awareness and lifestyle and start caring for all living forms on the planet.

The isolation of the island, its climatic, geological and topographical regimes gave rise to a high degree of endemism. Mauritius has about 691 native flowering plant species of which 273 are endemic. The only native mammals are bats and, to date, 9 endemic species of land birds and 11 endemic reptile species exist on the island. However, this biodiversity is threatened through habitat destruction, overexploitation, pollution, climate change and introduction of invasive species of plants and animals. Although conservation activities began some 35 years ago, the International Union for Conservation of Nature (IUCN) has rated Mauritius as the third country in the world after Hawaii and Canary Islands to have the most threatened plant species. Native forest covers less than 2 % of Mauritius and is restricted to the south west area, where much is protected within the Black River Gorges National Parks.

The protection of ecosystem services is crucial to human well-being. Forests, agriculture, inland waters, wetlands, coastal and marine biodiversity not only

provide important ecosystem services (provisioning, regulating, supporting and cultural), but they also represent key components of mitigation and adaptation measures for climate change. As a Small Island Developing State (SIDS), Mauritius faces several challenges that impact its biodiversity: its small size, high population density, limited resources, dependence on international trade, high vulnerability to natural as well as environmental disasters (global warming, sea level rise, etc.)

The aim of the Assises de l'Environnement is to provide a forum for discussion on the means for the protection, as well as conservation of the biodiversity, environmentally sensitive areas (ESAs) and natural resources through a concerted and participatory approach. Its objectives are to protect and conserve critical ecological systems and resources which are essential for life-support, livelihoods, economic growth and biodiversity through sustainable practices, legislative framework and enforcement.

The Pink pigeon is a species of Columbidae (doves and pigeons) endemic to Mauritius. Black River Gorges Photo Credit : Lonely Planet.



“..Mauritius has limited natural resources, which have been degraded by intensive agriculture, land development, and the invasion of exotic species.”



VISION/ TARGETS

To enhance the benefits from biodiversity and ecosystem services, through in-situ and ex-situ conservation strategies, ecosystem restoration, public awareness, promotion of ecotourism and implementation of international biodiversity agreements.

Targets:

- Maintain essential ecological processes and life support systems on which human survival depend
- Preserve genetic diversity, on which depend the breeding programmes necessary for the protection and improvement of cultivated plants and domesticated animals, as well as for scientific advancement
- Ensure the sustainable utilisation of species and ecosystems, for example, fish and other wildlife, forests and grazing lands
- Achieve the Sustainable Development Goal 15 of the 2030 Agenda for Sustainable Development to “protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss”
- Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society
- Reduce the direct pressures on biodiversity and promote sustainable use
- Implementation of the National Biodiversity Strategic Action Plan (NBSAP) 2017-2025
- Implementation of the Protected Area Network Expansion Strategy 2017-2026
- Promulgation of regulations under the Native Terrestrial Biodiversity and National Parks Act

ISSUES OF CONCERN

- Need for more knowledge and raise more awareness on local biodiversity
- Better management of biodiversity in marine and freshwater ecosystems
- Better protection of biodiversity in privately-owned forests
- Destruction of habitats and ecosystem
- Invasion by alien species
- Need for more knowledge for optimum use of species of medicinal and other values;
- Improved benefit sharing derived from biodiversity use
- Sustainable use of natural resources
- Loss of wetlands
- Baseline data sets, scientific data sharing and long-term monitoring mechanisms
- Loss of biodiversity in caves and lava tunnels

EXISTING POLICIES AND STRATEGIES

Mauritius has adopted a number of policies and strategies for conservation and sustainable use of biodiversity. The new legislative framework has adopted the Native Terrestrial Biodiversity and National Parks Act in 2015 for better management and protection of our biodiversity.

The new National Biodiversity Strategic Action Plan 2017-2025 has, as mission, to reduce biodiversity loss, achieve ecosystem resilience capacity to climate change and start to build an ecosystem-based economy which invests in the restoration of biodiversity values.

INTERNATIONAL CONVENTIONS, AGREEMENTS AND CO-OPERATION

Mauritius was the first country in the world to ratify the Convention on Biological Diversity (CBD) in 1992. The Convention recognises that biodiversity is more about plants, animals and micro-organisms and the ecosystems. It is about people and our need for food security, medicines, fresh air and water, shelter, and a clean and healthy environment in which to live.

The Government of Mauritius is also signatory to a number of International Conventions relating to Article 1 of the CBD. These include:

- The International Convention for the Regulation of Whaling, (1946)
- The African Convention for the Protection of Nature and Natural Resources, (1968)
- The Convention on Fishing and Conservation of Living Resources of the High Seas, (1958)
- The Convention on Wetlands of International Importance especially as Waterfowl Habitat (RAMSAR), (1971)
- The Convention for the Protection of the World Cultural and Natural Heritage, (1972)
- The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), (1973)
- The UN Convention on the Law of the Sea (UNCLOS), (1982)
- The UN Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (MARPOL), (1989)
- The UN Framework Convention on Climate Change (UNFCCC) (1992)
- The Convention to Combat Drought and Desertification in Africa (UNCCD) (1995)
- The Convention on Migratory Species (1994)
- The African Eurasian Water Bird Agreement (1999)
- The Indian Ocean – South-East Asia Marine Turtle MOU (IOSEA) 2003
- The Cartagena Protocol on Biosafety to the Convention on Biological Diversity (2000)

EXISTING LAWS AND REGULATIONS

Legislations to protect the environment have always been a priority to our legislators. As an example, the Rivers and Canals Act dates back to 1839 and the Code Civil also includes many clauses related to the environment. Over time, numerous laws and regulations related to the environment have been proclaimed as follows:

Primary Legislation

- The Environment Protection Act 2002
- The Fisheries and Marine Resources Act 1998
- The Native Terrestrial Biodiversity and National Park Act 2015
- The Rivers and Canals Act 1839
- The Pas Geometriques Act
- The Forests and Reserves Act 1983
- The Plant Protection Act 2006
- The Botanical Gardens (Pamplemousses) Regulations 1945 and Botanical Gardens Regulations 1922

Secondary Legislation

- The Female Sea Turtles (Prohibition of Import) Regulations, 1950
- The Plant (Importation and Exportation) Regulations, 1976
- The Plant (Pest and Disease Control) Regulations 1984
- The Marine Protected Area Regulations 2001



Echo Parakeet.
Photo Credit :Wildlife Foundation

ACTIONS TAKEN/ONGOING

- 4.7% of our terrestrial land area is protected and the new protected area expansion strategy 2017-2025 aims at increasing the area to 16% by 2030
- Proclamation of Ramsar Sites of international importance namely Pointe d'Esny Wetland, Rivulet Terre Rouge Estuary Bird Sanctuary and Blue Bay Marine Park
- Proclamation of 2 national parks namely Bras D'eau and Black River Gorges and 8 islets national parks
- Three endemic birds namely the Mauritius Kestrel, the Echo Parakeet and Pink Pigeon saved from extinction
- The Echo Parakeet was downlisted to "Vulnerable" in December 2019
- Out of the 192 native plants classified as critically endangered species, 43 have been successfully propagated
- 4 public nurseries have been established specifically to propagate native species, along with an arboretum where rare species, contained on the list of the most threatened plant species, are propagated and planted
- Creation of a seed bank facility for native species and field gene bank
- More than 60 ha of invaded forests have been restored

PROJECTS IMPLEMENTED/ BEING IMPLEMENTED

- Government, through the National Parks and Conservation Services (NPCS) and the Mauritius Revenue Authority (MRA), ensures that there is no illegal wildlife trade. The Mauritius Pink Pigeon, which was downlisted from "Critically Endangered" to "Endangered" in 2000, was downlisted to "Vulnerable" in November 2018. The population grew from only 10 wild birds in 1990's to 300 by 2000 and 400 in 2018 through conservation programs carried out by the NPCS in collaboration with its local and international partners
- A nationwide campaign/programme, with the aim to plant 100 000 trees annually from 2016-2020, was launched to encourage individuals and institutions to take part in tree planting and protection activities, and to emphasize the importance of forests and trees in improving the natural environment for healthy living. During the period January 2016 – December 2017, a total of 205,982 plants (106,721 plants in year 2016 and 99,261 in 2017) have been planted.

PROPOSED ISSUES FOR DISCUSSION (NON-EXHAUSTIVE)

In order to address the environmental challenges with respect to the conservation of biodiversity and natural resources, as well as achieving the vision of the Assises de l'Environnement, participants can propose practical solutions, innovative ideas and best practices, amongst others, in relation to the problems identified to constructively advance towards a shared vision.

Where we are

- In the last four years, 4 birds have been downlisted on the IUCN Red List of Threatened species from "Critically Endangered" to "Endangered", "Endangered" to "Vulnerable", and "Vulnerable" to "Near Threatened".
- Extent of native forest is less than 2%;
- Restoration: over a period of 6 years 645 ha of forest have been cleared of invasive plants
- New Biodiversity Strategy 2017 -2025 aims at halting biodiversity loss and achieving our national targets, in line with the international Aichi biodiversity targets
- Eight islets have been proclaimed as Islet National Parks in 2004

Where we need to go?

- Important habitats and ecosystem restored by 100 ha annually
- Increase extent of conservation management areas
- Creation of new native/endemic forest areas
- Conservation of our species to improve their conservation status
- Conservation of habitats and ecosystems for better resilience to climate change
- Increase awareness on the importance of nature for human wellbeing
- Protect our endemic fauna and flora;
- Preserve wetlands, ESAs, forests;
- Implement strategies as per NBSAP etc

How to reach there?

- Avoiding extinction of endangered and threatened species of flora and fauna by providing sound planning, allocation and management of land and water use. This could be supported by an on-site preservation in protected areas and an off-site protection such as zoos and botanical gardens;
- Increasing the area under conservation management through restoration of habitats and creation of new native/endemic forest areas
- Mainstreaming biodiversity into development sectors including tourism, industry, etc
- Conserving as wide a genetic diversity as possible of many varieties of the same plants and animals;
- Conservation of species and ecosystems such as wetlands, riparian habitats through better policy development;
- Expanding our protected areas and large conservation management areas to other key biodiversity hot spots areas
- Increase capacity building through improving technical capacity and increasing human resources for better management of our biodiversity
- Better public education and sensitisation on biodiversity conservation for the human well being
- Increase resource mobilisation through new and innovative financial mechanisms for biodiversity protection including ecosystem valuation tools and models
- Further studies and research on biodiversity conservation to provide data and information for better policy making decision
- Ecosystem-based or nature-based solutions developed for climate change adaptation





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