

MAURITIUS OCEANOGRAPHY INSTITUTE

The Mauritius Oceanography Institute (MOI), a parastatal body functioning under the Prime Minister's Office, was established in January 2000 in order to rationalise and coordinate research and development activities related to oceanography in Mauritian Waters. The Institute also advises Government on the formulation and implementation of policies and programmes in respect to oceanography. (<http://moi.gov.mu/>)

The Institute undertakes the following projects with the services listed below:

(1) Bathymetric surveys of the shallow lagoons of Mauritius and Rodrigues

- Capabilities in conducting bathymetric surveys.
- Bathymetry charts available for some lagoons.

(2) Coral culture

- Technical expertise available for (i) land/ocean based coral culture (ii) and creation of coral gardens.

(3) (a) Database of Marine Organisms and (b) Genetic Database of Commercial Organisms in the waters of Mauritius

- a) CD-ROM and an internet database on taxonomic and geographical information of species from Mauritian waters
<http://moi.gov.mu/marinedb/>.
- b) Inventory of commercial marine organisms using taxonomy and DNA-based techniques - an ongoing project. Morphometric and genetic data of commercial fish is now available on the online database, the Marine Diversity and Genetic Databank (MDGDB)
<http://www.mdgdb.com>

(4) Chemical Oceanography

- Sea water analysis (phosphate, nitrate, nitrite and carbonate), pollutants including fertilizers and pesticides, analysis of trace elements such as mercury and lead among others.

(5) Geo-Spatial Information System (GIS) for Mapping Maritime Habitats South-East of the Mauritius

- Cartographic document, CD-ROM and an Atlas of the South East coast of Mauritius available.

(6) African Monitoring of the Environment for Sustainable Development (AMESD)/ Monitoring for Environment and Security in Africa (MESA) Project

- Real time data on ocean colour (chlorophyll concentration), sea surface temperature, marine currents and altimetry; electronic tool for detection of potential fishing zones and predictive models from satellite imagery.
<http://moi.gov.mu/amesd/>.

(7) Geosciences

- Multi-Beam Bathymetry of the Central Indian Ridge segments between 15°S and 21°S as well as different area of the Mauritian EEZ and around Mauritius Island
- Single-Beam Bathymetry of the lagoons of Mauritius
- Magnetic data along various cruise tracks in the Mauritian EEZ
- Gravity and seismic data along selected tracks of the Mascarene region and Central Indian Ridge

(8) CLCS data

- Gravity and seismic data along selected tracks of the Mascarene Plateau (Saya de Malha and Nazareth banks)

(9) Aquaculture Services

- MOI could provide technical feasibility studies of aquaculture sites, including identification of marine organisms, water quality investigation and monitoring programs

(10) Ocean state parameters and climatology

- Technical services, expert opinion and practical solutions for the computing (modelling and assimilation), analysis and mapping of ocean climatology around Mauritius and for the South Western Indian Ocean [ocean currents (full water column), temperatures (full water column), salinity (full water column), Oceanic wind and Ocean waves]