



COUNTRY REPORT

REPUBLIC OF MAURITIUS

11TH SOUTHERN AFRICA AND ISLANDS
HYDROGRAPHIC COMMISSION

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SOUTHERN AFRICA AND ISLANDS HYDROGRAPHIC COMMISSION (SAIHC)
COUNTRY REPORT REPUBLIC OF MAURITIUS

1. **Introduction**

Mauritius is an Island nation of 2040 sq. km. situated 20° South of the Equator and on longitude 57.5° East. Mauritius is a maritime state with a large Exclusive Economic Zone (EEZ) of 1.9 million sq. km. The United Nations Commission on Limits of Continental Shelf has endorsed the joint submission by Mauritius and Seychelles for 396,000 square kilometers of additional seabed in the Mascarene region which will be managed jointly by the two countries. Mauritius also being signatory to International Maritime Organisation (IMO) Convention of Safety of Life at Sea (SOLAS) has national and international responsibilities to provide safety of navigation in its area of jurisdiction. For the exploration and exploitation of the potential marine resources, it is imperative that systematic data is collected in the ocean surrounding the island territory.

2. **Hydrographic Office and Services**

(a) **Setting up of Hydrographic Infrastructure.** The Indian National Hydrographic Office has deputed a Hydrographer and two Surveying Recorders on 31 October 2013 for capacity building and to assist in the initial set up of the hydrographic infrastructure. The Hydrographic Unit has been established at the Ministry of Housing and Lands to prepare up-to-date nautical charts for safe and efficient operation of maritime traffic, conduct of minor surveys and protection of marine environment. The objectives set for the Hydrographic Unit are as follows:-

- (i) Setting up of infrastructure.
- (ii) To carryout hydrographic survey of ports and passes.
- (iii) To provide quality training in the field of hydrography.
- (iv) To develop and strengthen hydrographic research.
- (v) Provide nautical information to the international marine community for safe navigation.

(vi) Provide hydrographic and geodetic data for the delimitation of maritime zones.

(b) The Hydrographic Unit has been reinforced with basic infrastructure and has started hydrographic surveys of lagoons and coastal areas. The achievements of the unit so far are as follows:-

(i) **Inshore Survey Vessel Pathfinder.** The team has made Inshore Survey Vessel Pathfinder operational and has successfully streamlined the hydrographic survey procedures.

(ii) **Synergy with National Organisations at Mauritius.** Synergy has been carried out with various stakeholders of nautical products, on issues of cooperation, smooth conduct of hydrographic surveys, to facilitate the delivery of all nautical information necessary for safe navigation, offshore activities, research, delimitation of maritime zones and maritime trade.

(iii) **Utilisation of Helicopter for Coastline Delineation.** A methodology for coast line delineation utilising helicopter was framed and successful delineation carried out in various areas with challenging terrain.

(iv) **Training of Surveyors.** To convey the training for various stakeholders, fortnightly capsule courses were planned. Training programmes included ashore and afloat training. A total of 09 land surveyors and 03 coast guard personnel have been trained so far.

(v) **Corrections on Existing Charts.** All Navigational charts available for sale at the cartographic section of the Ministry have been updated.

(c) Other Government Agencies dealing with hydrographic activities are as follows:-

(i) The Mauritius Ports Authority (MPA) setup under the Ports Act in 1998 is responsible to regulate and control the port sector, provide marine services, dredging of the port area and provision of

navigational aids.

- (ii) The Mauritius Meteorological Service which is responsible for the maintenance of tide gauges and production of tide tables.
- (iii) The Shipping Division of the Ministry of Public Infrastructure, Land Transport and Shipping is the maritime administrator responsible for the development of maritime activities such as registration of ships and implementation of the Merchant Shipping Act.
- (iv) The Mauritius Oceanography Institute (MOI) advises Government on the formulation and implementation of policies and programs in respect to oceanography and marine resources.

3. **Surveys**

Cooperation between India and Mauritius

(a) A Memorandum of Understanding (MoU) between the Republic of Mauritius and the Republic of India in the field of hydrography was signed on 24 October 2005. The MoU provides for the promotion of development and cooperation in the field of hydrography between the two countries and provides for the assistance in the production of navigational charts, training of staff and expertise for setting up of a hydrographic infrastructure and office in Mauritius. There is also a provision for assistance by the Indian Hydrographic Office for the hydrographic surveys in our EEZ, ports and lagoons.

(b) Eight Joint Indo- Mauritian Committees have been held since 2006 to discuss and finalise hydrographic tasks. So far under the provisions of the MoU, the Indian Authorities have deployed naval survey vessels each year since 2006 to undertake the agreed survey tasks. Each ship has been deployed in our waters for an average duration of 30 days. The Ninth Joint Indo- Mauritian Committees is scheduled in the month of September at Mauritius.

4. Surveys by Hydrographic Unit. Recently the unit completed its maiden survey of Port Louis harbour. The survey was aimed at updating nautical chart of Port Louis harbour and imparting training on hydrography.

The collected data was forwarded to concerned charting agencies for updating nautical charts and products on completion of work.

5. The resources available with the Hydrographic Unit are as follows:-

- (a) Inshore Survey Vessel.
- (b) Atlas Deso-30 Echo sounder with 210 kilohertz and 33 kilohertz transducers.
- (c) Hemisphere R-131 Satellite DGPS.
- (d) TSS Dynamic Motion Sensor 25.
- (e) HYPACK software
- (f) Side Scan Sonar 4200 FS with Discover and Sonar wiz software
- (g) CTD 48M Sound Velocity Profiler
- (h) Precision Depth Recorders – PDR 601
- (i) Differential GPS – Aquarius 5000 Series (Dassault Sercel)

6. Indian Naval Ships visited on eight different occasions and have carried out 26 Hydrographic surveys of Mauritian waters. Fair sheets of these areas have been submitted by the Indian Authorities. A summary of surveys undertaken for the period 2006-2013 is as follows:-

SL.	SHIP	PERIOD	SURVEY
(a)	INS Sarvekshak	12 Jan 06 to 25 Feb 06	(a) Port Louis Harbour (b) Approaches to Port Louis Harbour (c) Proposed fishing port at Bain des Dames (d) Agalega & Surrounding waters (e) Deep sea water sampling
(b)	INS Sarvekshak	10 Mar 07 to 09 Apr 07	(a) Port Mathurin Harbour (b) Approaches to Port Mathurin Harbour (c) Bathymetric survey for LBOI at: - Trou d'Eau Douce - Riviere Noire
(c)	INS Investigator	29 Feb 08 to	(a) St Brandon Shoals (30%) (b) Profile for MOI –CLCS Survey

		09 Apr 08	
(d)	INS Nirdeshak	10 Mar 09 to 06 Apr 09	(a) St Brandon Shoals (up to 70%) (b) Survey of Passes: - Grand Bay - Tamarin Bay - Grande Riviere Noire Bay (c) Lagoon at Riviere des Galets
(e)	INS Nirdeshak	26 Mar 10 to 26 Apr 10	(a) St Brandon Shoals (100%) (b) Flic en Flac (c) Grand Port – Southern Entrance
(f)	INS Sarvekshak	23 Feb 11 to 23 Mar 11	(a) Survey in the East of Rodrigues (b) Survey of Eastern flank of Mauritius (c) Survey of Navigational Channel to SSR Terminal and Quays A/D up to the Fishing Port (d) Rodrigues Island Transects (e) Survey of Passes – Cap Malheureux- Albion
(g)	INS Darshak	24 Apr 12 to 15 May 12	(a) Survey of off lagoon from Bel Ombre to Le Chaland (b) Survey off Albion coast
(h)	INS Sarvekshak	02 Feb 13 to 13 Mar 13	(a) Survey of Poudre D’or region (b) Survey of Off GRSE region.

7. New Charts & Updates

A protocol on the sale of navigational charts was signed on 02 April 2009 between India and Mauritius. This provides for the production, marketing, printing by the National Hydrographic Office and also the criteria for the payment of royalties and commissions. The following six national charts have been produced and are on sale at 33 US Dollars per chart. These charts are also kept up-to-date incorporating all correction as promulgated by Notices to Mariners.

<u>Sheet No</u>	<u>Name</u>
2503	Approaches to Cargados Carajos Shoals
2084	Agalega Island

2086	Port Louis and Approaches to Port Louis. (The chart will be replaced with chart no. 2514, INT 7739)
2504	Mathurin Harbour
2505	Approaches to Mathurin Harbour
2506	Grand Bay and Grand Riviere Noire Bay

8. **Capacity Building**

Capacity Building Programme

In the context of MoU the Government of India has deputed a Hydrographic team to set up a hydrographic infrastructure. The functions of this team are as follows:-

- (a) Prepare and regulate long-term program of hydrographic surveying and charting of Mauritian Water.
- (b) Carry out specialized survey with other government departments such as Oceanographic, Fisheries, Meteorological and Port authorities. Supervise and provide advice for any hydrographic survey work carried out by a private contractor.
- (c) To represent Government of Mauritius at International and regional level on Hydrographic matters.
- (d) To act as focal point and repository for hydrographic and nautical information.
- (e) To coordinate training facilities at national and international level for hydrographic surveying and technicians
- (f) To recommend national policy and take steps for improvement of hydrographic survey services.

Training received

- (a) Opportunity was given to our staff for onboard training on the Indian Navy hydrographic survey ships during their mission in our waters. Twelve officers have followed Cat B Hydrographic course from

India, Holland, and Japan and few officers have also followed the multi-beam sonar course. One officer is undergoing CAT 'A' course at USA, Mississippi.

(b) Three officers have undergone training in Marine Cartography and ENC at United Kingdom Hydrographic Office.

(c) One officer followed a regional training course in Basic Electronic Navigational Charting (ENC) and ENC production at the School of Ports in Durban, South Africa.

(d) On the job training has been provided onboard Indian Navy ships during each survey mission.

(e) On job and in house training was conducted by Hydrographic Unit during the survey of Port Louis Harbour at Mauritius. The Hydrographic Unit has developing strategy for training and up gradation of the staff.

Training Needed

Capacity building and training are required in the following areas: -

- (a) Hydrographic Surveys
- (b) Nautical Cartography
- (c) Hydrographic equipment maintenance
- (d) On- job training for hydrographic surveys and chart production.
- (e) Hydrographic Surveying Category 'A' and Category 'B' Courses.

9. **Other Activities**

(a) The 9th Indo-Mauritian Joint Hydrographic Committee. The 9th Indo-Mauritian Joint Hydrographic Committee is scheduled in the month of September 2014 in Mauritius in continuation of the bilateral cooperation between both Governments.

(b) Producer Nation of Charts for Mauritian Waters. Discussions are ongoing regarding the transition of producer nation of charts to India from UK and the outcome is positive.

10. **Mauritius Port and Shipping Statistics**

According to the port trade statistics, the overall traffic for year 2013 is as follows:

- (a) Vessel Traffic 2418
- (b) Import- 5686342 tonnes
- (c) Export-1252878 tonnes