

**GOVERNMENT OF INDIA
OCEAN DEVELOPMENT
LOK SABHA**

UNSTARRED QUESTION NO:2996
ANSWERED ON:12.08.2005
OCEAN DEVELOPMENT PROGRAMME
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Will the Minister of OCEAN DEVELOPMENT be pleased to state:

- (a) the new initiatives taken by the Government during the Tenth Five Year Plan for ocean development;
- (b) the comprehensive Bathymetric survey of entire exclusive economic zone; and
- (c) the details of the programmes?

Answer

MINISTER OF STATE (INDEPENDENT CHARGE) OF THE MINISTRY OF SCIENCE AND TECHNOLOGY AND MINISTER OF STATE (INDEPENDENT CHARGE) OF THE DEPARTMENT OF OCEAN DEVELOPMENT (SHRI KAPIL SIBAL)

(a) The new initiatives taken by the Government include

- (i) Geophysical study of Laxmi Basin,
- (ii) Studies on gas hydrate exploration and technology development for its assessment,
- (iii) Swath bathymetric survey of Exclusive Economic Zone,
- (iv) acquisition of a new technology demonstration vessel and
- (v) Establishment of early warning system for mitigation of oceanogenic disasters: Tsunami and storm surges in Indian Ocean

(b) & (c)

(i) The programme on comprehensive Bathymetric survey of Exclusive Economic Zone envisages the swath bathymetric surveys using multibeam sonar which will be useful in the scientific investigations of our oceans and developing cutting edge oceanographic science and technologies for exploring and utilizing the ocean resources. The details of other programmes taken up during the Tenth Five Year Plan are provided below:

(ii) Geophysical Study of Laxmi basin The programme has been taken up by Department to establish conclusively the nature of basement in the Laxmi basin as well as in the area to its north and south, detailed geophysical surveys along the entire West Coast margin upwards of the northern extremity of the Chagos - Laccadive ridge would be necessary. This involves acquisition, processing interpretation and analysis of geophysical data, followed by preparation of documents, charts and maps.

(iii) Studies on gas hydrate exploration and technology development for its assessment Gas hydrates are ice like crystalline accumulations formed mainly from methane and water, found in specific temperature - pressure regimes of the seabed and emerging as a potential cleaner fuel resource. The programme focuses on scientific research with special emphasis on resource extent evaluation and environmental impacts and development of technology for detection and qualification of gas hydrates off India's coast.

(iv) Acquisition of new Research Vessel With a view to develop sustainable technology for the exploitation of various non-living resources, suitable multipurpose vessel is proposed to be acquired to cater to shallow water survey, data buoy maintenance, technology services and demonstration for the various coastal and deep ocean activities planned by the Department. The vessel will also augment the capacity needs of the marine living and non-living resources programme of the Department.

(v) Establishment of early warning system for mitigation of oceanogenic disasters: Tsunami and storm surges in Indian Ocean The Government is in process of setting up a Tsunami and Storm Surge Early Warning System with the following components;

- # Strengthening of the existing seismological network to indicate in near real time occurrence of tsunamigenic earthquakes.
- # Installation of ocean bottom pressure sensors at appropriate locales in the Indian Ocean, with real time connectivity.
- # Tide gauge and data buoys networking.
- # Modeling of the inundation scenarios for the entire coast.
- # Establishment of a centre for collection of information, analysis and generating status advisories.