

**GOVERNMENT OF INDIA  
MINES  
LOK SABHA**

UNSTARRED QUESTION NO:4609  
ANSWERED ON:22.12.2014  
MAGNETIC BATHYMETRIC PARAMETRIC SURVEYS  
M. Smt. Vasanthi;Rajendran Shri S.

**Will the Minister of MINES be pleased to state:**

- (a) whether the Government has any plan to carry out magnetic, bathymetric and parametric surveys on board;
- (b) if so, the details thereof along with the area identified under exclusive economic zone and the territorial waters of India;
- (c) whether the Government has any plan to do such surveys other than on board; and
- (d) if so, the details thereof?

**Answer**

THE MINISTER OF STATE FOR MINES AND STEEL (SHRI VISHNU DEO SAI)

(a) & (b): Yes, Madam. Geological Survey of India [GSI] is carrying out magnetic, bathymetric and parametric surveys in the Exclusive Economic Zone (EEZ) and Territorial Waters (TW) of India on board Research Vessels. GSI has detailed plans for carrying out such surveys in XII and XIII Plan periods in the EEZ and TW.

In EEZ, GSI has carried out 3,26,000 line km of bathymetric, 4,04,365 sq km of multibeam bathymetric and 2,20,000 line km of magnetic surveys. Under parametric surveys in the EEZ, it has covered 15,367 line km of gravity and 13,227 line km of sub-bottom profiling. In the TW, GSI has covered about 66,000 line km of bathymetric, 2,867 sq km of multibeam bathymetric and 25,000 line km of magnetic surveys. Under parametric surveys in TW, it has covered 47,097 line km of shallow seismic and 7,249 line km of sub-bottom profiling.

Council for Scientific and Industrial Research - National Institute of Oceanography [CSIR-NIO] along with National Geophysical Research Institute [NGRI] has planned bathymetric, magnetic, gravity, multi-channel seismic reflection and seismic refraction surveys in the Bay of Bengal and across the Andaman Subduction Zone. In these surveys, CSIR-NIO plans to acquire about 3,300 line km of bathymetric, gravity, magnetic and multi-channel seismic reflection data and about 1500 line km of seismic refraction data over the Bay of Bengal and about 400 line km of similar parametric data across the Andaman Subduction Zone.

Ministry of Earth Sciences [MOES], under the continuing programme on topographic survey of EEZ, has acquired multibeam bathymetric data of 6,02,445 sq km off West Coast, 32,480 sq km off East Coast and 2,63,950 sq km off Andamans on board oceanographic vessels. In addition to ongoing survey of EEZ, MOES has carried out bathymetric and magnetic surveys covering over 31,000 km as part of the work for delineation of Outer Limit of Continental Shelf in and off the EEZ.

(c) & (d) : GSI conducts such marine surveys only on board its research vessels. CSIR-NIO and MOES have no plans of carrying surveys other than on board.