

**GOVERNMENT OF INDIA
MINISTRY OF EARTH SCIENCES
RAJYA SABHA
UNSTARRED QUESTION NO. 3226
TO BE ANSWERED ON THURSDAY, 31ST MARCH, 2022**

ACTIVITIES ENVISAGED UNDER DEEP OCEAN MISSION

3226. SHRI SANJAY SETH:

Will the Minister of EARTH SCIENCES be pleased to state:

- (a) the details of various components and proposed activities envisaged under Deep Ocean Mission;
- (b) the amount of funds sanctioned and allocated till date;
- (c) whether it is fact that Indian Ocean region has huge capacity of minerals, energy and marine diversity of the underwater world still remains unexplored;
- (d) if so the details thereof; and
- (e) the steps Government is taking to realize its intended goals in a systematic and time bound manner?

ANSWER

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR
MINISTRY OF SCIENCE AND TECHNOLOGY
AND EARTH SCIENCES
(DR. JITENDRA SINGH)

- (a) The Deep Ocean Mission is a multi-ministerial, multi-disciplinary programme with emphasis on development of deep-sea technology that includes development of manned Submersible rated for 6000 metre water depth along with technologies for deep sea mining, exploration of deep-sea mineral resources and marine biodiversity, acquisition of a research vessel for ocean exploration, development of ocean climate change advisory services, deep sea observations, and capacity building in Marine Biology. The various components of the Deep Ocean Mission are:
 - Development of technologies for deep sea mining, manned submersible, and underwater robotics.
 - Development of ocean climate change advisory services,
 - Technological innovations for exploration and conservation of deep-sea biodiversity,
 - Deep ocean survey and exploration,
 - Energy and freshwater from the ocean.
 - Advanced marine station for ocean biology.
- (b) The overall estimated cost of the Deep Ocean Mission (DOM) is Rs. 4077 crores for a period of five years (2021-2026). Rs. 150 crores have been allocated for the financial year 2021-2022.
- (c) Yes, Sir.

- (d) MoES through contractual agreements with the International Seabed Authority (ISA), is carrying out exploration activities for Poly-metallic Nodules (PMN) in the Central Indian Ocean Basin and for Poly-metallic Sulphides (PMS) in parts of Central and South-West Indian ridges. Preliminary estimates indicate 380 Million Metric Tonnes (MMT) of Polymetallic Nodules comprising Copper, Nickel, Cobalt and Manganese are available within an allocated area of 75000 sq km for exploration of PMN in Central Indian Ocean Basin.
- (e) For effective and speedier management of the Deep Ocean Mission, the following management system is in place to oversee the project and fulfil the objectives:
- Mission Steering Committee (MSC),
 - Deep Ocean Council (DOC),
 - Mission Management Council (MMC) and
 - Project Advisory Committees (PAC)
