

GOVERNMENT OF INDIA  
MINISTRY OF EARTH SCIENCES  
**RAJYA SABHA**  
**UNSTARRED QUESTION NO. 518**  
ANSWERED ON 04/12/2025

**DEEP SEA EXPLORATION FOR MINERALS, OIL AND NATURAL GAS**

**518. SHRI A.D. SINGH:**

Will the Minister of **EARTH SCIENCES** be pleased to state:

- (a) whether Government is undertaking or supporting deep sea exploration for minerals, oil and natural gas;
- (b) if so, the details of current projects under the Deep Ocean Mission and related collaborations with international agencies such as the International Seabed Authority (ISA);
- (c) whether any environmental impact assessments have been conducted for these activities; and
- (d) the measures being taken to ensure sustainable and environmentally responsible exploration and extraction from the country's Exclusive Economic Zone and beyond?

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

- (a) Yes sir.
- (b) Under the Deep Ocean Mission (DOM), two verticals entitled 'Technological Advancements for Deep-Sea Mining and Crewed Submersibles' and "Deep Ocean Survey & Exploration" focuses on the deep sea exploration related activities. The deep seabed minerals exploration is done following signed contract with the International Seabed Authority. At present, the Government of India has three contracts with the International Seabed Authority (ISA), one signed in 2002 for exploration of polymetallic nodules (PMN) over an area of ~75,000 km<sup>2</sup> in the Central Indian Ocean Basin (CIOB) and two, signed in 2016 and 2025, for exploration of polymetallic sulphides (PMS) over an area of 10,000 km<sup>2</sup> each in the Central Indian Ridge (CIR) region and Carlsberg Ridge, respectively in Indian Ocean.
- (c) The exploration activities are being conducted following the approved plan of work by the ISA. Seabed resource estimation and environmental studies at mineral exploration sites is an integral component of the contract with the ISA. For this, geological, geophysical, oceanographic and biological data are collected from the allocated contract area of the Indian Ocean. Comprehensive environmental baseline studies, including biodiversity assessments are undertaken to better understand deep-sea ecosystems.

- (d) Ministry of Mines has notified Rules to ensure sustainable exploration and extraction of minerals from the EEZ of India. Offshore Areas Mineral (Development and Regulation) Act (OAMDR) (amended in August, 2023) provides for development and regulation of mineral resources in the territorial waters, continental shelf, EEZ and other maritime zones of India. The Act applies to all minerals in the offshore areas except mineral oils and hydrocarbons. Many rules are notified under the OAMDR act viz. Offshore Areas (Existence of Mineral Resources) Rules, 2024, Offshore Areas Mineral (Auction) Rules, 2024, Offshore Areas Operating Right Rules, 2024 and Offshore Areas Mineral Conservation and Development Rules, 2024. Beyond the EEZ of India, seabed mineral exploration activities in the contract areas in the Indian Ocean are carried out in alignment with the regulatory framework of ISA.

\*\*\*\*\*