

GOVERNMENT OF INDIA

MINISTRY OF EARTH SCIENCES

RAJYA SABHA

UNSTARRED QUESTION No. 193

TO BE ANSWERED ON TUESDAY, NOVEMBER 19, 2019

INTERNATIONAL OCEAN DRILLING PROGRAMME

193. SHRI AHAMED HASSAN :

Will the Minister of EARTH SCIENCES be pleased to state:

- (a) whether the Ministry has been a partner to international Ocean Drilling Programme in the past years, if so, the details thereof;**
- (b) the achievements made during this programme; and**
- (c) whether the Ministry is planning to work with other countries on such joint mission in the coming years, if so, the details thereof?**

ANSWER

MINISTER FOR SCIENCE AND TECHNOLOGY AND

MINISTRY OF EARTH SCIENCES

(DR. HARSH VARDHAN)

- (a) Yes Sir. India is an associate member of an international consortium of 26 countries for Scientific Ocean Drilling named as International Ocean Discovery Program (IODP). The IODP is an international marine research collaboration that explores Earth's history and dynamics using ocean-going research platforms to recover data recorded in seafloor sediments and rocks and to monitor subsea floor environments.**

The National Centre for Polar and Ocean Research (NCPOR), Goa an autonomous institution under the Ministry of Earth Sciences (MoES) has been designated as the nodal agency for looking after Indian activities pertaining to the scientific ocean drilling. As an exclusive scientific advantage of this Memorandum of Understanding (MoU) between National Science Foundation (NSF, USA) as well as MoES, Indian scientists routinely participate in various IODP expeditions onboard drilling platform 'JOIDES Resolution' throughout the world.

- (b) India joined this consortium through an MoU with National Science Foundation, USA in 2008-09, which allows Indian scientists and researchers an exclusive access to the state of the art scientific drilling platform JOIDES Resolution. Ever since, India joined this consortium, more than 40 scientists from various national research laboratories and Universities across India have had the hands on experience with science of ocean drilling, which is possible only through this consortium. Over several years, Indian scientists have**

participated in various IODP expeditions and have contributed significantly to the marine science research and discovery including publications in high impact peer reviewed top international journals such as 'Science and Nature'.

For the first time, India spearheaded a scientific drilling program in the Arabian Sea to understand long-term links between Himalayan mountain-building and Asian Monsoon. Sediment archives of more than 1700m in total length from two sites have been retrieved from the Arabian Sea by drilling more than 1100m deep below seafloor. Analyses of these records would enable us to decipher monsoon variability over past at least 17 million years.

- (c) The MoU has been further extended for a period of four years until 30th September 2023.**
