

**GOVERNMENT OF INDIA
MINISTRY OF EARTH SCIENCES
LOK SABHA
UNSTARRED QUESTION NO. 4221
TO BE ANSWERED ON WEDNESDAY, 18TH MARCH, 2026**

NEW POLAR BHAVAN AND SAGAR BHAVAN FACILITIES

4221. SMT. MAHIMA KUMARI MEWAR:
SHRI KRISHNA PRASAD TENNETI:

Will the Minister of EARTH SCIENCES be pleased to state:

- (a) whether the construction of the new Polar Bhavan and Sagar Bhavan facilities has strengthened India's research capabilities in the Arctic and Antarctic regions and if so, the details thereof;
- (b) the manner in which the Government proposes to integrate these facilities with India's long-term Polar Research Programme and global climate commitments; and
- (c) whether the Government plans to launch additional domestically built research vessels under the "Make in India" initiative to strengthen polar and ocean research and if so, the details thereof?

ANSWER

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

- (a) Yes Sir. The newly constructed Polar Bhavan and Sagar Bhavan facilities significantly strengthen India's research capabilities in the Polar regions. Different types of samples collected during the annual scientific expeditions to the Arctic, Antarctic, Southern Ocean and Himalayas are being processed at the advanced laboratories and analytical instruments housed at the Polar Bhavan enabling cutting-edge studies in polar geosciences, deep-ocean mineral exploration, and climate dynamics. The '*Science on a Sphere*' facility and upcoming Polar and Ocean Museum promote scientific outreach and global collaboration. Sagar Bhavan's ultra-low temperature ice-core labs, cold storage, and metal-free clean rooms support critical climate and cryosphere research, enabling precise geochemical and isotope analyses. Collectively, these facilities strengthen India's institutional capacity to conduct advanced scientific research, preserve valuable cryospheric samples, and promote knowledge dissemination in the field of polar and ocean studies.
- (b) The Polar and Sagar Bhavan facilities shall support India' long-term Polar Research Programme and global climate commitments by:
 - providing support for integrated scientific investigations across the Antarctic and Arctic regions, while also complementing research efforts in the Himalayan cryosphere and surrounding oceans.

- providing advanced laboratory capabilities, infrastructure will enable interdisciplinary studies in glaciology, climate science, polar biology, atmospheric sciences, and oceanography, thereby reinforcing India's capacity to generate high-quality scientific knowledge on polar and cryospheric processes.
- systematically managing cryospheric sample repository that will ensure the secure preservation of valuable samples collected from polar and high-altitude environments. This strengthened repository will facilitate long-term monitoring, comparative analyses, and future research, thereby expanding opportunities for collaborative scientific investigations at national and international levels.

Collectively, these facilities will play a pivotal role in advancing India's long-term Polar Research Programme, supporting evidence-based understanding of climate variability and cryosphere dynamics. The strengthened research capacity will also contribute meaningfully to India's global climate commitments, including improved climate observations, data sharing, and international scientific cooperation in addressing the challenges posed by climate change.

- (c) India is significantly advancing its polar and ocean research through the 'Make in India' initiative. Currently, the Ministry of Earth Sciences (MoES) is building a new Oceanographic Research Vessel (ORV) at the M/s Garden Reach Shipbuilders. This vessel is designed to bolster marine exploration in the Indian Ocean region.

In addition, the Ministry is also in the process to build a Polar Research Vessel, an Oceanographic Research Vessel (ORV), and a Fishery Oceanographic Research Vessel (FORV).
