

GOVERNMENT OF INDIA
MINISTRY OF EARTH SCIENCES
RAJYA SABHA
UNSTARRED QUESTION NO. 1321
ANSWERED ON 30/07/2026

PROGRESS OF SAMUDRAYAAN MISSION

1321. **SHRI ASHOKRAO SHANKARRAO CHAVAN:**
SHRI MASTHAN RAO YADAV BEEDHA:

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

- (a) the progress made under the Samudrayaan Mission, including the development and testing of MATSYA 6000 manned submersible;
- (b) whether harbour and shallow-water trials have been completed and if so, the details thereof;
- (c) the timeline for deep-ocean demonstration and operational deployment of the submersible; and
- (d) the measures taken to promote indigenous technologies for deep-sea exploration and sustainable utilisation of marine resources?

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

- (a) - (c) The design and integration of the human submersible (MATSYA-6000) to carry three persons to a depth of 6000 meters have been completed by the National Institute of Ocean Technology (NIOT), Chennai, under the Ministry of Earth Sciences, as part of the Deep Ocean Mission. The wet harbour trials of MATSYA-6000 at an 8-meter depth with crewed dives were successfully conducted in January-February 2025 at L&T Shipbuilding Facility in Katupalli, near Tamil Nadu.
- (d) The design and development of MATSYA-6000 have been completed by NIOT, Chennai, under the Ministry of Earth Sciences. The realisation of the titanium personnel sphere for MATSYA-6000 has been initiated as an indigenous effort in collaboration with ISRO. Sub-components such as the sub-sea thrusters, base frame, underwater cameras and lights, pressure cases, data acquisition system, AI-enabled processor, and fibre-optic multiplexer are developed with Indian industry partners. The development of inertial navigation systems and their integration with global positioning systems, doppler velocity logs, depth and acoustic positioning systems, and an underwater acoustic telephone is being undertaken with DRDO.
