

**GOVERNMENT OF INDIA
MINISTRY OF EARTH SCIENCES
LOK SABHA
STARRED QUESTION NO. *351
TO BE ANSWERED ON WEDNESDAY, AUGUST 10, 2016**

NEW RESEARCH PROJECTS

***351. SHRIMATI RITI PATHAK:**

Will the Minister of EARTH SCIENCES be pleased to state:

- (a) whether Government has taken any new research projects in the Integrated Coastal and Marine Area Management (ICMAM) and National Institute of Ocean Technology (NIOT) in Chennai and if so, the details thereof;**
- (b) the funds allocated, disbursed and utilized in these centres during the last three years and the current year, year-wise?**

**ANSWER
MINISTER FOR MINISTRY OF SCIENCE AND TECHNOLOGY AND
MINISTRY OF EARTH SCIENCES
(Dr. HARSH VARDHAN)**

(a) to (b): A statement is laid on the Table of the House.

STATEMENT REFERRED TO IN REPLY TO PARTS (a) and (b) OF THE LOK SABHA STARRED QUESTION NO. *351 REGARDING NEW RESEARCH PROJECTS FOR ANSWER ON 10th AUGUST, 2016.

- (a) **Yes, Madam. Both Integrated Coastal and Marine Area Management (ICMAM) and National Institute of Ocean Technology (NIOT) in Chennai have regular ongoing activities in addition to several new research projects that have been undertaken. The details of new research projects taken up are as follows:**

Integrated Coastal and Marine Area Management (ICMAM):

- 1. Integrated Coastal Zone Management (Coastal processes, Erosion, Ecosystem management and Training).**
- 2. Pollution and Environment (Water Quality Monitoring, Prediction and Ecotoxicology) aiming to understand the issues and generate the quality information needed for effective management and development of India's coastal zones.**

The main objectives of these projects are: a) to generate products by scientific techniques that are useful to solve issues like coastal erosion which have long-term socio-economic implications, b) to facilitate sustenance of productivity of marine environment through adoption of modern approach like ecosystem based management, c) to detect periodical changes in Coastal Water quality, predict pollution levels and undertake associated activities like determination of seawater quality criteria for protection and preservation of marine environment and d) to develop capabilities in coastal states & UTs for adoption of Integrated Coastal and Marine Area Management through training.

National Institute of Ocean Technology (NIOT):

- 1. Ocean Resource: An Autonomous coring system (ACS) was developed for ground truth validation of gas hydrate occurrence in Indian continental margins and tested over the sea floor of Krishna Godavari Basin.**
- 2. Technology Development: Various subsystems that are required for mining operations have been developed and sea trials have been performed. These are (i) Remotely operable Subsea In-situ Soil tester (ii) An Exploratory Mining System with single module of collector, crusher and hydraulic sub-systems. (iii) a Remotely Operable Vehicle (ROV) rated for 6000m water depth for survey and exploration (iv) another ROV rated for shallow water operation, operated at the Priyadarshini Lake, ice shelf in Antarctica and in coral reef in the Andaman Sea.**

3. **Mariculture Technology: Successful demonstration of Open sea cage culture in Andhra Pradesh, Andamans and Tamil Nadu.**
4. **Development of Ocean Observation Systems: Technology developed under the program include (i) Autonomous Underwater Profiling Drifter (AUPD) has been successfully tested in the sea and trial production of AUPDs by Indian industry is completed (ii) Indigenized drifter buoys with INSAT communication were deployed in Indian waters (iii) Deployment of IndARC, India's first sub-surface moored observatory in the polar waters of Arctic.**
5. **Seafront Facility: The objective is to create a world class Seafront Research Facility (SRF) to enable activities in development and testing of prototype systems and validation of indigenously developed marine systems in the ocean environment, at the proposed location in the Andhra Pradesh allotted total extent of 211.74 acres - Pamanji, Vagarru and Chittedu Villages, Nellore. Towards this about 155.56 acres of land has been acquired at Thupilipallam village in Vakadu Mandal near Nellore in Andhra Pradesh. A berthing facility with control room located at this center is also proposed to manage the running, operation and maintenance of the fleet of for Ocean Research Vessels.**

- (b) **The details of funds allocated, disbursed and utilized in the last three years and current year, year-wise is as follows:**

Integrated Coastal and Marine Area Management (ICMAM):

(Rupees in crores)

S. No.	Financial Year	As per A.O.	Budget allocated	Funds disbursed
1	2013-14	36.51	19.88	9.75
2	2014-15	31.56	17.50	9.87
3	2015-16	31.18	18.35	10.87
4	2016-17	23.11	21.11	3.43

National Institute of Ocean Technology (NIOT):

(Rupees in crores)

S. No.	Financial Year	As per A.O.	GIA received	Expenditure incurred
1	2013-14	260.70	177.27	167.73
2	2014-15	302.83	126.89	139.90
3	2015-16	462.70	155.36	147.59
4	2016-17	502.61	80.25	44.46
