

GOVERNMENT OF INDIA
MINISTRY OF SCIENCE AND TECHNOLOGY
DEPARTMENT OF SCIENCE AND TECHNOLOGY
LOK SABHA
UNSTARRED QUESTION No. 2383
TO BE ANSWERED ON 15.3.2023

NATIONAL MISSION ON INTERDISCIPLINARY-CYBER PHYSICAL SYSTEM

2383. COL. RAJYAVARDHAN RATHORE:

Will the Minister of **SCIENCE AND TECHNOLOGY** विज्ञान और प्रौद्योगिकी मंत्री be pleased to state:

- (a) the year-wise details of the budgetary provisions allocated under National Mission on Interdisciplinary-Cyber Physical System (NM-ICPS) by the Government since its inception;
- (b) the details of the outcomes and achievements of the National Mission on Interdisciplinary Cyber- Physical Systems (NM-ICPS);
- (c) the details of the extent to which the mission has contributed towards conforming to the technical requirements of the society vis-a-vis international norms and standards; and
- (d) the details of the number of jobs created through the Mission by imparting advanced skills and generating skilled manpower as per the requirement of the industry/society?

ANSWER

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

विज्ञान और प्रौद्योगिकी तथा पृथ्वी विज्ञान मंत्रालय के राज्य मंत्री (स्वतंत्र प्रभार)
(डॉ. जितेंद्र सिंह)

- (a) The year-wise details of the budgetary provisions allocated under National Mission on Interdisciplinary-Cyber Physical System (NM-ICPS) by the Government since its inception is given below:

S.No.	Year	Budgetry Provisions (Rs. in Crores)
1.	2018-19	0.01
2.	2019-20	123.83
3.	2020-21	270.85
4.	2021-22	0.00
5.	2022-23	300.00
	Total Budget allocated since the inception of the Mission	694.69

(b) Under NM-ICPS, 25 Technology Innovation Hubs (TIHs) have been set up in academic institutions of repute across the country in various advanced technology verticals of Cyber Physical Systems (CPS). Each TIH is working towards achieving the Mission targets. The details of outcomes and achievements of NM-ICPS is given below:

Mission outcomes	Outcomes and Achievements in Number
Technologies	276
Start-ups	257
Increase in CPS and related researchers base	607
Technology products	512
High end skill development (HRD)	30512
Hubs & TTRPs	25 Hubs
Job creation	8293
Publications, IPR and other intellectual activities	727
International Collaborations	96

(c) The technical requirement of the society in terms of Artificial Intelligence & Machine Learning, Robotics, Data Analysis, Internet of Things, Cyber Security, Communication systems and other advanced technologies has been fulfilled by the Mission and the developed technologies are catering to sectors like health, agriculture, and defense. Examples of some of these technologies developed by the TIHs under the Mission are: IHUB NTIHAC Foundation (C3iHub) at Indian Institute of Technology (IIT) Kanpur has developed Security Operations Centre (SoC) C3iVazra, which is implemented at National Highways Authority of India (NHAI) headquarters; i-Hub DRISHTI Foundation at IIT Jodhpur has developed Smart Health Solution For Rapid Mass Screening Using Integrated Telemedicine; IITM PRAVARTAK Technologies Foundation at IIT Madras has developed a Made in India mobile operating system named-BHarOS with unique technology features; IIT Ropar Technology & Innovation Foundation at IIT Ropar has developed a customized drone and Farm App for precision farming.

(d) The Mission has created 8293 number of jobs by imparting advanced skills and generating skilled manpower in CPS technologies as per the requirement of the industry/society in the last three years.
