GOVERNMENT OF INDIA
MINISTRY OF ELECTRONICS AND INFORMATION TECHNOLOGY
LOK SABHA
UNSTARRED QUESTION NO.2740
TO BE ANSWERED ON: 07.08.2024

RESEARCH AND DEVELOPMENT

2740. SHRI SATPAL BRAHAMCHARI:

Will the Minister of ELECTRONICS & INFORMATION TECHNOLOGY be pleased to state: -

(a) whether the Government is aware that Research and Development of Electronics and Information Technology Sector is being neglected in the country;
(b) if so, the details thereof and if not, the justification thereto;
(c) whether the Government has initiated any scheme to promote Research and Development in Electronics and Information Technology sector;
(d) if so, the details thereof; and
(e) the contribution of Digital Public Infrastructure (DPI) in the development and financial inclusion of the country along with the details thereof?

ANSWER

MINISTER OF STATE FOR ELECTRONICS AND INFORMATION TECHNOLOGY
(SHRI JITIN PRASADA)

(a) to (e): Ministry of Electronics and Information Technology ('MeitY') is promoting research and development in Electronics and Information Technology in the country through its Digital India Program. Government supports the R&D ecosystem which includes capacity building, creation of infrastructure for research and through suitable policy intervention at academia/Research organization/ startups and industry.

The initiatives taken by Government to promote research and development in are as follows:

i. **IndiaAI Mission**: The Cabinet has approved the IndiaAI Mission at a total outlay of Rs. 10,371.92 Crores as a comprehensive programme for leveraging transformative technologies to foster inclusion, innovation and adoption for social impact as well as to make India a global leader in the Al space and ensure responsible and transformational use of Al for all. The India AI mission seeks to foster responsible and inclusive growth within India's AI landscape by democratizing access to computing resources, enhancing data quality, nurturing homegrown AI expertise, attracting top talent, fostering industry partnerships, supporting startup ventures, promoting socially impactful AI projects, and emphasizing ethical practices in AI.

ii. MeitY has launched Mission Digital India Bhashini in the year 2022 with an outlay of Rs 495.51 crore for three-year duration to develop core language technologies for speech and text translation for 22 scheduled Indian languages in open source to help transcend language barriers in the digital medium. A national public digital platform http://bhashini.gov.in has been developed to proliferate language technology solutions

iii. MeitY has initiated 'FutureSkills PRIME' a programme for Re-skilling/Up-skilling of IT Manpower for Employability in 10 new/emerging technologies. These include AI, Blockchain, Robotics, Big Data & Analytics, IoT, Virtual Reality, Cybersecurity, Cloud Computing, 3D Printing and Web 3.0.

iv. Government has initiated 'Visvesvaraya PhD Scheme' with the objective to enhance the number of PhDs in Electronics System Design & Manufacturing (ESDM) and IT/IT Enabled Services (IT/ITES) sectors including AI and Emerging Technologies.

v. **National Mission on Interdisciplinary Cyber Physical Systems (NM-ICPS):** The Mission was approved by the Union Cabinet in 2018 with a total outlay of Rs.3,660 Crores. With an aim for convergence with all stakeholders by establishing strong linkages between academia, industry, Government and International Organizations. The Mission is working with all the concerned Ministries/ Departments to identify their technology needs, develop solutions and technical support. The Mission aims at development of technology platforms to carry out R&D, Translational Research, Product Development, Incubating & Supporting Start-ups as well as Commercialization.

vi. **National Supercomputing Mission**: The mission was launched in 2015, to foster a robust ecosystem in High-Performance Computing (HPC). Under NSM, more than 30 Peta-Flop (1015) capacity supercomputers have been deployed across academic institutions, R&D labs like IISc, IITs, etc. enabling over 8000 researches from 200 institutes to execute more than 94 lakh application codes. These supercomputers are pivotal in developing national-level applications in genomics, drug discovery, flood forecasting, disaster management, and seismic data processing. Capacity building efforts have trained over 20,000 individuals in HPC and AI. To become 'Atmanirbhar' (self-reliant) in HPC and AI, development of indigenous supercomputing sub-components i.e. Server Board, High Speed Interconnect, Complete Software Stack, Direct contact liquid Cooling (DCLC) cooling technology etc. have been undertaken through the mission.

Digital Public Infrastructures (DPIs) such as Aadhaar, Unified Payment Interface (UPI), DigiLocker, Unified Mobile Application for New-age Governance (UMANG), etc., solution have been developed aimed at enhancing accessibility, efficiency, and inclusivity. These have significantly contributed towards financial inclusion at grass root level by bringing more untapped populations into the formal financial system. It is estimated that DPIshave brought down KYC (Know Your Customer) costs from Rs 1 thousand to Rs 6 from about Rs 1,000.

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