GOVERNMENT OF INDIA MINISTRY OF SCIENCE AND TECHNOLOGY DEPARTMENT OF SCIENCE AND TECHNOLOGY LOK SABHA

UNSTARRED QUESTION NO. 681 ANSWERED ON 03/12/2025

SCIENTIFIC RESEARCH AND INNOVATION IN PUNJAB UNIVERSITIES AND INSTITUTES

681. SHRI MALVINDER SINGH KANG:

Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

- (a) the details of steps being taken by the Government to promote scientific research and innovation in Punjab's universities and institutes;
- (b) whether the Government has initiated any major technology parks or incubators specifically in Punjab; and
- (c) if so, the details thereof and their outcomes?

ANSWER

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

(a) The Government has been actively supporting scientific research and innovation through various schemes/initiatives across the country, including different institutes and universities in the state of Punjab.

Department of Science and Technology, under the National Quantum Mission, has supported creation of facilities at Indian Institute of Technology, Ropar in the area of Quantum Computing and Quantum Sensing & Metrology, and at Indian Institute of Science Education and Research (IISER) Mohali in the area of Quantum Communication.

Under Fund for Improvement of S&T Infrastructure in Universities and Higher Educational Institutions (FIST) program, 25 academic institutions have been supported in the state of Punjab. Under Promotion of University Research and Scientific Excellence (PURSE) scheme, two universities have been supported to strengthen the research and development (R&D) infrastructure, enabling them to conduct mission-oriented research in various areas aligned with national priorities.

To promote indigenous innovation in clean energy and water, DST has supported several R&D projects in universities and institutes of Punjab, such as Punjab Agricultural University, Ludhiana; IISER, Mohali; Plaksha University, Mohali; Thapar Institute of Engineering & Technology, Jalandhar and IIT Ropar. DST's Institute of Nano Science and Technology (INST), Mohali has been pursuing cutting edge research in several interdisciplinary subjects in the realm of nano science and technology.

Under the Science and Heritage Research Initiative (SHRI), DST has supported projects in Punjab Agricultural University, Ludhiana; Dr B.R. Ambedkar National Institute of Technology, Jalandhar; Punjab Remote Sensing Centre (PRSC), Ludhiana and IISER, Mohali for developing viable technologies to address cultural heritage related issues.

Anusandhan National Research Foundation (ANRF) has been promoting research and development and fostering a culture of research and innovation in various Universities, Colleges, Research Institutions, and R&D laboratories of Punjab. ANRF (erstwhile Science and Engineering Research Board - SERB) has sanctioned following number of projects during last three years under different programs to support research in the state of Punjab.

Financial Year	Total number of projects sanctioned
2022-23	116
2023-24	103
2024-25	38
2025-26 (Till date)	29

The constituents laboratories of Council of Scientific and Industrial Research (CSIR) namely, CSIR-Central Scientific Instruments Organisation (CSIR-CSIO), Chandigarh and CSIR-Institute of Microbial Technology (CSIR-IMT), Chandigarh have undertaken several steps to promote the scientific research and innovation in Punjab's universities and institutes.

(b) to (c): Department of Science and Technology, under the National Initiative for Developing and Harnessing Innovations (NIDHI), has established Inclusive-Technology Business Incubator (I-TBI) at Guru Angad Dev Veterinary and Animal Sciences University, Ludhiana and Central University of Punjab, Bathinda to nurture innovative ideas of innovators and entrepreneurs in the nearby regions. Under the NIDHI TBI program, DST has established Technology Business Incubator at IISER,

Mohali; Dr B R Ambedkar National Institute of Technology Jalandhar (NIT), Jalandhar; Lovely Professional University, Phagwara; and Punjab Agriculture University, Ludhiana; for providing support and nurturing knowledge driven innovative start-ups into successful enterprises. These centres have supported more than 65 startups working in various fields of Science and Technology like Biotechnology, Life Sciences, Agriculture, Dairy etc.

DST, under the National Mission on Interdisciplinary Cyber Physical Systems (NM-ICPS) has established Technology Innovation Hub at IIT Ropar, specializing in agriculture and water technologies. The Hub actively fosters collaborations between academia and industry, particularly in areas such as agriculture, water management, and related domains across the country.

DST has supported the establishment of a nanotechnology-focused incubator in Punjab. This initiative has led to the creation of the Nanobio Incubation Center at the Institute of Nano Science and Technology, Mohali. The centre nurtures innovations in healthcare, agriculture, environmental sustainability and related sectors.

The Department of Biotechnology has established the a BioNEST incubation centres at National Agri Food Biotechnology Institute (NABI), Mohali; E-YUVA Centre at Central University of Punjab, Bathinda and a BioNEST incubation centre and an E-YUVA Centre at Panjab University, Chandigarh to foster innovation and entrepreneurship in the domain of biotechnology. These Incubation centres have supported a total of 64 fellows and incubatees, fostering translational research and entrepreneurship among students and researchers in the state of Punjab.
