GOVERNMENT OF INDIA
MINISTRY OF SCIENCE AND TECHNOLOGY
DEPARTMENT OF SCIENCE AND TECHNOLOGY
LOK SABHA
UNSTARRED QUESTION NO. 2672
ANSWERED ON 11/12/2024

ESTABLISHMENT OF ADVANCE RESEARCH LABORATORIES

2672. Shri Daggumalla Prasada Rao:

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

(a) the number of advance research laboratories established in academic institutions;

(b) the details thereof, State-wise;

(c) whether the Government has any data regarding the physical progress and financial allocations made and utilized for the establishment of advance research laboratories in academic institutions;

(d) if so, the details thereof, State-wise especially in the state of Andhra Pradesh;

(e) the details of the metrics involved and process used for selecting institutions where advance research laboratories are to be established under the said scheme;

(f) the details of the progress of international, bilateral and multilateral cooperation made and the countries working and interested in collaborative research in sustainable energy, water, etc.; and

(g) the details of the outcome of the scheme in building institutional and human capacity and progress made in innovation technology development and deployment?

ANSWER

MINISTER OF STATE (INDEPENDENT CHARGE) OF 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) to (b): Four national-level Sophisticated Analytical & Technical Help Institute (SATHI) centres and fifteen regional Sophisticated Analytical Instrument Facilities (SAIF) centers equipped with major analytical instruments have been established. The four SATHI centers are at Indian Institute of Technology, Delhi (Delhi), Indian Institute of Technology Kharagpur (West Bengal), Banaras Hindu University, Varanasi (Uttar Pradesh) and Indian Institute of Technology, Hyderabad (Telangana), while over the years 15 SAIF centers were also established at various States (Annexure).

(c) to (d): Yes, in terms of physical progress, both SAIF and SATHI centers annually analyse approximately 1,00,000 samples, serving around 32,000 users, and contributing to approximately 2,200 research publications.

Schemes	Financial allocations/Utilsation Amount in ((₹) Crore)		
	2021-2022	2022-2023	2023-2024
SATHI & SAIF	46.7	37.62	34.09

No such facility is established so far, in the state of Andhra Pradesh.

(e) Under SATHI scheme, institutions are selected on cluster mode based on metrics such as academic and research profile, Institute of Eminence status, rank according to National Institutional Ranking Framework (NIRF), quality of research publications, the breadth of Science, Technology, Engineering, Maths (STEM) disciplines, willingness of lead organisation and its co-opted partners (minimum 5 partners) from nearby organizations to collaborate, technical expertise, readiness to form Section-8 company, availability of dedicated space under one roof, the presence of supportive infrastructure, prior experience in managing shared equipment, well-structured plans for skill development and capacity building, and a minimum 25% funding contribution towards DST's recommended cost slab. Only ongoing support is provided for strengthening research facilities at SAIF centres and no new calls has been announced to establish new SAIF centres.

(f) DST has supported numerous R&D projects under bilateral S&T cooperation with many countries including Australia, Belarus, Canada, Czech Republic, Denmark, Germany, Finland, France, Israel, Italy, Japan, South Korea, Netherlands, Romania, Russia, Serbia, Slovenia, Sri Lanka, Sweden, Taiwan, UK, USA and African countries. Under multilateral international cooperation DST is involved with The Association of Southeast Asian Nations (ASEAN), Brazil, Russia, India, China and South Africa (BRICS), European Union (EU) etc in the area of sustainable energy, water etc. Some of the salient highlights of these collaborations are focused on adoption of clean technologies, water management, real-time water quality monitoring and water treatment technologies etc.

(g) The scheme in building institutional and human capacity, has made significant paces in advancing scientific research, technological innovation, and human capacity building, by strengthening research facilities of various academic institutions and nurtured young talent. During last financial year, Innovation in Science Pursuit for Inspired Research -Million Minds Augmenting National Aspiration and Knowledge (INSPIRE-MANAK) program empowered young minds by recognizing over 46,000 innovative ideas submitted by them,

with a significant female participation. Additionally, through programs like INSPIRE Faculty and INSPIRE-Scholarship for Higher Education (INSPIRE-SHE), DST has supported more than 11500 fellowship to encouraged research excellence on annual basis.

DST provides assistance to the educational institutions to promote innovation in science and technology under National Initiative for Developing and Harnessing Innovations (NIDHI). Support is provided for establishment of startup incubation centers in academic institutions across the country. These centers help in augmenting the institutional capacity of the educational institutes for supporting innovation and translation of research to startup. Over the years, DST has established around 180 incubators across the country in various educational and research institutes supporting startups in different technology domains. In order to strengthen Human Capacity in entrepreneurship and innovation, DST provides fellowship to students through NIDHI Entrepreneur in residence program. Over the last 3 years, a total 931 students have been supported through the NIDHI Entrepreneur in residence fellowship. Climate Energy and Sustainable Technology program has supported over 290 projects on water technology and clean energy.

By nurturing young talent, supporting startups, and promoting technological advancements, DST is contributing to India's growth and development as a global leader in science and technology.

Annexure

Name of the institutes and State where Sophisticated Analytical Instrument Facilities (SAIF) have been established: -

S.No	Institution Name	State
1.	Indian Institute of Technology -Madras, Chennai	Tamil Nadu
2.	Central Drug Research Institute, Lucknow	Uttar Pradesh
3.	Indian Institute of Technology -Bombay, Mumbai	Maharashtra
4.	Shivaji University, Kolhapur	Maharashtra
5.	Indian Institute of Science, Bangalore	Karnataka
6.	Karnatak University, Dharwad	Karnataka
7.	Panjab University, Chandigarh	Chandigarh
8.	All India Institute of Medical Sciences, New Delhi	Delhi
9.	North Eastern Hill University, Shillong	Meghalaya
10.	Gauhati University, Guwahati	Assam
11.	Sophisticated Instrumentation Centre for Applied Research & Testing, Charutar Vidya Mandal, Vallabh Vidyanagar, Anand	Gujarat
12.	Sophisticated Test and Instrumentation Centre, Cochin University of Science and Technology (CUSAT), Kochi	Kerala
13.	Mahatma Gandhi University, Kottayam	Kerala
14.	Indian Institute of Technology-Patna	Bihar
15.	Indian Institute of Engineering Science and Technology, Shibpur	West Bengal

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