

# Vigyan Dhara: A Catalyst for India's Scientific Progress

(Ministry of Science & Technology)

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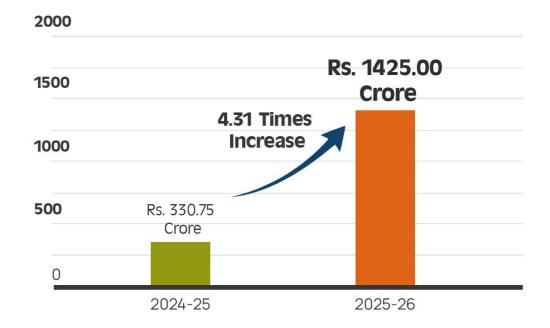
## **Strengthening India's Scientific Future**

The Government of India has significantly increased the allocation for the Vigyan Dhara scheme, reinforcing its commitment to enhancing the country's scientific research, innovation, and technological development ecosystem. The budget has witnessed a substantial rise from **Rs. 330.75 crore** in **2024-25** to **Rs. 1425.00 crore** in **2025-26**. The proposed outlay for the implementation of the unified scheme 'Vigyan Dhara' is Rs.10,579.84 crore for the period of 2021-22 to 2025-26, aligning with the 15th Finance Commission. This increased investment underscores the government's dedication to fostering science and technology as a foundation for national progress.

# Budget Allocation under Vigyan Dhara Scheme



(Numbers in Crore)



# The Birth of Vigyan Dhara

The Vigyan Dhara scheme came into force with effect from 16.01.2025. It merges three key umbrella schemes into one, focusing on:

- ❖ Science and Technology (S&T) Institutional and Human Capacity Building: This component focuses on strengthening India's scientific infrastructure and human resource pool. It aims to build and enhance research and development (R&D) labs across academic institutions, creating a robust environment for scientific research.
- ❖ Research and Development (R&D): Vigyan Dhara emphasises research in various critical areas, including basic research, translational research in sustainable energy and water, and access to international mega facilities. This component also fosters collaborative research through international bilateral and multilateral cooperation.
- ❖ Innovation, Technology Development, and Deployment: This segment of the scheme aims to drive innovation at all levels, from schools to higher education and the industry. It seeks to promote technology development and deployment, with a particular focus on increasing collaboration between academia, government, and industry, as well as supporting startups.

This strategic integration enhances efficiency in fund utilization and establishes synchronization among the sub-schemes and programs, ensuring a more streamlined approach to achieving scientific progress in India.

# **Key Focus Areas of Vigyan Dhara**

#### 1. Capacity Building

- Establishing advanced research laboratories in academic institutions
- Supporting faculty development and student research
- Promoting international scientific collaborations

#### 2. Research and Development

- Encouraging basic research with access to international mega facilities
- Supporting **translational research** in areas such as sustainable energy, water, etc.
- Fostering collaborative research through international bilateral and multilateral cooperation
- Contributing to building a critical **human resource pool** to expand the nation's **R&D base** and improve the Full-Time Equivalent (FTE) researcher count.

#### 3. Innovation and Technology Development

- Supporting startups and entrepreneurs in science and technology
- Facilitating technology transfer and commercialization
- Promoting the development of indigenous technologies
- Reinforcing innovation efforts from **school-level education to higher education**, industries, and startups through targeted interventions

#### 4. Promoting Gender Parity in Science and Technology

- Implementing focused programs to increase the **participation of women** in S&T fields
- Ensuring gender equality in **Science, Technology, and Innovation (STI)** through strategic interventions

#### 5. International Collaboration

- Promoting joint research projects
- Facilitating knowledge exchange with international researchers

• Strengthening India's position as a global scientific leader.

### **Key Impacts:**

- ❖ Enhanced collaboration between academia, government, and industry
- ❖ Increased participation of <u>women in S&T fields</u>.
- ❖ Strengthened R&D capabilities, aligned with global standards and national priorities.

All the programs under the **Vigyan Dhara** scheme are aligned with the **5-year goals of the Department of Science and Technology (DST)**, contributing towards the vision of **Viksit Bharat 2047**. Furthermore, the Research and Development (R&D) component of the scheme is structured to align with the **Anusandhan National Research Foundation (ANRF)**, ensuring that India's scientific research follows globally prevailing standards while adhering to national priorities.

#### **Fostering a Culture of Innovation**

As of March 2025, **57,869 individual beneficiaries** have availed the scheme. The beneficiaries include young students in the age group of **10-15 years** and studying in class VI to X availing the benefits under **INSPIRE-MANAK (Million Minds Augmenting National Aspiration and Knowledge) program**. This initiative nurtures a scientific mindset, encourages research careers, and fosters innovation among students.

In **Telangana alone**, **4002 beneficiaries** have availed of the scheme, with **Rs. 3.3 crore** utilized as of **10.03.2025**. The increased budget allocation will further strengthen state-level scientific initiatives, enabling more individuals and institutions to benefit.

#### **Nationwide Implementation: Spreading Scientific Awareness**

Vigyan Dhara operates as a **central sector scheme**, implemented across the country. The Department of Science and Technology (DST) has taken proactive measures to raise awareness through:

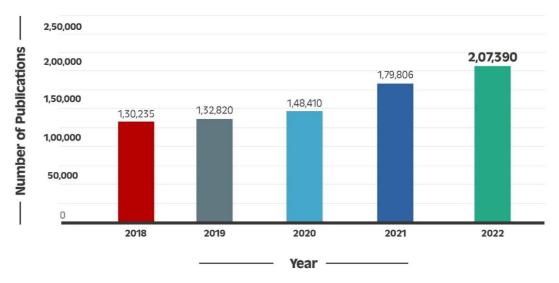
- Extensive media coverage across print, social, and digital platforms
- A dedicated web portal providing comprehensive information on various programs
- Active engagement with stakeholders to disseminate knowledge about the scheme's benefits.

#### **Rising Scientific Publications**

As per the latest Science & Engineering Indicators report from the **National Science Foundation**, **USA**, India has shown a consistent rise in scientific publications. The details are as follows:

# **Rising Scientific Publications in India**





The government has taken several steps to strengthen the research ecosystem and encourage researchers for scientific publications, including:

- Successive increases in budget allocations for scientific research
- Establishment of Anusandhan National Research Foundation (ANRF) through the ANRF Act 2023
- Creation of Centres of Excellence
- Instituting research fellowships and research programs
- Encouraging industry participation in R&D
- Providing extramural project funding and fellowship schemes through DST, DBT, and CSIR

Research funding supports areas such as clean energy, water, nano and advanced materials, cyber-physical systems, quantum science, geospatial technology, biotechnology, and industrial technologies. The outcomes of these initiatives include scientific publications, intellectual property creation (patents), technology transfers, and industrial designs. Additionally, researchers are encouraged to conduct research publications and generate intellectual property, as these are key performance indicators for career progression.

#### A Transformative Vision for India's Future

**Vigyan Dhara** is set to revolutionize India's scientific landscape by fostering innovation, strengthening research capabilities, and promoting technological advancements. The government's increased budget allocation signifies a clear commitment to advancing India's position as a **global leader in science and technology** while ensuring inclusive participation and alignment with the nation's long-term development goals.

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