
**NATIONAL SCIENCE AND TECHNOLOGY MANAGEMENT INFORMATION SYSTEM**
**DEPARTMENT OF SCIENCE & TECHNOLOGY**
MINISTRY OF SCIENCE & TECHNOLOGY
GOVERNMENT OF INDIA
NEW DELHI-110016 (INDIA)

# S&T INDICATORS TABLES

## RESEARCH AND DEVELOPMENT STATISTICS 2025-26

July 2026


**NATIONAL SCIENCE AND TECHNOLOGY MANAGEMENT INFORMATION SYSTEM**
**DEPARTMENT OF SCIENCE & TECHNOLOGY**
MINISTRY OF SCIENCE & TECHNOLOGY
GOVERNMENT OF INDIA
NEW DELHI-110016 (INDIA)

# S&T INDICATORS TABLES

## RESEARCH AND DEVELOPMENT STATISTICS
## 2025-26

July 2026

**ISBN: 81- 87607-45-9**

***Citation***: NSTMIS (2026). ***S&T Indicators Tables: Research and Development Statistics 2025-26.*** National Science and Technology Management Information System (NSTMIS), Department of Science and Technology, Government of India.

The present publication is available at
www.dst.gov.in ; www.nstmis-dst.org

Disclaimer

The indicators presented in this publication are derived from the latest S&T data collected through national S&T surveys and secondary sources. Although rigorous measures have been taken to ensure accuracy and reliability, we welcome feedbacks and suggestions to further improve future editions.

**डॉ० जितेन्द्र सिंह**
राज्य मंत्री (स्वतंत्र प्रभार),
विज्ञान एवं प्रौद्योगिकी मंत्रालय;
राज्य मंत्री (स्वतंत्र प्रभार) पृथ्वी विज्ञान मंत्रालय;
राज्य मंत्री, प्रधान मंत्री कार्यालय;
राज्य मंत्री कार्मिक, लोक शिकायत एवं पेंशन मंत्रालय;
राज्य मंत्री परमाणु ऊर्जा विभाग तथा
राज्य मंत्री अंतरिक्ष विभाग
भारत सरकार

सत्यमेव जयते

**Dr. JITENDRA SINGH**
Minister of State (Independent Charge)
of the Ministry of Science and Technology;
Minister of State (Independent Charge)
of the Ministry of Earth Sciences;
Minister of State in the Prime Minister's Office;
Minister of State in the Ministry of Personnel,
Public Grievances and Pensions;
Minister of State in the Department of Atomic Energy and
Minister of State in the Department of Space
Government of India

## MESSAGE

I am pleased to extend my warmest congratulations to the Department of Science and Technology (DST) for successfully completing the National S&T Survey, 2024-25, and bringing out its findings in the form of the publication titled *Science & Technology (S&T) Indicators Tables 2025-26*. This publication is a comprehensive compilation of key statistical indicators that reflect the status and progress of India's science, technology and research ecosystem. It provides valuable insights into emerging trends, sectoral performance, and the evolving capabilities of the country's research ecosystem, while also facilitating national and global benchmarking.

Science, technology, and innovation are central to India's aspirations of becoming a knowledge-driven and globally competitive economy. The Government of India has consistently prioritized strengthening the national research and innovation ecosystem through strategic investments, policy initiatives, and institutional support. As the country advances towards the vision of Viksit Bharat, robust and reliable S&T statistics are indispensable for informed policymaking, effective resource allocation, and evidence-based decision-making.

I am confident that this publication will serve as a valuable reference for policymakers, researchers, academia, industry, and other stakeholders engaged in strengthening India's scientific and technological capabilities.

I commend the National Science and Technology Management Information System (NSTMIS), DST for its continued efforts in developing a robust statistical foundation for India's science, technology, and innovation ecosystem and wish this publication every success.

**(Dr. Jitendra Singh)**
MBBS (Stanley, Chennai)
MD Medicine, Fellowship Diabetes (AIIMS, New Delhi)
MNAMS Diabetes & Endocrinology
FICP (Fellow, Indian College of Physicians)

Anusandhan Bhawan, 2, Rafi Marg, New Delhi-110001
Tel. : 011-23316766, 23714230

Prithvi Bhawan, Lodhi Road, Opp. India Habitat Centre, New Delhi-110003
Tel. : 011-24629788, 24629789

Seva Teerth, New Delhi-110011
Tel. : 011-23010191
Kartavya Bhavan-03, New Delhi-110001
Tel. : 011-24010700, 011-24010555

सत्यमेव जयते
प्रो. उमेश वी. वाघमारे
**Prof. Umesh V. Waghmare**

**सचिव**
भारत सरकार
विज्ञान एवं प्रौद्योगिकी मंत्रालय
विज्ञान एवं प्रौद्योगिकी विभाग
**Secretary**
**Government of India**
Ministry of Science and Technology
**Department of Science and Technology**

# FOREWORD

The Department of Science and Technology (DST), Government of India, is committed to strengthening the country's Science Technology and Innovation (STI) ecosystem through informed policymaking and strategic interventions. In this endeavor, reliable and comprehensive statistical indicators serve as an essential foundation for understanding the evolving landscape of science, technology, and research in the country.

This publication titled - *Science and Technology Indicators Tables 2025-26* is an outcome of National S&T Survey, 2024-25, which involves a mammoth task of collecting data from around 8000 R&D performing entities covering national laboratories, state research institutions, higher education institutions, public & private industries, scientific & industrial research organizations, etc. spread across the country. The planning and execution of the national S&T survey is an in-house exercise of NSTMIS programme of DST and reflects the dedicated efforts of the NSTMIS team led by Dr. Arvind Kumar with the support from Dr. Rabindra Kr. Panigrahy, Mr. Pramod Kr. Arya, Mr. Subrata Maiti and Ms. Hemlata.

I complement all the central ministries/departments, state governments, scientific agencies, research institutions, higher education institutions, industries, and industry associations for their active participation and valuable contribution to the national S&T survey exercise.

I hope that this publication will serve as a valuable reference for policymakers, researchers, academicians, industry representatives, and other stakeholders, supporting evidence-based policy planning, decision- making, benchmarking, and monitoring of India's progress in science, technology, and innovation.

V. Umesh

July, 2026

(Umesh V. Waghmare)

New Block - 1, Technology Bhawan, New Mehrauli Road, New Delhi - 110016 Tel: +91 11 26511439 / 26510068
Fax: +91 11 26863847 | E-mail : dstsec@nic.in | Website: http://www.dst.gov.in

सत्यमेव जयते
डॉ. अरविंद कुमार
**Dr. Arvind Kumar**

वैज्ञानिक जी एवं प्रमुख
राष्ट्रीय विज्ञान एवं प्रौद्योगिकी प्रबंधन सूचना प्रणाली
सह–प्रमुख
नीति–समन्वय और कार्यक्रम प्रबंधन
विज्ञान और प्रौद्योगिकी विभाग
भारत सरकार
Scientist G & Head
National Science & Technology Management
Information System (NSTMIS)
Associate Head
Policy Coordination & Programme Management
Department of Science & Technology
Government of India

## PREFACE

The publication titled - *Science and Technology Indicators Tables 2025–26* presents a comprehensive compilation of statistical indicators reflecting various dimensions of India's science, technology, and innovation (STI) ecosystem. It consolidates data on research and development (R&D) investments, scientific and technical human resources, and other related indicators essential for assessing the country's scientific and technological progress.

The indicators presented in this volume are derived from the National S&T Survey, 2024–25 and supplemented with data from various national and international sources. The compilation of the Indicator Tables follows internationally accepted concepts, definitions, classifications, and methodological frameworks recommended by UNESCO and the OECD.

We acknowledge the valuable support and cooperation extended by central ministries/departments, state governments, scientific agencies, research institutions, higher education institutions, industries, and industry associations in providing data and information for this compilation. We also sincerely appreciate the guidance and valuable inputs provided by the members of the duly constituted Expert Committee in enhancing the quality, robustness, and relevance of the indicators presented in this publication.

We hope that this publication will serve as a useful resource for understanding India's STI landscape and support informed policy formulation, research, and strategic planning.

July, 2026

(Arvind Kumar)

Room No. 18A, S&T Block-I, Technology Bhavan, New Mehrauli Road, New Delhi-110016
Tele.: 011-26962213 Website: http://www.dst.gov.in / http://www.nstmis-dst.org
E-mail : http://arvind.kumar71@nic.in

# Acknowledgement

The publication of **Science and Technology Indicators Tables 2025–26** is the result of the collective efforts and contributions of various Ministries, Departments, R&D institutions, industry groups and associations, and implementing agencies involved in the National Science and Technology (S&T) Survey, 2024–25.

The National Science and Technology Management Information System (NSTMIS) Division of the Department of Science and Technology (DST) expresses its sincere gratitude to Prof. Umesh V. Waghmare, Secretary, DST, for his visionary leadership and guidance in bringing out this publication. NSTMIS also gratefully acknowledges the valuable guidance provided by Prof. Abhay Karandikar, Former Secretary, DST, throughout the survey process, and the support extended by Shri Sunil Kumar, Additional Secretary, DST, in facilitating responses from R&D institutions during the survey.

DST extends its heartfelt gratitude to the Secretaries of all ministries/departments of the Government of India especially Dr.(Mrs.) N. Kalaiselvi, Secretary, DSIR and DG, CSIR, for their continued support extended through the nominated nodal officers.

DST also sincerely acknowledges the support provided by Shri Vinay Kumar, Dr. (Ms.) Sarika Madan, and Dr. Anoop Singh from Department of Scientific and Industrial Research (DSIR) for their efforts in collection of information from the Scientific and Industrial Research Organisations (SIROs) and DSIR-registered industries.

The contributions of all the members of all industry groups & associations, particularly, Federation of Indian Chambers of Commerce & Industry (FICCI), India SME Forum, State S&T Councils and members of the duly constituted Expert Committee: Dr. Parveen Arora, Dr. Rajive Kumar, Prof. Ramakar Jha, Ms. Navanita Gogoi, Dr. Praveen Kumar, Prof Ankit Kumar, and Shri Vinay Kumar are gratefully acknowledged.

The NSTMIS also acknowledges the guidance provided by the Head, NSTMIS and the contribution of DST officials, namely: Dr. Nisha Mendirata, Dr. Praveen Roy, Dr. Pratishtha T Pandey and Dr. Ekta Kapoor.

The efforts of the implementing teams of the National S&T Survey, 2024–25—The Energy and Resources Institute (TERI), New Delhi led by Ms. N. Deepa with support from Dr. Anurag Anand, Ms. R. A. Maningdoula, Dr. Mithu Dey, and Ms. Jyoti Shukla; ICAR–National Academy of Agricultural Research Management (ICAR-NAARM) led by Dr. B. Ganesh Kumar with support from Ms. Asha; and Punjab Engineering College (PEC), Chandigarh led by Prof. Rajesh Bhatia with support from Dr. Sanjay K. Batish, Mr. Sushil Kumar, and Dr. Manish Kumar, in the timely collection and collation of S&T data and preparation of the R&D Statistics publication are duly acknowledged by NSTMIS, DST.

The NSTMIS, DST, gratefully acknowledges the wholehearted participation of R&D-performing entities and the valuable support of all stakeholders and contributors in this national S&T survey exercise.

# Contents

# Abbreviations

| | |
|---|---|
| AISHE | All India Survey of Higher Education |
| AYUSH | Ministry of Ayurveda, Yoga, Naturopathy, Unani, Siddha & Homoeopathy |
| BERD | Business Enterprise Research and Development |
| BRICS | Brazil, Russia, India, China, and South Africa |
| CAGR | Compound Annual Growth Rate |
| CPSUs | Central Public Sector Undertakings |
| CSIR | Council of Scientific & Industrial Research |
| DAE | Department of Atomic Energy |
| DBT | Department of Biotechnology |
| DoS | Department of Space |
| DRDO | Defence Research & Development Organisation |
| DSIR | Department of Scientific and Industrial Research |
| DST | Department of Science & Technology |
| FTE | Full Time Equivalent |
| GDP | Gross Domestic Production |
| GERD | Gross Expenditure on Research and Development / Gross Domestic Expenditure on Research and Development |
| GTO | Gross Turnover |
| ICAR | Indian Council of Agricultural Research |
| ICMR | Indian Council of Medical Research |
| ISRO | Indian Space Research Organisation |
| MeitY | Ministry of Electronics and Information Technology |
| MNRE | Ministry of New & Renewable Energy |
| MoE | Ministry of Education |
| MoEFCC | Ministry of Environment, Forest and Climate Change |
| MoES | Ministry of Earth Sciences |
| MoP | Ministry of Power |
| MoS | Ministry of Steel |
| MoWR | Ministry of Water Resources |
| MoSPI | Ministry of Statistics and Programme Implementation |
| NIRF | National Institutional Ranking Framework |
| NSF | National Science Foundation |
| NSTMIS | National Science and Technology Management Information System |
| OECD | Organisation for Economic Co-operation and Development |

| | |
|---|---|
| PCT | The Patent Cooperation Treaty |
| PSU | Public Sector Undertaking |
| R&D | Research and Development |
| S&E | Science and Engineering |
| S&T | Science and Technology |
| SAUs | State Agriculture Universities |
| STI | Science, Technology, and Innovation |
| SIROs | Scientific and Industrial Research Organizations |
| SPSUs | State Public Sector Undertakings |
| STO | Sales Turnover |
| UK | United Kingdom |
| UNESCO | United Nations Educational, Scientific and Cultural Organization |
| USA | United States of America |
| WIPO | World Intellectual Property Organization |

# Overview

The National Science and Technology Management Information System (NSTMIS), Department of Science and Technology (DST), serves as the nodal agency for the assessment, monitoring, and benchmarking of India's science, technology, and innovation (STI) ecosystem. To support evidence-based policymaking, NSTMIS has been conducting the National Science and Technology (S&T) Survey since 1973–74 on regular basis, creating a comprehensive repository of S&T data spanning over five decades.

The National S&T Survey, 2024–25 was conducted between December 2024 to December 2025 as census of R&D-performing institutions identified through the periodically updated Directory of R&D Institutions. The Survey covered more than 8,000 R&D-performing institutions across the country, representing six major sectors: Central Sector, State Sector, Public Sector Industry, Private Sector Industry, Scientific and Industrial Research Organisations (SIROs), and Higher Education Institutions (HEIs).

Data were collected through standardized questionnaires developed in accordance with the OECD Frascati Manual (2015), ensuring international comparability of the statistics. An online survey portal facilitated data submission while providing respondents with access to records from previous survey rounds, thereby improving reporting efficiency and data consistency.

The collected information underwent rigorous validation and was supplemented with data from authenticated secondary sources to address information gaps. These secondary sources include records from the Department of Scientific and Industrial Research (DSIR), the Centre for Monitoring Indian Economy (CMIE), Annual Reports, Business Responsibility and Sustainability Reporting (BRSR) reports, Public Enterprises Survey reports, the Agricultural Research Data Book, Demand for Grants, the National Institutional Ranking Framework (NIRF), the All India Survey on Higher Education (AISHE), National Assessment and Accreditation Council (NAAC), institutional websites, yearbooks, and other official publications.

The outcome of the Survey resulted in national estimates of major indicators such Gross Expenditure on Research and Development (GERD), Business Enterprises Expenditure on Research and Development (BERD) and Full time Equivalent (FTE) researchers engaged in R&D activities in the country and many other Indicators. The draft reports were reviewed, validated finalized in consultations with  a duly constituted Expert Committee.

The National S&T Survey, 2024–25 culminated in the publication of two flagship reports: *Science and Technology Indicator Tables 2025-26* and *Research and Development Statistics at a Glance 2025-26*. The indicators presented in these publications cover key dimensions of the national R&D ecosystem, including R&D expenditure, human resources, institutional participation, research output, and sectoral performance. Developed using standardized definitions and internationally accepted methodologies, these indicators provide a reliable statistical framework for assessing the country's STI landscape. They serve as an important evidence base for policy formulation, strategic planning, resource allocation, performance monitoring, and international benchmarking.

# S&T INDICATORS
# TABLES

# Table 1

## NATIONAL EXPENDITURE ON RESEARCH AND DEVELOPMENT BY SECTOR

**(Rs. Crore)**

| Sector | 1970-71 | 1980-81 | 1990-91 | 2001-02 | 2010-11 | 2013-14 | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 | 2024-25* | 2025-26* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Central Sector | 112.47 | 580.49 | 3058.27 | 11536.33 | 33095.18 | 38879.89 | 43094.90 | 46887.17 | 50219.42 | 56920.02 | 65423.90 | 69317.09 | 61281.48 | 79355.80 | 81183.38 | 85711.50 | 89130.71 | 92725.43 |
| State Sector | 12.58 | 59.34 | 365.92 | 1494.33 | 4457.81 | 5951.15 | 6327.32 | 6447.94 | 6866.96 | 7264.81 | 8029.21 | 8554.79 | 8476.35 | 8394.24 | 9193.28 | 9796.10 | 10582.52 | 11432.07 |
| Private Sector | 14.59 | 120.69 | 549.98 | 3292.69 | 19337.02 | 30514.80 | 32538.39 | 36022.15 | 39124.71 | 41855.88 | 42489.95 | 44753.54 | 46388.13 | 82974.99 | 95422.17 | 118351.68 | 141355.00 | 168834.00 |
| Higher Education Sector | - | - | - | 714.80 | 3306.74 | 4010.05 | 5512.83 | 6095.18 | 6888.17 | 7784.33 | 8797.08 | 9941.59 | 11235.00 | 24085.80 | 27579.29 | 30908.53 | 35127.90 | 40015.52 |
| **Total** | **139.64** | **760.52** | **3974.17** | **17038.15** | **60196.75** | **79355.89** | **87473.44** | **95452.44** | **103099.26** | **113825.03** | **124740.14** | **132567.01** | **127380.96** | **194810.83** | **213378.12** | **244767.81** | **276196.13** | **313007.02** |

***Source*** **:** Data collected and compiled by National Science and Technology Management Information System (NSTMIS), Department of Science and Technology (DST), Government of India (GoI).

Note **:** 1. Central Sector data includes Research and Development (R&D) expenditure of Central Government R&D Labs/Institutes and Central Public Sector Enterprises/ Joint Sector companies.

2. State Sector data includes R&D expenditure of State Agricultural Universities (SAUs) and State Government R&D labs/institutions.

3. Private Sector data includes in-house Private Sector R&D units and Scientific and Industrial Research Organisations (SIROs). SIROs are research-oriented entities recognized by the Department of Scientific and Industrial Research, GoI.

4. Higher Education Sector data includes R&D expenditure by Public and Private Sector Higher Education Institutes.

5. *2024-25 and 2025-26 data is estimated by applying sector-wise CAGR based on period from 2021-22 to 2023-24.

6.- Not available

# Table 2

## NATIONAL EXPENDITURE ON R&D BY INSTITUTIONAL AND INDUSTRIAL SECTORS

**(Rs. Crore)**

| Sl No. | Sector | 2021-22 | 2022-23 | 2023-24 |
|---|---|---|---|---|
| **A** | **INSTITUTIONAL SECTOR** | | | |
| 1 | Institutions under Central Government | 71022.31 | 72381.52 | 75655.72 |
| 2 | Institutions under State Government | 8394.24 | 9193.28 | 9796.10 |
| 3 | Higher Education | | | |
| | *Higher Education (Public)* | 18383.28 | 20573.11 | 22353.61 |
| | *Higher Education (Private)* | 5702.52 | 7006.18 | 8554.92 |
| | Total Higher Education (Public + Private) | 24085.80 | 27579.29 | 30908.53 |
| 4 | Scientific and Industrial Research Organisation (SIRO) | 5709.44 | 6739.10 | 7798.28 |
| | **TOTAL (A)** | **109211.79** | **115893.19** | **124158.63** |
| **B** | **INDUSTRY SECTOR** | | | |
| 7 | Industry (Private) | 77265.55 | 88683.07 | 110553.40 |
| 8 | Industry (Public) | 8333.49 | 8801.86 | 10055.78 |
| | **TOTAL (B)** | **85599.04** | **97484.93** | **120609.18** |
| | **Total (A+B)** | **194810.83** | **213378.12** | **244767.81** |

***Source*** **:** Data collected and compiled by NSTMIS, DST, GoI.

***Note*** **:** 1. Institutions under Central Government data includes R&D expenditure of Central Government R&D Labs/ Institutions.

2. Institutions under State Government data include R&D expenditure of State Agricultural Universities (SAUs) and other State Government R&D labs/institutions.

3. Higher Education Sector data includes R&D expenditure by Public and Private Higher Education Institutes.

# Table 3

## NATIONAL EXPENDITURE ON R&D IN RELATION TO GDP

| Year | R&D Expenditure at current prices (Rs. Crore) | GDP at current prices (Rs. Crore) | R&D as % of GDP |
|---|---|---|---|
| **Series: 2004-05** | | | |
| 1995-96 | 7483.88 | 1226725 | 0.61 |
| 1996-97 | 8913.61 | 1419277 | 0.63 |
| 1997-98 | 10611.34 | 1572394 | 0.67 |
| 1998-99 | 12473.17 | 1803378 | 0.69 |
| 1999-00 | 14397.60 | 2023130 | 0.71 |
| 2000-01 | 16198.80 | 2177413 | 0.74 |
| 2001-02 | 17038.15 | 2355845 | 0.72 |
| 2002-03 | 18088.16 | 2536327 | 0.71 |
| 2003-04 | 20086.34 | 2841503 | 0.71 |
| 2004-05 | 24117.24 | 3242209 | 0.74 |
| 2005-06 | 29932.58 | 3693369 | 0.81 |
| 2006-07 | 34238.39 | 4294706 | 0.80 |
| 2007-08 | 39437.77 | 4987090 | 0.79 |
| 2008-09 | 47353.38 | 5630063 | 0.84 |
| 2009-10 | 53041.30 | 6477827 | 0.82 |
| 2010-11 | 60196.75 | 7784115 | 0.77 |
| **Series: 2011-12** | | | |
| 2011-12 | 65961.33 | 8736329 | 0.76 |
| 2012-13 | 73982.79 | 9944013 | 0.74 |
| 2013-14 | 79355.89 | 11233522 | 0.71 |
| 2014-15 | 87473.44 | 12467959 | 0.70 |
| 2015-16 | 95452.44 | 13771874 | 0.69 |
| 2016-17 | 103099.26 | 15391669 | 0.67 |
| 2017-18 | 113825.03 | 17090042 | 0.67 |
| 2018-19 | 124740.14 | 18899668 | 0.66 |
| 2019-20 | 132567.01 | 20103593 | 0.66 |
| 2020-21 | 127380.96 | 19854096 | 0.64 |
| 2021-22 | 194810.83 | 23597398 | 0.83 |
| **Series: 2022-23** | | | |
| 2022-23 | 213378.12 | 26117627 | 0.82 |
| 2023-24 | 244767.81 | 28983909 | 0.84 |
| 2024-25* | 276196.13 | 31807309 | 0.87 |
| 2025-26* | 313007.02 | 34635638 | 0.90 |

***Source*** **:** Data collected and compiled by NSTMIS, DST, GoI.

***Note*** **:**
1. Data on GDP from 1995-96 to 2010-11- Economic Survey 2018-19.
2. Data on GDP from 2011-12 to 2021-22 - Economic Survey 2025-26.
3. Data on GDP from 2022-23 to 2025-26- MoSPI New GDP Series, June 2026.
4. R&D/GDP ratio have been revised as per the new GDP figures.
5. *Estimated

# Table 4

## NATIONAL EXPENDITURE ON R&D AT CURRENT AND CONSTANT PRICES

**(Rs. Crore)**

| Year | National Expenditure on Research and Development | |
|---|---|---|
| | Current Prices | Constant Prices |
| **Base Year: 2004-05** | | |
| 1985-86 | 2068.78 | 7960.98 |
| 1990-91 | 3974.17 | 10085.15 |
| 1995-96 | 7483.88 | 11627.32 |
| 1996-97 | 8913.61 | 12873.45 |
| 1997-98 | 10611.34 | 14393.25 |
| 1998-99 | 12473.17 | 15663.93 |
| 1999-00 | 14397.60 | 17542.37 |
| 2000-01 | 16198.80 | 19042.89 |
| 2001-02 | 17038.15 | 19405.60 |
| 2002-03 | 18088.16 | 21563.84 |
| 2003-04 | 20086.34 | 21236.36 |
| 2004-05 | 24117.24 | 24117.24 |
| 2005-06 | 29932.58 | 28715.90 |
| 2006-07 | 34238.39 | 30864.41 |
| 2007-08 | 39437.77 | 33616.38 |
| 2008-09 | 47353.38 | 37145.07 |
| 2009-10 | 53041.30 | 39228.08 |
| 2010-11 | 60196.75 | 40850.18 |
| **Base Year: 2011-12** | | |
| | Current Prices | Constant Prices |
| 2011-12 | 65961.33 | 65961.33 |
| 2012-13 | 73982.79 | 68544.23 |
| 2013-14 | 79355.89 | 69238.88 |
| 2014-15 | 87473.44 | 73680.67 |
| 2015-16 | 95452.44 | 78801.61 |
| 2016-17 | 103099.26 | 82444.97 |
| 2017-18 | 113825.03 | 87547.03 |
| 2018-19 | 124740.14 | 92354.96 |
| 2019-20 | 132567.01 | 95844.26 |
| 2020-21 | 127380.96 | 87864.27 |
| 2021-22 | 194810.83 | 124014.45 |
| **Base Year: 2022-23** | | |
| | Current Prices | Constant Prices |
| 2022-23 | 213378.12 | 213378.12 |
| 2023-24 | 244767.81 | 236465.22 |
| 2024-25* | 276196.13 | 260403.69 |
| 2025-26* | 313007.02 | 292008.30 |

***Source*** **:** Data collected and compiled by NSTMIS, DST, GoI.

***Note*** **:** 1. Data on GDP from 1995-96 to 2010-11- Economic Survey 2018-19.

2. Data on GDP from 2011-12 to 2021-22- Economic Survey 2025-26.

3. Data on GDP from 2022-23 to 2025-26- MoSPI New GDP Series, June 2026.

4. *Estimated

# Table 5

## PUBLIC AND PRIVATE INVESTMENT IN NATIONAL R&D AND PERCENTAGE SHARE IN GDP

**(Rs. Crore)**

| Year | Public Investment in R&D | % share of Public Investment in total R&D | Private Investment in R&D | % share of Private Investment in total R&D | Total Investment in R&D |
|---|---|---|---|---|---|
| 2004-05 | 18078.28(0.5) | 75.0 | 6038.96(0.2) | 25.0 | 24117.24(0.7) |
| 2005-06 | 21460.63(0.6) | 71.7 | 8471.95(0.2) | 28.3 | 29932.58(0.8) |
| 2006-07 | 23752.81(0.6) | 69.4 | 10485.58(0.2) | 30.6 | 34238.39(0.8) |
| 2007-08 | 26511.64(0.5) | 67.2 | 12926.14(0.3) | 32.8 | 39437.77(0.8) |
| 2008-09 | 32987.98(0.5) | 69.7 | 14365.40(0.3) | 30.3 | 47353.38(0.8) |
| 2009-10 | 37735.75(0.6) | 71.1 | 15305.55(0.2) | 28.9 | 53041.30(0.8) |
| 2010-11 | 40859.73(0.6) | 67.9 | 19337.02(0.2) | 32.1 | 60196.75(0.8) |
| 2011-12 | 42665.62(0.5) | 64.7 | 23295.71(0.3) | 35.3 | 65961.33(0.8) |
| 2012-13 | 46886.28(0.5) | 63.4 | 27096.51(0.3) | 36.6 | 73982.79(0.7) |
| 2013-14 | 48841.09(0.4) | 61.5 | 30514.80(0.3) | 38.5 | 79355.89(0.7) |
| 2014-15 | 54935.05(0.4) | 62.8 | 32538.39(0.3) | 37.2 | 87473.44(0.7) |
| 2015-16 | 59430.29(0.4) | 62.3 | 36022.15(0.3) | 37.7 | 95452.44(0.7) |
| 2016-17 | 63974.55(0.4) | 62.1 | 39124.71(0.3) | 37.9 | 103099.26(0.7) |
| 2017-18 | 71969.15(0.5) | 63.2 | 41855.88(0.2) | 36.8 | 113825.03(0.7) |
| 2018-19 | 82250.19(0.4) | 65.9 | 42489.95(0.2) | 34.1 | 124740.14(0.7) |
| 2019-20 | 87813.47(0.4) | 66.2 | 44753.54(0.2) | 33.8 | 132567.01(0.7) |
| 2020-21 | 80992.83(0.4) | 63.6 | 46388.13(0.2) | 36.4 | 127380.96(0.6) |
| 2021-22 | 106133.32(0.45) | 54.48 | 88677.51(0.38) | 45.52 | 194810.83(0.83) |
| 2022-23 | 110949.77(0.42) | 52.00 | 102428.35(0.39) | 48.00 | 213378.12(0.82) |
| 2023-24 | 117861.21(0.41) | 48.15 | 126906.6(0.44) | 51.85 | 244767.81(0.84) |
| 2024-25* | 124362.83(0.39) | 45.03 | 151832.85(0.48) | 54.97 | 276196.13(0.87) |
| 2025-26* | 131338.93(0.38) | 41.96 | 181667.88(0.52) | 58.04 | 313007.02(0.90) |

***Source*** **:** Data collected and compiled by NSTMIS, DST, GoI.

***Note*** **:** 1. Public Investments in R&D = Central Government Ministries/Department Institutions + State Government. Department/ State Agricultural Universities + Public Sector/joint sector Industries + Public Higher Education Institutes.

2. Private Investment in R&D = Private Sector Industries + SIROs + Private Higher Education Institutes .

3. Number in paranthesis indicate percentage share in GDP.

4. * Estimated

# Table 6

## BUSINESS ENTERPRISE INVESTMENT IN NATIONAL R&D AND PERCENTAGE SHARE IN GERD AND GDP

**(Rs. Crore)**

| Year | Investment in R&D by Business Enterprises | % of BERD in total GERD | Total GERD |
|---|---|---|---|
| 2004-05 | 7296.84(0.2) | 30.3 | 24117.24(0.7) |
| 2005-06 | 9759.15(0.3) | 32.6 | 29932.58(0.8) |
| 2006-07 | 11950.99(0.3) | 34.9 | 34238.39(0.8) |
| 2007-08 | 14803.39(0.3) | 37.5 | 39437.78(0.8) |
| 2008-09 | 16822.42(0.3) | 35.5 | 47353.38(0.8) |
| 2009-10 | 18120.11(0.3) | 34.2 | 53041.30(0.8) |
| 2010-11 | 22648.83(0.3) | 37.6 | 60196.75(0.8) |
| 2011-12 | 27058.28(0.3) | 41.0 | 65961.33(0.8) |
| 2012-13 | 33414.70(0.3) | 45.2 | 73982.79(0.7) |
| 2013-14 | 34936.55(0.3) | 44.0 | 79355.89(0.7) |
| 2014-15 | 37188.03(0.3) | 42.5 | 87473.44(0.7) |
| 2015-16 | 40475.99(0.3) | 42.4 | 95452.44(0.7) |
| 2016-17 | 43830.93(0.3) | 42.5 | 103099.26(0.7) |
| 2017-18 | 47109.08(0.3) | 41.4 | 113825.03(0.7) |
| 2018-19 | 48083.72(0.3) | 38.5 | 124740.14(0.7) |
| 2019-20 | 49943.69(0.2) | 37.7 | 132567.01(0.7) |
| 2020-21 | 51983.68(0.3) | 40.8 | 127380.96(0.6) |
| 2021-22 | 85599.04(0.36) | 43.9 | 194810.83(0.83) |
| 2022-23 | 97484.93(0.37) | 45.7 | 213378.12(0.82) |
| 2023-24 | 120609.18(0.42) | 49.3 | 244767.81(0.84) |
| 2024-25* | 143286.85(0.45) | 51.9 | 276196.13(0.87) |
| 2025-26* | 170316.47(0.49) | 54.4 | 313007.02(0.90) |

***Source*** **:** Data collected and compiled by NSTMIS, DST, GoI.

***Note*** **:** 1. Investment in R&D by Business Enterprise/ Industry includes R&D Expenditure by Public sector industry and Private sector industry.

2. Number in paranthesis indicate percentage share in GDP.

3. * Estimated

# Table 7

## EXPENDITURE ON R&D BY SELECT MAJOR SCIENTIFIC AGENCIES

**(Rs. Crore)**

| Sl No. | Agency | 2018-19 | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
|---|---|---|---|---|---|---|---|
| 1 | Council of Scientific & Industrial Research (CSIR) | 4548.78 | 4871.63 | 4198.82 | 5110.35 | 5831.31 | 6128.87 |
| 2 | Defence Research & Development Organisation (DRDO) | 17049.02 | 17425.60 | 15807.08 | 18290.95 | 20586.18 | 22927.58 |
| 3 | Department of Atomic Energy (DAE) | 6323.78 | 7151.63 | 5839.02 | 9245.71 | 10496.21 | 10109.49 |
| 4 | Department of Biotechnology (DBT) | 2379.10 | 2358.77 | 2259.10 | 2819.98 | 2088.68 | 1499.75 |
| 5 | Ministry of Electronics and Information Technology (MEITY) | 951.35 | 1157.86 | 1155.95 | 956.61 | 942.16 | 1924.81 |
| 6 | Ministry of New and Renewable Energy (MNRE) | 55.82 | 48.97 | 59.80 | 65.64 | 72.58 | 70.93 |
| 7 | Ministry of Earth Sciences (MoES) | 1004.59 | 1163.31 | 793.23 | 1160.71 | 1068.85 | 1329.51 |
| 8 | Department of Science & Technology (DST) | 3768.33 | 4053.38 | 3514.23 | 4562.33 | 3940.55 | 3516.42 |
| 9 | Department of Space (DoS) | 11135.41 | 12966.54 | 9452.72 | 12427.72 | 10026.00 | 10567.89 |
| 10 | Indian Council of Agricultural Research (ICAR) | 6223.80 | 6152.02 | 6358.66 | 8214.02 | 8410.82 | 9176.45 |
| 11 | Indian Council of Medical Research (ICMR) | 1436.62 | 1521.17 | 1580.78 | 1841.36 | 2056.04 | 2343.18 |
| 12 | Ministry of Environment, Forest and Climate Change (MoEFCC) | 440.48 | 456.53 | 422.66 | 356.90 | 441.34 | 625.01 |
| | **Total** | **55317.08** | **59327.41** | **51442.05** | **65052.28** | **65960.72** | **70219.89** |

***Source*** **:** Data collected and compiled by NSTMIS, DST, GoI.

***Note*** **:** Not including Public Sector Industries Research and Development Expenditure.

# Table 8

## EXPENDITURE ON R&D BY CENTRAL MINISTRIES/ DEPARTMENTS OTHER THAN MAJOR SCIENTIFIC AGENCIES

**(Rs. Crore)**

| Sl No. | Ministry/Departments | Research and Development Expenditure | | |
|---|---|---|---|---|
| | | 2021-22 | 2022-23 | 2023-24 |
| 1 | Animal Husbandry and Dairying | 9.82 | 15.09 | 16.33 |
| 2 | AYUSH | 538.3 | 606.52 | 644.04 |
| 3 | Chemicals and Petrochemicals | 3.14 | 3.41 | 3.31 |
| 4 | Civil Aviation | 82.98 | 168.03 | 56.15 |
| 5 | Coal | 58.9 | 111.67 | 119.40 |
| 6 | Commerce | 76.13 | 79.79 | 78.72 |
| 7 | Consumer Affairs | 13.5 | 14.17 | 14.88 |
| 8 | Culture | 33.48 | 49.58 | 51.37 |
| 9 | Defence | 0 | 0.22 | 74.03 |
| 10 | Defence Production | 3623.58 | 4202.15 | 4870.46 |
| 11 | Empowerment of Persons with Disabilities | 25.02 | 25.37 | 31.11 |
| 12 | Fertilizers | 41.57 | 56.22 | 53.03 |
| 13 | Finance | 2.41 | 2.26 | 29.04 |
| 14 | Food and Public Distribution | 13.76 | 23.97 | 15.39 |
| 15 | Food Processing Industries | 76.86 | 88.48 | 81.90 |
| 16 | Health and Family Welfare | 2775.74 | 2860.79 | 1540.42 |
| 17 | Health Research* | 324.10 | 340.15 | 475.82 |
| 18 | Heavy Industry | 1144.43 | 1110.93 | 1250.64 |
| 19 | Home Affairs | 3.17 | 1.51 | 4.25 |
| 20 | Housing and Urban Affairs | 5.02 | 8.75 | 17.48 |
| 21 | Information and Broadcasting | 11.43 | 11.2 | 10.97 |
| 22 | Labor and Employment | 4.74 | 6.14 | 6.80 |
| 23 | Micro, Small and Medium Enterprises | 8.90 | 9.20 | 9.26 |
| 24 | Mines | 174.00 | 290.40 | 262.37 |
| 25 | Petroleum and Natural Gas | 2065.62 | 2143.71 | 2609.49 |
| 26 | Pharmaceuticals | 126.83 | 128.58 | 141.57 |
| 27 | Power | 399.20 | 608.27 | 1031.45 |
| 28 | Promotion of Industry and Internal Trade | 137.02 | 165.13 | 183.56 |
| 29 | Railways | 257.54 | 323.10 | 336.30 |
| 30 | Road Transport and Highways | 14.63 | 18.44 | 23.11 |

*Table 8 Contd...*

# Table 8 (Contd.)

## EXPENDITURE ON R&D BY CENTRAL MINISTRIES/ DEPARTMENTS OTHER THAN MAJOR SCIENTIFIC AGENCIES

**(Rs. Crore)**

| Sl No. | Ministry/Departments | Research and Development Expenditure | | |
|---|---|---|---|---|
| | | 2021-22 | 2022-23 | 2023-24 |
| 31 | Shipping | 0 | 8.64 | 20.77 |
| 32 | Statistics and Programme Implementation | 218.30 | 231.93 | 238.44 |
| 33 | Steel | 1191.06 | 625.34 | 374.81 |
| 34 | Telecommunications | 319.19 | 325.96 | 338.05 |
| 35 | Textiles | 260.13 | 290.61 | 209.83 |
| 36 | Water Resources, River Development and Ganga Rejuvenation | 98.82 | 107.61 | 103.99 |
| 37 | Public Sector under Major Scientific Agencies | 117.01 | 105.67 | 105.71 |
| 38 | Joint Sector under State Undertaking | 46.84 | 53.36 | 56.97 |
| | **Total** | **14303.17** | **15222.35** | **15491.22** |

***Source*** **:** Data collected and compiled by NSTMIS, DST, GoI.

***Note*** **:** 1. Expenditure on R&D by central ministries/departments other than major scientific agencies includes data of public sector enterprises under the respective ministries/departments.

2. Departments/Ministries with no R&D expenditure are not shown in this Table.

3. * Excludes ICMR

# Table 9

## EXPENDITURE ON R&D BY STATE GOVERNMENTS

**(Rs. Crore)**

| Sl No. | State | Research and Development Expenditure | | |
|---|---|---|---|---|
| | | 2021-22 | 2022-23 | 2023-24 |
| 1 | Andhra Pradesh | 114.70 | 128.38 | 154.09 |
| 2 | Assam | 87.14 | 100.61 | 169.02 |
| 3 | Bihar | 187.64 | 185.22 | 152.73 |
| 4 | Chhattisgarh | 189.36 | 211.50 | 354.59 |
| 5 | Gujarat | 661.76 | 781.67 | 814.79 |
| 6 | Haryana | 506.71 | 525.80 | 595.03 |
| 7 | Himachal Pradesh | 322.28 | 373.78 | 374.68 |
| 8 | Jammu & Kashmir | 111.76 | 143.65 | 153.03 |
| 9 | Jharkhand | 79.75 | 96.97 | 94.09 |
| 10 | Karnataka | 1090.38 | 1075.88 | 1130.15 |
| 11 | Kerala | 391.75 | 369.84 | 326.46 |
| 12 | Madhya Pradesh | 132.21 | 170.49 | 155.90 |
| 13 | Maharashtra | 460.85 | 545.97 | 528.37 |
| 14 | Manipur | 0.90 | 0.94 | 0.38 |
| 15 | Meghalaya | 9.00 | 9.09 | 9.17 |
| 16 | Odisha | 225.00 | 271.10 | 320.60 |
| 17 | Punjab | 872.17 | 960.06 | 994.78 |
| 18 | Rajasthan | 512.96 | 650.53 | 640.65 |
| 19 | Tamil Nadu | 898.22 | 1008.63 | 1214.50 |
| 20 | Telangana | 647.74 | 667.89 | 652.02 |
| 21 | Uttar Pradesh | 404.20 | 403.60 | 433.99 |
| 22 | Uttarakhand | 203.13 | 213.50 | 220.34 |
| 23 | West Bengal | 284.62 | 298.18 | 306.74 |
| | **Total** | **8394.23** | **9193.28** | **9796.10** |

***Source*** **:** Data collected and compiled by NSTMIS, DST, GoI.

***Note*** **:** 1. Data includes State Agricultural Universities and state R&D labs/research institutes.

2. States/Union Territories with no R&D Expenditure or R&D Units are not shown in this Table.

# Table 10

## EXPENDITURE ON R&D BY COOPERATIVE RESEARCH ASSOCIATIONS

**(Rs. Crore)**

| Sl No. | Name | 2021-22 | 2022-23 | 2023-24 |
|---|---|---|---|---|
| 1 | Ahmedabad Textile Industry's Research Association | 9.35 | 10.29 | 11.32 |
| 2 | Dudhsagar Research and Development Association | 9.82 | 10.70 | 11.65 |
| 3 | Electrical Research & Development Association | 81.55 | 93.33 | 91.30 |
| 4 | Indian Jute Industries' Research Association | 5.64 | 6.10 | 10.57 |
| 5 | Northern India Textile Research Association | 9.13 | 8.87 | 13.98 |
| 6 | The Automotive Research Association of India | 382.36 | 354.86 | 489.83 |
| 7 | The Bombay Textile Research Association | 8.48 | 14.95 | 9.58 |
| 8 | The Man-Made Textiles Research Association | 2.82 | 3.90 | 3.91 |
| 9 | The Sima Cotton Development & Research Association | 0.08 | 0.10 | 0.10 |
| 10 | The South India Textile Research Association | 13.30 | 18.02 | 17.85 |
| 11 | The Synthetic & Art Silk Mills' Research Association | 18.16 | 17.94 | 17.50 |
| 12 | Tea Research Association* | 29.15 | 29.85 | 29.81 |
| 13 | Wool Research Association | 2.50 | 2.69 | 6.95 |
| | **Total** | **572.34** | **571.60** | **714.35** |

***Source*** **:** Data collected and compiled by NSTMIS, DST, GoI

***Note*** **:** * Includes data for all Tea Research Institutes.

# Table 11

## SCIENCE & TECHNOLOGY EXPENDITURE BY TYPE OF WORK BY CENTRAL AND STATE GOVERNMENTS & SIROs

(Rs. Crore)

| Year | Central Government | | | | | State Government | | | | | SIRO | | | | | Total | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Basic Research | Applied Research | Experimental Development | Other Related S&T Activities | Total S&T | Basic Research | Applied Research | Experimental Development | Other Related S&T Activities | Total S&T | Basic Research | Applied Research | Experimental Development | Other Related S&T Activities | Total S&T | Basic Research | Applied Research | Experimental Development | Other Related S&T Activities | Total S&T |
| 2021-22 | 15163.99 | 23349.07 | 32476.88 | 1200.70 | 72190.64 | 1613.08 | 3858.92 | 2922.24 | 1265.09 | 9659.33 | 1235.35 | 2641.81 | 1797.18 | 1082.25 | 6756.59 | 18012.42 | 29849.80 | 37196.30 | 3548.04 | 88606.56 |
| 2022-23 | 15168.73 | 23816.37 | 33347.87 | 1373.48 | 73706.45 | 1767.95 | 4219.29 | 3206.04 | 1359.31 | 10552.59 | 1478.38 | 3062.93 | 2167.00 | 1340.61 | 8048.92 | 18415.06 | 31098.59 | 38720.91 | 4073.40 | 92307.96 |
| 2023-24 | 15174.79 | 24897.45 | 35536.39 | 1536.69 | 77145.32 | 1892.19 | 4479.65 | 3424.26 | 1430.98 | 11227.08 | 1689.66 | 3550.56 | 2535.22 | 1535.08 | 9310.52 | 18756.64 | 32927.66 | 41495.87 | 4502.75 | 97682.92 |

***Source*** **:** Data collected and compiled by NSTMIS, DST, GoI.

***Note*** **:** 1. R&D- Research and Development = Basic Research + Applied Research + Experimental Development.

2. S&T- Science and Technology = R&D + Other related S&T activities.

# Table 12

## EXPENDITURE ON R&D BY OBJECTIVES

**(Rs. Crore)**

| Sl No | Objective | Central Government | | | State Government | | | SIRO | | | Private Sector Industry | | | Public Sector Industry | | | Total | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 2021-22 | 2022-23 | 2023-24 | 2021-22 | 2022-23 | 2023-24 | 2021-22 | 2022-23 | 2023-24 | 2021-22 | 2022-23 | 2023-24 | 2021-22 | 2022-23 | 2023-24 | 2021-22 | 2022-23 | 2023-24 |
| 1 | Defence | 18290.95 | 20586.18 | 22927.58 | - | - | - | 0.42 | 0.57 | 0.58 | 744.41 | 691.32 | 906.67 | 3623.58 | 4202.37 | 4944.49 | 22659.36 | 25480.44 | 28779.32 |
| 2 | Development of Agriculture, Forestry and Fishing | 8967.62 | 9324.18 | 10197.37 | 2611.20 | 2816.54 | 3065.91 | 85.56 | 100.26 | 103.66 | 2670.42 | 3092.24 | 3422.67 | 10.43 | 11.69 | 14.14 | 14345.23 | 15344.91 | 16803.75 |
| 3 | Education | 1082.04 | 1200.15 | 1365.63 | 5734.87 | 6326.73 | 6678.84 | 1601.19 | 1992.25 | 2214.11 | 1.06 | 1.06 | 1.10 | - | - | - | 8419.16 | 9520.19 | 10259.68 |
| 4 | Energy | 6680.23 | 6416.01 | 6778.40 | - | - | - | 201.26 | 256.34 | 270.66 | 1149.04 | 1479.77 | 1773.58 | 2444.20 | 2454.83 | 3266.41 | 10474.73 | 10606.95 | 12089.05 |
| 5 | Environment | 500.33 | 645.23 | 656.90 | - | - | - | 109.27 | 137.95 | 145.3 | 127.24 | 108.56 | 129.11 | - | - | - | 736.84 | 891.74 | 931.31 |
| 6 | Exploration and Exploitation of Space | 12538.04 | 10153.49 | 10712.31 | - | - | - | 58.54 | 75.79 | 79.41 | - | - | - | - | - | - | 12596.58 | 10229.28 | 10791.72 |
| 7 | Exploration and Exploitation of the Earth | 1795.74 | 1698.44 | 1872.25 | - | - | - | 7.24 | 10.16 | 18.92 | 65.61 | 79.97 | 82.22 | 674.31 | 841.73 | 926.84 | 2542.9 | 2630.30 | 2900.23 |
| 8 | General Advancement of Knowledge | 7668.34 | 7716.31 | 7513.24 | 0.90 | 0.94 | 0.38 | 427.28 | 482.05 | 598.93 | 575.09 | 683.27 | 820.70 | 2.41 | 2.26 | 29.04 | 8674.02 | 8884.83 | 8962.29 |
| 9 | Health | 8510.58 | 8123.68 | 6757.48 | 11.32 | 11.40 | 11.48 | 2415.92 | 2655.46 | 3254.12 | 28205.62 | 32039.74 | 35775.78 | 10.34 | 12.04 | 13.20 | 39153.78 | 42842.32 | 45812.06 |
| 10 | Industrial Production and Technology | 2503.44 | 3833.11 | 3299.46 | - | - | - | 58.42 | 97.14 | 75.06 | 32041.75 | 37343.34 | 49636.98 | 1449.22 | 1053.05 | 736.79 | 36052.83 | 42326.64 | 53748.29 |
| 11 | Other Aims | 1309.81 | 1560.47 | 1571.27 | - | - | - | 602.86 | 698.71 | 850.77 | 712.45 | 810.07 | 878.75 | - | - | - | 2625.12 | 3069.25 | 3300.79 |

*Table 12 Contd...*

# Table 12 (Contd.)

## EXPENDITURE ON R&D BY OBJECTIVES

(Rs. Crore)

| Sl No | Objective | Central Government | | | State Government | | | SIRO | | | Private Sector Industry | | | Public Sector Industry | | | Total | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 2021-22 | 2022-23 | 2023-24 | 2021-22 | 2022-23 | 2023-24 | 2021-22 | 2022-23 | 2023-24 | 2021-22 | 2022-23 | 2023-24 | 2021-22 | 2022-23 | 2023-24 | 2021-22 | 2022-23 | 2023-24 |
| 12 | Political & Social Systems,Structures & Processes (including socio-economic services) | 13.72 | 12.27 | 13.50 | 30.28 | 31.74 | 33.27 | 67.64 | 67.94 | 65.62 | 0.57 | 6.53 | 10.00 | 2.12 | 3.48 | 3.22 | 114.33 | 121.96 | 125.61 |
| 13 | Transport, Telecommunication and other Infrastructures | 1161.47 | 1111.99 | 1990.35 | 5.66 | 5.93 | 6.22 | 73.84 | 164.47 | 121.13 | 10972.29 | 12347.18 | 17115.84 | 116.88 | 220.41 | 121.67 | 12330.14 | 13849.98 | 19355.21 |
| | **Total** | **71022.31** | **72381.51** | **75655.74** | **8394.23** | **9193.28** | **9796.1** | **5709.44** | **6739.09** | **7798.27** | **77265.55** | **88683.05** | **110553.4** | **8333.49** | **8801.86** | **10055.8** | **170725.02** | **185798.79** | **213859.31** |

***Source*** **:** Data collected and compiled by NSTMIS, DST, GoI

***Note*** **:** 1. Higher Education sector is not included.

2. Objectives standardised as per UNESCO Classification.

3. ¯ represent `NIL'.

# Table 13

## RESEARCH AND DEVELOPMENT EXPENDITURE, ADVERTISING EXPENDITURE, NEW PLANT AND MACHINERY EXPENDITURE VERSUS SALES TURNOVER IN PUBLIC AND PRIVATE SECTOR INDUSTRY

| Year | Research and Development Expenditure | | Advertising Expenditure | | New Plant Machinery Expenditure | | Sales Turnover | | Research and Development Expenditure as % of Sales Turnover | | Advertising Expenditure as % of Sales Turnover | | New Plant Machinery Expenditure as % of Sales Turnover | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Rs. Crore) | | (Rs. Crore) | | (Rs. Crore) | | (Rs. Crore) | | (%) | | (%) | | (%) | |
| | Public Sector | Private Sector | Public Sector | Private Sector | Public Sector | Private Sector | Public Sector | Private Sector | Public Sector | Private Sector | Public Sector | Private Sector | Public Sector | Private Sector |
| 2021-22 | 8333.49 | 77265.55 | 766.72 | 45825.68 | 91922.38 | 3077337.05 | 2646492.14 | 14176345.40 | 0.31 | 0.55 | 0.03 | 0.32 | 3.47 | 21.71 |
| 2022-23 | 8801.86 | 88683.07 | 731.99 | 83492.18 | 112517.15 | 2676834.75 | 3323288.44 | 17589542.03 | 0.26 | 0.50 | 0.02 | 0.47 | 3.39 | 15.22 |
| 2023-24 | 10055.78 | 110553.16 | 739.63 | 119395.90 | 121345.12 | 2401930.65 | 3165657.62 | 20764662.69 | 0.32 | 0.53 | 0.02 | 0.57 | 3.83 | 11.57 |

***Source*** : Data collected and compiled by NSTMIS, DST, GoI

***Note*** : 1. Data for Public Sector refers to 104 industrial R&D units.

2. Data for Private Sector refers to 2732 industrial R&D units.

# Table 14

## EXPENDITURE ON R&D BY PUBLIC/JOINT SECTOR UNDERTAKINGS 2023-24

| Ministry/ Department | Public/Joint Sector Undertaking | R&D Expenditure (Rs.Crore) | R&D Expenditure as % of S.T.O. |
|---|---|---|---|
| Atomic Energy | Electronics Corporation of India Ltd. | 34.72 | 1.12 |
| | IREL (India) Ltd. | 37.41 | 1.78 |
| | Nuclear Power Corporation of India Ltd. | 20.57 | 0.11 |
| | Uranium Corporation of India Ltd. | 12.35 | 0.53 |
| Scientific and Industrial Research | Central Electronics Ltd. | 0.66 | 0.19 |
| Fertilizers | Fertilisers and Chemicals Travancore Ltd. | 0.58 | 0.01 |
| | Indian Farmers Fertiliser Cooperative Ltd., Kalol | 8.70 | 0.33 |
| | Indian Farmers Fertiliser Cooperative Ltd., Kandla unit | 0.54 | 0.01 |
| | National Fertilizers Ltd. | 0.07 | 0 |
| | Rashtriya Chemicals & Fertilizers Ltd. | 43.14 | 0.25 |
| Pharmaceuticals | Bengal Chemicals & Pharmaceuticals Ltd. | 0.08 | 0.07 |
| | Hindustan Antibiotics Ltd. | 0.73 | 0.38 |
| | Karnataka Antibiotics & Pharmaceuticals Ltd. | 1.22 | 0.26 |
| Civil Aviation | Airports Authority of India | 56.15 | 0.38 |
| Coal | Central Mine Planning & Design Institute Ltd. | 61.21 | 3.53 |
| | Mahanadi Coalfields Ltd. | 0.05 | 0 |
| | NLC India Ltd., | 43.37 | 0.38 |
| | Northern Coalfields Ltd. | 8.58 | 0.03 |
| | Singareni Collieries Company Ltd. | 6.19 | 0.02 |
| Telecommunications | ITI Ltd. | 20.44 | 1.25 |
| Food and Public Distribution | Central Warehousing Corporation | 13.38 | 0.58 |
| Defence | BEL Optronics Devices Ltd. | 1.03 | 0.74 |
| | Munitions India Ltd. | 73.00 | 1.01 |
| Defence Production | Advanced Weapons & Equipment India Ltd. | 35.25 | 1.73 |
| | Armoured Vehicles Nigam Ltd. | 13.09 | 0.28 |
| | BEML Ltd. (Formerly Bharat Earth Movers Ltd.) | 86.71 | 2.14 |
| | Bharat Dynamics Ltd. | 90.79 | 3.83 |

*Table 14 Contd...*

# Table 14 (Contd.)

## EXPENDITURE ON R&D BY PUBLIC/JOINT SECTOR UNDERTAKINGS 2023-24

| Ministry/ Department | Public/Joint Sector Undertaking | R&D Expenditure (Rs.Crore) | R&D Expenditure as % of S.T.O. |
|---|---|---|---|
| | Bharat Electronics Ltd. | 1325.21 | 6.69 |
| | Garden Reach Shipbuilders & Engineers Ltd. | 24.08 | 0.67 |
| | Gliders India Ltd. | 2.43 | 1.23 |
| | Goa Shipyard Ltd. | 15.00 | 0.86 |
| | Hindustan Aeronautics Ltd. | 2826.24 | 9.3 |
| | Hindustan Shipyard Ltd. | 9.21 | 0.65 |
| | India Optel Ltd. | 19.07 | 1.38 |
| | Mazagon Dock Shipbuilders Ltd. | 399.68 | 3.78 |
| | Mishra Dhatu Nigam Ltd. | 18.36 | 1.71 |
| | Yantra India Ltd. | 5.35 | 0.19 |
| Health and Family Welfare | HLL Lifecare Ltd. (HLL) (Formely Hindustan Latex Ltd.) | 5.61 | 0.15 |
| Heavy Industry | Bharat Heavy Electricals Ltd. | 697.60 | 3.04 |
| | Bridge and Roof Company (India) Ltd. | 3.04 | 0.08 |
| | HMT Machine Tools Ltd., | 0.19 | 0.19 |
| | NEPA Ltd. | 0.32 | 0.26 |
| | Rajasthan Electronics & Instruments Ltd. | 3.36 | 1.78 |
| | Sambhar Salts Ltd. | 0.32 | 0.49 |
| Housing and Urban Affairs | Hindustan Steelworks Construction Ltd. | 0.61 | 0.08 |
| | Hospital Services Consultancy Corporation Ltd. (India) | 1.11 | 0.08 |
| | Housing and Urban Development Corporation Ltd. | 0.10 | 0 |
| | NBCC India Ltd. | 9.67 | 0.09 |
| Micro, Small and Medium Enterprises | The National Small Industries Corporation Ltd. | 3.22 | 0.02 |
| Mines | F C I Aravali Gypsum and Minerals India Ltd. | 0.64 | 2.10 |
| | Hindustan Copper Ltd. | 8.04 | 0.48 |
| | Mineral Exploration and Consultancy Ltd | 0.02 | 0.01 |
| | National Aluminium Company Ltd. | 106.36 | 0.81 |

*Table 14 Contd...*

# Table 14 (Contd.)

## EXPENDITURE ON R&D BY PUBLIC/JOINT SECTOR UNDERTAKINGS 2023-24

| Ministry/ Department | Public/Joint Sector Undertaking | R&D Expenditure (Rs.Crore) | R&D Expenditure as % of S.T.O. |
|---|---|---|---|
| Petroleum and Natural Gas | Balmer Lawrie & Company Ltd. | 9.80 | 0.41 |
| | Bharat Petroleum Corporation Ltd. | 189.97 | 0.04 |
| | Chennai Petroleum Corporation Ltd. (Madras Refineries Ltd.) | 10.72 | 0.01 |
| | Engineers India Ltd. | 29.12 | 0.90 |
| | Gail (India) Ltd. | 250.20 | 0.19 |
| | Hindustan Petroleum Corporation Ltd. | 352.50 | 0.08 |
| | Indian Oil Corporation Ltd. | 946.14 | 0.11 |
| | Mangalore Refinery & Petrochemicals Ltd. | 5.11 | 0 |
| | Numaligarh Refinery Ltd. | 3.00 | 0.01 |
| | Oil & Natural Gas Corporation Ltd. | 617.16 | 0.45 |
| | Oil India Ltd. | 185.34 | 0.76 |
| | ONGC Videsh Ltd. | 10.42 | 0.19 |
| Power | Grid Controller of India Ltd. | 2.22 | 0.45 |
| | NHPC Ltd. | 11.55 | 0.14 |
| | North Eastern Electric Power Corporation Ltd | 0.23 | 0.01 |
| | NTPC Ltd. | 483.63 | 0.27 |
| | Power Grid Corporation of India Ltd. | 218.07 | 0.46 |
| | SJVN Ltd. | 1.54 | 0.06 |
| | THDC India Ltd | 15.57 | 0.79 |
| Railways | Braithwaite & Company Ltd. | 1.15 | 0.10 |
| | Container Corporation of India Ltd. | 71.43 | 0.83 |
| Shipping | Cochin Shipyard Ltd. | 20.77 | 0.57 |
| Empowerment of Persons with Disabilities | Artificial Limbs Manufacturing Corporation of India | 4.27 | 0.67 |
| Steel | KIOCL Ltd. | 0.20 | 0.01 |
| | MECON Ltd. | 1.93 | 0.21 |
| | MOIL Ltd. (Formerly Manganese Ore India Ltd.) | 27.26 | 1.88 |

*Table 14 Contd...*

# Table 14 (Contd.)

## EXPENDITURE ON R&D BY PUBLIC/JOINT SECTOR UNDERTAKINGS 2023-24

| Ministry/ Department | Public/Joint Sector Undertaking | R&D Expenditure (Rs.Crore) | R&D Expenditure as % of S.T.O. |
|---|---|---|---|
| | NMDC Ltd. | 24.49 | 0.12 |
| | Rashtriya Ispat Nigam Ltd. | 13.86 | 0.06 |
| | Research & Development Centre for Iron & Steel (RDCIS), SAIL | 307.08 | 28.83 |
| Textiles | National Textile Corporation (Southern Regional Office) Ltd. | 0.18 | 12.48 |
| Finance | Security Printing and Minting Corporation Of India Ltd. | 29.04 | 57.18 |
| Gujarat | Gujarat Alkalies & Chemicals | 3.17 | 0.09 |
| | Gujarat Insecticides Ltd. | 1.17 | 0.46 |
| | Gujarat Narmada Valley Fertilizers and Chemicals Ltd. | 3.54 | 0.04 |
| | Gujarat State Fertilizers & Chemicals Ltd. Fertilizer Unit | 13.33 | 0.15 |
| | Gujarat Urja Vikas Nigam Ltd. | 4.00 | 0 |
| Haryana | Haryana Leather Chemicals Ltd. | 1.47 | 3.06 |
| | Haryana State Electronics Development. Corporation Ltd. | 2.66 | 0 |
| Karnataka | Karnataka Soaps & Detergents Ltd. | 0.61 | 0.04 |
| | Karnataka State Seed Corporation Ltd. | 0.55 | 0.16 |
| Kerala | Keltron Component Complex Ltd. | 0.65 | 0.63 |
| | Kerala Electrical & Allied Engg. Co. Ltd. | 0.01 | 0.01 |
| | Travancore Titanium Products Ltd | 2.76 | 1.23 |
| Maharashtra | Haffkine Bio-Pharmaceutical Corporation Ltd. | 0.16 | 0.09 |
| | Maharashtra State Seeds Corporation Ltd., Akola | 1.83 | 0.34 |
| Tamil Nadu | Tamil Nadu Co-Operative Sugar Federation Ltd. | 0.69 | 42.72 |
| | Tamil Nadu Newsprint & Papers Ltd. | 19.01 | 0.40 |
| West Bengal | Webfil Ltd. | 1.36 | 2.91 |
| | **Total** | **10055.77** | **0.32** |

***Source :*** Data collected and compiled by NSTMIS, DST, GoI.

# Table 15

## EXPENDITURE ON RESEARCH AND DEVELOPMENT BY INDUSTRY GROUPS FOR PUBLIC SECTOR

| Sl No. | Industry Group | No.of R&D Units | R&D Expenditure (Rs. Crore) | | | R&D Expenditure as % of S.T.O. | | |
|---|---|---|---|---|---|---|---|---|
| | | | 2021-22 | 2022-23 | 2023-24 | 2021-22 | 2022-23 | 2023-24 |
| 1 | Agricultural Machinery | 1 | 0.53 | 0.40 | 0.55 | 0.19 | 0.08 | 0.16 |
| 2 | Bio-technology | 1 | 1.24 | 1.26 | 1.83 | 0.28 | 0.32 | 0.34 |
| 3 | Boilers & Steam Generating Plants | 1 | 222.48 | 283.45 | 483.63 | 0.17 | 0.16 | 0.27 |
| 4 | Cement & Gypsum Products | 1 | 0 | 0.10 | 0.64 | 0 | 0.18 | 2.10 |
| 5 | Chemicals (other than fertilizers) | 8 | 19.85 | 25.51 | 22.23 | 0.13 | 0.14 | 0.15 |
| 6 | Consultancy Services | 6 | 62.25 | 109.9.0 | 103.32 | 0.16 | 0.27 | 0.27 |
| 7 | Defence Industries | 16 | 3616.76 | 4182.11 | 4926.14 | 5.70 | 5.29 | 5.33 |
| 8 | Drugs & Pharmaceuticals | 6 | 3.63 | 4.36 | 3.30 | 0.13 | 0.20 | 0.13 |
| 9 | Electricals & Electronics | 10 | 106.38 | 85.75 | 292.58 | 0.08 | 0.05 | 0.17 |
| 10 | Fertilizers | 6 | 51.77 | 66.77 | 66.36 | 0.09 | 0.07 | 0.10 |
| 11 | Fuels | 15 | 2067.96 | 2154.29 | 2641.08 | 0.10 | 0.08 | 0.11 |
| 12 | Industrial Equipment | 2 | 700.00 | 690.85 | 697.60 | 3.47 | 3.11 | 3.04 |
| 13 | Industrial Machinery | 2 | 2.00 | 2.27 | 0.80 | 0.29 | 0.25 | 0.09 |
| 14 | Medical & Surgical Appliances | 2 | 6.71 | 7.67 | 9.88 | 0.02 | 0.18 | 0.23 |
| 15 | Metallurgical Industries | 11 | 1296.88 | 866.93 | 558.38 | 1.61 | 1.32 | 0.80 |
| 16 | Misc. Mechanical Engineering Industries | 3 | 36.90 | 34.06 | 52.65 | 0.20 | 0.19 | 0.23 |
| 17 | Paper & Pulp | 2 | 12.87 | 15.11 | 19.33 | 0.31 | 0.29 | 0.40 |
| 18 | Scientific Instruments | 2 | 3.07 | 2.98 | 2.68 | 0.65 | 1.40 | 0.85 |
| 19 | Soaps, Cosmetics, Toilet Preparations | 1 | 0.26 | 0.31 | 0.61 | 0.03 | 0.03 | 0.04 |
| 20 | Sugar | 1 | 0.98 | 0.86 | 0.70 | 45.79 | 37.72 | 43.21 |
| 21 | Telecommunications | 2 | 20.83 | 18.82 | 21.80 | 0.98 | 1.15 | 1.29 |
| 22 | Textiles (Dyed, Printed, Processed) | 1 | 0.18 | 0.18 | 0.18 | 0.33 | 1.71 | 12.50 |
| 23 | Transportation | 4 | 99.98 | 247.91 | 149.5 | 0.56 | 1.08 | 0.53 |
| | **Total** | **104** | **8333.51** | **8801.85** | **10055.77** | **0.31** | **0.26** | **0.32** |

***Source :*** Data collected and compiled by NSTMIS, DST, GoI.

# Table 16

## EXPENDITURE ON RESEARCH AND DEVELOPMENT BY INDUSTRY GROUPS FOR PRIVATE SECTOR

| Sl No. | Industry Group | No.of R&D Units | R&D Expenditure (Rs. Crore) | | | R&D Expenditure as % of S.T.O. | | |
|---|---|---|---|---|---|---|---|---|
| | | | 2021-22 | 2022-23 | 2023-24 | 2021-22 | 2022-23 | 2023-24 |
| 1 | Agricultural Machinery | 152 | 1460.91 | 1617.61 | 1846.28 | 1.79 | 1.81 | 2.09 |
| 2 | Bio-technology | 186 | 6274.60 | 9752.36 | 10321.00 | 7.87 | 16.01 | 16.84 |
| 3 | Boilers & Steam Generating Plants | 6 | 11.00 | 13.95 | 13.40 | 0.30 | 0.36 | 0.45 |
| 4 | Cement & Gypsum Products | 29 | 429.21 | 93.52 | 119.47 | 0.39 | 0.07 | 0.08 |
| 5 | Ceramics | 15 | 81.73 | 87.83 | 83.01 | 0.44 | 0.40 | 0.36 |
| 6 | Chemicals (other than fertilizers) | 279 | 2615.24 | 3032.35 | 3345.76 | 0.62 | 0.66 | 0.76 |
| 7 | Commercial, Office, Household Equipment | 14 | 253.22 | 273.40 | 389.63 | 0.46 | 0.38 | 0.44 |
| 8 | Consultancy Services | 21 | 64.16 | 73.00 | 108.26 | 0.63 | 0.59 | 0.78 |
| 9 | Defence Industries | 28 | 721.38 | 666.86 | 867.79 | 5.15 | 4.73 | 5.77 |
| 10 | Drugs & Pharmaceuticals | 492 | 22117.44 | 22421.6 | 25846.63 | 0.31 | 3.23 | 5.22 |
| 11 | Dyestuffs | 7 | 47.81 | 54.62 | 59.18 | 0.80 | 0.95 | 1.07 |
| 12 | Earth Moving Machinery | 6 | 92.05 | 107.74 | 151.38 | 1.03 | 0.94 | 1.11 |
| 13 | Electricals & Electronics | 355 | 4239.41 | 5354.57 | 6779.18 | 0.93 | 0.75 | 1.10 |
| 14 | Fermentation Industries | 11 | 22.87 | 37.02 | 37.81 | 0.07 | 0.13 | 0.14 |
| 15 | Fertilizers | 31 | 120.86 | 160.59 | 161.47 | 0.29 | 0.26 | 0.38 |
| 16 | Food Processing Industries | 137 | 729.10 | 809.63 | 893.43 | 0.03 | 0.04 | 0.04 |
| 17 | Fuels | 32 | 2677.06 | 3073.63 | 3727.38 | 2.00 | 2.02 | 0.52 |
| 18 | Glass | 5 | 184.64 | 171.56 | 189.05 | 2.28 | 0.94 | 0.91 |
| 19 | Glue & Gelatine | 3 | 5.00 | 4.37 | 10.47 | 1.33 | 0.94 | 2.15 |
| 20 | Industrial Equipment | 111 | 895.15 | 1032.37 | 1182.75 | 0.50 | 0.01 | 0.01 |
| 21 | Industrial Machinery | 130 | 529.99 | 597.55 | 697.05 | 0.49 | 0.53 | 0.59 |
| 22 | Information Technology | 63 | 5593.33 | 6367.25 | 9587.44 | 0.81 | 1.02 | 1.43 |

*Table 16 Contd...*

# Table 16 (Contd.)

## EXPENDITURE ON RESEARCH AND DEVELOPMENT BY INDUSTRY GROUPS FOR PRIVATE SECTOR

| Sl No. | Industry Group | No.of R&D Units | R&D Expenditure (Rs. Crore) | | | R&D Expenditure as % of S.T.O. | | |
|---|---|---|---|---|---|---|---|---|
| | | | 2021-22 | 2022-23 | 2023-24 | 2021-22 | 2022-23 | 2023-24 |
| 23 | Leather, Leather goods & Pickers | 16 | 23.20 | 22.26 | 23.05 | 0.64 | 0.80 | 1.02 |
| 24 | Machine Tools | 20 | 188.00 | 348.27 | 461.07 | 0.85 | 0.81 | 2.66 |
| 25 | Math. Surveying & Drawing Instruments | 1 | 0.27 | 0.30 | 0.16 | 0.06 | 0.06 | 0.03 |
| 26 | Medical & Surgical Appliances | 40 | 207.19 | 223.75 | 291.94 | 3.21 | 3.11 | 3.34 |
| 27 | Metallurgical Industries | 57 | 537.58 | 647.07 | 705.64 | 0.10 | 0.10 | 0.11 |
| 28 | Misc. Mechanical Engineering Industries | 62 | 213.85 | 292.95 | 313.48 | 0.41 | 0.43 | 0.45 |
| 29 | Miscellaneous Industries | 72 | 212.91 | 198.51 | 225.18 | 0.36 | 0.38 | 0.39 |
| 30 | Paper & Pulp | 20 | 34.40 | 37.57 | 41.44 | 0.30 | 0.26 | 0.30 |
| 31 | Photographic Raw Film & Paper | 4 | 14.51 | 13.24 | 8.84 | 0.50 | 0.47 | 0.36 |
| 32 | Prime Movers | 2 | 9.51 | 12.21 | 10.03 | 0.68 | 0.66 | 0.45 |
| 33 | Rubber Goods | 55 | 771.66 | 986.15 | 1148.43 | 0.89 | 0.98 | 1.12 |
| 34 | Scientific Instruments | 21 | 194.56 | 218.42 | 219.3 | 24.56 | 25.43 | 23.21 |
| 35 | Soaps, Cosmetics, Toilet Preparations | 12 | 106.29 | 158.17 | 194.24 | 0.34 | 0.49 | 0.77 |
| 36 | Sugar | 10 | 8.49 | 10.38 | 28.03 | 0.08 | 0.07 | 0.21 |
| 37 | Telecommunications | 28 | 266.82 | 538.16 | 796.72 | 2.13 | 4.03 | 9.47 |
| 38 | Textiles (Dyed, Printed, Processed) | 45 | 304.68 | 355.75 | 408.26 | 0.36 | 0.36 | 0.42 |
| 39 | Timber Products | 6 | 86.20 | 102.71 | 108.68 | 1.08 | 1.02 | 1.02 |
| 40 | Transportation | 142 | 24906.24 | 28698.48 | 39136.95 | 2.16 | 2.10 | 3.39 |
| 41 | Vegetable Oil & Vanaspati | 6 | 13.02 | 15.46 | 14.23 | 0.42 | 0.53 | 0.65 |
| | **Total** | **2732** | **77265.54** | **88683.19** | **110553.49** | **0.55** | **0.50** | **0.53** |

***Source :*** Data collected and complied by NSTMIS, DST, GoI.

# Table 17

## RESEARCH AND DEVELOPMENT EXPENDITURE BY MULTINATIONAL ENTERPRISES

**(Rs. Crore)**

| Type of Multinationals | No.of R&D Units | 2021-22 | 2022-23 | 2023-24 |
|---|---|---|---|---|
| Private Sector- India | 252 | 46379.39 | 51502.48 | 69336.22 |
| Private Sector- Foreign | 124 | 9612.11 | 11341.68 | 12912.88 |
| Public Sector | 14 | 2922.80 | 3087.38 | 3707.94 |
| **Total** | **390** | **58914.30** | **65931.54** | **85957.04** |

***Source*** **:** Data collected and compiled by NSTMIS, DST, GoI.

# Table 18

## NATIONAL EXPENDITURE ON R&D BY ECONOMIC ACTIVITY

**(Rs. Crore)**

| S.No. | Economic Activity | NIC Code | R&D Expenditure | | |
|---|---|---|---|---|---|
| | | | 2021-22 | 2022-23 | 2023-24 |
| 1 | Agriculture, Forestry and Fishing | 1 | 16208.54 | 17343.58 | 18707.14 |
| 2 | Mining and Quarrying | 5 | 1069.21 | 1077.71 | 1035.14 |
| 3 | Manufacture of Food Products | 10 | 452.27 | 477.70 | 524.82 |
| 4 | Manufacture of Beverages | 11 | 60.73 | 65.53 | 55.76 |
| 5 | Manufacture of Tobacco Products | 12 | 20.98 | 22.48 | 26.23 |
| 6 | Manufacture of Textiles | 13 | 427.02 | 500.13 | 528.32 |
| 7 | Manufacture of Wearing Apparel | 14 | 6.62 | 8.70 | 11.64 |
| 8 | Manufacture of Leather and Related Products | 15 | 41.66 | 77.50 | 53.16 |
| 9 | Manufacture of Wood and of Products of Wood &Cork, except Furniture | 16 | 0.54 | 0.64 | 1.41 |
| 10 | Manufacture of Paper and Paper Products | 17 | 382.19 | 275.19 | 496.42 |
| 11 | Manufacture of Coke and Refined Petroleum Products | 19 | 3262.53 | 3574.89 | 4299.10 |
| 12 | Manufacture of Chemicals and Chemical Products | 20 | 3146.21 | 3732.02 | 4334.52 |
| 13 | Manufacture of Basic Pharmaceutical Products and Pharmaceutical Preparations | 21 | 21964.70 | 22128.42 | 25501.54 |
| 14 | Manufacture of Rubber and Plastic Products | 22 | 962.93 | 1175.02 | 1194.45 |
| 15 | Manufacture of Other Non-Metallic Mineral Products | 23 | 401.46 | 60.52 | 67.41 |
| 16 | Manufacture of Basic Metals | 24 | 1221.81 | 1044.79 | 892.98 |
| 17 | Manufacture of Fabricated Metal Products, except Machinery and Equipment | 25 | 312.94 | 349.03 | 426.68 |
| 18 | Manufacture of Computer, Electronic and other Optical Products | 26 | 3692.14 | 4744.58 | 6100.88 |
| 19 | Manufacture of Electrical Equipment | 27 | 1639.86 | 2200.43 | 2658.10 |
| 20 | Manufacture of Machinery and Equipment n.e.c | 28 | 2598.23 | 2826.59 | 2989.35 |
| 21 | Manufacture of Motor Vehicles, Trailers and Semi-Trailers | 29 | 8865.69 | 7350.07 | 8581.74 |
| 22 | Manufacture of Other Transport Equipment | 30 | 0969.62 | 1082.70 | 1348.53 |
| 23 | Manufacture of Furniture | 31 | 0.15 | 0.15 | 0.15 |
| 24 | Other Manufacturing | 32 | 1780.84 | 1935.71 | 2367.80 |
| 25 | Repair and Installation of Machinery and Equipment | 33 | 0.30 | 0.32 | 0.34 |
| 26 | Electricity, Gas, Steam and Air Conditioning Supply | 35 | 4554.66 | 4653.75 | 4787.75 |
| 27 | Water Supply, Sewerage, Waste Management and Remediation activities | 36 | 8.02 | 9.40 | 11.00 |

*Table 18 Contd...*

# Table 18 (Contd.)

## NATIONAL EXPENDITURE ON R&D BY ECONOMIC ACTIVITY

**(Rs. Crore)**

| S.No. | Economic Activity | NIC Code | R&D Expenditure | | |
|---|---|---|---|---|---|
| | | | 2021-22 | 2022-23 | 2023-24 |
| 28 | Construction | 41 | 237.82 | 273.76 | 331.90 |
| 29 | Transportation and Storage | 49 | 15599.55 | 20706.21 | 29861.78 |
| 30 | Professional, Scientific and Technical Activities | 69 | 48311.18 | 50374.32 | 54935.75 |
| 31 | Public Administration and Defence, Compulsory Social Security | 84 | 2255.42 | 2944.59 | 3347.65 |
| 32 | Education | 85 | 4833.19 | 5556.16 | 6332.45 |
| 33 | Human Health and Social Work Activities | 86 | 14222.73 | 17219.26 | 16662.45 |
| 34 | Service Sector | 90 | 5231.87 | 6014.36 | 8926.80 |
| 35 | Others | 91 | 5981.51 | 5992.76 | 6457.95 |
| | **Total** | | **170725.12** | **185798.97** | **213859.09** |

***Source*** **:** Data collected and compiled by NSTMIS, DST, GoI.

***Note*** **:** National expenditure covers expenditure by organisations under Central Government, State Government, Private, Public Sector, SIROs (excludes Higher Education Sector).

# Table 19

## GOVERNMENT EXPENDITURE ON R&D BY ECONOMIC ACTIVITY

**(Rs. Crore)**

| S.No. | Economic Activity | NIC Code | Research & Development Expenditure | | |
|---|---|---|---|---|---|
| | | | 2021-22 | 2022-23 | 2023-24 |
| 1 | Agriculture, Forestry and Fishing | 1 | 14692.53 | 15639.62 | 16817.53 |
| 2 | Mining and Quarrying | 5 | 22.11 | 23.81 | 25.03 |
| 3 | Manufacture of Food Products | 10 | 23.15 | 27.14 | 24.92 |
| 4 | Manufacture of Textiles | 13 | 127.12 | 146.32 | 125.02 |
| 5 | Manufacture of Paper and Paper Products | 17 | 10.24 | 10.05 | 12.37 |
| 6 | Manufacture of Basic Pharmaceutical Products and Pharmaceutical Preparations | 21 | 28.92 | 28.82 | 32.54 |
| 7 | Manufacture of Rubber and Plastic Products | 22 | 59.77 | 60.00 | 69.96 |
| 8 | Manufacture of Electrical Equipment | 27 | 130.75 | 280.45 | 298.64 |
| 9 | Manufacture of Machinery and Equipment n.e.c | 28 | 49.08 | 50.26 | 51.10 |
| 10 | Electricity, Gas, Steam and Air Conditioning Supply | 35 | 3923.70 | 4050.81 | 3825.93 |
| 11 | Construction | 41 | 101.37 | 111.20 | 115.97 |
| 12 | Transportation and Storage | 49 | 3.91 | 4.11 | 4.31 |
| 13 | Professional, Scientific and Technical Activities | 69 | 45004.68 | 46272.10 | 49919.61 |
| 14 | Public Administration and Defence, Compulsory Social Security | 84 | 40.00 | 41.04 | 42.00 |
| 15 | Education | 85 | 3077.91 | 3419.44 | 3816.39 |
| 16 | Human Health and Social Work Activities | 86 | 7793.58 | 7322.09 | 5991.73 |
| 17 | Service Sector | 90 | 35.64 | 35.78 | 35.95 |
| 18 | Others | 91 | 4292.09 | 4051.76 | 4242.83 |
| | **Total** | | **79416.55** | **81574.80** | **85451.83** |

***Source*** **:** Data collected and compiled by NSTMIS, DST, GoI.

***Note*** **:** Goverment expenditure covers expenditure by organisations under Central Government and State Government.

# Table 20

## INDUSTRIAL SECTOR AND SIROs EXPENDITURE ON R&D BY ECONOMIC ACTIVITY

**(Rs. Crore)**

| S.No. | Economic Activity | NIC Code | Research & Development Expenditure | | |
|---|---|---|---|---|---|
| | | | 2021-22 | 2022-23 | 2023-24 |
| 1 | Agriculture, Forestry and Fishing | 1 | 1516.01 | 1703.96 | 1889.61 |
| 2 | Mining and Quarrying | 5 | 1047.10 | 1053.90 | 1010.11 |
| 3 | Manufacture of Food Products | 10 | 429.12 | 450.56 | 499.90 |
| 4 | Manufacture of Beverages | 11 | 60.73 | 65.53 | 55.76 |
| 5 | Manufacture of Tobacco Products | 12 | 20.98 | 22.48 | 26.23 |
| 6 | Manufacture of Textiles | 13 | 299.90 | 353.81 | 403.30 |
| 7 | Manufacture of Wearing Apparel | 14 | 6.62 | 8.70 | 11.64 |
| 8 | Manufacture of Leather and Related Products | 15 | 41.66 | 77.50 | 53.16 |
| 9 | Manufacture of Wood and of Products of Wood &Cork, except Furniture | 16 | 0.54 | 0.64 | 1.41 |
| 10 | Manufacture of Paper and Paper Products | 17 | 371.95 | 265.14 | 484.05 |
| 11 | Manufacture of Coke and Refined Petroleum Products | 19 | 3262.53 | 3574.89 | 4299.10 |
| 12 | Manufacture of Chemicals and Chemical Products | 20 | 3146.21 | 3732.02 | 4334.52 |
| 13 | Manufacture of Basic Pharmaceutical Products and Pharmaceutical Preparations | 21 | 21935.78 | 22099.61 | 25469.00 |
| 14 | Manufacture of Rubber and Plastic Products | 22 | 903.16 | 1115.02 | 1124.49 |
| 15 | Manufacture of Other Non-Metallic Mineral Products | 23 | 401.46 | 60.52 | 67.41 |
| 16 | Manufacture of Basic Metals | 24 | 1221.81 | 1044.79 | 892.98 |
| 17 | Manufacture of Fabricated Metal Products, except Machinery and Equipment | 25 | 312.94 | 349.03 | 426.68 |
| 18 | Manufacture of Computer, Electronic and other Optical Products | 26 | 3692.14 | 4744.58 | 6100.88 |
| 19 | Manufacture of Electrical Equipment | 27 | 1509.11 | 1919.98 | 2359.46 |
| 20 | Manufacture of Machinery and Equipment n.e.c | 28 | 2549.15 | 2776.33 | 2938.25 |
| 21 | Manufacture of Motor Vehicles, Trailers and Semi-Trailers | 29 | 8865.69 | 7350.07 | 8581.74 |
| 22 | Manufacture of Other Transport Equipment | 30 | 969.62 | 1082.70 | 1348.53 |
| 23 | Manufacture of Furniture | 31 | 0.15 | 0.15 | 0.15 |
| 24 | Other Manufacturing | 32 | 1780.84 | 1935.71 | 2367.80 |
| 25 | Repair and Installation of Machinery and Equipment | 33 | 0.30 | 0.32 | 0.34 |
| 26 | Electricity, Gas, Steam and Air Conditioning Supply | 35 | 630.96 | 602.94 | 961.82 |
| 27 | Water Supply, Sewerage, Waste Management and Remediation activities | 36 | 8.02 | 9.40 | 11.00 |
| 28 | Construction | 41 | 136.45 | 162.56 | 215.93 |
| 29 | Transportation and Storage | 49 | 15595.64 | 20702.10 | 29857.47 |

*Table 20 Contd...*

# Table 20 (Contd.)

## INDUSTRIAL SECTOR AND SIRO EXPENDITURE ON R&D BY ECONOMIC ACTIVITY

**(Rs. Crore)**

| S.No. | Economic Activity | NIC Code | Research & Development Expenditure | | |
|---|---|---|---|---|---|
| | | | 2021-22 | 2022-23 | 2023-24 |
| 30 | Professional, Scientific and Technical Activities | 69 | 3306.50 | 4102.22 | 5016.14 |
| 31 | Public Administration and Defence, Compulsory Social Security | 84 | 2215.42 | 2903.55 | 3305.65 |
| 32 | Education | 85 | 1755.28 | 2136.72 | 2516.06 |
| 33 | Human Health and Social Work Activities | 86 | 6429.15 | 9897.17 | 10670.72 |
| 34 | Service Sector | 90 | 5196.23 | 5978.58 | 8890.85 |
| 35 | Others | 91 | 1689.42 | 1941.00 | 2215.12 |
| | **Total** | | **91308.57** | **104224.18** | **128407.26** |

***Source*** **:** Data collected and compiled by NSTMIS, DST, GoI.

***Note*** **:** The R&D expenditure data covers Private Sector Industries, Public Sector Industries, and SIROs.

# Table 21

## FULL TIME EQUIVALENT OF MANPOWER EMPLOYED IN R&D ESTABLISHMENTS AS ON 01.04.2024

(Number)

| S.No. | Name of Establishment | Personnel Engaged in | | | Total (1+2+3) |
|---|---|---|---|---|---|
| | | R&D Activities (1) | Auxilliary Activities (2) | Administrative Activities (3) | |
| **1** | **INSTITUTIONAL SECTOR** | | | | |
| A | GOVERNMENT INSTITUTIONS | | | | |
| | Major Central Ministries Scientific Agency/ Department | 56252 | 35622 | 28104 | 119979 |
| | Other Central Ministry/ Department | 11090 | 7520 | 6832 | 25442 |
| | State Government/UT | 10415 | 207 | 393 | 11015 |
| | Total Government Institutions | 77757 | 43349 | 35329 | 156436 |
| B | Higher Education Sector | 238728 | 50657 | 168479 | 457864 |
| C | Scientific and Industrial Research Organisation (SIRO) | 41482 | 23571 | 31378 | 96431 |
| | **Total Institutional Sector (1= A+B+C)** | **357967** | **117577** | **235186** | **710730** |
| **2** | **INDUSTRIAL SECTOR** | | | | |
| A | Industry (Private) | 140318 | 32618 | 13931 | 186867 |
| B | Industry (Public) | 9066 | 1673 | 602 | 11341 |
| | **Total Industrial Sector (2)** | **149384** | **34291** | **14533** | **198208** |
| | **TOTAL (1+2)** | **507351** | **151868** | **249719** | **908938** |

***Source*** **:** Data collected and compiled by NSTMIS, DST, GoI.

# Table 22

## FULL TIME EQUIVALENT OF WOMEN EMPLOYED IN RESEARCH AND DEVELOPMENT ESTABLISHMENTS AS ON 01.04.2024

**(Number)**

| S.No. | Name of Establishment | Personnel Engaged in | | | Total (1+2+3) |
|---|---|---|---|---|---|
| | | R&D Activities (1) | Auxilliary Activities (2) | Administrative Activities (3) | |
| **1** | **INSTITUTIONAL SECTOR** | | | | |
| A | GOVERNMENT INSTITUTIONS | | | | |
| | Major Central Ministries Scientific Agency/Department | 12294 | 6652 | 7245 | 26191 |
| | Other Central Ministry/Department | 3203 | 1902 | 1557 | 6662 |
| | State Government/UT | 2912 | 65 | 91 | 3068 |
| | **Total Government Institutions** | **18409** | **8619** | **8893** | **35921** |
| B | Higher Education Sector | 85997 | 17871 | 67958 | 171826 |
| C | Scientific And Industrial Research Organisation (SIRO) | 15748 | 10762 | 13425 | 39935 |
| | **Total Institutional Sector (1= A+B+C)** | **120154** | **37252** | **90276** | **247682** |
| **2** | **INDUSTRIAL SECTOR** | | | | |
| A | Industry (Private) | 25039 | 6227 | 3634 | 34900 |
| B | Industry (Public) | 1926 | 224 | 153 | 2303 |
| | **Total Industrial Sector (2)** | **26965** | **6451** | **3787** | **37203** |
| | **Total (1+2)** | **147119** | **43703** | **94063** | **284885** |
| | Percentage share of total FTE | 29.0% | 28.8% | 37.7% | 31.3% |

***Source*** **:** Data collected and compiled by NSTMIS, DST, GoI.

# Table 23

## FIELD OF SPECIALIZATION OF FULL TIME PERSONNEL EMPLOYED IN RESEARCH AND DEVELOPMENT AS ON 01.04.2024

**(Number)**

| Field/Education | Male | Female | Total |
|---|---|---|---|
| Agricultural Sciences | 20886 | 6383 | 27269 |
| Engineering Technology | 115702 | 25442 | 141144 |
| Medical Sciences | 44464 | 17446 | 61910 |
| Natural Sciences | 23248 | 9280 | 32528 |
| Social Sciences | 3201 | 2571 | 5772 |
| **Total** | **207501** | **61122** | **268623** |

***Source*** **:** Data collected and compiled by NSTMIS, DST, GoI.

***Note*** **:** Data is based on the Survey responses. Data includes all sectors except Higher Education. In case of Higher Education, field of specialization of full time personnel employed in R&D is not available.

# Table 24

## RESEARCHERS PER MILLION INHABITANTS (FTE) FOR SELECT COUNTRIES, 2023

| Sl No | Country | Reseachers Per Million People | Population in Million |
|---|---|---|---|
| 1 | Australia | 4569 | 26.32 |
| 2 | Brazil | 903 | 209.91 |
| 3 | Canada | 5624 | 39.06 |
| 4 | China | 2107 | 1424.26 |
| 5 | Germany | 5926 | 84.40 |
| 6 | Denmark | 8838 | 5.93 |
| 7 | Spain | 3654 | 47.91 |
| 8 | Finland | 8315 | 5.59 |
| 9 | France | 5369 | 66.38 |
| 10 | United Kingdom | 4473 | 68.44 |
| 11 | Hungary | 4567 | 9.68 |
| **12** | **India** | **354** | **1431.70** |
| 13 | Israel | 8342 | 9.19 |
| 14 | Italy | 2855 | 59.56 |
| 15 | Japan | 5609 | 124.67 |
| 16 | Republic of Korea | 9472 | 51.76 |
| 17 | Sri Lanka | 94 | 22.90 |
| 18 | Mexico | 419 | 129.17 |
| 19 | Malaysia | 1218 | 34.91 |
| 20 | Netherlands | 6563 | 18.02 |
| 21 | New Zealand | 5435 | 5.15 |
| 22 | Norway | 5489 | 5.49 |
| 23 | Pakistan | 474 | 245.67 |
| 24 | Philippines | 320 | 114.41 |
| 25 | Sweden | 8911 | 10.52 |
| 26 | South Africa | 444 | 62.80 |
| 27 | Switzerland | 6108 | 8.84 |
| 28 | Russia | 2653 | 145.68 |
| 29 | USA | 4937 | 340.59 |
| 30 | Venezuela, RB | 180 | 28.25 |

***Source :*** UNESCO, UIS website accessed March, 2026 ; India-R&D Statistics 2025-26, DST, GoI.

***Note :*** S&T Indicator- Reference years:

1. Researcher per Million People: 2010- Australia, 2012-Israel, 2014-Brazil, 2017-UK, 2020- Phillipines, 2022- Canada, Sri Lanka, Malaysia, USA, South Africa
2. Population: 2022- USA

# Table 25

## R&D EXPENDITURE AND R&D TO GDP (%) FOR SELECT COUNTRIES, 2023

| Country | R&D Expenditure (billion curent PPP US$) | R&D Expenditdure as % of GDP | Per Capita GDP (current PPP US$) | Per Capita R&D (current PPP US$) |
|---|---|---|---|---|
| Australia | 33.7 | 1.86 | 72273 | 1264.3 |
| Brazil | NA | 1.19 | 21176 | N/A |
| Canada | 50.4 | 1.81 | 64219 | 1256.3 |
| China | 915.5 | 2.58 | 25179 | 648.9 |
| Denmark | 14.1 | 3.05 | 77892 | 2374.5 |
| Finland | 11.0 | 3.09 | 63415 | 1961.9 |
| France | 90.6 | 2.18 | 60839 | 1325.3 |
| Germany | 188.3 | 3.15 | 71684 | 2260.8 |
| Hungary | 6.2 | 1.38 | 46592 | 641.8 |
| **India** | **120.6** | **0.84** | **10323** | **84.3** |
| Israel | 37.9 | 6.35 | 55171 | 3848.4 |
| Italy | 48.8 | 1.38 | 60030 | 828.0 |
| Japan | 217.1 | 3.44 | 50662 | 1743.4 |
| Korea | 146.8 | 4.94 | 57430 | 2839.1 |
| Mexico | 8.1 | 0.27 | 25243 | 62.3 |
| Netherlands | 33.1 | 2.27 | 81729 | 1852.9 |
| New Zealand | 4.4 | 1.55 | 54697 | 847.0 |
| Norway | 10.6 | NA | 103638 | 1918.8 |
| Russia | 48.0 | 0.94 | 44269 | 333.4 |
| Singapore | 17.2 | 1.81 | 143786 | 2912.4 |
| South Africa | 5.9 | 0.61 | 15200 | 93.8 |
| Spain | 40.2 | 1.49 | 55682 | 831.7 |
| Sweden | 26.3 | 3.60 | 69226 | 2492.0 |
| Switzerland | 25.9 | 3.22 | 95142 | 2915.7 |
| United Kingdom | 114.7 | 2.68 | 59911 | 1674.5 |
| USA | 952.1 | 3.45 | 82305 | 2826.9 |

***Source*** **:** Main Science and Technology Indicators (MSTI), OECD, UNESCO website & World Bank website, accessed on June 2026, and India- R&D Statistics 2025-26, DST, GoI.

***Note*** **:** S&T Indicator- Reference years:

1. R&D Exp. Billion Current PPP US$ (MSTI)
2. R&D Expenditure as a % of GDP, UNESCO, 2023; 2022-Singapore, South Africa; 2021- Australia; 2017- Mexico
3. Per Capita GDP (Current PPP US$), World Bank, 2023
4. NA- Not available

# Table 26

## UNIVERSITIES / COLLEGES AND THEIR ENROLMENT FROM 1976-77 TO 2022-23

(Number)

| Year | Universities | Institutions/ Deemed to be Universities | Colleges | Total Enrolment |
|---|---|---|---|---|
| 1976-77 | 105 | 9 | 4317 | 2431563 |
| 1977-78 | 108 | 9 | 4375 | 2564972 |
| 1978-79 | 108 | 10 | 4460 | 2618228 |
| 1979-80 | 112 | 10 | 4558 | 2648579 |
| 1980-81 | 116 | 12 | 4722 | 2752437 |
| 1981-82 | 120 | 12 | 4880 | 2952066 |
| 1982-83 | 125 | 14 | 5039 | 3133093 |
| 1983-84 | 126 | 14 | 5246 | 3307649 |
| 1984-85 | 132 | 16 | 5590 | 3404096 |
| 1985-86 | 136 | 17 | 5816 | 3605029 |
| 1986-87 | 143 | 21 | 6040 | 3757158 |
| 1987-88 | 144 | 22 | 6685 | 4020159 |
| 1988-89 | 145 | 27 | 6773 | 4285489 |
| 1989-90 | 149 | 28 | 7145 | 4602680 |
| 1990-91 | 150 | 29 | 7346 | 4924868 |
| 1991-92 | 155 | 31 | 7761 | 5265886 |
| 1992-93 | 159 | 31 | 7993 | 5534966 |
| 1993-94 | 163 | 34 | 8441 | 5817249 |
| 1994-95 | 168 | 36 | 9019 | 6113929 |
| 1995-96 | 171 | 37 | 9252 | 6574005 |
| 1996-97 | 172 | 38 | 9940 | 6842598 |
| 1997-98 | 182 | 39 | 10678 | 7260418 |
| 1998-99 | 182 | 40 | 11397 | 7705520 |
| 1999-00 | 189 | 42 | 11865 | 8050607 |
| 2000-01 | 193 | 47 | 12806 | 8399443 |
| 2001-02 | 196 | 52 | 15437 | 8964680 |
| 2002-03 | 200 | 81 | 16206 | 9516773 |
| 2003-04 | 213 | 89 | 16742 | 10201981 |
| 2004-05 | 229 | 96 | 18080 | 11038543 |
| 2005-06 | 241 | 101 | 19327 | 12043050 |
| 2006-07 | 249 | 109 | 21170 | 13163054 |
| 2007-08 | 272 | 103 | 23206 | 14400381 |
| 2008-09 | 300 | 128 | 25951 | 15768417 |
| 2009-10 | 363 | 130 | 31812 | 17243352 |
| 2010-11 | 621 | 131 | 32974 | 27499749 |

*Table 26 Contd...*

# Table 26 (Contd.)

## UNIVERSITIES / COLLEGES AND THEIR ENROLMENT FROM 1976-77 TO 2022-23

**(Number)**

| Year | Universities | Institutions/ Deemed to be Universities | Colleges | Total Enrolment |
|---|---|---|---|---|
| 2011-12 | 642 | 128 | 34852 | 29184331 |
| 2012-13 | 667 | 127 | 35525 | 30152417 |
| 2013-14 | 723 | 127 | 36634 | 32336234 |
| 2014-15 | 760 | 122 | 38498 | 34211637 |
| 2015-16 | 799 | 122 | 39071 | 34584781 |
| 2016-17 | 864 | 122 | 40026 | 35705905 |
| 2017-18 | 903 | 123 | 39050 | 36642378 |
| 2018-19 | 993 | 124 | 39931 | 37399388 |
| 2019-20 | 1043 | 126 | 42343 | 38536359 |
| 2020-21 | 1113 | 124 | 43796 | 41380713 |
| 2021-22 | 1043 | 126 | 46207 | 43268181 |
| 2022-23 | 1162 | 136 | 48291 | 42993064 |

***Source*** **:** University Grants Commission (UGC) Annual Reports and All India Survey on Higher Education (AISHE), Ministry of Education (MoE) Survey Reports.

***Note*** **:** 1. Series revised from 2010-11 as per the various AISHE, MoE survey reports.

2. The number of Universities since 2010-11 onwards also includes institutions of National Importance.

3. Figures of students enrolment pertain to regular/distance mode courses in universities and colleges including standalone institutions such as polytechnics, Institutes under central ministries, nursing institutes, teacher training Institutes etc awarding diploma and certificate.

# Table 27

## DOCTORATE DEGREES AWARDED FACULTY-WISE, 2012-13 TO 2021-22

**(Number)**

| Sl No. | Faculty | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | 2020-21 | 2021-22 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| A | Science & Technology | | | | | | | | | | |
| | Science | 4381 | 5910 | 5721 | 6678 | 8089 | 8914 | 10055 | 9172 | 6232 | 7732 |
| | Engineering/ Technology | 2477 | 3074 | 2918 | 3272 | 3749 | 5289 | 7659 | 6627 | 5001 | 6913 |
| | Medicine | 1644 | 900 | 985 | 1226 | 1507 | 1422 | 1606 | 2120 | 1757 | 2073 |
| | Agriculture | 3473 | 2346 | 1810 | 2062 | 1951 | 4465 | 4748 | 4990 | 1793 | 1738 |
| | Veterinary Science | 200 | 281 | 279 | 291 | 295 | 298 | 406 | 444 | 200 | 316 |
| | Total S&T- (A) | 12175 | 12511 | 11713 | 13529 | 15591 | 20388 | 24474 | 23353 | 14983 | 18772 |
| B | Others | 11455 | 11350 | 10117 | 10642 | 13188 | 14012 | 16339 | 15633 | 10567 | 13816 |
| | Total (A+B) | 23630 | 23861 | 21830 | 24171 | 28779 | 34400 | 40813 | 38986 | 25550 | 32588 |
| | | | | | | | | | | | |
| | **% in Science & Technology(S&T) Disciplines** | | | | | | | | | | |
| | | | | | | | | | | | |
| | Science | 36.0 | 47.2 | 48.8 | 49.4 | 51.9 | 43.7 | 41.1 | 39.3 | 41.6 | 41.2 |
| | Engineering/ Technology | 20.3 | 24.6 | 24.9 | 24.2 | 24.0 | 25.9 | 31.3 | 28.4 | 33.4 | 36.8 |
| | Medicine | 13.5 | 7.2 | 8.4 | 9.1 | 9.7 | 7.0 | 6.6 | 9.1 | 11.7 | 11.0 |
| | Agriculture | 28.5 | 18.8 | 15.5 | 15.2 | 12.5 | 21.9 | 19.4 | 21.4 | 11.8 | 9.3 |
| | Veterinary Science | 1.6 | 2.2 | 2.4 | 2.2 | 1.9 | 1.5 | 1.7 | 1.9 | 1.3 | 1.7 |
| | **Total (S&T) - A** | **(100)** | **(100)** | **(100)** | **(100)** | **(100)** | **(100)** | **(100)** | **(100)** | **(100)** | **(100)** |

***Source*** **:** UGC Annual Reports and AISHE, MoE Survey Reports

***Note*** **:** Engineering/Technology includes Engineering Science, IT & Computer; Agriculture includes Fisheries Science,Science includes Criminology & Forensic Science, Marine Science/Oceanography; Others includes Arts, Commerce, Law, Eduction, Library & Information Science; Music, Performing/Visual Arts, Journalism & Mass Communication, Physical Education & Social Work etc.

# Table 28

## SCIENCE AND ENGINEERING (S&E) DOCTORAL DEGREES AWARDED BY SELECT COUNTRIES, 2022

**(Number)**

| Sl No. | Country | All S&E |
|---|---|---|
| 1 | China | 53,385 |
| 2 | United States | 44,739 |
| 3 | India | 18,772 |
| 4 | United Kingdom | 16,017 |
| 5 | Germany | 14,019 |
| 6 | Brazil | 10,571 |
| 7 | France | 10,411 |
| 8 | South Korea | 8,571 |
| 9 | Japan | 6,474 |

***Source*** **:** 1. Science and Engineering Indicators 2024, NSF, USA

2. Data for India- AISHE, MoE Survey report 2021-22

***Note*** **:** India- All S&E include Science (including Criminology & Forensic Science, Marine Science/Oceanography), Engineering/Technology (including Engineering Science, IT & Computer), Medicine, Agriculture (including Fisheries Science) and Veterinary Science.

# Table 29

## SCIENCE AND ENGINEERING (S&E) ARTICLES IN ALL FIELDS, FOR REGIONS, COUNTRIES, OR ECONOMIES, 2012 AND 2022

| Rank | Region, country, or economy | 2012 (Number) | 2022 (Number) | 2022 World Total (%) | Average compound annual growth rate, 2012-22 (%) |
|---|---|---|---|---|---|
| 1 | China | 3,29,067 | 8,98,949 | 26.88 | 10.57 |
| 2 | United States | 4,30,164 | 4,57,335 | 13.68 | 0.61 |
| **3** | **India** | **78,135** | **2,07,390** | **6.20** | **10.25** |
| 4 | Germany | 1,05,639 | 1,13,976 | 3.41 | 0.76 |
| 5 | United Kingdom | 98,685 | 1,05,584 | 3.16 | 0.68 |
| 6 | South America | 68,065 | 1,05,062 | 3.14 | 4.44 |
| 7 | Japan | 1,09,040 | 1,03,723 | 3.10 | -0.50 |
| 8 | Italy | 64,131 | 90,586 | 2.71 | 3.51 |
| 9 | Russia | 36,532 | 84,252 | 2.52 | 8.72 |
| 10 | South Korea | 56,101 | 76,936 | 2.30 | 3.21 |
| 11 | Canada | 59,762 | 69,052 | 2.06 | 1.46 |
| 12 | Spain | 54,680 | 67,100 | 2.01 | 2.07 |
| 13 | Brazil | 48,166 | 67,031 | 2.00 | 3.36 |
| 14 | France | 72,431 | 65,888 | 1.97 | -0.94 |
| 15 | Australia | 46,728 | 62,305 | 1.86 | 2.92 |
| 16 | Iran | 31,462 | 60,940 | 1.82 | 6.83 |
| 17 | Turkey | 27,962 | 52,658 | 1.57 | 6.53 |
| | **World** | **21,05,157** | **33,44,037** | **100.00** | **4.74** |

***Source*** **:** National Center for Science and Engineering Statistics; Science-Metrix; Elsevier, Scopus abstract and citation database, accessed May 2026; Science and Engineering Indicators 2024, NSF, USA

***Note*** **:** 1. The countries or economies are ranked based on the 2022 total.

2. Article counts refer to publications from conference proceedings and peer-reviewed journal articles in S&E and indexed in Scopus.

3. Articles are classified by their year of publication and are assigned to a region, country, or economy on the basis of the institutional address(es) of the author(s) listed in the article. Articles are credited on a fractional count basis.

# Table 30

## PATENT APPLICATIONS FROM PERSONS IN INDIA AND ABROAD, 2014-15 TO 2024-25

**(Number)**

| | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 | 2024-25 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| India | 12071 | 13066 | 13219 | 15550 | 17005 | 20843 | 24326 | 29508 | 43301 | 51574 | 68201 |
| Foreigners Resident abroad | 30692 | 33838 | 32225 | 32304 | 33654 | 35625 | 34177 | 36932 | 39510 | 40594 | 42174 |
| **Total** | **42763** | **46904** | **45444** | **47854** | **50659** | **56468** | **58503** | **66440** | **82811** | **92168** | **110375** |

***Source*** **:** Annual Reports of the Controller General of Patents, Designs and Trade Marks.

***Note*** **:** Foreigners Resident Abroad includes Ordinary, Convention & National Phase Applications under PCT.

# Table 31

## PATENT APPLICATIONS FILED IN INDIA BY FOREIGN COUNTRIES, 2014-15 TO 2024-25

**(Number)**

| Sl. No. | Country | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 | 2024-25 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | U.S.A. | 9702 | 11815 | 10883 | 10179 | 9959 | 10564 | 10487 | 12087 | 14701 | 13907 | 13376 |
| 2. | Germany | 3089 | 2965 | 2818 | 2773 | 2702 | 2700 | 2589 | 2681 | 2562 | 3035 | 3019 |
| 3. | U.K. | 1059 | 1165 | 1008 | 1136 | 1097 | 959 | 965 | 1072 | 1163 | 1242 | 1157 |
| 4. | France | 1469 | 1263 | 1214 | 1184 | 1213 | 1176 | 1045 | 1186 | 1068 | 1176 | 1332 |
| 5. | Japan | 5425 | 4835 | 4275 | 4487 | 4698 | 4908 | 4782 | 4833 | 4544 | 4764 | 5415 |
| 6. | Switzerland | 1549 | 1385 | 1467 | 1268 | 1330 | 1072 | 1084 | 1334 | 1401 | 1567 | 1301 |
| 7. | Italy | 583 | 612 | 551 | 577 | 586 | 569 | 556 | 556 | 564 | 645 | 617 |
| 8. | Russia | 90 | 93 | 67 | 93 | 65 | 80 | 56 | 101 | 103 | 103 | 86 |
| 9. | Netherlands | 1323 | 1498 | 1359 | 1387 | 1130 | 1252 | 994 | 1015 | 947 | 951 | 951 |
| 10. | Others | 6403 | 8207 | 8583 | 9220 | 10874 | 12345 | 11619 | 12067 | 12457 | 13204 | 14920 |
| | **Total #** | **30692** | **33838** | **32225** | **32304** | **33654** | **35625** | **34177** | **36932** | **39510** | **40594** | **42174** |

***Source*** **:** Annual Reports of the Controller General of Patents, Designs and Trade Marks.

***Note*** **:** # Includes Ordinary, Convention & National Phase Applications under PCT.

# Table 32

## PATENT APPLICATIONS FILED BY DIFFERENT STATES IN INDIA, 2020-21 TO 2024-25

**(Number)**

| Sl No. | State/Union Territory | 2020-21 | 2021-22 | 2022-23 | 2023-24 | 2024-25 |
|---|---|---|---|---|---|---|
| 1 | Andhra Pradesh | 709 | 934 | 1445 | 2134 | 3582 |
| 2 | Bihar | 62 | 80 | 169 | 235 | 324 |
| 3 | Delhi | 1608 | 1673 | 1960 | 2002 | 2520 |
| 4 | Gujarat | 921 | 1067 | 1215 | 2718 | 2743 |
| 5 | Haryana | 765 | 998 | 959 | 1014 | 1521 |
| 6 | Karnataka | 2784 | 3222 | 5408 | 6086 | 8371 |
| 7 | Kerala | 426 | 454 | 497 | 637 | 827 |
| 8 | Madhya Pradesh | 398 | 488 | 646 | 726 | 971 |
| 9 | Maharashtra | 4214 | 4566 | 5626 | 7251 | 7893 |
| 10 | Punjab | 1650 | 2197 | 3405 | 4604 | 4461 |
| 11 | Rajasthan | 449 | 465 | 1278 | 1466 | 2003 |
| 12 | Tamil Nadu | 3945 | 5262 | 7686 | 9565 | 15440 |
| 13 | Telangana | 1662 | 1750 | 2438 | 2807 | 4293 |
| 14 | Uttar Pradesh | 2317 | 3622 | 5564 | 5779 | 5703 |
| 15 | West Bengal | 505 | 453 | 808 | 874 | 1415 |
| | Others (States/UTs) | 1911 | 2277 | 4197 | 3676 | 6134 |
| | **TOTAL** | **24326** | **29508** | **43301** | **51574** | **68201** |

***Source*** **:** Annual Reports of the Controller General of Patents, Designs and Trade Marks.

# Table 33

## PATENTS FILED AND SEALED IN INDIA, 2013-14 TO 2024-25

(Number)

| Year | No.of applications made | Total No.of applications to be examined | No. of applications deemed to have been abandoned filling of complete specifications | No. of applications deemed to have been abandoned non-acceptance of Complete Specifications | No. of patents sealed | | No. of patents in force | |
|---|---|---|---|---|---|---|---|---|
| | | | | | Indian | Foreign | Indian | Foreign |
| 2013-14 | 42951 | 37474 | 224 | 6418 | 634 | 3592 | 7464 | 35168 |
| 2014-15 | 42763 | 34958 | 12 | 6970 | 684 | 5294 | 7561 | 35695 |
| 2015-16 | 46904 | 35960 | 1226 | 12782 | 918 | 5408 | 7306 | 37218 |
| 2016-17 | 45444 | 38578 | 4357 | 10408 | 1315 | 8532 | 7660 | 41105 |
| 2017-18 | 47854 | 37208 | 184 | 24992 | 1937 | 11108 | 8830 | 47934 |
| 2018-19 | 50659 | 38665 | 3779 | 30458 | 2511 | 12772 | 9787 | 54899 |
| 2019-20 | 56267 | 42007 | 3761 | 23291 | 4003 | 20933 | 12181 | 69098 |
| 2020-21 | 58503 | 42196 | 295 | 17944 | 5629 | 22756 | 15687 | 83211 |
| 2021-22 | 66440 | 46230 | 0 | 1 | 6397 | 23676 | 19700 | 96216 |
| 2022-23 | 82811 | 48373 | 0 | 19303 | 9239 | 24895 | 26165 | 111168 |
| 2023-24 | 92168 | 56905 | 4393 | 4305 | 25082 | 77975 | 47335 | 175910 |
| 2024-25 | 110375 | 90971 | 755 | 0 | 10682 | 22822 | 50848 | 179632 |

***Source*** **:** Annual Reports of the Controller General of Patents, Design and Trade Marks.

# Table 34

## TOP FOREIGN RESIDENT PATENT APPLICANTS IN INDIA, 2022-23 TO 2024-25

**(Number)**

| Name of Organisation | 2022-23 | 2023-24 | 2024-25 |
|---|---|---|---|
| Qualcomm Incorporated | 3482 | 3017 | 2949 |
| Nokia Technologies OY | 359 | 517 | 1582 |
| Samsung Electronics Co. Ltd. | 979 | 1555 | 1563 |
| Beijing Xiaomi Mobile Software Co. Ltd. | 237 | 457 | 700 |
| LG Electronics Inc. | 326 | # | 675 |
| Google LLC | # | 479 | 626 |
| Huawei Technologies Co.Ltd. | 936 | 681 | 521 |
| Apple Inc. | 575 | 516 | 409 |
| Mercedes-Benz Group AG | # | 407 | 391 |
| Interdigital Patent Holdings, Inc | # | # | 349 |
| Telefonaktiebolaget L M Ericsson (Publ) | 434 | 462 | # |
| Microsoft Technology Licensing LLC | 428 | # | # |
| LG Energy Solution, Ltd. | 288 | 458 | # |

***Source*** **:** Annual Report of Controller General of Patents, Design and Trade Marks.

***Note*** **:** 1. The figures are arranged in the descending order by the reference year 2024-25.

2. # During the period under reference these organisatons did not fall among top patentees.

# Table 35

## BUDGET ALLOCATION (BE) FOR SELECT CENTRAL SCIENTIFIC DEPARTMENTS DURING LAST 5 YEARS

**(Rs. Crore)**

| Department/Ministry | 2022-23 | 2023-24 | 2024-25 | 2025-26 | 2026-27 |
|---|---|---|---|---|---|
| Department of Science & Technology (DST) | 6000.00 | 7931.05 | 8029.01 | 28508.90 | 28049.32 |
| Department of Scientific & Industrial Research (DSIR) / Council of Scientific & Industrial Research (CSIR) | 5636.46 | 5746.51 | 6323.41 | 6657.78 | 6765.62 |
| Department of Biotechnology (DBT) | 2581.00 | 2683.86 | 2275.70 | 3446.64 | 3446.00 |
| Department of Space (DoS) | 13700.00 | 12543.91 | 13042.75 | 13416.20 | 13705.63 |
| Department of Atomic Energy (R&D Sector) | 7257.91 | 7618.13 | 8846.29 | 9627.94 | 10411.39 |
| Ministry of Earth Sciences (MoES) | 2653.51 | 3319.88 | 3064.80 | 3649.81 | 3789.23 |
| **Total** | **37828.88** | **39843.34** | **41581.96** | **65307.27** | **66167.19** |

***Source*** **:** Demands for Grants of Central Government, Expenditure Budget, GoI (various years)

***Note*** **:** BE = Budget Estimate

## Institutional Coverage of R&D Data

The R&D data presented in the Science & Technology Indicator Tables are compiled from a broad spectrum of research-performing institutions across all major sectors of the national innovation system.

- Central Government Sector: Data cover 590 Central Government R&D laboratories and institutions engaged in scientific research and technological development.
- State Government Sector: Coverage includes 75 State Agricultural Universities (SAUs) and State Government R&D laboratories and research institutions.
- Public Sector Industry: Information has been collected from 104 Central Public Sector Enterprises and Joint Sector Companies undertaking in-house R&D activities.
- Private Sector Industry: Data encompass 2732 private-sector R&D units engaged in research and innovation activities across diverse industrial sectors.
- Scientific and Industrial Research Organisations (SIROs): The compilation includes data from 690 SIROs, which are research-oriented organizations recognized by the Department of Scientific and Industrial Research (DSIR), Government of India.
- Higher Education Sector: R&D expenditure data have been compiled from 721 higher education institutions undertaking research activities which includes Institutes of National Importance, Central Universities, Private Universities, Deemed Universities and State Universities.
- Several indicators have been compiled from secondary sources, including the All India Survey on Higher Education (AISHE), University Grants Commission, Ministry of Education (MoE), Office of the Controller General of Patents, Designs and Trade Marks, international databases of UNESCO Institute for Statistics, OECD, National Science Foundation (NSF), and other official national and international sources.


**NATIONAL SCIENCE AND TECHNOLOGY MANAGEMENT INFORMATION SYSTEM**
**DEPARTMENT OF SCIENCE & TECHNOLOGY**
MINISTRY OF SCIENCE & TECHNOLOGY
GOVERNMENT OF INDIA
NEW DELHI-110016 (INDIA)

July 2026