

**MINISTRY OF SCIENCE AND TECHNOLOGY**

DEMAND NO. 85

**Department of Science and Technology**

A. The Budget allocations, net of recoveries, are given below:

Major Head	Actual 2011-2012			Budget 2012-2013			Revised 2012-2013			<i>(In crores of Rupees)</i> Budget 2013-2014			
	Plan	Non-Plan	Total	Plan	Non-Plan	Total	Plan	Non-Plan	Total	Plan	Non-Plan	Total	
Revenue	2130.32	343.82	2474.14	2438.23	395.02	2833.25	2148.23	374.14	2522.37	2755.80	405.32	3161.12	
Capital	36.86	0.66	37.52	38.77	1.20	39.97	26.77	1.05	27.82	21.20	1.95	23.15	
<b>Total</b>	<b>2167.18</b>	<b>344.48</b>	<b>2511.66</b>	<b>2477.00</b>	<b>396.22</b>	<b>2873.22</b>	<b>2175.00</b>	<b>375.19</b>	<b>2550.19</b>	<b>2777.00</b>	<b>407.27</b>	<b>3184.27</b>	
1. Secretariat-Economic Services	3451	...	44.59	44.59	...	47.15	47.15	...	49.06	49.06	...	52.61	52.61
<b>Other Scientific Research</b>													
2. Modernisation of Mapping Organizations (SOI and NATMO)	3425	16.54	275.81	292.35	26.23	301.02	327.25	26.23	283.38	309.61	23.80	313.17	336.97
	5425	9.57	0.06	9.63	13.77	0.20	13.97	13.77	0.05	13.82	11.20	0.45	11.65
<i>Total</i>		26.11	275.87	301.98	40.00	301.22	341.22	40.00	283.43	323.43	35.00	313.62	348.62
<b>Science and Technology</b>													
3. Autonomous Institutions & Professional Bodies	3425	642.74	15.00	657.74	700.00	12.60	712.60	689.00	11.34	700.34	711.00	14.50	725.50
4. Research and Development Support - Multi-Disciplinary Research in Science and Technology (SERC)	3425	395.41	1.34	396.75	315.00	1.50	316.50	299.00	1.00	300.00	225.00	1.19	226.19
5. Technology Development Programme	3425	127.37	...	127.37	140.00	...	140.00	130.65	...	130.65	128.00	...	128.00
6. Technology for Bamboo Products (Mission Mode Project)	3425	25.00	...	25.00	...	...	...	...	...	...	...	...	...
7. S & T Programmes for Socio-Economic Development	3425	120.73	...	120.73	85.00	...	85.00	79.32	...	79.32	135.00	...	135.00
8. State Science & Technology Programme	3425	41.30	...	41.30	70.00	...	70.00	36.76	...	36.76	30.00	...	30.00
9. International Cooperation	3425	72.54	6.38	78.92	90.00	7.35	97.35	89.00	6.50	95.50	90.00	8.35	98.35
10. Payment to Technology Development Board against Cess receipts	3425	...	...	...	...	25.00	25.00	...	22.50	22.50	...	15.00	15.00
11. Information Technology	3425	1.21	...	1.21	5.00	...	5.00	1.00	...	1.00	1.00	...	1.00
12. National Training Programme for Scientists/Technologists working with Government of India	3425	4.91	...	4.91	...	...	...	...	...	...	...	...	...
13. Other Programmes	3425	...	0.70	0.70	...	0.40	0.40	...	0.36	0.36	...	0.50	0.50
	5425	...	0.60	0.60	...	1.00	1.00	...	1.00	1.00	...	1.50	1.50
<i>Total</i>		...	1.30	1.30	...	1.40	1.40	...	1.36	1.36	...	2.00	2.00
14. Synergy Projects (O/o Pr. Scientific Adviser)													
14.01 Programme Component	3425	14.01	...	14.01	17.76	...	17.76	12.76	...	12.76	15.00	...	15.00

(In crores of Rupees)

	Major Head	Actual 2011-2012			Budget 2012-2013			Revised 2012-2013			Budget 2013-2014			
		Plan	Non-Plan	Total	Plan	Non-Plan	Total	Plan	Non-Plan	Total	Plan	Non-Plan	Total	
14.02	EAP Component	3425	...	...	0.24	...	0.24	0.24	...	0.24	...	...	...	
	<i>Total- Synergy Projects (O/o Pr. Scientific Adviser)</i>		14.01	...	14.01	18.00	...	18.00	13.00	...	13.00	15.00	...	15.00
15.	Drugs and Pharmaceutical Research	3425	14.63	...	14.63	15.00	...	15.00	15.00	...	15.00	20.00	...	20.00
		7425	27.29	...	27.29	25.00	...	25.00	13.00	...	13.00	10.00	...	10.00
	<i>Total</i>		41.92	...	41.92	40.00	...	40.00	28.00	...	28.00	30.00	...	30.00
16.	National Mission on Nano Science & Nano Technology	3425	88.44	...	88.44	85.00	...	85.00	85.00	...	85.00	85.00	...	85.00
17.	Scholarships for Science in Higher Education (Oversight Committee Recommendation)	3425	75.00	...	75.00	...	...	...	...	...	...	...	...	...
18.	Water Technology Initiative	3425	24.58	...	24.58	...	...	...	...	...	...	...	...	...
19.	Innovations in Science Pursuit for Inspired Research (INSPIRE)	3425	229.90	...	229.90	...	...	...	...	...	...	...	...	...
20.	Innovation Clusters	3425	11.32	...	11.32	...	...	...	...	...	...	...	...	...
21.	Security Technology Initiative	3425	4.69	...	4.69	...	...	...	...	...	...	...	...	...
22.	Mega facilities for Basic Research	3425	20.00	...	20.00	30.00	...	30.00	20.00	...	20.00	50.00	...	50.00
23.	Science and Engineering Research Board	3425	200.00	...	200.00	400.00	...	400.00	400.00	...	400.00	534.00	...	534.00
24.	Policy Research Cell	3425	...	...	...	10.00	...	10.00	2.00	...	2.00	10.00	...	10.00
25.	Disha Programme for women in Science	3425	...	...	...	49.00	...	49.00	47.24	...	47.24	53.00	...	53.00
26.	Alliance and R&D Mission	3425	...	...	...	400.00	...	400.00	215.03	...	215.03	345.00	...	345.00
27.	Super Computing Facility and Capacity Building	3425	...	...	...	...	...	...	...	...	...	100.00	...	100.00
28.	National Geographic Information System	3425	...	...	...	...	...	...	...	...	...	200.00	...	200.00
	<b>Total-Science and Technology</b>		<b>2141.07</b>	<b>24.02</b>	<b>2165.09</b>	<b>2437.00</b>	<b>47.85</b>	<b>2484.85</b>	<b>2135.00</b>	<b>42.70</b>	<b>2177.70</b>	<b>2742.00</b>	<b>41.04</b>	<b>2783.04</b>
	<b>Total-Other Scientific Research</b>		<b>2167.18</b>	<b>299.89</b>	<b>2467.07</b>	<b>2477.00</b>	<b>349.07</b>	<b>2826.07</b>	<b>2175.00</b>	<b>326.13</b>	<b>2501.13</b>	<b>2777.00</b>	<b>354.66</b>	<b>3131.66</b>
	<b>Grand Total</b>		<b>2167.18</b>	<b>344.48</b>	<b>2511.66</b>	<b>2477.00</b>	<b>396.22</b>	<b>2873.22</b>	<b>2175.00</b>	<b>375.19</b>	<b>2550.19</b>	<b>2777.00</b>	<b>407.27</b>	<b>3184.27</b>
	Head of Dev		Budget Support	IEBR	Total	Budget Support	IEBR	Total	Budget Support	IEBR	Total	Budget Support	IEBR	Total
<b>C. Plan Outlay</b>														
1.	Other Scientific Research	13425	2167.18	...	2167.18	2477.00	...	2477.00	2175.00	...	2175.00	2777.00	...	2777.00

1. **Secretariat - Economic Services:** Provides expenditure for the Secretariat of the Department of Science and Technology (DST).

2. **Modernisation of Mapping Organizations (Sol and NATMO):** Survey of India (Sol) and National Atlas and Thematic Mapping Organization (NATMO) are operationally two different entities, but insofar as the budget outlays are concerned the two schemes have been merged and

renamed as Modernization of Mapping Organizations. The Survey of India, the principal national surveying and mapping organization is mainly responsible for producing topographical maps and providing survey support to the defence forces and various national development projects in the country.

The National Atlas and Thematic Mapping Organization set up in 1956 primarily aims at preparing National Atlas of India.

3. **Autonomous Institutions & Professional Bodies:** There are 23 independent autonomous institutions and professional bodies situated at different locations of the country having different mandates. However, insofar as the budget outlays are concerned these schemes have been merged and renamed as - Autonomous Institutions & Professional Bodies. As per guidelines issued by the Planning Commission allocations have been earmarked for spending under the SCSP ₹ 12 crore and TSP ₹ 12 crore.

4. **Research and Development Support - Multidisciplinary Research in Science and Technology (SERC):** The Department of Science and Technology, as a part of its S&T promotional activity has been supporting R&D programmes under Science and Engineering Research Council (SERC). As per guidelines issued by the Planning Commission allocations have been earmarked for spending under the SCSP ₹ 8 crore and TSP schemes ₹ 8 crore. This includes the new initiatives 'Programme for Research Initiatives in Mathematics Education (PRIME)' and 'Empowering Opportunities for Excellence in Science for SC&ST'.

5. **Programme for Special Technology Development & Coordination (Technology Development Programme):** The programme is aimed at developing indigenous technology through joint projects with industry and socio-economic Ministries. It also includes activities relating to development of Natural Resources Data Management System (NRDMS), Patent Facilitating Cells (PFC), Joint Technology Projects (JTP) Inter-Sectoral S&T Advisory Council (IS-STAC), Disaster Management Cell (DMC), National Spatial Data Infrastructure (NSDI), Fly Ash Unit (FAU), National Good Laboratory Practices Compliance Monitoring Authority (NGLPCMA), Solar Energy Research Initiative (SERI) Water Technology Initiative, Security Technology Initiative and Technology for Bamboo Products.

7. **S&T Programme for Socio-Economic Development:** The following plan schemes: S&T Entrepreneurship Development, Science & Society Programme, S&T Communication & Popularization, which were hitherto separate Plan schemes have now been merged and renamed as - S&T Programme for Socio Economic Development - insofar as budget outlays are concerned. The Scheme SCSP has helped in demonstrating technology packages and enhancing livelihood opportunities for SC population by capacity in several sectors in association of S&T based field groups and S&T institutions. The beneficiaries under this scheme are SC community only. Tribal Sub Plan (TSP) Scheme has achieved significant breakthroughs in developing and demonstrating technology packages in several sectors with the association of S&T based field groups and S&T institutions working in tribal areas. DST role in these initiatives has been catalytic where technology development and demonstration aspects are focused. As per guidelines issued by the Planning Commission allocations have been earmarked for spending under the SCSP ₹ 29 crore and TSP schemes ₹25 crore.

8. **State Science & Technology Programme:** The objective is to establish and support State Councils for S&T to act as focal points in the States and Union Territories for planning, guiding, evaluating, monitoring, co-coordinating and in general spreading Science and Technology activities at State level.

9. **International Cooperation: Indo US S&T Forum, Indo French Centre for Promotion of Advanced Research, S&T Programme of Cooperation with Other Countries and Indo German Science & Technology Centre:** This includes the programs of S&T cooperation with the United States of America, France, Germany and other developed and developing countries to undertake collaborative projects in the identified thrust areas in frontiers of S&T and programs of cooperation in related areas of science for basic research and to explore other possible areas for future cooperation.

This includes annual contributions to Centres for the Non Aligned and Other Developing Countries and the International Council of Scientific Unions and affiliated Unions and Committees.

10. **Payment to Technology Development Board against Cess Receipts:** The provision is for payment to Technology Development Board against net proceeds of cess realized under Technology Development Board Act, 1995. The Board has been set up to help the indigenously developed technologies reach the stage of commercial application.

13. **Other Programmes:** This depicts Exhibitions and Fairs as well as the capital expenditure relating to special construction work-building and air-conditioning and equipments of the Secretariat.

14. **Synergy Projects (O/o Principal Scientific Adviser):** The scheme is operated by the Office of the Principal Scientific Adviser to the Government of India. The objective of having a separate budget allocation is to enable that Office to play a catalytic role in taking up selective R&D and technology development projects in a number of important areas where multiple scientific and technological agencies are involved. This includes the Externally Aided Project 'Coordination and Harmonization of Advanced e Infrastructures (CHAIN)' funded by the European Union.

15. **Drugs & Pharmaceuticals Research:** The scheme is to be used for the purpose of supporting research and development programmes and setting up of national facilities for furthering R&D activities in the country.

16. **National Mission on Nano Science & Nano Technology:** The following areas of research have been identified for immediate attention:

- a. studies of free atomic and molecular clusters, cluster assembled materials, low-dimensional structures and quantum dots,
- b. nano-electronics and nano-photonics,
- c. applications: nano-coatings, nano-device based sensors and diagnostics kits, controlled and targeted drug delivery systems, nano-phosphor based display devices, etc..

22. **Mega Facilities for Basic Research:** Basic research in the country has been depending upon mega and capital intensive facilities created by other countries. This practice has led to asymmetries in credit sharing. Further, Indian expertise to build advance scientific instruments and devices does not get fostered outside the strategic areas of research where technology denial forces building of capacities. DST along with Department of Atomic Energy has identified areas where an effective partnership of the two departments can bring about an effective capacity building in the university and academic sector for building mega facilities for basic research.

23. **Science and Engineering Research Board (SERB):** Supporting basic research in emerging areas of Science and Engineering will be the primary and distinctive mandate of the board. The board's structure, with both financial and administrative powers vested in the board will enable quicker decisions on research issues. As per guidelines issued by the Planning Commission allocations have been earmarked for spending under the SCSP ₹ 3.93 crore and TSP schemes ₹ 7.93 crore.

24. **Policy Research Cell:** PRC spearheads the design policy instruments for building academy-research-industry collaborations; preparation of study reports of STI policies of developed and emerging economies; periodical dialogues and discussions with stake holders, national and international policy experts, socio economic ministries, industrial leaders and develop policy papers for research and development sector as inputs for decision making; advise general directions in policy environment for increasing the private sector investment into R&D; advise measures for re-engineering and rationalization governance processes to suit the special needs of the Indian science sector etc.

25. **Disha Programme for Women in Science:** Disha is a special scheme to facilitate the mobility of women scientists. This scheme aims to avoid or reduce difficulties faced by employed women in mid career to move from one place of employment to another within in India on account family reasons.

26. **Alliance and R&D Mission:** This component includes the schemes like Building Educators for Science Teaching (BEST), Innovation in Science Pursuit for Inspired Research (INSPIRE), Scholarship for Higher Education (SHE), Public Private Partnership (PPP) for R&D, PAN INDIA S&T MISSIONS, CLIMATE CHANGE PROGRAMME, Establishment of Joint (virtual) Centres, Super Computing Facility and Capacity Building, National Geographic Information System (NGIS), etc. As per the guidelines of the Planning Commission allocations have been earmarked for spending under the SCSP ₹ 17 crore and TSP Schemes ₹ 17 crore.

27. **Super Computing Facility and Capacity Building:** The Program aims to make India a leader in supercomputing and develop petaflop supercomputer. The Programme will be implemented in close collaboration with organizations like C-DAC of Department of Electronics and Information Technology. As per guidelines issued by the Planning Commission allocations under SCSP and TSP have been earmarked.

28. **National Geographic Information System:** NGIS will be a technology platform for creating applications based on geospatial data to enable transition from e-governance (e-gov) to geospatial governance (g-gov). As per guideline issued by the Planning Commission allocations under SCSP and TSP have been earmarked.