MINISTRY OF SCIENCE AND TECHNOLOGY

DEMAND NO. 86

Department of Science and Technology

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

(In crores of Rupees)

			Actual 2012-2013			Budget 2013-2014			Revised 2013-2014			Budget 2014-2015		
		Major Head	Plan	Non-Plan	Total	Plan	Non-Plan	Total	Plan	Non-Plan	Total	Plan	Non-Plan	Total
		Revenue	2117.85	375.62	2493.47	2755.80	405.32	3161.12	2212.11	378.12	2590.23	3109.82	413.10	3522.92
		Capital	20.46	0.98	21.44	21.20	1.95	23.15	12.89	1.88	14.77	15.18	5.90	21.08
		Total	2138.31	376.60	2514.91	2777.00	407.27	3184.27	2225.00	380.00	2605.00	3125.00	419.00	3544.00
	Secretariat-Economic Services	3451	•••	48.57	48.57		52.61	52.61		57.21	57.21	•••	62.59	62.59
	eientific Research													
	Modernisation of Mapping Organizations (SOI and NATMO)	3425	18.97	285.86	304.83	23.80	313.17	336.97	12.30	290.08	302.38	23.15	323.01	346.16
	organizations (our and riverime)	5425	7.46	0.02	7.48	11.20	0.45	11.65	5.70	0.38	6.08	6.85	0.15	7.00
		Total	26.43	285.88	312.31	35.00	313.62	348.62	18.00	290.46	308.46	30.00	323.16	353.16
Scien	ce and Technology													
-	Autonomous Institutions & Professional Bodies	3425	687.86	11.34	699.20	711.00	14.50	725.50	685.00	9.00	694.00	785.00	9.00	794.00
4.	Research and Development Support - Multi-Disciplinary Research in	3425	294.55	0.76	295.31	225.00	1.19	226.19	180.00	0.70	180.70	300.00	1.00	301.00
	Science and Technology Technology Development Programme	3425	128.95		128.95	128.00		128.00	108.00		108.00	140.00		140.00
	S & T Programmes for Socio-	3425	75.03		75.03	135.00	•••	135.00	107.00		107.00	140.00		140.00
	Economic Development State Science & Technology	3425	35.99		35.99	30.00	•••	30.00	30.00		30.00	35.00		35.00
	Programme													
	International Cooperation	3425	87.92	6.25	94.17	90.00	8.35	98.35	72.00	7.37	79.37	90.00	9.60	99.60
	Payment to Technology Development Board against Cess receipts	3425	•••	22.50	22.50		15.00	15.00		13.50	13.50	•••	7.50	7.50
	Information Technology	3425	0.78		0.78	1.00		1.00	0.70		0.70	2.00		2.00
11.	Other Programmes	3425		0.34	0.34		0.50	0.50		0.26	0.26		0.40	0.40
		5425		0.96	0.96		1.50	1.50		1.50	1.50		5.75	5.75
		Total		1.30	1.30		2.00	2.00		1.76	1.76		6.15	6.15
12.	Synergy Projects (O/o Pr. Scientific Adviser)													
	12.01 Programme Component	3425	8.89		8.89	15.00		15.00	11.00		11.00	26.00		26.00
	12.02 EAP Component	3425	0.26		0.26									
	Total- Synergy Projects (O/o Pr. Scientific Adviser)		9.15		9.15	15.00		15.00	11.00		11.00	26.00		26.00
13.	Drugs and Pharmaceutical Research	3425	13.59		13.59	20.00		20.00	17.11		17.11	16.67		16.67
		7425	13.00	•••	13.00	10.00		10.00	7.19	•••	7.19	8.33	•••	8.33

(In crores of Puncos)

												('In crores of	Rupees)
		Major Head	Actual 2012-2013			Budget 2013-2014			Revised 2013-2014			Budget 2014-2015		
			Plan	Non-Plan	Total	Plan	Non-Plan	Total	Plan	Non-Plan	Total	Plan	Non-Plan	Total
		Total	26.59		26.59	30.00		30.00	24.30		24.30	25.00		25.00
14.	National Mission on Nano Science & Nano Technology	3425	84.77		84.77	85.00		85.00	65.00		65.00	85.00		85.00
15.	Mega facilities for Basic Research	3425	19.15		19.15	50.00		50.00	28.00		28.00	90.00		90.00
16.	Science and Engineering Research Board	3425	400.00		400.00	534.00		534.00	530.00		530.00	600.00		600.00
17.	Policy Research Cell	3425	1.88		1.88	10.00		10.00	7.00		7.00	17.00		17.00
18.	Disha Programme for women in Science	3425	45.18		45.18	53.00		53.00	43.00		43.00	53.00		53.00
19.	Alliance and R&D Mission	3425	214.08		214.08	345.00		345.00	315.00		315.00	495.00		495.00
20.	Super Computing Facility and Capacity Building	3425				100.00		100.00				17.00		17.00
21.	National Geographic Information System	3425				200.00		200.00	1.00		1.00	40.00		40.00
22.	Fund for Inclusive Innovations for Common Man	3425						•••				30.00		30.00
23.	Technical Research Centres	3425										125.00		125.00
Total-Science and Technology			2111.88	42.15	2154.03	2742.00	41.04	2783.04	2207.00	32.33	2239.33	3095.00	33.25	3128.25
Total-Other Scientific Research Grand Total			2138.31 2138.31	328.03 376.60	2466.34 2514.91	2777.00 2777.00	354.66 <i>407.27</i>	3131.66 <i>3184.27</i>	2225.00 2225.00	322.79 380.00	2547.79 2605.00	3125.00 3125.00	356.41 <i>419.00</i>	3481.41 3544.00
		Head of Dev	Budget Support	IEBR	Total	Budget Support	IEBR	Total	Budget Support	IEBR	Total	Budget Support	IEBR	Total
C. Pla	n Outlay													
1.	Other Scientific Research	13425	2138.31		2138.31	2777.00		2777.00	2225.00		2225.00	3125.00		3125.00

- 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.
- 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.

- 4. Research and Development Support Multidisciplinary Research in Science and Technology: The Department of Science and Technology, as a part of its S&T promotional activity has been supporting R&D programmes. This includes the new initiative 'Programme for Research Initiatives in Mathematics Education (PRIME)'
- 5. **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 (ISSTAC), 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 North East Centre for Technology Application and Reach (NECTAR).
- 6. **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.

- 7. **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.
- 8. 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.
- 9. **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 and for grafting imported technologies for wider domestic applications.
- 10. **Information Technology:** The scheme pertains to expenditure incurred on Information Technology (IT) e-Governance and related areas.
- 11. **Other Programmes:** This depicts Exhibitions and Fairs as well as the capital expenditure relating to construction work.
- 12. **Synergy Projects (O/o Principal Scientific Adviser):** The provision enable the Office of Principal Scientific Adviser 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.
- 13. 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.
- 14. **National Mission on Nano Science & Nano Technology:** The provision support the following areas of research which 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..
- dependent on 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.
- 16. **Science and Engineering Research Board (SERB):** Supporting basic research in emerging areas of Science and Engineering is the primary and distinctive mandate of the board.
- 17. **Policy Research Cell (PRC):** 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. This also includes allocations for the National Science and Technology Management Information System NSTMIS and the National Training Programme for Scientists/Technologists working with the Government of India.
- 18. **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. Allocations for Consolidation of Research for Innovation and Excellence in Women Universities (CURIE) is also a part of this programme
- 19. **Alliance and R&D Mission:** This component includes the schemes like Innovation in Science Pursuit for Inspired Research (INSPIRE), Scholarship for Higher Education (SHE) and Climate Change Programme.
- 20. **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.
- 21. **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).
- 22. Fund for Inclusive Innovations for Common Man: The S&T sector has been working on developing technologies and innovations which need to be scaled up and the benefits of

these innovations have to reach the common man and in order to support and scale up these innovations a fund has been created.

23. **Technical Research Centres:** This provision is for a new initiative for Technical Research Centres including allocations for SCSP and TSP.