

Table 11

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

Sl.No	Industry Group	No. of R&D Units	R&D Expenditure (Rs. Crores)			R&D Expenditure as % of S.T.O.		
			1998-99	1999-00	2000-01	1998-99	1999-00	2000-01
1	Metallurgical Industries	13	67.61	67.26	76.30	0.29	0.26	0.28
2	Fuels	8	155.60	164.03	171.96	0.18	0.15	0.13
3	Boilers and Steam Generating Plants	0	0.00	0.00	0.00	0.00	0.00	0.00
4	Prime Movers	0	0.00	0.00	0.00	0.00	0.00	0.00
5	Electricals and Electronics Equipment	23	80.09	84.52	97.50	0.58	0.58	0.64
6	Telecommunications	13	62.05	69.41	80.72	0.63	0.64	0.67
7	Transportation	2	3.99	3.92	3.48	2.85	2.75	2.68
8	Industrial Machinery	8	2.70	2.62	2.65	1.38	0.96	0.76
9	Machine Tools	4	0.47	0.48	1.02	0.16	0.16	0.48
10	Agricultural Machinery	3	5.13	5.19	5.29	0.34	0.34	0.36
11	Earth Moving Machinery	0	0.00	0.00	0.00	0.00	0.00	0.00
12	Misc. Mechanical Engineering Industries	3	3.54	3.25	2.17	0.93	1.05	0.67
13	Commercial Offices, Household Equipment	0	0.00	0.00	0.00	0.00	0.00	0.00
14	Medical and Surgical Appliances	0	0.00	0.00	0.00	0.00	0.00	0.00
15	Industrial Instruments	5	2.94	2.63	3.44	0.44	0.50	0.56
16	Scientific Instruments	1	1.91	1.91	1.91	2.39	2.39	2.39
17	Math. Surveying & Drawing Instrument	1	0.12	0.12	0.12	4.00	4.00	4.00
18	Fertilisers	9	23.24	22.90	25.82	0.23	0.21	0.21
19	Chemicals (other than Fertilizers)	12	13.48	15.59	16.93	0.11	0.10	0.09
20	Photographic Raw Film and Paper	1	1.26	1.15	1.07	3.67	4.07	4.22
21	Dye-stuffs	0	0.00	0.00	0.00	0.00	0.00	0.00
22	Drugs and Pharmaceuticals	8	6.58	7.20	7.36	2.68	2.52	2.42
23	Textiles (Dyed, Printed, Processed)	4	0.77	0.83	0.79	0.17	0.17	0.16
24	Paper and Pulp	4	1.10	1.84	2.19	0.00	0.01	0.01
25	Sugar	2	0.12	0.14	0.13	0.21	0.25	0.23
26	Fermentation Industries	0	0.00	0.00	0.00	0.00	0.00	0.00
27	Food Processing Industries	1	0.06	0.07	0.17	0.07	0.11	0.19
28	Vegetable Oil & Vanaspathi	0	0.00	0.00	0.00	0.00	0.00	0.00
29	Soaps, Cosmetics and Toilet Preparations	1	0.11	0.09	0.09	0.09	0.06	0.08
30	Rubber Goods	1	0.55	0.89	0.95	0.78	0.85	0.88
31	Leather, Leather Goods and Pickers	0	0.00	0.00	0.00	0.00	0.00	0.00
32	Glue and Gelatin	0	0.00	0.00	0.00	0.00	0.00	0.00
33	Glass	0	0.00	0.00	0.00	0.00	0.00	0.00
34	Ceramics	1	1.05	1.05	1.09	1.15	1.18	1.86
35	Cement and Gypsum Products	1	0.20	0.21	0.17	0.09	0.15	0.23
36	Timber Products	0	0.00	0.00	0.00	0.00	0.00	0.00
37	Defence Industries	11	199.20	253.87	291.86	6.49	7.31	8.09
38	Information Technology	3	11.16	11.16	11.16	2.74	1.91	1.76
39	Biotechnology	0	0.00	0.00	0.00	0.00	0.00	0.00
40	Consultancy Services	4	24.64	32.38	30.23	3.34	3.22	2.40
41	Miscellaneous Industries	5	4.20	2.92	6.31	0.10	0.05	0.08
	Total	152	673.87	757.63	842.88	0.35	0.34	0.32

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Table 11 (Continued)

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

Sl.No	Industry Group	No. of R&D Units	R&D Expenditure (Rs. Crores)		R&D Expenditure as % of S.T.O.	
			2001-02	2002-03	2001-02	2002-03
1	Metallurgical Industries	10	79.67	69.41	0.31	0.22
2	Fuels	7	177.63	178.97	0.09	0.08
3	Boilers and Steam Generating Plants	0	0.00	0.00	0.00	0.00
4	Prime Movers	0	0.00	0.00	0.00	0.00
5	Electricals and Electronics Equipment	9	116.56	114.86	1.00	0.92
6	Telecommunications	5	60.24	48.91	1.83	1.95
7	Transportation	1	0.85	0.48	0.66	0.33
8	Industrial Machinery	2	0.20	0.18	0.49	1.02
9	Machine Tools	2	0.13	0.09	0.48	0.72
10	Agricultural Machinery	2	1.29	1.89	0.43	0.91
11	Earth Moving Machinery	0	0.00	0.00	0.00	0.00
12	Misc. Mechanical Engineering Industries	2	2.13	2.39	2.59	5.05
13	Commercial Offices, Household Equipment	0	0.00	0.00	0.00	0.00
14	Medical and Surgical Appliances	0	0.00	0.00	0.00	0.00
15	Industrial Instruments	4	1.13	0.89	0.21	0.17
16	Scientific Instruments	1	1.38	1.70	N.A.	N.A.
17	Math, Surveying & Drawing Instrument	0	0.00	0.00	0.00	0.00
18	Fertilisers	8	16.21	14.32	0.17	0.13
19	Chemicals (other than Fertilizers)	8	9.68	9.28	0.11	0.07
20	Photographic Raw Film and Paper	1	1.01	0.98	3.48	3.62
21	Dye-stuffs	0	0.00	0.00	0.00	0.00
22	Drugs and Pharmaceuticals	6	3.84	4.71	1.47	1.90
23	Textiles (Dyed, Printed, Processed)	2	0.48	0.77	0.19	0.34
24	Paper and Pulp	4	1.69	3.94	0.13	0.33
25	Sugar	1	0.05	0.07	7.64	13.04
26	Fermentation Industries	0	0.00	0.00	0.00	0.00
27	Food Processing Industries	1	0.09	0.11	0.24	0.29
28	Vegetable Oil & Vanaspathi	0	0.00	0.00	0.00	0.00
29	Soaps, Cosmetics and Toilet Preparations	1	0.08	0.10	0.07	0.09
30	Rubber Goods	1	0.16	0.19	0.15	0.18
31	Leather, Leather Goods and Pickers	0	0.00	0.00	0.00	0.00
32	Glue and Gelatin	0	0.00	0.00	0.00	0.00
33	Glass	0	0.00	0.00	0.00	0.00
34	Ceramics	1	0.33	0.15	0.56	0.21
35	Cement and Gypsum Products	1	0.15	0.12	0.11	0.10
36	Timber Products	0	0.00	0.00	0.00	0.00
37	Defence Industries	5	275.99	338.99	8.89	8.78
38	Information Technology	0	0.00	0.00	0.00	0.00
39	Biotechnology	0	0.00	0.00	0.00	0.00
40	Consultancy Services	4	13.33	11.87	1.53	1.03
41	Miscellaneous Industries	4	3.07	3.58	0.05	0.04
	Total	93	767.37	808.95	0.27	0.26

Source : Data collected and compiled by DST

Note : S.T.O - Sales Turnover

: Data for the period 1998-99 to 2000-01 refers to 152 R&D units and 93 units for the period 2001-02 to 2002-03.